

# DELHI ELECTRICITY REGULATORY COMMISSION

Viniyamak Bhawan, 'C' Block, Shivalik, Malviya Nagar, New Delhi- 110017.

F.11(1367/DERC/2015-16/

#### Petition No. 16/2017

In the matter of: Petition for determination of Generation Tariff and Submission of Business Plan for the MYT period from for FY 2016-17 to FY 2020-21.

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#### Petition No. 27/2017

In the matter of:

Petition for True up of expenditure for FY 2014 and FY 2015-16.

Pragati Power Corporation Ltd. Through its : Director (Tech.) Himadri, Rajghat Power House Complex New Delhi 110 002

...Petitioner/Licensee

Coram: Sh. B. P. Singh, Member.

#### ORDER

# (Date of Order: 31.08.2017)

M/s. Pragati Power Corporation Limited filed aforesaid Petition No. 16 of 2017 for determination of Generation Tariff and Submission of Business Plan for the MYT period from for FY 2016-17 to FY 2020-2, admitted by the Commission vide Order dated 26.05.2017; and Petition No. 27 of 2017 for True-up of expenditure for FY 2014 and FY 2015-16, admitted by the Commission vide Order dated 30.05.2017. The Petitions along with Executive summary were uploaded on the website of the Commission seeking response of the stakeholders. This was also widely publicised through advertisement in newspapers. In response to the advertisement the Commission received comments and suggestions of the stakeholders, the submissions made during the public hearing held on 19.07.2017 and the arguments advanced by the Petitioner have been taken into consideration.

After having considered the above, the Commission in exercise of the power vested in it by the Electricity Act, 2003 and Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2017, hereby pass this Tariff Order signed, dated and issued on 31.08.2017.

The Petitioner shall take immediate steps to implement the said Order, so as to make the revised tariffs applicable from 01.09.2017.

This Tariff Order shall remain in force till replaced by a subsequent Tariff Order and/or is amended, reviewed or modified, in accordance with the provisions of the Electricity Act, 2003 and the Regulations made there under.

(B. P. Singh) Member

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# List of Abbreviation

Abbreviation	Explanation			
ARR	Aggregate Revenue Requirement			
A&G	Administrative and General			
AAD	Advance Against Depreciation			
ABT	Availability Based Tariff			
ACD	Advance Consumption Deposit			
AMR	Automated Meter Reading			
APDRP	Accelerated Power Development and Reforms Program			
AT&C	Aggregate Technical and Commercial			
ATE	Appellate Tribunal for Electricity			
BEST	Birhanmumbai Electric Supply and Transport			
BHEL	Bharat Heavy Electricals Limited			
BIS	Bureau of Indian Standards			
BPTA	Bulk Power Transmission Agreement			
BRPL	BSES Rajdhani Power Limited			
BST	Bulk Supply Tariff			
BTPS	Badarpur Thermal Power Station			
BYPL	BSES Yamuna Power Limited			
CAGR	Compounded Annual Growth Rate			
CCGT	Combined Cycle Gas Turbine			
CEA	Central Electricity Authority			
CERC	Central Electricity Regulatory Commission			
CFL	Compact Fluorescent Lamp			
CGHS	Cooperative Group Housing Societies			
CGS	Central Generating Stations			
CIC	Central Information Commission			
CISF	Central Industrial Security Force			
CoS	Cost of Supply			
СРІ	Consumer Price Index			
CPRI	Central Power Research Institute			
CPSUs	Central Power Sector Utilities			
CSGS	Central Sector Generating Stations			
CWIP	Capital Work in Progress			
DA	Dearness Allowance			
DDA	Delhi Development Authority			
DERA	Delhi Electricity Reform Act			
DERC	Delhi Electricity Regulatory Commission			
DIAL	Delhi International Airport Limited			
DISCOMs	Distribution Companies (BRPL, BYPL, TPDDL & NDMC)			
DMRC	Delhi Metro Rail Corporation			



Abbreviation	Explanation
DPCL	Delhi Power Company Limited
DTL	Delhi Transco Limited
DVB	Delhi Vidyut Board
DVC	Damodar Valley Corporation
EHV	Extra High Voltage
EPS	Electric Power Survey
FBT	Fringe Benefit Tax
FPA	Fuel Price Adjustment
GFA	Gross Fixed Assets
GIS	Geographical Information System
GoNCTD	Government of National Capital Territory of Delhi
GTPS	Gas Turbine Power Station
HEP	Hydro Electric Power
HPSEB	Himachal Pradesh State Electricity Board
HRA	House Rent Allowance
HT	High Tension
HVDS	High Voltage Distribution System
IDC	Interest During Construction
IGI Airport	Indira Gandhi International Airport
IPGCL	Indraprastha Power Generation Company Limited
JJ Cluster	Jhugghi Jhopadi Cluster
KSEB	Kerala State Electricity Board
LED	Light Emitting Diode
LIP	Large Industrial Power
LT	Low Tension
LVDS	Low Voltage Distribution System
MCD	Municipal Corporation of Delhi
MES	Military Engineering Service
MLHT	Mixed Load High Tension
MMC	Monthly Minimum Charge
МоР	Ministry of Power
MTNL	Mahanagar Telephone Nigam Limited
MU	Million Units
MYT	Multi Year Tariff
NABL	National Accreditation Board for Testing and Calibration of Laboratories
NAPS	Narora Atomic Power Station
NCT	National Capital Territory
NCTPS	National Capital Thermal Power Station
NDLT	Non Domestic Low Tension
NDMC	New Delhi Municipal Council
NEP	National Electricity Policy

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Abbreviation	Explanation		
NGO	Non Government Organisation		
NHPC	National Hydroelectric Power Corporation		
NPCIL	Nuclear Power Corporation of India Limited		
NRPC	Northern Regional Power Committee		
NTI	Non Tariff Income		
NTP	National Tariff Policy		
0&M	Operations and Maintenance		
OCFA	Original Cost of Fixed Assets		
PGCIL	Power Grid Corporation of India		
PLF	Plant Load Factor		
PLR	Prime Lending Rate		
PPA	Power Purchase Agreement / Power Purchase Adjustment		
PPCL	Pragati Power Corporation Limited		
РТС	Power Trading Corporation		
PWD	Public Works Department		
R&M	Repair and Maintenance		
RAPS	Rajasthan Atomic Power Station		
REA	Regional Energy Account		
RoCE	Return on Capital Employed		
ROE	Return on Equity		
RRB	Regulated Rate Base		
RTI	Right to Information		
RWA	Resident Welfare Associations		
SBI	State Bank of India		
SERC	State Electricity Regulatory Commission		
SIP	Small Industrial Power		
SJVNL	Satluj Jal Vidyut Nigam Limited		
SLDC	State Load Despatch Centre		
SPD	Single Point Delivery		
SPUs	State Power Utilities		
SVRS	Special Voluntary Retirement Scheme		
THDC	Tehri Hydro Development Corporation		
ToD	Time of Day		
TOWMCL	Timarpur Okhla Waste Management Company (P) Limited		
TPDDL	Tata Power Delhi Distribution Limited		
TPS	Thermal Power Station		
UI	Unscheduled Interchange		
UoM	Units of Measurement		
WACC	Weighted Average Cost of Capital		
WC	Working Capital		
WPI	Wholesale Price Index		

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#### A1: INTRODUCTION

1.1 This Order relates to the petition filed by Pragati Power Corporation Limited (hereinafter referred to as "PPCL" or the "Petitioner") for True-up of expenses for FY 2014-15 & FY 2015-16 for Generation Business in terms of "Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Generation Tariff) Regulations, 2011 (hereinafter referred to as the 'MYT Generation Regulations, 2011') and approval of Aggregate Revenue Requirement & Tariff for FY 2017-18 in terms of Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2017 (hereinafter referred to as the 'Tariff Regulations, 2017').

## **Pragati Power Generation Company Limited**

1.2 PPCL, wholly owned by the Government of National Capital Territory of Delhi, is a generating company which operates the Pragati Power Station-I (330 MW) power generating station, having two gas turbine units of 104 MW each and one steam turbine unit of 122 MW.

## **Delhi Electricity Regulatory Commission**

- 1.3 Delhi Electricity Regulatory Commission (hereinafter referred to as 'DERC' or the 'Commission') was constituted by the GoNCTD on 03.03.1999 and it became operational from 10.12.1999.
- 1.4 The Commission's approach to regulation is driven by the Electricity Act, 2003, the National Electricity Plan, the Tariff Policy and the Delhi Electricity Reform Act 2000 (hereinafter referred to as 'DERA'). The Electricity Act, 2003 mandates the Commission to take measures conducive to the development and management of the electricity industry in an efficient, economic and competitive manner, which inter-alia includes Tariff determination.

## Multi Year Tariff Regulations

1.5 The Commission issued Tariff Regulations vide gazette notification dated 31.01.2017 specifying Terms and Conditions for Determination of Tariff for Generation of

electricity under the Multi Year Tariff (MYT) framework. Further the operational norms for Generation utilities have also been approved by the Commission in Delhi Electricity Regulatory Commission Business Plan Regulations, 2017 under Tariff Regulations for the period FY 2017-18 to FY 2019-20.

- 1.6 The Commission issued 'MYT Generation Regulations, 2011' vide Order dated 02.12.2011 specifying Terms and Conditions for Determination of Tariff for Generation of electricity under the Multi Year Tariff (MYT) framework for the period FY 2012-13 to FY 2014-15.
- 1.7 The Commission vide order dated October 22, 2014 has extended the MYT period of FY 2012-13 to FY 2014-15 for a further period of one year till FY 2015-16.

# Filing of Petition for True-Up of Expense for FY 2014-15 & FY 2015-16 and Approval of Aggregate Revenue Requirement & Tariff for FY 2017-18

# Filing and Acceptance of Petition

- 1.8 PPCL has filed its petition before the Commission on 25.02.2016 for "Determination of Generation Tariff for FY 2016-17 to FY 2020-21".
- 1.9 Further, PPCL has filed its petition before the Commission on 01.05.2017 for "True up of expenditure for FY 2014-15 and FY 2015-16".
- 1.10 The Commission admitted both the petitions vide its Orders dated 26.05.2017 and 30.05.2017 for True Up and Tariff Determination respectively subject to clarifications/ additional information, if any, which would be sought from the Petitioner from time to time. A copy of the Admission Order is enclosed as **Annexure** I to this Order.

## Interaction with the Petitioner

1.11 The Order has referred at numerous places to various actions taken by the "Commission". It may be mentioned for the sake of clarity, that the term "Commission" in most of the cases refers to the Officers of the Commission and the Staff Consultants appointed by the Commission for carrying out the due diligence on the petition filed by the Petitioner, obtaining and analyzing information/clarifications



received from the Petitioner and submitting all issues for consideration by the Commission.

- 1.12 For this purpose, the Commission Officers and Staff Consultants held discussions with the Petitioner, obtained information/clarifications wherever required and carried out technical validation with regard to the information provided.
- 1.13 The Commission held public hearing on 19.07.2017 to take a final view with respect to various issues concerning the principles and guidelines for tariff determination. The Commission has considered due diligence conducted by the Officers of the Commission and the Staff Consultants in arriving at its final decision. The use of the term "Commission" may, therefore, be read in the context of the above clarification.
- 1.14 A preliminary scrutiny/analysis of the petition submitted by the Petitioner was conducted and certain deficiencies were observed. Accordingly, deficiency notes were issued to the Petitioner. Further, additional information/clarifications were solicited from the Petitioner as and when required. The Commission and the Petitioner also discussed key issues raised in the petition, which included details of O&M Expenses, Assets Capitalization, Depreciation, Working Capital Requirement, Return on Capital Employed (RoCE), Implementation of Judgment of APTEL etc. The Petitioner submitted additional information through various letters.
- 1.15 The Commission also conducted multiple validation sessions with the Petitioner during which discrepancies in the petition and additional information required by the Commission were sought. Subsequently, the Petitioner submitted replies to the issues raised in these sessions and provided documentary evidence to substantiate its claims regarding various submissions.
- 1.16 The replies of the Petitioner, as mentioned in the Table 1 as follows have been considered for approval of the True Up and ARR of the Petitioner:

SI.	Letter No.	Letter Dated	Subject
No.			
1	F.3(390)/Tariff/DERC/20	18.12.2015	Tariff Petition for MYT 2016-
	14-15/4596/3452		17 to FY 2020-21
2	Commercial/DERC/F.12/	31.12.2015	Tariff Petition for MYT 2016-
	211		17 to FY 2020-21

# Table 1: List of Correspondence with the Petitioner



SI.	Letter No.	Letter Dated	Subject
No.			
3	Commercial/DERC/F.12/	14.01.2016	Tariff Petition for MYT 2016-
	224		17 to FY 2020-21
4	F.3(390)/Tariff/DERC/20	02.02.2016	Tariff Petition for MYT 2016-
	14-15/4596/3859		17 to FY 2020-21
5	F.3(390)/Tariff/DERC/20	15.02.2016	Tariff Petition for MYT 2016-
	14-15/4596/035		17 to FY 2020-21
6	PPCL/Comml./F.12/250	25.02.2016	Tariff Petition for MYT 2016-
			17 to FY 2020-21
7	F.11(1367)/DERC/2015-	30.03.2016	Tariff Petition for MYT 2016-
	16/5192/4383		17 to FY 2020-21
8	PPCL/Commercial/DERC/	21.04.2016	Tariff Petition for MYT 2016-
	F.12/11		17 to FY 2020-21
9	F.3(503)/Tariff-	02.02.2017	Tariff Petition for MYT 2016-
	Engg/DERC/2016-		17 to FY 2020-21
	17/5614/2224		
10	Comml./DERCF.12/205	13.02.2017	Tariff Petition for MYT 2016-
			17 to FY 2020-21
11	PPCL/Commercial/DERC/	01.05.2016	Tariff Petition for MYT 2016-
	F.12/13		17 to FY 2020-21
12	F.11(1479)/DERC/2017-	24.05.2017	Tariff Petition for MYT 2016-
	18/5735/427		17 to FY 2020-21
13	F.11(1479)/DERC/2017-	24.05.2017	Tariff Petition for MYT 2016-
	18/5735/427		17 to FY 2020-21
14	PPCL/Comml/F.12/26	30.05.2017	Tariff Petition for MYT 2016-
			17 to FY 2020-21
15	Comml/2016-17/F.11/36	22.06.2017	Draft Business Regulations,
ļ			2017
16	PPCL/Comml./F.13/42	03.07.2017	CAPEX details
17	PPCL/Comml/DERC/F.13 /49	10.07.2017	AGP & STP expenditure

# **Public Notice**

1.17 The Commission published a Public Notice in the following newspapers on 07.06.2017 inviting comments from stakeholders on the Tariff petitions filed by the Petitioners by 27.06.2017:

i) Indian Express (English)	-	07.06.2017
ii) The Pioneer (English)	-	07.06.2017
iii) Times of India (English)	-	07.06.2017
iv) Hindustan (Hindi)	-	07.06.2017



v) Dainik Jagaran (Hindi)	-	07.06.2017
vi) Educator (Punjabi)	-	07.06.2017

Copies of the above Public Notices are available on Commission's website (www.derc.gov.in).

1.18 The Petitioner also published a Public Notice indicating salient features of its petition for inviting comments from the stakeholders and requesting to submit response on the petition on or before 27.06.2017 in the following newspapers on the respective dates mentioned alongside:

i) The Hindu (English)	-	24.06.2017
ii) Business Standard (English)	-	24.06.2017
iii) Punjab Kesari (Hindi)	-	24.06.2017
iv) The Daily Milap (Urdu)	-	24.06.2017
v) The Daily Educator (Punjabi)	-	24.06.2017

Copies of the above Public Notices are available on Commission's website (www.derc.gov.in).

- 1.19 A copy of the petition was also made available for purchase from the head-office of the Petitioner on any working day between 11 A.M. and 4 P.M. on payment of Rs.100/- for hard copy of each petition either by cash or demand draft/pay order. A copy of the complete petition was also uploaded on the website of the Commission, as well as that of the Petitioner, requesting for comments of the stakeholders thereon.
- 1.20 At the request of the stakeholders, the Commission extended the last date for filing objections and suggestions up to 18.07.2017 for which the public notice was issued in the following newspapers on the respective dates mentioned along side:

i) Pioneer (English)	-	25.06.2017
ii) Hindustan Times (English)	-	25.06.2017
iii) Mail Today (English)	-	25.06.2017
iv) Hindustan (Hindi)	-	25.06.2017
v) Punjab Kesari (Hindi)	-	25.06.2017
vi) Rashtriya Sahara (Hindi)	-	25.06.2017



vii) The Educator (Punjabi)

25.06.2017

Copies of the above Public Notices are available on Commission's website (www.derc.gov.in).

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- 1.21 In order to extend help to the stakeholders in understanding the ARR Petition and filing their comments, the Commission prepared a Executive Summary highlighting salient features of the Tariff Petition filed by the Petitioner, which was uploaded on the Commission's website. In this regard, three officers of the Commission viz. Joint Director (Tariff-Finance), Joint Director (Engineering) and Joint Director (PS&E) were nominated for discussion on the ARR Petitions. This was duly highlighted in the Public Notices published by the Commission.
- 1.22 Further, the Commission published a Public Notice indicating the venue, date and time of public hearing on 4<sup>th</sup> and 5<sup>th</sup> July, 2017 in the following newspapers on the respective dates mentioned alongside:

i) Pioneer (English)	-	25.06.2017
ii) Hindustan Times (English)	-	25.06.2017
iii) Mail Today (English)	-	25.06.2017
iv) Hindustan (Hindi)	-	25.06.2017
v) Punjab Kesari (Hindi)	-	25.06.2017
vi) Rashtriya Sahara (Hindi)	-	25.06.2017
vii) The Educator (Punjabi)	-	25.06.2017

Copies of the above Public Notices are available on Commission's website (www.derc.gov.in).

1.23 At the request of the stakeholders, the Commission extended the date of Public hearing from 04<sup>th</sup> and 05<sup>th</sup> of July 2017 to 19<sup>th</sup> of July 2017.

The public notice was issued in the following newspapers on the respective dates mentioned along side:

i) Pioneer (English)	-	02.07.2017
ii) Hindustan Times (English)	-	02.07.2017
iii) Mail Today (English)	-	02.07.2017
iv) Indian Express (English)	-	02.07.2017



v) Hindustan (Hindi)	-	02.07.2017
vi) Punjab Kesari (Hindi)	-	02.07.2017
vii) Dainik Jagran (Hindi)	-	02.07.2017
viii) Jadid in dinon (Urdu)	-	02.07.2017
ix) The Jan Ekta (Punjabi	-	02.07.2017

Copies of the above Public Notices are available on Commission's website (www.derc.gov.in).

- 1.24 The Commission received written comments from stakeholders. The comments of the stakeholders were also forwarded to the Petitioner who, responded to the comments of the stakeholders with a copy of its replies to the Commission. The Commission invited all stakeholders, including those who had filed their objections and suggestions, to attend the Public Hearing. List of the stakeholders who submitted their comments on True-up of expense for FY 2014-15 & FY 2015-16 and approval of Aggregate Revenue Requirement & Tariff for FY 2017-18 is enclosed as Annexure II to this Order.
- 1.25 The public hearing was held at the Auditorium of Scope Convention Centre, Scope Complex, New Delhi for all stakeholders on 19.07.2017 to discuss the issues related to the petition filed by the Petitioner. The issues and concerns voiced by various stakeholders have been examined by the Commission. The major issues discussed during the public hearing and/or written comments made by the stakeholders, the responses of the Petitioner thereon and the views of the Commission, have been summarized in Chapter A2. List of Stakeholders/consumers who attended the public hearing is enclosed as Annexure III to this Order.

# Layout of the Order

- 1.26 This Order is organised into five Chapters:
  - (a) Chapter A1 provides the approach of the Order;
  - (b) Chapter A2 provides a brief of the Public Hearing process, including the details of comments of various stakeholders, the Petitioner's response and views of the Commission thereon;



- (c) Chapter A3 provides analysis of truing up for FY 2014-15 to FY 2015-16 for PPS-I Station;
- (d) Chapter A4 provides determination of tariff for FY 2017-18 for PPS-I Station;
- (e) **Chapter A5** provides summary of all the directives issued by the Commission in this Order.
- 1.27 The Order contains following Annexure, which are an integral part of the Tariff Order:
  - (a) Annexure I Admission Order.
  - (b) Annexure II List of the stakeholders who submitted their comments on True-up of expense for FY 2014-15 & FY 2015-16 and approval of Aggregate Revenue Requirement & Tariff for FY 2017-18.
  - (c) Annexure III List of Stakeholders/consumers who attended the public hearing.

# Approach of the Order

## Approach for FY 2014-15 and FY 2015-16

- 1.28 Under the MYT Framework, the Commission had projected the ARR of the Petitioner for FY 2014-15 and FY 2015-16 in the MYT Order issued on 13.07.2012 and Tariff Order issued on 29.09.2015. Under 'MYT Generation Regulations, 2011', the components of ARR have been segregated into controllable and un-controllable parameters. As per regulation 5.8, 5.10, 5.11 and 5.12 of the 'MYT Generation Regulations, 2011', various controllable and un-controllable parameters shall be trued-up as per the principle stated as follows:
  - a) Actual capital expenditure incurred and capitalisation at the end of each year of the Control Period vis-à-vis the approved capital expenditure and capitalisation schedule shall be reviewed. Capital expenditure and capitalisation for remaining years of the Control Period based on trued up capital expenditure and capitalisation for any year may be revised.
  - b) For controllable parameters,



i. Any surplus or deficit on account of Gross Station Heat Rate, Normative Annual Plant Availability Factor, Auxiliary Energy Consumption, Secondary Fuel Oil Consumption, Operation and Maintenance (O&M) expenses) shall be to the account of the Generating Company and shall not be adjusted in tariffs; and

ii. Depreciation, Loan and Return on Equity shall be trued-up every year based on the actual capital expenditure and actual capitalization vis-à-vis capital investment plan (capital expenditure and capitalisation) approved by the Commission.

Provided that any surplus or deficit in Working Capital shall be to the account of the Generating Company and shall not be trued-up in ARR.

Provided further that the Commission shall not true-up interest rate, if variation in State Bank of India Base Rate as on 01.04.2012, is within (+/-) 1% during the Control Period. Any increase / decrease in State Bank of India Base Rate beyond (+/-) 1% only shall be trued-up.

1.29 The Commission has accordingly, trued up the uncontrollable based on the audited accounts and other information submitted by the Petitioner for FY 2014-15 and FY 2015-16 after exercising prudence check. The true up of controllable parameters is governed by Regulation 5.12 of the 'MYT Generation Regulations, 2011' as mentioned above. The detailed treatment of each component of uncontrollable and controllable parameters is provided in Chapter A3 of this Order.

# Approach for FY 2016-17

1.30 The Petitioner has requested for a review of ARR for FY 2016-17. The mechanism for True up as specified in the 'MYT Generation Regulations, 2011' envisages that variations on account of uncontrollable items shall be trued up. Truing up shall be carried out for each year based on actual/audited accounts and prudence checks undertaken by the Commission. Accordingly, the Commission is of the opinion that in accordance with the 'MYT Generation Regulations, 2011' the True up of FY 2016-17 can only be considered based on the audited financial statement once the Petitioner makes a regular tariff Petition for True up of FY 2016-17.



#### Approach for FY 2017-18

- 1.31 The Commission vide notification dated January 31, 2017 issued the Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2017.
- 1.32 Further, the Commission has issued the Delhi Electricity Regulatory Commission Business Plan Regulations, 2017.
- 1.33 The Commission has evaluated the ARR submitted by the Petitioner on the basis of the provisions in Tariff Regulations, 2017 read with Delhi Electricity Regulatory Commission Business Plan Regulations, 2017 and other factors considered appropriate by the Commission.



## A2: RESPONSE FROM STAKEHOLDERS

2.1 Summary of Objections/ suggestions from stakeholders, response of PPCL (Pragati Power Corporation Limited) and Commission's view.

## Introduction

- 2.2 Section 62 of the Electricity Act, 2003 mandates the Commission to determine the Generation tariff after consideration of all suggestions received from the public and the response of the Petitioner to the objections/suggestions of stakeholders, issue a tariff order accepting the applications with such modifications or such conditions as may be specified in the order. Public hearing, being a platform to understand the problems and concerns of various stakeholders, the Commission has encouraged transparent and participative approach in hearings to obtain necessary inputs required for tariff determination. Accordingly public hearing was held on 19<sup>th</sup> July, 2017 in SCOPE Convention Centre, SCOPE Complex, New Delhi.
- 2.3 In the Public Hearing, stakeholders put forth their comments/suggestions before the Commission in the presence of the Petitioner. The Petitioner was given an opportunity to respond to the comments put forth by the stakeholders.
- 2.4 The Commission has examined the issues and concerns voiced by various stakeholders in their written comments as well as in the Public hearing and also the response of the petitioner thereon.
- 2.5 The comments/ suggestions submitted by various stakeholders in response to the petition, the replies/ response given by the Petitioner and the view of the Commission are summarized below under various sub-heads:

# Issue 1: Norms of Operation

# Stakeholders' View

2.6 PPCL in the present Petition cannot rely upon the parameters as set out in CERC (Terms and Conditions of Tariff) Regulations, 2014, ("CERC Regulations, 2014") since this Commission has already notified the DERC (Terms and Conditions for Determination of Tariff) Regulations, 2017 ("DERC Tariff Regulations"). Accordingly, the Petition and the operational parameters claimed in the Petition have to be in line



with the DERC Tariff Regulations, 2017 and therefore the Commission is requested not to consider the submissions of PPCL, which are based upon CERC Tariff Regulations, 2014

2.7 The Petitioner has submitted that its plant cannot achieve the normative operational parameters and therefore the same may be relaxed. In this regard it is submitted that the plant needs to be closed down if it cannot meet the specified norms. The plant cannot be allowed to be a burden on the end consumers who are already reeling under high tariff.

## **Petitioner's Submission**

2.8 In this regard, the petitioner submitted that as per clause 61 of Electricity Act 2003, all State Electricity Regulatory Commissions shall, subject to the provisions of the act, specify the terms and conditions for determinations of tariff, in doing so shall be guided by the following:

(a) the principles and methodologies specified by the Central Commission for determination of the tariff applicable to generating companies and transmission licensees;

- 2.9 The petitioner further submitted that DERC is to necessarily frame its tariff regulation in line with CERC Regulation, 2014 for the generating companies. The petitioner had written various letters showing its inability to compile content of business plan and MYT tariff petition for the period for FY 2016-17 to 2020-21 in absence of business plan & tariff regulation of DERC. Accordingly as per provisions of clause 61(a) of electricity Act 2003, the petitioner had submitted its petition for the period in compliance of DERC order No. F3(390)/Tariff/DERC/2014-15/4596/035 dated 15.02.2016 and related letters.
- 2.10 Further, regarding deteriorated rating of parameters of the stations, it is to submit that due to frequent start and stops on account of erratic scheduling by beneficiaries un-productive fuel and electricity consumption by the plant gets increased. Therefore, PPCL has requested the Commission to account separately the auxiliary consumption for back down part of scheduling for the station.

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

- 2.11 The Commission has trued up the expenses for FY 2014-15 and FY 2015-16 in line with the provisions of Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Generation Tariff) Regulations, 2011.
- 2.12 The Commission has determined the Aggregate Revenue Requirement (ARR) for FY 2017-18 in line with the provisions of Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2017 read with Delhi Electricity Regulatory Commission (Business Plan) Regulations, 2017.

## Issue 2: Variable Cost & Fixed Cost

#### Stakeholders' View

2.13 The Variable Cost has been calculated based on SHR of 2015 kCal/kWh. The Petitioner needs to recalculate the Variable Cost based on the DERC Tariff Regulations, 2017 for FY 16-17.

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

2.14 The variable cost is charged based upon the SHR allowed by the Commission and the fuel cost received for the month for FY 2014-15 and FY 2015-16. The submissions made in the petitions are indicative and in line with DERC regulations, 2011 and as per instruction of DERC through various communications.

## **Commission's View**

2.15 The Commission has specified normative parameters of operation in Delhi Electricity Regulatory Commission (Business Plan) Regulations, 2017 after due deliberations. Accordingly, the Commission has considered the same in determining the Aggregate Revenue Requirement (ARR) for FY 2017-18

## Issue 3: O&M expenses

## Stakeholders' View

2.16 The petitioner has calculated the O&M cost based on the CERC Tariff Regulations, 2014 which is not applicable to the Petitioner's plant. The Petitioner therefore need to recalculate the O&M Cost based on the DERC Tariff Regulations, 2011 for FY 16-



17.

## **Petitioner's Submission**

2.17 As per provisions of clause 61(a) of electricity Act 2003 discussed earlier in detail, the petitioner had submitted its petition for the period in compliance of DERC order No.
 F3 (390)/Tariff/DERC/2014-15/4596/035 dated 15.02.2016 and related letters. Therefore, it is requested to fix the O&M in line with CERC Regulation 2014.

# **Commission's View**

2.18 The Commission has considered the O&M expenses for FY 2017-18 in line with the provisions of Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2017 read with Delhi Electricity Regulatory Commission (Business Plan) Regulations, 2017.

## Issue 4: Return on Equity

# Stakeholders' View

2.19 The Petitioner has considered pre-tax base rate of 15.5% as per CERC Tariff Regulations, 2014 which, as stated hereinabove are not applicable to the Petitioner. In terms of MYT 2011 and DERC Tariff Regulations 2017, the ROE for Generating Entity shall be computed at the Base Rate of 14.00% on post-tax basis. Accordingly, the submission of the Petitioner is liable to be rejected and the Petitioner needs to recalculate the ROE based on the Base Rate of 14.00% on post-tax basis.

# **Petitioner's Submission**

As per provisions of clause 61(a) of electricity Act 2003 discussed earlier in detail, the petitioner had submitted its petition for the period in compliance of DERC order No.
 F3 (390)/Tariff/DERC/2014-15/4596/035 dated 15.02.2016 and related letters. Therefore, the Commission is requested to consider and allow ROE @ 15.5% of base rate as per CERC Regulations, 2014.



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

2.21 The Commission has considered the rate of Return on Equity in line with the provisions of Delhi Electricity Regulatory Commission (Business Plan) Regulations, 2017.

#### Issue 5: CAPEX of PPCL

#### **Stakeholders' View**

- 2.22 The Petitioner needs to provide the details of the CAPEX schemes like reason for capitalization, in terms of DERC Terms and Condition for Determination of Tariff Regulations, 2011 and 2017 under which the schemes have been claimed etc. It is difficult to assess the requirement/viability of the claimed schemes without such details. The Petitioner further needs to provide the de-capitalization details which are required to be excluded from the capital cost of the plant.
- 2.23 The Petitioner has claimed certain items under CAPEX scheme which are actually O&M/minor expenses in nature and therefore should not be allowed to be a part of capital cost

## **Petitioner's Submission**

2.24 The petitioner has already submitted details of Capital Schemes vide letter no. IPGCL/Comml./DERC/F.13/52 dated 20.07.2017

## **Commission's View**

2.25 The Commission has allowed only necessary and approved expenses with regards to Capitalization for PPS-I Station for FY 2014-15 and FY 2015-16

#### **Issue 6: Heat Rate**

## **Stakeholders' View**

2.26 Heat Rate should be lower than the specified norm. As per Commission's Tariff Order dated 29.09.2015, Para 3.12, generator is able to achieve SHR of 1749 kCal/kWh as per manufacturer design. As per petition, Heat rate is 2046 kcal/kWh and 1998 kcal/kWh for FY 15 and FY 16 respectively. As per APTEL judgement in Appeal No. 25 of 2008, PPCL Heat Rate is 1978.08 kCal/kWh. As per clause 7.6 of Delhi Electricity



Regulatory Commission (Terms and conditions for Determination of Generation Tariff) Regulations 2011. The norms specified by the Commission are ceiling norms only and any efficiency on parameters should be adjusted in ARR. Hence, the Commission is ought to consider 1749 kcal/kWh as Station Heat rate for the plant.

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

2.27 As per clause 7.1(2) of MYT Generation Regulation, 2011, the normative heat rate of Power stations for FY 2012-13, FY 2013-14, FY 2014-15 and extended period FY 2015-16 is 2000 kcal/ kWh. The heat rate of 1749 kcal/kWh relates to designed value at NCV of the gas and GCV value computes to 1938.94 kcal/kWh. Further, if same is arrived as per DERC regulation 37(2) of 2011; will be 2035.88 kcal/ kWh. However, the Commission has allowed only 2000 kcal/ kWh. Accordingly the heat rate of 1749 being design value on NCV cannot be taken as operating heat rate for the plant.

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

2.28 The Commission has specified normative parameters of operation for Delhi GENCOs in Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Generation Tariff) Regulations, 2011 and Delhi Electricity Regulatory Commission (Business Plan) Regulations, 2017 after due deliberations. Accordingly, the Commission has considered the same in truing up of FY 2014-15 & FY 2015-16 and in determining the Aggregate Revenue Requirement (ARR) for FY 2017-18.

#### **Issue 7: Auxiliary Power Consumption**

## **Stakeholders' View**

2.29 Auxiliary power Consumption should be as per actual subject to ceiling limit. As per clause 7.6 of Delhi Electricity Regulatory Commission (Terms and conditions) for Determination of Generation Tariff) Regulations, 2011, the norms specified by the Commission are ceiling norms only and any efficiency on parameters should be adjusted in ARR. However, as PPCL failed to install separate meters for Auxiliary consumption (as per Para 3.172 of Tariff order dated 29.09.2015. Therefore, it is



against the norms and should not be passed through and no auxiliary consumption is ought to be allowed in absence of data.

2.30 The Commission vide order dated 29.09.2015 rejected the prayer of the Petitioner to allow lower Aux Consumption in view of no separate arrangement for recording of unit auxiliary transformers. The relevant extract of the said order is reproduced below:

"2.25 During various validation sessions/prudence checks, it was observed by the Commission that there is no separate arrangement for recording of unit auxiliary transformers consumption, as no meters have been provided / installed by PPS-1 for recording the unit auxiliary consumption"

*"2.26 The Commission has not considered any relaxation in norms of operation fixed in DERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2011."* 

PPCL has failed to install separate Aux meter for Aux power consumption contrary to Central Electricity Authority (Installation and Operation of Meters) Regulation, 2006 (as amended on 04.06.2010)("CEA Metering Regulations"). Therefore, it is requested not to consider any relaxation on the Auxiliary Consumption parameter.

# **Petitioner's Submission**

- 2.31 The above referred point of Tariff Order dated 29.09.2015 is not line will MYT Generation Regulation, 2011. Therefore, PPCL has filed Appeal No. 288 of 2015 in APTEL where such issues have been raised by PPCL.
- 2.32 Further, PPCL has provided Ex-bus energy metering provisions as per Central Electricity Authority (Installation and Operation of Meters) Regulation, 2006 (as amended on 04.06.2010 ("CEA Metering Regulations"). However only standby meters are required to install at HT side of all station auxiliary transformers. Clearly the standby meters are not meant for Energy Accounting.
- 2.33 Accordingly, as per CEA Regulation there is no provision for separate accounting of auxiliary power.



## **Commission's View**

2.34 The Commission has specified normative parameters of operation for Delhi GENCOs in Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Generation Tariff) Regulations, 2011 and Delhi Electricity Regulatory Commission (Business Plan) Regulations, 2017 after due deliberations. Accordingly, the Commission has considered the same in truing up of FY 2014-15 & FY 2015-16 and in determining the Aggregate Revenue Requirement (ARR) for FY 2017-18.

## **Issue 8: Plant Availability**

## Stakeholders' View

- 2.35 PPCL has been wrongly declaring the availability of PPS-I Station. In order to optimise the power purchase cost in Delhi, various meetings were held with Delhi SLDC, GNCTD, and DISCOMs and accordingly PPCL has to transfer its gas for PPS-I Station to Bawana (PPCL) station. In view of the same, PPS-I Station cannot declare its plant capacity as the fuel has already been transferred.
- 2.36 It is further noted that in various months PPCL has declared the availability of PPS-I Station more than 100% to manage normative yearly availability more than 85%. Based on R-LNG fuel, PPCL is declaring the capacity and earning huge incentives. Also, it is a well known fact that power from RLNG does not fit in MOD principle due to excessive high cost. Situation like this lead to unduly burden the DISCOMs not only on account of fixed cost and excess incentive, but also high Variable Charges on account of forced scheduling from the Station.

## **Petitioner's Submission**

2.37 In this regard, the petitioner has submitted that it was agreed in various meetings that in case, the cheaper gas is not utilised at PPS-I due to less scheduling, then the same will be diverted to PPS-III Bawana for the larger interest of consumer of Delhi as Bawana is more efficient. It is in correct to say that the gas has been transferred from to PPS-I to PPS-III on permanent basis. PPS-I have declared availability on RLNG up to extent the APM or non APM gas is not available for the station.



2.38 PPCL re-iterates that there is contract for sufficient amount of APM gas. Further as per directions of Ministry of Power, Govt. of India priority and allotment of cheaper Domestic gas i.e APM, NON-APM & PMT has changed accordingly Power sector has been placed to lesser priority as compared to domestic, transport and fertilizer sector requirement. This has been effective for our power plants where from Delhi DISCOMs are scheduling power, these plants also make up with RLNG gas to cope up with short fall in cheaper domestic gas supply. PPS-I is one of the few power plants of higher efficiency in gas turbine category.

## **Commission's View**

2.39 The Commission has specified normative parameters of operation for Delhi GENCOs in Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Generation Tariff) Regulations, 2011 and Delhi Electricity Regulatory Commission (Business Plan) Regulations, 2017 after due deliberations. Accordingly, the Commission has considered the same in truing up of FY 2014-15 & FY 2015-16 and in determining the Aggregate Revenue Requirement (ARR) for FY 2017-18.

#### **Issue 9: Working capital**

#### **Stakeholders' View**

2.40 No working capital is required for PPS-I Station. As per Petitioner, the plant has been utilized only 64% in FY 2015 and 53% in FY 2016. Therefore, working capital is ought to be allowed on actual basis.

## **Petitioner's Submission**

- 2.41 PPCL has claimed Interest on Working capital as per Norms and in line with MYT Generation Regulations, 2011.
- 2.42 BYPL, BRPL and TPDDL are not paying energy bills since long. Therefore PPCL has to borrow short term loans at higher rates. Therefore, thus the claims being done by PPCL in present petition are more than actual rates allowed by the Commission as per DERC regulation, 2011. Moreover, as per clause 6.28 & 6.29 of MYT Generation Regulations, 2011, the interest on working capital is chargeable on normative basis.



## **Commission's View**

- 2.43 The Commission has specified the principles for determination of Working Capital in Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Generation Tariff) Regulations, 2011 and in Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2017.
- 2.44 Accordingly, the Commission has considered the same in truing up of Interest on Working Capital of FY 2014-15 & FY 2015-16 and in determining the Interest on Working Capital for FY 2017-18.

## Issue 10: Audit

# **Stakeholders' View**

- 2.45 Independent third party audit should be conducted to verify the correctness of the cost charged like price of coal/gas, Quantity of coal/gas consumed, gross calorific value of coal/gas in case of PPS-I, so that the end consumers are not heavily burdened.
- 2.46 Third Party agencies like Bureau of Energy Efficiency (BEE) can be appointed to perform such audits on randomly basis across all the stations and the reports should be submitted on monthly basis to the Commission.

# **Petitioner's Submission**

2.47 PPCL has been submitting all the relevant information relating to fuel availability and fuel bills. Further PPCL has also been submitted information as per Form 27 along with copy of bills paid. The details are also available on Petitioner's website for the period as per direction of the Commission on the matter. Thus there is no need for further audit or verification.

# **Commission's View**

2.48 The Commission has trued up the expenses for FY 2014-15 and FY 2015-16 in line with the provisions of Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Generation Tariff) Regulations, 2011.



- 2.49 The Commission has determined the Aggregate Revenue Requirement (ARR) for FY 2017-18 in line with the provisions of Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2017 read with Delhi Electricity Regulatory Commission (Business Plan) Regulations, 2017.
- 2.50 Accordingly, the concern of fuel related expenses has been appropriately dealt with in the relevant sections of this order.



## A3: TRUE UP OF FY 2014-15 AND FY 2015-16

3.1 Regulation 5.8 of MYT Generation Regulations, 2011 specifies the following:

"..... The Commission shall review actual capital expenditure incurred and capitalisation at the end of each year of the Control Period vis-a-vis the approved capital expenditure and capitalisation schedule. The Commission may also revise the capital expenditure and capitalisation for remaining years of the Control Period based on trued up capital expenditure and capitalisation for any year."

3.2 Regulation 5.12 of MYT Generation Regulations, 2011 specifies the following:

"..... Depreciation, Loan and Equity shall be trued up every year based on the actual capital expenditure and actual capitalisation vis-à-vis capital investment plan (capital expenditure and capitalisation) approved by the Commission"

3.3 Therefore, in accordance with MYT Generation Regulations, 2011, the Commission has trued up the Capital Expenditure, Depreciation, Interest on Loans and Return on Equity of the Petitioner for FY 2014-15 & FY 2015-16.

# Norms of Operation

# Availability

# **Petitioner's Submission**

3.4 Actual Availability submitted by the Petitioner is as follows:

SI. No.	Station	UoM	FY 2014-15	FY 2015-16	
1	PPS-I	%	85.62%	90.25%	

## Table 2: Actual Availability submitted by the Petitioner

3.5 The Petitioner has requested the Commission to allow recovery of fixed charges and incentive as per MYT Generation Regulations, 2011.



## **Commission's Analysis**

- 3.6 The Commission in its MYT Generation Regulations, 2011 and MYT Order July, 2012 has approved the availability of 85% for FY 2012-13 to FY 2014-15. Further, the said Regulations were extended for FY 2015-16 vide Commission's Order dated October 22, 2014.
- 3.7 The Commission sought the actual data regarding plant availability for true up of PPS-I for FY 2014-15 and FY 2015-16 from SLDC Delhi vide e-mail dated 08/06/2017 and SLDC has submitted the details vide its e-mail dated 19/06/2017. Accordingly, the Commission has approved the plant availability as submitted by the SLDC for the purpose of truing up of FY 2014-15 and FY 2015-16 as follows:

SI.	Station	UoM		FY 2014-15		FY 2015-16			
No.			MYT	Actual as	Approved	MYT	Actual as	Approved	
			Order	submitted	for True	Order	submitted	for True	
			July 2012	by	Up	July 2012	by	Up	
				Petitioner			Petitioner		
1	PPS-I	%	85.00	85.62	85.62	85.00	90.25	90.25	

#### Table 3: Plant Availability approved by the Commission

# Station Heat Rate (SHR)

# **Petitioner's Submission**

3.8 Actual Heat Rate as submitted by the Petitioner is as follows:

SI. No.	Mode of Operation	UoM	FY 2014-15	FY 2015-16
1	Combined Cycle	kCal/kWh	2046	1998
2	Open Cycle	kCal/kWh	3188	3196

## Table 4: Station Heat Rate as submitted by the Petitioner

3.9 The Petitioner has submitted that the guaranteed heat rate of turbines as given by the manufacturer is 2986 kCal/kWh at 100% PLF. Further, the Petitioner has submitted that CEA has considered the open cycle heat rate of 3075.30 kCal/kWh at



100% PLF in its report on technical standards on operational norms for Gas Turbine stations, 2004.

- 3.10 The Petitioner has further submitted that PPS-I runs on open cycle mode only as and when requisitioned by SLDC, Delhi. It submits that PPS-I always endeavour to run in combined cycle mode but, if operated in open cycle mode, on the request of SLDC, the station may be allowed higher heat rate.
- 3.11 The Petitioner has submitted that there is a direct loss on account of recovery of lesser fuel cost when operated in open cycle mode. This loss in absolute terms is on higher side. It also submits that the backing down and open cycle generation also results in increase in auxiliary consumption.
- 3.12 The petitioner has requested the Commission to approve actual SHR achieved in open and close cycle mode during FY 2014-15 & 2015-16 of current MYT Regulation.

# Commission's Analysis:

3.13 The Commission had approved the Operational Norms for FY 2012-13 to FY 2014-15 in MYT Generation Regulations, 2011 as follows:

"7.1 The values for different operational norms for the existing generating plants have been decided, considering the vintage and current operations of these plants as under:

Pragati Power Corporation Limited (	(PPCL)	
	· · · · /	

Operational Parameters	2012-13	2013-14	2014-15
Normative Annual Plant Availability Factor (%)	85%	85%	85%
Combined Cycle Gross Station Heat Rate (kCal/kWh)	2000	2000	2000
Open Cycle Gross Station Heat Rate (kCal/kWh)	2900	2900	2900
Combined Cycle Auxiliary Consumption (%)	3.0%	3.0%	3.0%
<b>Open Cycle Auxiliary Consumption (%)</b>	1.0%	1.0%	1.0%

"

- 3.14 The Commission vide its Order dated October 22, 2014 had extended the applicability of MYT Generation Regulations, 2011 for FY 2015-16.
- 3.15 Further, the Commission observes that the Petitioner had been able to achieve the actual heat rate of 1998 kCal/kWh in combined cycle mode during FY 2015-16.



3.16 In view of the above, the Commission approves the following SHR for PPS-I for true up of FY 2014-15 and FY 2015-16 as per the approved norms in MYT Generation Regulations, 2011 as follows:

SI.	Station	Mode of	UoM		FY 2014-15			FY 2015-16			
No.		Operation		MYT	Actual as	Approved	MYT	Actual as	Approved		
				Order	submitted	for True	Order	submitted	for True		
				July	by	Up	July	by	Up		
				2012	Petitioner		2012	Petitioner			
		Combined	kCal/	2000	2046	2000	2000	1998	2000		
1		Cycle	kWh								
1	PPS-I	Open	kCal/	2900	3188	2900	2900	3196	2900		
		Cycle	kWh								

#### Table 5: Station Heat Rate as approved by the Commission

# Auxiliary Power Consumption (APC)

## **Petitioner's Submission**

- 3.17 Petitioner has submitted the Auxiliary Power Consumption (%) achieved in combined cycle mode during the control period starting from FY 2014-15 to FY 2015-16. Petitioner has further submitted that it has considered the open cycle auxiliary power consumption of 1%.
- 3.18 Petitioner has submitted that the percentage of backing down and open cycle generation has been rising on year to year basis therefore the auxiliary power consumption achieved during the year gets increased due to unproductive percentage of auxiliary consumption.
- 3.19 Petitioner has requested the Commission to allow the norms of open cycle auxiliary power consumption as 1% and combined cycle auxiliary consumption as 3% in line with DERC Regulation, 2011.

## Table 6: Actual Auxiliary Power Consumption as submitted by the Petitioner

SI. No.	Mode of Operation	UoM	FY 2014-15	FY 2015-16
1	Combined Cycle	%	2.60	2.71
2	Open Cycle	%	1.00	1.00



## **Commission's Analysis:**

- 3.20 It is observed that the Petitioner has claimed auxiliary power consumption of 2.60% and 2.71% in Combined Cycle mode for FY 2014-15 and FY 2015-16 respectively against the target norm of 3%
- 3.21 The Commission had approved the Auxiliary Power Consumption for PPS-I Station as 3% in Combined Cycle Mode and 1% in Open Cycle Mode for FY 2012-13 to FY 2014-15 in MYT Generation Regulations, 2011 which were extended by the Commission for FY 2015-16 vide Order dated October 22, 2014.
- 3.22 Accordingly, the Commission approves the Auxiliary Power Consumption for PPS-I for FY 2014-15 and FY 2015-16 as follows:

SI.	Station	Mode of	UoM		FY 2014-15			FY 2015-16			
No.		Operation		MYT Order July 2012	Actual as submitted by Petitioner	Approved for True Up	MYT Order July 2012	Actual as submitted by Petitioner	Approved for True Up		
1	PPS-I	Combined Cycle	%	3.00	2.60	3.00	3.00	2.71	3.00		
1	FF3-1	Open Cycle	%	1.00	1.00	1.00	1.00	1.00	1.00		

#### Table 7: Auxiliary Power Consumption approved by the Commission

# Energy Charge Rate and Fuel Cost

# **Petitioner's Submission**

3.23 Petitioner has submitted that Pragati Power Station-I has a long-term agreement with Gas Authority of India Limited (GAIL) for supply of Gas. Initially, PPS-I was having an allocation of 1.75 MMSCMD of APM Gas. This gas was sufficient to run both the Gas Turbines on base load. Due to depleting gas reserves of ONGC, GAIL has been imposing cuts on its supply on day to day basis. The present gas allocation on day to day basis is between 1.1 MMSCMD to 1.2 MMSCMD of APM gas and 0.28 MMSCMD of PMT gas. To meet the short fall in the gas supply, fall back agreement has been signed with GAIL for supply of spot R-LNG gas on take and pay basis. Recently, MoP&NG has allocated 0.02 MMSCMD non-APM ONGC gas whose supply has been commenced from mid October, 2011.



3.24 The Consumption of APM Gas, PMT Gas, R-LNG gas and Spot- Gas during the control period from FY 2014-15 to FY 2015-16 submitted by the Petitioner is as follows:

SI. No.	Particulars	UoM	FY 2014-15	FY 2015-16
1	APM Gas	MMSCM	258.446	208.176
2	PMT Gas	MMSCM	27.303	29.631
3	R-LNG Gas	MMSCM	102.618	69.334
4	NAPM Gas	MMSCM	3.428	3.362
5	SPOT Gas	MMSCM	-	11.928
6	Total Gas Consumption	MMSCM	391.796	322.433

- 3.25 Petitioner has also submitted that the prices of APM gas and PMT gas are determined by Group of Ministers, GOI whereas Spot price of RLNG is driven by market dynamics in the LNG market worldwide. The key pricing determinants will be the movement in Henry-Hub prices and crude oil prices.
- 3.26 Petitioner has submitted the Fuel Cost for FY 2014-15 & FY 2015-16 as follows:

SI. No.	Particulars	UoM	FY 2014-15	FY 2015-16
1	Total Gas Consumption	MMSCM	391.797	322.43
2	Average Gas Price	Rs/SCM	19.027	17.999
3	Total Gas Cost	Rs Cr	745.46	580.36
4	Net Generation	MU	1799.245	1497.798
5	Variable Cost – CC	Rs/kWh	4.14	3.87

Table 9: Variable cost for FY 2014-15 as submitted by the Petitioner

# **Commission Analysis:**

3.27 As per MYT Generation Regulations, 2011 any financial loss / gain on account of under / over-performance on targets for controllable parameters shall not be trued up. The relevant extract is as follows:

*"5.10 The Commission shall set targets for each year of the Control Period for the items or parameters that are deemed to be "controllable" and which includes:* 

- (a) Gross Station Heat Rate;
- (b) Normative Annual Plant Availability Factor;


(c) Auxiliary Energy Consumption;

(d) Secondary Fuel Oil Consumption;

(e) Operation and Maintenance Expenses;

(f) Financing Cost which includes cost of debt (interest), cost of equity (return); and

(g) Depreciation.

5.11 Any financial loss on account of underperformance on targets for parameters specified in Clause 5.10 (a) to (e) is not recoverable through tariffs. Similarly, any financial gain on account of over-performance with respect to these parameters is to the generating company's benefit and shall not be adjusted in tariffs."

3.28 Further, the Commission vide its e-mail dated 14/06/2017 has sought the authenticity of energy charge rate billed by PPS-I from the beneficiary DISCOMs. It is observed that no beneficiary has objected the computation of energy charge rate billed by PPS-I during FY 2014-15 and FY 2015-16. Accordingly, the Commission has not considered true up of fuel cost for FY 2014-15 and FY 2015-16.

#### **Fixed Cost**

#### **Operation & Maintenance Expenses**

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

- 3.29 Petitioner has submitted that Pragati Power Station-I is sourcing plant water requirement from the treated effluent water from sewage treatment plants and has to incur more cost to get raw water, as compared to other similar stations being operated elsewhere in the country, drawing water from river and paying nominal water cess. PPS-I has taken over the operation of the sewage water treatment plants from Delhi Jal Board for treating the sewerage water from Delhi Gate Nala and Sen Nursing Home Nala. The actual expenditure on this account of above for FY 14-15 & 15-16 includes expenditure on operation, electricity, Chemicals etc.
- 3.30 Petitioner has submitted that these plants were commissioned by Delhi Jal Board, after handing over to these plants to petitioner, are being operated round the clock to supply uninterrupted raw water to PPS 1. Operation and Maintenance of the Plant is entrusted to originally equipment manufacturer M/s. Degremont on year to year on



contract basis. Being in operation for more than 15 years some of the major equipments required replacement / extensive maintenance to ensure continuous smooth operation of plant.

- 3.31 Petitioner has submitted that it has installed DLN Burner at PPS-I to control the NOx level. The Commission has allowed Rs.15 Crore additional R&M expenses every year during the Control period FY 2012-13, 2013-14 & 2014-15. Petitioner has submitted that repair and maintenance expenditure including expenditure on DLN burners has varied significantly during the period on year to year basis only due to reasons that schedule of overhauling of Gas Turbine and DLN Burners are cyclic in nature. Therefore, Commission while allowing expenditure on account of DLN Burners previously have smoothen the allowed charges to reduce the impact in a single year in which the expenditure is actually incurred. The expenditure on account of expenditure on DLN Burner was Rs. 34.1 Cr. during the year 2012-13, 2013-14 and 2014-15. The expenditure on account of DLN burner and critical components of Gas Turbine for FY 2015-16 has been Rs.65.5 Cr. Commission is accordingly requested to allow expenditure on account of DLN Burners as requested and given in the respective table.
- 3.32 Actual O&M Expenses submitted by the Petitioner is as follows:

	•		1	
SI. No.	Description	UoM	FY 2014-15	FY 2015-16
1	Repairs and Maintenance (R&M)	Rs Cr	33.84	15.56
2	Employee Expenses	Rs Cr	19.89	21.50
3	Administrative and General Expenses	Rs Cr	11.21	10.80
4	O&M Expenses	Rs Cr	64.94	47.86
5	Special R&M Expenses (DLN AGP)	Rs Cr	0	65.55
6	STP	Rs Cr	0	3.35
7	Total O&M Expenses	Rs Cr	64.94	116.76

#### **Commission Analysis**



3.33 As per Regulations 5.10 and 5.11 of the MYT Generation Regulations, 2011, O&M Expenses are controllable parameters and any financial gain or loss on account of over achievement / under performance is on the account of the generating company and is not recoverable / adjusted through the tariff. Relevant extract from the MYT Generation Regulations 2011 is as follows:

"5.10 The Commission shall set targets for each year of the Control Period for the items or parameters that are deemed to be "controllable" and which includes:

- (a) Gross Station Heat Rate;
- (b) Normative Annual Plant Availability Factor;
- (c) Auxiliary Energy Consumption;
- (d) Secondary Fuel Oil Consumption;
- (e) Operation and Maintenance Expenses;

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5.11 Any financial loss on account of underperformance on targets for parameters specified in Clause 5.10 (a) to (e) is not recoverable through tariffs. Similarly, any financial gain on account of over-performance with respect to these parameters is to the generating company's benefit and shall not be adjusted in tariffs."

- 3.34 It is observed that the Petitioner has requested for additional R&M Expenses of Rs 65.55 Cr under the head of DLN Burner (Advanced Gas Path) and Rs 3.35 Cr against Sewage Treatment Plant (STP) for FY 2015-16. During the validation session/prudence check the Petitioner was directed to submit the purchase orders/payment vouchers on account of expenses against Advance Gas Path components and STP.
- 3.35 The Petitioner submitted the required documents and on the scrutiny of the same, it was observed that the activity of DLN Burner (Advanced Gas Path) is cyclic in nature which is for four years starting from FY 2015-16. Accordingly, the Commission has divided the expenses against DLN Burner (Advanced Gas Path) in to four years starting from FY 2015-16 and considered Rs 16.12 Cr for FY 2015-16. Regarding STP Expenses, the Commission has considered Rs 3.35 Cr against STP Expenses after verifying the documents submitted by the Petitioner.
- 3.36 In view of the above, the O&M Expenses approved by the Commission are as follows:



SI.	Particulars	UoM		FY 2014-15		FY 2015-16			
No.			MYT Order July 2012	Actual as submitted by Petitioner	Approved for true up	Tariff Order Sept. 2015	Actual as submitted by Petitioner	Approved for true up	
А	Employee Expenses	Rs Cr	28.75	19.89	28.75	31.05	21.50	31.05	
В	A&G Expenses	Rs Cr	17.44	11.21	17.44	18.84	10.80	18.84	
С	R&M Expenses	Rs Cr	13.31	33.84	13.31	13.39	15.56	13.39	
D	Base O&M	Rs Cr	59.50	64.94	59.50	63.28	47.86	63.28	
E	Special R&M on DLN Burner (AGP)	Rs Cr	15.00	0.00	0.00	15.00	65.55	16.12	
F	STP	Rs Cr	3.81	0.00	0.00	3.81	3.35	3.35	
G	Total O&M Expenses	Rs Cr	78.31	64.94	59.50	82.09	116.76	82.75	

Table 11: O&M Expenses as Approved by the Commission

## **Capital Expenditure**

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

- 3.37 Petitioner has submitted that the Commission has approved the Opening Gross Fixed Asset of Rs. 1031.57 Crores of FY 2007-08 and accorded in-principle approval for implementation of Enterprise Resource Planning system in the company. The share of cost of ERP implementation in PPS-I was Rs. 2.48 Crore in FY 2009-10. Beside ERP, certain other capital additions were made during the control period of previous MYT and in year 2012-13, 2013-14, 2014-15 & 2015-16 of current MYT.
- 3.38 The capitalization submitted by the Petitioner during FY 2014-15 and FY 2015-16 is as follows:

SI.	Particulars	UoM	FY 2014-15	FY 2015-16							
No.											
1	Opening GFA	Rs Cr	1038.31	1048.28							
2	Addition	Rs Cr	10.813	6.99							
3	Deletion	Rs Cr	0.839	0.9							
4	Closing GFA	Rs Cr	1048.28	1054.37							

Table 12: Capitalization submitted by the Petitioner

**Commission's Analysis** 



3.39 The Commission had sought the details of capitalisation and de-capitalisation during FY 2014-15 and FY 2015-16 from the Petitioner. Capitalisation approved for FY 2014-15 and FY 2015-16 based on the prudence check and subsequent plant visit by officials of the Commission is as follows:

SI. No.	Particulars	UoM	FY 201	.4-15	FY 2015-16			
NO.				Approved for True up	Petitioner Submission	Approved for True up		
A	Opening GFA	Rs Cr	1038.31	1038.31	1048.28	1045.65		
В	Addition	Rs Cr	10.81	8.18	6.99	5.64		
С	Deletion	Rs Cr	0.84	0.84	0.9	0.91		
D	Closing GFA	Rs Cr	1048.28	1045.65	1054.37	1050.38		

#### Table 13: Capitalization as approved by the Commission

## Depreciation

## **Petitioner's Submission**

3.40 The Depreciation amount for FY 2014-15 and FY 2015-16 submitted by the petitioner is as follows:

SI. No.	Station	UoM	FY 2014-15	FY 2015-16	
1	PPS-I	Rs Cr	56.06	57.10	

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

3.41 Regulations 6.30-6.34 of the MYT Generation Regulations, 2011 specify the methodology for calculation of depreciation for a generation company during the Control Period as follows:

"6.30 Depreciation shall be calculated for each year of the Control Period, on the amount of Capital Cost of the Fixed Assets as admitted by the Commission; Provided that depreciation shall not be allowed on assets funded by any capital subsidy / grant.



6.31 Depreciation for each year of the Control Period shall be determined based on the methodology as specified in these Regulations along with the rates and other terms specified in Appendix-I of these Regulations.

6.32 Depreciation shall be calculated annually, based on the straight line method, over the useful life of the asset. The base value for the purpose of depreciation shall be capital cost of the asset as admitted by the Commission. Provided that, the remaining depreciable value as on 31st March of the year closing after a period of 12 years from the date of commercial operation shall be spread over the balance useful life of the assets.

6.33 In case of the existing Projects, the balance depreciable value as on 1.4.2012 shall be worked out by deducting the cumulative depreciation including Advance Against Depreciation as admitted by the Commission up to 31.3.2012 from the gross depreciable value of the assets. The rate of depreciation shall be continued to be charged at the rate specified in Appendix-I till cumulative depreciation reaches 70%. Thereafter the remaining depreciable value shall be spread over the remaining life of the asset such that the maximum depreciation does not exceed 90%.

6.34 The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to a maximum of 90% of the capital cost of the asset. Land is not a depreciable asset and its cost shall be excluded while computing 90% of the original cost of the asset. In the event of Renovation and Modernization expenditure affecting the life of the asset, the depreciation shall be allowed up to a maximum of 90% of the cost of the asset within the enhanced life span of the asset".

- 3.42 It is observed that the Accumulated Depreciation at the closing of FY 2014-15 has reached in excess of 70% of the total depreciation to be allowed. Accordingly, the Commission has spread the remaining depreciable value over the remaining life of the asset and has computed depreciation for FY 2015-16.
- 3.43 The Depreciation approved by the Commission for true up for FY 2014-15 and FY 2015-16 is as follows:

Table 15: Depreciation approved by the Commission



## Pragati Power Corporation Limited

#### **TARIFF ORDER FOR FY 2017-18**

SI.	Particulars	UoM	FY 2014-15 FY 2015-16				Ref.		
No.			Tariff Order	Petitioner's Submission	Approved for True Up	Tariff Order	Petitioner's Submission	Approved for True Up	
А	Opening GFA	Rs. Cr.	1033.52	1038.31	1038.31	1033.52	1048.28	1045.65	Table 13
В	Additions	Rs. Cr.	0	10.81	8.18	0.00	6.99	5.64	Table 13
C	Deletions	Rs. Cr.	0	0.84	0.84	0.00	0.9	0.91	Table 13
D	Closing GFA	Rs. Cr.	1033.52	1048.28	1045.65	1033.52	1054.37	1050.38	Table 13
E	Average GFA	Rs. Cr.	1033.52	1043.30	1041.98	1033.52	1051.33	1048.02	(A+D)/2
F	Depreciation Rate (%)	%			5.38%			1.28%	(G/E)x100
G	Depreciation	Rs. Cr.	52.97	56.06	56.06	16.13	57.10	13.46	Para 3.42
н	Opening Accumulated depreciation	Rs. Cr.			712.24			768.30	Tariff Order
I	Closing Accumulated depreciation	Rs. Cr.			768.30			781.75	G+H
J	Average Accumulated depreciation	Rs. Cr.			740.27			775.03	(H+I)/2

#### Interest on Loan

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

- 3.44 The Petitioner has submitted that PPS-I had taken a loan of Rs. 675.3 Crore from Power Finance Corporation Ltd. to fund the project. The loan was repayable over a period of 10 years and the interest rate on the loan varies from 6.25% to 12 % depending on the period of disbursement. The loan has been paid in FY 2013-14.
- 3.45 Further the petitioner has submitted that certain capital addition has been made in PPS-I during the Control period FY 14-15 & 15-16. The same has been funded through Reserve and surplus. As per Regulations, 70% of the capital additions have been considered to be funded through Loans. Accordingly, interest on this loan has been taken @ 11.65%.
- 3.46 Petitioner has submitted the Interest Charges for capital expenditure during FY 14-15& 15-16 has been shown in Table below. Petitioner has requested the Commission to approve the Interest and finance charges on capital additions as given below.

3.47 The Interest on Loan submitted by the Petitioner for FY 2014-15 and FY 2015-16 is as follows:

SI. No.	Station	UoM	FY 2014-15	FY 2015-16
1	PPS-I	Rs Cr	1.52	2.07

#### Table 16: Interest on loan submitted by the Petitioner

## **Commission Analysis**

3.48 Regulation 6.1 of MYT Generation Regulations, 2011 deals with financing of the capital cost in Debt Equity ratio allowed for Generation Business and the relevant extract is as follows:

# "6.1 Capital cost for a Project shall include:

- (a) the expenditure incurred or projected to be incurred, including interest during construction and financing charges, any gain or loss on account of foreign exchange risk variation during construction on the loan (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed, up to the date of commercial operation of the project, as admitted by the Commission, as admitted by the Commission after prudence check shall form the basis for determination of tariff;"
- 3.49 Regulation 5.12 of MYT Generation Regulations, 2011 deals with interest on Loan as follows:

*"5.12 Depreciation, Loan and Equity shall be trued up every year based on the actual capital expenditure and actual capitalisation vis-à-vis capital investment plan (capital expenditure and capitalisation) approved by the Commission:* 

Provided that any surplus or deficit in Working Capital shall be to the account of the generating company and shall not be trued up in ARR;

Provided further that the Commission shall not true up the interest rate, if variation in State Bank of India Base Rate as on April 1, 2012, is within +/- 1% during the Control Period. Any increase / decrease in State Bank of India Base Rate beyond +/-



1% only shall be trued up."

- 3.50 It is observed that the State Bank of India base rate did not vary more than +/- 1%, as the same was 10% on 01.04.2012, 01.04.2014 and 01.04.2015. Therefore, the Commission has not trued up the Rate of Interest on Loan.
- 3.51 Accordingly, the Commission has computed the quantum of Loan and Equity required for funding of Net Fixed Asset (NFA) for FY 2014-15 and FY 2015-16 as follows:

SI.	Particulars	UoM	FY 2014-15		FY 20	Ref.	
No.			Petitioner	Approved for	Petitioner	Approved for	
			Submission	True Up	Submission	True Up	
А	Opening GFA	Rs Cr	1038.31	1038.31	1048.28	1045.65	Table 13
	Opening	Rs Cr		712.24		768.30	
В	Accumulated						Table 15
	Depreciation						
с	Opening	Rs Cr		326.07		277.35	
C	NFA						A-B
	Opening	Rs Cr		325.21		327.41	Tariff
D	Balance						Order
	Equity						Order
	Opening	Rs Cr		0.86		0	
Е	Loan						C-D
	Requirement						
F	Closing loan	Rs Cr		0		0	
6	Average	Rs Cr		0.43		0	( / 2
G	Loan						(E+F)/2
н	Interest Rate	%		6.87%		11.00%	Tariff
П	(%)						Order
	Interest on	Rs Cr		0.03		0	GxH
I	Loan						UЛП

# Table 17: Requirement of Loan approved by the Commission (Rs Cr)

- 3.52 It is observed that the Petitioner has done Capital Expenditure during FY 2014-15 and FY 2015-16. However, the requirement of funding of the same from Loan is covered by the amount of respective depreciation allowed in FY 2014-15 and FY 2015-16.
- 3.53 The quantum of loan required for funding of capital asset has been dealt in regulation6.13 and 6.17 of MYT Generation Regulations, 2011 as follows:



"6.13 Any expenditure incurred or projected to be incurred and admitted by the Commission after prudence check based on the estimates of renovation and modernization expenditure and life extension, and after deducting the accumulated depreciation already recovered from the original project cost, shall form the basis for determination of tariff.

6.17 The loan repayment for each year of the Control Period 2012-15 shall be deemed to be equal to the depreciation allowed for that year."

3.54 It is observed from conjoint reading of the above provisions and the above table that there is no loan required for funding of Capital Asset for FY 2015-16 as Accumulated Depreciation has already exceeded 70% of the value of Gross Fixed Asset and the remaining written down value of GFA is considered as funding through Equity only as per the provisions of MYT Generation Regulations, 2011. Therefore, the Commission has not considered Interest on Loan for FY 2015-16.

## Return on Equity (ROE)

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

- 3.55 Petitioner has submitted that it has computed return on equity on approved equity of Rs. 331.71 Cr of the project and the 30% equivalent amount of the capital additions made during the Control period.
- 3.56 The details of Return on Equity submitted by the Petitioner are as follows:

 Table 18: Return on Equity submitted by the Petitioner

SI.				
No.	Particulars	UoM	FY 2014-15	FY 2015-16
1	Equity (Opening Balance)	Rs Cr	325.21	328.20
2	Additions during the year	Rs Cr	2.99	1.83
3	Equity (Closing Balance)	Rs Cr	328.20	330.03
4	Average Equity	Rs Cr	326.71	329.12
5	Gross up Rate of Return on Equity	%	17.71%	17.71%
6	Return on Equity	Rs Cr	57.87	58.29



- 3.57 Regulation 6.36 of the MYT Generation Regulations, 2011 specifies Return on Equity as follows:
  - "6.36 Return on equity shall be computed on the equity determined in accordance with clauses 6.6 - 6.10 of these Regulations and shall be 14% (post tax); Provided that return on equity invested in work in progress shall be allowed from the Date of Commercial Operation."
- 3.58 Return on Equity inclusive of Income Tax allowed for true up for FY 2014-15 and FY 2015-16 in accordance with the provisions of MYT Generation Regulations, 2011 is as follows:

SI.	Particulars	UoM		FY 2014-15			Ref.		
No.			Tariff Order	Petitioner's Submission	Approved for True Up	Tariff Order	Petitioner's Submission	Approved for True Up	
A	Opening Equity	Rs Cr	323.78	325.21	325.21	325.21	328.20	327.41	Tariff Order
В	Additions	Rs Cr	0.00	3.24	2.45	2.07	2.10	1.69	Table 13
С	Deletions	Rs Cr	0.00	0.25	0.25	0.00	0.27	0.27	Table 13
D	Closing Equity	Rs Cr	323.78	328.45	327.41	327.28	330.30	328.83	A+B-C
E	Average Equity	Rs Cr	323.78	326.83	326.31	326.25	329.25	328.12	(A+D)/2
F	Base Rate of return on equity (%)	%	14.00%	15.50%	14.00%	14.00%	15.50%	14.00%	Tariff Order
G	Income Tax Rate (%)	%		20.96%	20.96%		20.96%	20.96%	
Н	Effective Rate of Return on Equity (%)	%		17.71%	17.71%		17.71%	17.71%	F/(100-G)
I	Effective Return on Equity	Rs Cr		57.87	57.80		58.28	58.12	ExH

Table 19: Return on Equity as approved by the Commission

# Interest on Working Capital (IoWC)

Petitioner's Submission



- 3.59 Petitioner has submitted that while submitting tariff petition for FY 2014-15 & 2015-16 the petitioner had taken values of per unit cost of fuel for the month of October, November & December. However, as per clause 6.27 of the MYT Generation Regulations, 2011, the fuel cost for arriving tariff for a financial year is to be 3 months prior to date of applicable tariff i.e. for the tariff applicable from 1st April of the financial year the fuel cost is to be considered for the month of January, February, and March of the respective year.
- 3.60 The relevant contents of the said clause is reproduced as under;

"6.27 The cost of fuel in cases covered under Sub-clauses (a) and (b) of clause 6.25 and 6.26 of these Regulations shall be based on 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 and no fuel price escalation shall be provided during the control period."

3.61 Accordingly, the Petitioner has submitted the Interest on Working Capital for FY 2014-15 and FY 2015-16 as follows:

SI. No	Particulars	Unit	2014-15	2015-16
1	Fuel expenses for 1 month	Rs Cr	44.80	64.21
2	Liquid fuel stock for ½ month	Rs Cr	0	0
3	Maintenance spares @ 30% of O&M	Rs Cr	23.50	24.63
4	O&M expenses for 1 month	Rs Cr	6.53	6.84
5	Receivables equivalent to 2 months of capacity and energy charge	Rs Cr	125.12	159.92
6	Total Working Capital	Rs Cr	199.95	255.60
7	Rate of Interest	%	13.50%	13.50%
8	Interest on Working Capital	Rs Cr	26.99	34.51

Table 20: Interest on working capital as submitted by the Petitioner

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

3.62 Regarding True up of Interest on Working Capital, Regulation 5.12 of MYT Generation Regulations 2011 specifies the following:



*"5.12 Depreciation, Loan and Equity shall be trued up every year based on the actual capital expenditure and actual capitalisation vis-à-vis capital investment plan (capital expenditure and capitalisation) approved by the Commission:* 

Provided that any surplus or deficit in Working Capital shall be to the account of the generating company and shall not be trued up in ARR;

Provided further that the Commission shall not true up the interest rate, if variation in State Bank of India Base Rate as on April 1, 2012, is within +/- 1% during the Control Period. Any increase / decrease in State Bank of India Base Rate beyond +/-1% only shall be trued up."

3.63 Accordingly, the Commission has not trued up the quantum of Working Capital. The State Bank of India base rate did not vary more than (+/-) 1%, as the same was 10% on 01.04.2012, 01.04.2014 and 01.04.2015. Therefore, the Commission has not trued up the Interest on Working Capital and thus approves the normative Interest on Working Capital for FY 2014-15 and FY 2015-16 as follows:

SI.	Particulars	UoM	FY 2014-15			FY 2015-16			
No.			Tariff Order	Actual as submitted by Petitioner	Approved for True Up	Tariff Order	Actual as submitted by Petitioner	Approved for True Up	
A	Interest on Working Capital	Rs Cr	26.99	26.99	26.99	34.51	34.51	34.51	

 Table 21: Interest on Working Capital approved by the Commission

#### **Summary of Fixed Cost**

#### Petitioner's Submission

3.64 The Petitioner has submitted the fixed cost of PPS-I Station as follows:

Table 22: Fixed C	Cost submitted	by the Petitioner
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SI. No.	Particulars	UoM	FY 2014-15	FY 2015-16
1	O&M Expenses	Rs Cr	64.94	47.86
2	Depreciation	Rs Cr	56.06	57.10
3	Interest Charges	Rs Cr	1.55	2.12

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SI. No.	Particulars	UoM	FY 2014-15	FY 2015-16
4	Return on Equity	Rs Cr	57.87	58.28
5	Interest on Working Capital	Rs Cr	26.99	34.51
6	Sp. R&M on account of DLN (AGP)	Rs Cr	-	65.55
7	STP	Rs Cr	-	3.35
8	Total Fixed Cost	Rs Cr	219.54	281.60
9	Net Generation (MU)	MU	1799.25	1797.80
10	Fixed Cost (Rs/ kWh)	Rs/ kWh	1.22	1.88

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

- 3.65 The Commission analyzed all the components of fixed cost submitted by the Petitioner in detail to determine the applicable fixed cost for each year of the Control Period. As per the MYT Generation Regulations 2011, the fixed cost of a generating station eligible for recovery through capacity charge shall include the following elements:
  - a) Operation & Maintenance Expenses
  - b) Depreciation
  - c) Interest on loans
  - d) Cost of secondary fuel oil (for coal based stations only)
  - e) Interest on Working Capital
  - f) Return on Equity
  - g) Income Tax
  - h) Special allowance in lieu of R&M or separate compensation allowance, wherever applicable
- 3.66 The Commission had approved the Operational Norms for FY 2012-13 to FY 2014-15 in MYT Generation Regulations, 2011 as follows:

"7.1 The values for different operational norms for the existing generating plants have been decided, considering the vintage and current operations of these plants as under:

Pragati Power Corporation Limited (PPCL)

Operational Parameters	2012-13	2013-14	2014-15
Normative Annual Plant Availability Factor (%)	85%	85%	85%
Combined Cycle Gross Station Heat Rate	2000	2000	2000



(kCal/kWh)			
Open Cycle Gross Station Heat Rate (kCal/kWh)	2900	2900	2900
Combined Cycle Auxiliary Consumption (%)	3.0%	3.0%	3.0%
Open Cycle Auxiliary Consumption (%)	1.0%	1.0%	1.0%

"

- 3.67 The Commission vide its Order dated October 22, 2014 had extended the applicability of MYT Generation Regulations, 2011 for FY 2015-16.
- 3.68 The Commission sought the actual data regarding Net Generation for true up of PPS-I for FY 2014-15 and FY 2015-16 from SLDC Delhi vide e-mail dated 08/06/2017 and SLDC has submitted the details vide its e-mail dated 19/06/2017. Accordingly, the Commission has considered the Net Generation as submitted by SLDC for the purpose of truing up of FY 2014-15 and FY 2015-16.
- 3.69 Based on the analysis of various components by the Commission, the Annual Fixed Cost for FY 2014-15 and FY 2015-16 as follows:

SI. Particulars UoM F		FY 2014-15			FY 2015-16		Ref.		
No.			MYT July 2012	Actual as submitted by Petitioner	Trued up	Tariff Order Sept. 2015	Actual as submitted by Petitioner	Trued up	
A	O&M Expenses (incl. DLN (AGP) and STP)	Rs. Cr.	78.32	64.94	59.50	82.09	116.76	82.75	Table 11
В	Depreciation	Rs. Cr.	52.97	56.06	56.06	16.13	57.10	13.46	Table 15
С	Interest Charges	Rs. Cr.	0.47	1.55	0.03	1.08	2.12	0	Table 17
D	Return on Equity (incl. income tax)	Rs. Cr.	54.40	57.87	57.80	55.24	58.28	58.12	Table 19
E	Interest on Working Capital	Rs. Cr.	26.99	26.99	26.99	34.51	34.51	34.51	Table 21

 Table 23: Annual Fixed Cost approved by the Commission

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SI.	Particulars	UoM		FY 2014-15			FY 2015-16		Ref.
No.			MYT July 2012	Actual as submitted by Petitioner	Trued up	Tariff Order Sept. 2015	Actual as submitted by Petitioner	Trued up	
F	Total Annual Fixed Cost	Rs. Cr.	213.15	219.54	200.38	189.05	281.60	188.83	A+B+C+D +E
G	AFC as per achieved Availability	Rs. Cr.	214.69		201.84	200.73		200.50	
н	Net Generation	MU	-	1799.25	1799.24	-	1497.80	1497.80	Para 3.68
Ι	Fixed Cost	Rs/ kWh	-	1.22	1.122	-	1.88	1.339	(G/H)x10

# **Revenue Surplus/ (Gap)**

3.70 The Revenue Surplus/ (Gap) on account of Annual Fixed Charges for FY 2014-15 & FY 2015-16 as approved by the Commission after the truing-up of all expenses is as follows:

SI. No.	Particulars	UoM	FY 2014-15	FY 2015-16	FY 2016-17	Ref.
Α	Opening Surplus/ (Gap)	Rs Cr	0.00	13.59	15.40	
В	Addition Surplus/ (Gap)	Rs Cr	12.85	0.23	0.00	Table 23
С	Interest Rate	%	11.50%	11.50%	11.50%	Tariff Order
D	Carrying Cost	Rs Cr	0.74	1.58	1.77	BxC
E	Closing Surplus/ (Gap)	Rs Cr	13.59	15.40	17.18	A+B+D

Table 24: Revenue Surplus/ (Gap) approved by the Commission

3.71 The Commission accordingly directs the Petitioner to refund the surplus amount (including carrying cost) of Rs 17.18 Cr to the respective beneficiaries in three equal monthly instalments starting from October, 2017.



#### A4: ANALYSIS OF AGGREGATE REVENUE REQUIREMENT (ARR) FOR FY 2017-18

#### Norms of Operation

4.1 The Commission has specified the norms of operation, for the purpose of determination of tariff in Business Plans Regulations, 2017. The Petitioner has made submissions for relaxation of certain operational norms. The submissions made by the Petitioner in this regard and the Commission's view on the same have been discussed in the following sections.

## Plant Availability and Plant Load Factor

#### Petitioner's Submission

- 4.2 The Petitioner has submitted that though it will make all efforts to achieve the target availability of 85% as fixed by the Commission in the MYT Regulations 2011 during the Control Period, it has requested the Commission that in case where it is unable to achieve the target availability due to reasons beyond its control, the Commission may relax the normative target availability during the Control Period.
- 4.3 The Petitioner has proposed plant availability for FY 2017-18 as follows:

#### Table 25: Plant Availability submitted by the Petitioner

SI. No.	Particulars	UoM	FY 2017-18
1	Plant Availability	%	85%

# **Commission's Analysis**

4.4 The Commission has specified the Normative Annual Plant Availability Factor (NAPAF) and Normative Annual Plant Load Factor (NAPLF) in Business Plan Regulations, 2017 and relevant extract is as follows:

*"8. NORMS OF OPERATION FOR GENERATING STATIONS:* 

(1) Normative Annual Plant Availability Factor and Normative Annual Plant Load Factor for existing generating stations of Delhi shall be as follows:

I. Normative Annual Plant Availability Factor (NAPAF): 85%

II. Normative Annual Plant Load Factor (NAPLF): 85%"



4.5 In view of the above, the Commission has considered Plant Availability and Plant LoadFactor as approved in Business Plan Regulations, 2017.

#### **Station Heat Rate**

#### Petitioner's Submission

- 4.6 The Petitioner has submitted that the actual Station Heat Rate in open cycle mode has been varying in the range from 3121-3213 kCal/kWh during the period FY 2012-13 to 2015-16. The manufacturer guaranteed heat rate is 2986 kCal/kWh at 100% PLF. It is further submitted that CEA has also considered the open cycle heat rate as 307x5.3 kcal/kwh at 100% PLF.
- 4.7 The Petitioner has further submitted that the station runs in open cycle mode only as and when requisitioned by SLDC, Delhi. The backing down and open cycle generation has been substantially high. The back down during FY 2012-13, 2013-14 and 2015-16 has been 4.11%, 7.86%, 21.70% & 39.03 % respectively. Thus the open cycle generation has also steep rising trend.
- 4.8 The Petitioner has further submitted that there is a direct loss on account of recovery of lesser fuel cost when operated in open cycle mode. This loss in absolute terms is on higher side. The Station always endeavour to run in combined cycle mode but, if operated in open cycle mode, on the request of SLDC, the station may be allowed higher heat rate of 3132 kCal/kWh. The backing down and open cycle generation also results in increase in auxiliary consumption
- 4.9 The Petitioner has proposed Station Heat Rate for FY 2017-18 as follows:

 Table 26: Proposed SHR submitted by the Petitioner

Sr. No.	Particulars	UoM	FY 2017-18
1	Station Heat Rate (Combined Cycle)	kCal/ kWh	2015
2	Station Heat rate (Open Cycle)	kCal/ kWh	3132

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

4.10 The Commission has specified the Station Heat Rate (SHR) for existing generating stations of Delhi in Business Plan Regulations, 2017 and relevant extract is as follows :

# "8. NORMS OF OPERATION FOR GENERATING STATIONS:



....

# (2) GROSS STATION HEAT RATE (GHR)

Gross Station Heat Rate for existing generating stations of Delhi shall be as follows:

Sr.	Generating Station	Combined Cycle	Open Cycle
		(kCal/ kWh)	
1	Gas Turbine Power Station (GTPS)	2100	3045
2	Pragati Power Station I (PPS-I)20002900		2900
"	• •		

4.11 In view of the above, the Commission has considered Station Heat Rate as approved in Business Plan Regulations, 2017.

## **Auxiliary Power Consumption**

## **Petitioner's Submission**

- 4.12 The Petitioner has submitted that the percentage of backing down and open cycle generation has been rising on year to year basis therefore the auxiliary power consumption achieved during previous year may get increased due to unproductive percentage of auxiliary consumption.
- 4.13 The Petitioner has proposed Auxiliary Power Consumption for FY 2017-18 as follows:

Sr. No.	Particulars	UoM	FY 2017-18
1	Auxiliary power consumption in CC mode	%	3.0%
2	Auxiliary power consumption in OC mode	%	1.0%

Table 27: Auxiliary Power Consumption submitted by the Petitioner

#### Commission's Analysis

4.14 The Commission has specified the Auxiliary Energy Consumption for existing generating stations of Delhi in Business Plan Regulations, 2017 as follows:

"8. NORMS OF OPERATION FOR GENERATING STATIONS:

•••



•••

#### (3) AUXILIARY ENERGY CONSUMPTION

Auxiliary Energy Consumption shall be computed in two parts:

a) Fixed: 0.5% of the generation at normative PLF of the plant capacity which shall form part of other expenses under Fixed Cost, at energy charge rate approved by the Commission in respective Tariff Order.

*b)* Variable: 2.0% of the actual generation which shall form part of computation of energy charge rate of the respective month."

4.15 The Commission has already considered the submission of the Petitioner regarding backing down, which has resulted into higher Auxiliary Power Consumption of the station. Accordingly, the Commission has considered Auxiliary Power Consumption as approved in Business Plan Regulations, 2017.

#### **Gross and Net Generation**

#### Petitioner's Submission

4.16 The Petitioner has submitted Gross and Net Generation for PPS-I Station for FY 2017-18 as follows:

Sr. No.	Particulars	UoM	FY 2017-18
1	Gross Generation	MU	2457.18
2	Auxiliary Consumption	%	3.00%
3	Net Generation	MU	2383.46

#### Table 28: Gross and Net Generation submitted by the Petitioner

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

4.17 Gross and Net Generation for FY 2017-18 approved by the Commission based on the norms of operation specified in Business Plan Regulations, 2017 is as follows:

SI. No.	PPS-I	UOM	FY 2017-18	Ref.
А	Capacity	MW	330	
В	NAPLF	%	85	Para 4.5
С	Gross Generation	MU	2457.18	(AxBx365x24) /1000



SI. No.	PPS-I	UOM	FY 2017-18	Ref.
D	Auxiliary Consumption	%	2.0%	Para 4.14
E	Auxiliary Consumption	MU	49.14	CxD
F	Net Generation	MU	2408.04	C-E

## **Energy Charge Rate and Variable Cost**

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

- 4.18 The Petitioner submitted that it has a long-term agreement with Gas Authority of India Limited (GAIL) for supply of gas. Initially, the Petitioner had a daily allocation of 1.75 MMSCM of APM gas, which was sufficient to run both gas turbines on base load. The daily gas allocation to PPCL was between 1.1 to 1.2 MMSCMD of APM gas and 0.28 MMSCMD of PMT gas. However, due to depleting gas reserves of ONGC, GAIL has been imposing regular cuts on supply of gas.
- 4.19 The Petitioner submitted that it then signed a fall back agreement with GAIL for supply of spot R-LNG gas in order to meet the shortfall in gas supply. The Petitioner has submitted that Ministry of Petroleum and Natural Gas (MoP&NG) has allocated 0.02 MMSCMD non-APM ONGC gas whose supply has been commenced from mid October, 2011.
- 4.20 The Petitioner has further submitted that, during the first MYT Control Period from FY 2007-08 to FY 2011-12, the station has also operated in open cycle mode. The quantum of open cycle generation calculated in terms of percentage is around 3.5% of the total generation of the station. However, the Petitioner has not considered the open cycle generation for projection of fuel consumption during FY 2012-13 to FY 2014-15.
- 4.21 Thus to project the fuel consumption of the station, the Petitioner has considered the heat rate of 2036 kCal/kWh in combined cycle mode at the gross calorific value of 9483 kCal/SCM, which translates into total gas consumption of 527.53 MMSCM during each year from FY 2012-13 to FY 2014-15.
- 4.22 For projecting the total fuel costs for 2<sup>nd</sup> MYT Control Period, the Petitioner has pointed out that there has been an increasing trend in gas prices. However, the weighted average price of the gas has been taken for preceding three months i.e.



September to November, 2011 in line with the MYT Regulations, 2011. The weighted average price of gas from September to November, 2011 for PPCL is Rs. 10389.00 /1000 SCM. The Petitioner has not considered any escalation in the fuel cost for the projection period.

- 4.23 Further, the Petitioner has stated that recovery of energy charges, as projected below, would be in accordance with the formula specified in the MYT Regulations 2011.
- 4.24 The Petitioner has submitted total fuel cost considering the Gross Generation of the plant, SHR of the station, Gross Calorific Value and the Fuel Prices as follows:

SI. No.	Particulars	UoM	FY 2017-18
1	Total Gas Consumption	MMSCM	521.71
2	Average Gas price	Rs./SCM	12.35
3	Total Gas Cost	Rs. Cr	644.21
4	Net Generation	MU	2457.18
5	Variable Cost per unit	Rs./kWh	2.703

Table 30: Fuel Cost for PPS-I submitted by the Petitioner

# Commission's Analysis

4.25 The Commission has specified the formula for computation of energy charge rate in Tariff Regulations, 2017 as follows:

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

(a) For coal based stations:

ECR = {(GHR - SFC x CVSF) x LPPF / CVPF+SFC x LPSFi + LC x LPL} x 100 / (100 - AUX)

(b) For gas and liquid fuel based stations

ECR = GHR x LPPF x 100 / {CVPF x (100 - AUX)}

Where,

AUX =Normative auxiliary energy consumption in percentage

CVPF=(a) Weighted Average Gross calorific value of coal on as received basis from the loaded wagons at the generating stations -in kCal per kg for coal based stations (b) Weighted Average Gross calorific value of primary fuel as received, in kCal per kg,

per litre or per standard cubic meter, as applicable for lignite, gas and liquid fuel



based stations.

(c) In case of blending of fuel from different sources, the weighted average Gross calorific value of primary fuel shall be arrived in proportion to blending ratio.

CVSF =Calorific value of secondary fuel, in kCal per ml.

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

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

*LC* = *Normative limestone consumption in kg per kWh.* 

LPL = Weighted average landed price of limestone in Rupees per kg.

LPPF =Weighted average landed price of primary fuel, in Rupees per kg, per litre or per standard cubic metre, as applicable, during the month. (In case of blending of fuel from different sources, the weighted average landed price of primary fuel shall be arrived in proportion to blending ratio)

SFC = Normative Specific fuel oil consumption, in ml per kWh.

LPSFi=Weighted Average Landed Price of Secondary Fuel in Rs./ml during the month; Provided that energy charge rate for a gas/liquid fuel based station shall be adjusted for open cycle operation based on certification of Delhi SLDC for the open cycle operation during the month.

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107. Landed Fuel Cost for Tariff Determination: The landed fuel cost of primary fuel and secondary fuel for tariff determination shall be based on actual weighted moving average cost of respective fuel before the start of the tariff period for existing and new generating stations"

4.26 Landed Price of Primary fuel and Gross Calorific Value has been computed as per the information available in Form 27 of March 2017, April 2017 and May 2017 uploaded by the Petitioner on its website as follows:

SI. No.	Particulars	UoM	Mar-17	Apr-17	May-17
1	Quantum	000'SCM	19319.35	26759.35	23708.88
2	Cost	Rs Cr	22.55	44.78	23.30
3	GCV	kCal/ SCM	9402.22	9492.93	9619.56
4	LPPF	Rs/ SCM	11.67	16.73	9.83
5	Weighted Average LPPF	Rs/ SCM		12.99	

#### Table 31: Fuel Parameters considered for determination of ECR



SI. No.	Particulars	UoM	Mar-17	Apr-17	May-17
6	Weighted Average GCV	kCal/ SCM		9510.84	

4.27 Accordingly, the Commission approves the Energy Charge Rate (ECR) and Fuel Cost for FY 2017-18 as follows:

SI. No.	Particulars	UoM	Petitioner's Submission	Approved Value	Ref.
Α	Net Generation	MU	2383.46	2408.04	Table 29
В	ECR	Rs/ kWh	2.703	2.787	
C	Fuel Cost	Rs Cr	644.21	671.03	(AxB)/10

## Table 32: ECR and Fuel Cost approved by the Commission

## **Fixed Cost**

# **Operation and Maintenance Expenses**

## **Petitioner's Submission**

- 4.28 The Petitioner has submitted that these expenses include expenses on repairs and maintenance of Plant and Machinery, Building, Civil works, Vehicles, Furniture & Fixtures, Office equipment, etc.
- 4.29 The Petitioner has submitted that Pragati Power Station-I is sourcing plant water requirement from the treated effluent water from sewage treatment plants and has to incur more cost to get raw water, as compared to other similar stations being operated elsewhere in the country, drawing water from river and paying nominal water cess.
- 4.30 The Petitioner submitted that it has taken over the operation of the sewage water treatment plants from Delhi Jal Board for treating the sewerage water from Delhi Gate Nala and Sen Nursing Home Nala. The estimated expenditure on this account of above for FY 2016-17 to 2020-21, mainly includes expenditure on operation, electricity, Chemicals etc. Petitioner further submitted that these plants were commissioned by Delhi Jal Board, after handing over to these plants to petitioner, are being operated round the clock to supply uninterrupted raw water to PPS-1. Operation and Maintenance of the Plant is entrusted to originally equipment manufacturer M/s. Degremont on year to year contact basis. Being in operation for



more than 15 years some of the major equipments require replacement / extensive maintenance to ensure continuous smooth operation of plant.

- 4.31 Petitioner has further submitted that it has installed DLN Burner at PPS-I to control the NOx level. These types of burners were installed for the first time in India. The additional R&M expenses towards R&M of DLN burners and for critical components of Gas Turbines are required to be incurred by the PPS-I for the smooth operations of the plant and to achieve the target level of generation. All the inspections and overhauling of the machines are as per the manufactures recommendation. The expenditure on DLN Burners is cyclic in nature and its amount varies from year to year depending upon the type of inspections carried out on the machines based on the running hours.
- 4.32 The Petitioner has further submitted that the Commission has allowed Rs. 15 Crore additional R&M expenses every year during the Control period FY 2012-13, 2013-14 & 2014-15. It submits that repair and maintenance expenditure including expenditure on DLN burners has varied significantly during the period on year to year basis only due to reasons that schedule of overhauling of Gas Turbine and DLN Burners are cyclic in nature. Therefore, Commission while allowing expenditure on account of DLN Burners previously have smoothen the allowed charges to reduce the impact in a single year in which the expenditure is actually incurred.
- 4.33 The Petitioner submits that during the financial year 2013-14 and 2014-15 of current MYT period major maintenance activities carried out are Combustion Inspection of GT#1, Hot Gas Path Inspection of GT#2, Exciter Overhauling in FY 2012-13; Major Inspection of GT#1, Overhauling of Generator and Exciter, Combustion Inspection of GT#2, Bearing Inspection and Exciter Overhauling of STG in FY 2013-14 and Major Inspection of GT#2 & Generator and Exciter overhauling in FY 2014-15. The expenditure on account of expenditure on DLN Burner has been Rs. 34.1 Cr. during the year 2012-13, 2013-14 and 2014-15. The expenditure on account of Gas Turbine will continue to be incurred in the current MYT period. Commission is accordingly requested to allow on account of expenditure on DLN Burners as requested and giving in the respective table.



4.34 The O&M Expenses submitted by the Petitioner for PPS-I is as follows:

SI. No.	Particulars (Rs.Cr.)	UoM	2017-18
A	O&M expenses as per CERC Regulation 2014	Rs Cr	58.11
В	Additional Expenditure on DLN Burners	Rs Cr	8.96
С	Additional Expenditure on Water from Sewage Treatment Plant	Rs Cr	5.67
	Total Cost	Rs Cr	72.74

Table 33 : O&M Expenses submitted by the Petitioner

4.35 The Petitioner has requested the Commission to allow the O&M expenses along with anticipated impact of GST and 7th Pay Commission for the smooth operations of the plant to achieve the target level of generation.

# **Commission's Analysis**

- 4.36 The Commission has specified the normative Operation and Maintenance Expenses for existing generating stations in Business Plan Regulations, 2017 as follows:
  - *"6. OPERATION AND MAINTENANCE EXPENSES*

(1) Normative Operation and Maintenance expenses in terms of Regulation 4(3) and Regulation 92 of the DERC (Terms and Conditions for Determination of Tariff) Regulations, 2017 for the Generating Entity shall be as follows:

(a) Normative Operation and Maintenance expenses for existing generating stations shall be as follows:

10	bie 2. Oain Expenses	(NS. Eakily WIVV)	
Station	2017-18	2018-19	2019-20
GTPS	29.66	31.32	33.08
PPS-I	17.69	18.68	19.73

Table 2: O&M Expenses (Rs. Lakh/ MW)

••••

(2) Impact of seventh pay commission on employee cost shall be considered separately, based on actual payment made by the Generation Entity and prudence check at the time of true up of ARR for the relevant financial year."



4.37 Accordingly, the Commission approves the O&M Expenses for PPS-I for FY 2017-18 except the impact of seventh pay commission on Employee Cost as follows:

SI. No.	Particulars	UoM	Amount	Ref
А	Base O&M Expenses	Rs Cr	58.38	Para 4.36
В	Additional R&M Expenses against Advanced Gas Path (AGP)	Rs Cr	16.12	Business Plan Regulations
С	Total O&M Expenses	Rs Cr	74.50	A+B

 Table 34: O&M Expenses approved by the Commission

4.38 Impact of any statutory Pay revision on employee's cost as may be applicable on case to case basis shall be considered separately, based on actual payment made by the Petitioner and prudence check at the time of true up as specified in the Business plan Regulations, 2017.

## **Capital Expenditure**

## Petitioner's Submission

4.39 The capitalization plan submitted by the Petitioner during FY 2017-18 is as follows:

SI. No.	Particulars	UoM	FY 2017-18
1	Opening GFA	Rs Cr	1048.28
2	Addition	Rs Cr	0.00
3	Deletion	Rs Cr	0.00
4	Closing GFA	Rs Cr	1048.28

Table 35: Capital Expenditure submitted by the Petitioner

# **Commission's Analysis**

- 4.40 The Commission had sought the details of the schemes to be capitalized during FY 2017-18 for PPS-I during the prudence check and the Petitioner informed that the Schemes proposed for Capitalization are pending for approval of the Board of Directors. Therefore, the Commission has not considered any additional capitalization for FY 2017-18.
- 4.41 Accordingly, the GFA approved by the Commission for FY 2017-18 is as follows:

# Table 36: Capital Expenditure approved by the Commission



SI. No.	Particulars	UoM	FY 2017-18		Ref.
			Petitioner Submission	Approved	
А	Opening GFA	Rs Cr	1048.28	1050.38	Table 13
В	Addition	Rs Cr	0.00	0.00	
С	Deletion	Rs Cr	0.00	0.00	
D	Closing GFA	Rs Cr	1048.28	1050.38	A+B-C

#### Depreciation

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

- 4.42 The Petitioner has submitted that the Commission has approved the Opening Gross Fixed Asset of Rs. 1031.57 Cr in the beginning of FY 2007-08 and accorded inprinciple approval for implementation of Enterprise Resource Planning system in the company. The share of cost of ERP implementation in PPS-I was Rs. 2.48 Cr in FY 2009-10. Besides ERP, certain other capital additions were made during the control period of previous MYT and in year 2012-13, 2013-14 and 2014-15 of current MYT.
- 4.43 The Petitioner has submitted that the depreciation amount during the FY 2017-18 has been as per the Depreciation Rates specified under Generation Tariff Regulations, further the depreciation allowed by the Commission since 2002-03 to 2015-16 along with advance against depreciation is as per table below:

Year	Depreciation allowed by DERC	AAD allowed by DERC
2002-03	35.55	0
2003-04	53.90	0
2004-05	50.76	0
2005-06	59.23	1.48
2006-07	57.94	9.11
2007-08	59.63	7.15
2008-09	59.76	7.02
2009-10	59.97	6.81
2010-11	60.06	6.72
2011-12	60.14	6.64
2012-13	52.95	
2013-14	53.05	
2014-15	52.97	

 Table 37: Details of accumulated Depreciation as submitted by the Petitioner (Rs Cr)



2015-16	16.13	
Total	732.04	44.93
Total Depreciation & AAD		776.97

- 4.44 The Petitioner has submitted that total accumulated depreciation (including advance against depreciation) up to FY 2015-16 is Rs. 776.97 Cr. Further, total gross block for FY 2015-16 as per books is Rs. 1063.51Crores. Accordingly, allowed depreciation up to 90% is Rs. 957.162 Cr. Thus, balance depreciation Rs. 180.19 Cr is to be recovered in balance life of eleven years at rate of Rs. 16.38 Cr per years. Accordingly petitioner has projected the recovery of depreciation for balance life of plant @ 16.38 Cr per year in line with clause 27(5) of CERC generation tariff Regulation 2014.
- 4.45 Accordingly, the Petitioner has requested to approve the depreciation for FY 2017-18 as follows:

#### Table 38: Depreciation submitted by the Petitioner

SI.	No.	Particulars (Rs Crores)	UoM	FY 2017-18
	1	Depreciation	Rs Cr	16.38

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

4.46 The Commission has specified provisions pertaining to Depreciation in Regulation 78 to 83 of the Tariff Regulations, 2017 and relevant extracts are as follows:

*"78.Annual Depreciation shall be computed based on Straight Line Method for each class of asset as specified in Appendix-1 of these Regulations.* 

79. The base value for the purpose of depreciation shall be the capital cost of the asset approved by the Commission. Depreciation shall be chargeable from the first year of commercial operation and in case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis.

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

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

81. Land other than the land held under lease shall not be a depreciable asset and its



cost shall be excluded from the capital cost while computing depreciable value of the asset.

82. In case of existing assets, the balance depreciable value as on 1st April of any financial year shall be worked out by deducting the cumulative depreciation as admitted by the Commission up to 31st March of the preceding financial year from the gross depreciable value of the assets.

83. The Depreciation for Life extension projects/scheme shall be allowed in the manner as indicated in Regulation 51 of these Regulations."

- 4.47 It is observed that the cumulative depreciation has reached 70% of the total depreciation to be allowed at the closing of FY 2014-15. Therefore the Commission has spread the remaining depreciable value over the remaining life of the asset.
- 4.48 Further, it is observed that PPS-I Station got commissioned in FY 2002-03 and shall complete its useful life by FY 2027-28.
- 4.49 Accordingly, the Commission has approved the depreciation for FY 2017-18 as follows:

SI. No.	Particulars	UoM	Petitioner's	Approved	Ref.
			Submission		
А	Average GFA	Rs Cr	1048.28	1050.38	Table 13
В	Opening Accumulated	Rs Cr	-	795.39*	Table 15
	Depreciation				
C	Balance Depreciation	Rs Cr	-	149.96	(90%xA)-B
D	Remaining useful life at	Years	-	11	Para 4.47
	the opening of FY				
	2017-18				
E	Depreciation	Rs Cr	16.38	13.63	C/D

## Table 39: Depreciation approved by the Commission

\*A depreciation of Rs 13.63 Cr has been considered for FY 2016-17

#### **Means of Financing**

# Petitioner's Submission



1.40

- 4.50 The Petitioner has submitted that the Return on equity has been computed on approved equity of Rs. 331.71 Cr of the project and the 30% equivalent amount of the capital additions made during the Control period.
- 4.51 The Petitioner has submitted that it had taken a loan of Rs. 675.3 Cr from Power Finance Corporation Ltd. to fund the project. The loan was repayable over a period of 10 years and the interest rate on the loan varies from 6.25% to 12 % depending on the period of disbursement. The loan has been paid in FY 2013-14.
- 4.52 Further Petitioner has submitted that it has made certain capital additions in PPS-I during the Control period FY 2012-13, 2013-14 & FY 2014-15. The same has been funded through Reserve and surplus. As per Regulations, 70% of the capital additions have been considered to be funded through Loans. Accordingly, interest on this loan has been taken @ 12.00%.
- 4.53 The Petitioner has submitted that the loan details for PPS-I as follows:

Table 40: Loan Details for PPS-I submitted by the Petitioner				
Particulars	UoM	FY 2017-18		

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Interest Charges

# **Commission's Analysis**

4.54 Regulation 63 of the Tariff Regulations, 2017 deals with financing of the capital cost in Debt Equity ratio to be allowed for existing project or scheme and the relevant extract is as follows:

*"63. For determination of Tariff, the debt-equity ratio for any project or scheme under commercial operation shall be considered as 70:30: Provided that:* 

Rs Cr

- (i) Where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff;
- (ii) Where equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as notional loan;
- (iii) The equity invested in foreign currency shall be designated in Indian rupees on the date of each investment;



- (iv) Any grant/contribution/deposit obtained for the execution of the project/scheme shall not be considered as a part of capital structure for the purpose of debt: equity ratio."
- 4.55 Accordingly, the Commission has computed the quantum of Loan and Equity required for funding of NFA for FY 2017-18 as follows:

SI.	Particulars	UoM	FY 201	7-18	
No.			Petitioner	Approved	Ref.
			Submission		
Α	Opening GFA	Rs Cr	1048.28	1050.38	Table 36
В	Opening Accumulated Depreciation	Rs Cr		795.39	Table 39
С	Opening NFA	Rs Cr		254.99	A-B
D	Opening Equity	Rs Cr		76.50	Tariff Order
E	Opening Loan Requirement	Rs Cr		178.50	C-D
F	Depreciation for the year	Rs Cr		13.63	Table 39
G	Closing NFA	Rs Cr		241.36	C-F
Н	Closing Equity	Rs Cr		72.41	D-(30%xF)
I	Closing Loan	Rs Cr		168.95	E-(70%xF)
J	Average Equity	Rs Cr		74.45	(D+H)/2
К	Average Loan	Rs Cr		173.72	(E+I)/2

# Table 41: Requirement of Loan and Equity computed by the Commission

# Working Capital

#### Petitioner's Submission

- 4.56 The Petitioner has submitted that it has calculated the Interest on Working Capital as per the following norms:
  - Cost of fuel for 1 month
  - O&M expenses for 1 month
  - Receivables equivalent to 2 months average billing



4.57 The Petitioner has further submitted that Maintenance Spares @ 30% of the O&M expenses @1% of project cost plus escalation has been considered. It submits that there is no provision for liquid fuel firing therefore it has not considered the same for calculating the working capital. Accordingly, the Petitioner has submitted the requirement of Working Capital as follows:

SI.	Particulars	UoM	FY 2017-18
No.			
1	Cost of Fuel for 1 month	Rs Cr	53.69
2	Maintenance spares @ 30% of O&M	Rs Cr	17.43
3	Liquid fuel stock for ½ month	Rs Cr	0
4	O&M expenses for 1 month	Rs Cr	4.84
5	Receivables equivalent to 2 months average billing	Rs Cr	138.18
6	Maintenance Spares	Rs Cr	17.43
7	Total Working Capital	Rs Cr	214.14

Table 42: Requirement of Working Capital as submitted by the Petitioner
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## **Commission Analysis**

4.58 Regulation 84 of the Tariff Regulations, 2017 deals with computation of Working Capital requirement as follows:

*"84. The Commission shall calculate the Working Capital requirement for:* 

(2) Open-cycle Gas Turbine/Combined Cycle thermal generating stations as follows:

Fuel Cost for 30 days corresponding to the Normative Annual Plant Availability Factor, duly taking into account mode of operation of the generating station on gas fuel and liquid fuel;

Liquid fuel stock for 15 days corresponding to the normative annual plant availability factor, and in case of use of more than one liquid fuel, cost of main liquid fuel duly taking into account mode of operation of the generating stations of gas fuel and liquid fuel;

Maintenance spares @ 30% of Operation and Maintenance expenses specified in this Regulation;

Receivables equivalent to two months of capacity charge and energy charge for sale



of electricity calculated on normative plant availability factor, duly taking into account mode of operation of the generating station on gas fuel and liquid fuel; and Operation and maintenance expenses for one month."Regulation 84 of the Tariff Regulations, 2017 deals with Working capital. Relevant extract is as follows:

4.59 Accordingly, Working Capital requirement for FY 2017-18 has been computed as follows:

SI.	Particulars	UoM	FY 2017-18		Ref.
No.			Petitioner	Approved	
			Submission		
А	Fuel expenses for 1 month	Rs Cr	53.69	55.92	Table 32
В	Maintenance spares @ 30% of O&M	Rs Cr	17.43	22.35	Table 34
C	O&M expenses for 1 month	Rs Cr	4.84	6.21	Table 34
D	Annual Fixed Cost for the year	Rs Cr	184.39	148.15	Table 50
E	Fuel Cost for the year	Rs Cr	644.21	671.03	Table 32
F	Receivables equivalent to 2 months	Rs Cr			(D+E)/6
	of capacity and energy charge		138.18	136.53	
G	Total Working Capital	Rs Cr	214.14	221.01	A+B+C+F

#### Table 43: Working Capital Requirement approved by the Commission

# Weighted Average Cost of Capital (WACC) and Return on Capital Employed (RoCE)

# **Petitioner's Submission**

4.60 The Petitioner has further submitted that it has taken income tax rate of 21.34 % in grossing up of ROE of 15.5 % as per CERC Regulation 2014 clause no 25(2)(i) & (II). Accordingly grossed up ROE is 19.71%.

SI. No.	Particulars	UoM	FY 2017-18
А	Average Equity	Rs Cr	331.71
В	Base Rate of return on equity	%	15.5%
С	Normal Income tax as considered by the Commission	%	21.34%
D (base rate/(1-C)	Gross up return on equity	%	19.71%

# Table 44: Grossed up Rate of ROE submitted by the Petitioner



- 4.61 The Petitioner has submitted that the Interest Charges for capital expenditure during previous years has been calculated at @ 12 % on normative equity for FY 2017-18
- 4.62 The Petitioner has submitted that the rate of Interest for FY 2017-18 has been computed in line with the CERC Generation Tariff Regulations, 2014. The base Rate of State Bank of India is 10 % as on 01.04.2015. The rate of Interest for FY 2017-18 is computed as 13.50 % by additionally allowing 350 basis points on base rate of SBI as per CERC regulation clause 3(5), 28(3).
- 4.63 The Petitioner has submitted the interest on working capital during the Control period from for FY 2017-18 as shown in below mentioned table. The petitioner requests the Commission to allow the estimated interest on working capital for FY 2017-18.

SI. No.	Description	UoM	FY 2017-18
1	Total Working Capital	Rs Cr	214.14
2	Rate of Interest (SBI rate on 01.04.2015)	%	13.50%
3	Interest on Working capital	Rs Cr	28.91

#### Table 45: Interest on Working Capital as submitted by the Petitioner

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

4.64 Regulation 3 and 4 of Business Plan Regulations, 2017 deal with Return on Equity (RoE) and Tax on Return on Equity as follows:

#### *"3. RATE OF RETURN ON EQUITY*

Return on Equity in terms of Regulation 4(1) of the DERC (Terms and Conditions for Determination of Tariff) Regulations, 2017 for Generating Entity shall be computed at the Base Rate of 14.00% on post tax basis.

4. TAX ON RETURN ON EQUITY

The base rate of Return on Equity as allowed by the Commission under Regulation 3, shall be grossed up with the Minimum Alternate Tax or Effective Tax Rate of the respective financial year in terms of Regulation 72 and 73 of the DERC (Terms and Conditions for Determination of Tariff) Regulations, 2017, as per the following



formula:

Rate of Return on Equity= 14/[(100-Tax Rate)/100]

where, Tax Rate is Minimum Alternate Tax (MAT) or Effective Tax Rate, as the case may be."

- 4.65 In view of the above, the Commission has considered the base rate of return on equity at 14% and the same has been grossed up with rate of income tax at 21.34%.
  Accordingly grossed up rate of return on equity has been computed at 17.80% for FY 2017-18.
- 4.66 Regulation 77 of Tariff Regulations, 2017 deal with interest on Loan as follows:

"77. The rate of interest on loan shall be based on weighted average rate of interest for actual loan portfolio subject to the maximum of bank rate as on 1st April of the year plus the margin as approved by the Commission in the Business Plan Regulations for a Control Period:

Provided that in no case the rate of interest on loan shall exceed approved rate of return on equity:

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

Provided also that if the Utility does not have actual loan then the rate of interest shall be considered at the bank rate plus margin, as specified by the Commission in the Business Plan Regulations, for the notional loan of the relevant control period:

Provided also that the loan availed through open tendering process (Competitive Bidding) among Scheduled Banks, Financial Institutions etc., shall be considered at the rate discovered through open tendering process."

4.67 Regulation 85 and 86 of Tariff Regulations, 2017 deal with Interest on Working Capital and relevant extract is as follows:

"85. Rate of Interest On Working Capital shall be considered as the bank rate as on 1st April of the year plus margin as specified by the Commission for the Control Period and shall be trued up on the basis of prevailing bank rate as on 1st April of the respective financial year:


Provided that the rate of interest availed through open tendering process (Competitive Bidding) among Scheduled Banks, Financial Institutions etc., shall not be trued up.

86. Interest on working capital shall be payable on normative basis notwithstanding that the Utility has availed any loan for the working capital."

- 4.68 The Commission has specified Margin for Rate of Interest on Ioan in Business Plan Regulations, 2017 as follows:
  - **"5. MARGIN FOR RATE OF INTEREST ON LOAN**
  - (1) Margin for rate of interest in terms of Regulation 4(2) of the DERC (Terms and Conditions for Determination of Tariff) Regulations, 2017 for the Generating Entity shall be allowed over and above 1 (one) year Marginal Cost of Fund based Lending Rate (MCLR) of SBI for computation of rate of interest on loan:

Sr.	Generating Station	Margin for	in for Rate of Interest on Loan (%)		
No.		2017-18	2018-19	2019-20	
1	Gas Turbine Power Station (GTPS)	2.34%	2.11%	2.01%	
2	Pragati Power Station I (PPS-I)	2.98%	2.98%	2.98%	

Table 1: Margin for Rate of Interest on Loan

- (2) The rate of interest on loan (MCLR plus Margin) shall not exceed approved base rate of return on equity i.e., 14.00%."
- 4.69 In view of the above, the Commission has considered the rate of interest on loan by considering the Bank Rate as Marginal Cost of Fund based Lending Rate (MCLR) of SBI as notified by the State Bank of India and margin as approved in Business Plan Regulations, 2017. Accordingly rate of interest on loan has been approved at 10.98% on the basis of SBI MCLR of 8% as on 1<sup>st</sup> April, 2017 plus margin of 2.98%.
- 4.70 Further, the Commission has specified the methodology for allowing Return on Capital Employed in Tariff Regulations, 2017 as follows:

"65. Return on Capital Employed shall be used to provide a return to the Utility, and shall cover all financing costs except expenses for availing the loans, without providing separate allowances for interest on loans and interest on working capital.

66. The Regulated Rate Base (RRB) shall be used to calculate the total capital employed which shall include the Original Cost of Fixed Assets (OCFA) and Working Capital. Capital work in progress (CWIP) shall not form part of the RRB. Accumulated Depreciation, Consumer Contribution, Capital Subsidies / Grants shall be deducted in arriving at the RRB.

67. The RRB shall be determined for each year of the Control Period at the beginning of the Control Period based on the approved capital investment plan with corresponding capitalisation schedule and normative working capital.

68. The Regulated Rate Base for the ith year of the Control Period shall be computed in the following manner:

 $RRBi = RRB i-1 + \Delta ABi / 2 + \Delta WCi;$ 

Where,

*"i" is the i<sup>th</sup> year of the Control Period;* 

RRBi: Average Regulated Rate Base for the  $i^{th}$  year of the Control Period;  $\Delta WCi$ : Change in working capital requirement in the  $i^{th}$ year of the Control Period from  $(i-1)^{th}$  year;

ΔABi: Change in the Capital Investment in the ith year of the Control Period;

This component shall be arrived as follows:

 $\Delta ABi = Invi - Di - CCi - Ret_i;$ 

Where,

*Invi: Investments projected to be capitalised during the i<sup>th</sup> year of the Control Period and approved;* 

*Di: Amount set aside or written off on account of Depreciation of fixed assets for the i<sup>th</sup> year of the Control Period;* 

CCi: Consumer Contributions, capital subsidy / grant pertaining to the  $\Delta ABi$  and capital grants/subsidies received during ith year of the Control Period for construction of service lines or creation of fixed assets;



*Ret<sub>i</sub>: Amount of fixed asset on account of Retirement/ Decapitalisation during i<sup>th</sup> Year;* 

RRB i-1: Closing Regulated Rate Base for the Financial Year preceeding the i<sup>th</sup> year of the Control period. For the first year of the Control Period, Closing RRB i-1 shall be the Opening Regulated Rate Base for the Base Year i.e. RRBO;

RRBO = OCFAO - ADO - CCO+ WCO;

Where;

OCFAO: Original Cost of Fixed Assets at the end of the Base Year;

ADO: Amounts written off or set aside on account of depreciation of fixed assets pertaining to the regulated business at the end of the Base Year;

CCO: Total contributions pertaining to the OCFAo, made by the consumers, capital subsidy / grants towards the cost of construction of distribution/service lines by the Distribution Licensee and also includes the capital grants/subsidies received for this purpose;

WCO: working capital requirement in the (i-1)<sup>th</sup> year of the Control Period.

69. Return on Capital Employed (RoCE) for the year "i" shall be computed in the following manner:

Where,

WACCi is the Weighted Average Cost of Capital for each year of the Control Period; RRBi – Average Regulated Rate Base for the ith year of the Control Period.

70. The WACC for each year of the Control Period shall be computed at the start of the Control Period in the following manner:

$$WACC = \left[\frac{D}{D+E}\right] * r_d + \left[\frac{E}{D+E}\right] * r_e$$

Where,

D is the amount of Debt derived as per these Regulations;



E is the amount of Equity derived as per these Regulations;

Where equity employed is in excess of 30% of the capital employed, the amount of equity for the purpose of tariff shall be limited to 30% and the balance amount shall be considered as notional loan. The amount of equity in excess of 30% treated as notional loan. The interest rate on excess equity shall be the weighted average rate of interest on the actual loans of the Licensee for the respective years. Where actual equity employed is less than 30%, the actual equity and debt shall be considered;

Provided that the Working capital shall be considered 100% debt financed for the calculation of WACC;

rd is the Cost of Debt;

re is the Return on Equity."

4.71 In view of the above, the Commission has computed Regulated Rate Base for FY 2017-18 as follows:

SI. No.	Particulars	UoM	FY 2017-18	Ref.
А	Opening GFA	Rs Cr	1050.38	Table 36
В	Opening Accumulated Depreciation	Rs Cr	795.39	Table 39
С	Opening RRB	Rs Cr	254.99	A-B
D	Working Capital	Rs Cr	221.01	Table 43
E	Depreciation for the year	Rs Cr	13.63	Table 39
F	Net Addition	Rs Cr	0	Table 36
G	Closing RRB	Rs Cr	462.37	C+D+F-E
Н	Average RRB	Rs Cr	469.18	C+D+(F-E)/2

## Table 46: RRB approved by the Commission

4.72 Further, the Commission has computed Weighted Average Cost of Capital (WACC) and Return on Capital Employed (RoCE) as follows:

SI. No.	Particulars	UoM	Quantum	Ref.
А	Average RRB	Rs Cr	469.18	Table 46
В	Average Loan Requirement for Capital	Rs Cr	173.72	Table 41

### Table 47: WACC and RoCE approved by the Commission



SI.	Particulars	UoM	Quantum	Ref.
No.				
	Investment			
С	Loan for Working Capital Requirement	Rs Cr	221.01	Table 43
D	Total Loan	Rs Cr	394.73	B+C
E	Average Equity	Rs Cr	74.45	Table 41
F	WACC	%	12.06%	
G	RoCE	Rs Cr	56.59	AxF

## **Fixed Auxiliary Consumption Expenses**

## **Commission View:**

4.73 The Commission has allowed Fixed Auxiliary Consumption (0.5%), as discussed above

in the relevant section. Accordingly, the Commission allows Fixed Auxiliary Consumption Expenses as follows:

Table 48: Fixed Auxiliary Consumption Expenses approved by the Commission

Sr. No.	Particulars	UoM	FY 2017-18	Ref
А	Plant Capacity	MW	330	
В	Normative PLF	%	85%	Para 4.5
С	Gross Generation	MU	2457.18	Table 29
D	Fixed Auxiliary	%	0.5%	Para 4.14
	Consumption			
Е	Fixed Auxiliary	MU	12.29	CxD
	Consumption			
F	Energy Charge Rate	Rs/kWh	2.787	Table 32
G	Fixed Auxiliary	Rs Cr	3.42	(ExF)/10
	Consumption			

## **Summary of Fixed Cost**

## Petitioner's Submission

4.74 Annual Fixed Cost for FY 2017-18 submitted by the Petitioner is as follows:

 Table 49: Total Fixed Cost submitted by the Petitioner

SI. No.	Particulars	UoM	FY 2017-18
1	O&M Charges	Rs Cr	58.11
2	Depreciation	Rs Cr	16.38
3	Interest on Loans	Rs Cr	1.45
4	Grossed up Return on Equity	Rs Cr	65.36
5	Interest on Working Capital	Rs Cr	28.91



SI. No.	Particulars	UoM	FY 2017-18
6	Sp. R&M on account of DLN	Rs Cr	8.97
7	STP	Rs Cr	5.67
8	Total Fixed Cost	Rs Cr	184.85
9	Net Generation	MU	2383.46
10	Fixed Cost Per Unit	Rs/ kWh	0.776

## **Commission Analysis**

4.75 Regulation 99 of Tariff Regulations, 2017 provides components to be considered for computation of Annual Fixed Cost for a Generating Entity and relevant extract is as follows:

*"99.* The annual fixed cost (AFC) of a Generating Entity shall consist of the following components as specified in these Regulations:

Return on Capital Employed;

Depreciation; and

Operation and Maintenance expenses."

4.76 Accordingly, the Commission approves the Annual Fixed Cost for FY 2017-18 by considering the various components as follows:

	Table 50:	<b>Annual Fixed</b>	Cost approved b	y the Commission
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SI.	Particulars	UoM	FY 201	7-18	Ref.
No.	Petitioner's Appro		Approved		
			Submission		
А	Return on Capital Employed	Rs Cr	95.26	56.59	Table 47
В	Depreciation	Rs Cr	16.38	13.63	Table 39
С	Operation and Maintenance	Rs Cr	72.75	74.50	Table 34
	Expenses (Incl. DLN (AGP) and STP)				
D	Fixed Auxiliary Consumption	Rs Cr	-	3.42	Table 48
E	Annual Fixed Cost	Rs Cr	184.39	148.15	A+B+C+D
F	Net Generation (MU)	MU	2383.46	2408.04	Table 29



## A5: DIRECTIVES ISSUED BY THE COMMISSION

- 5.1 The Commission directs the Petitioner to ensure that the fuel supply agreement does not contain the "Minimum Off Take Guarantee" clause linked with "Take or Pay" obligation, so as to optimize the cost of generation. Any cost incurred on account of such clause shall not be allowed to be billed to the beneficiaries and the liability on this count shall be solely to the account of the petitioner. The petitioner shall be allowed to recover only the actual cost of fuel (including fuel price adjustment/Power Purchase Cost Adjustments, if any but excluding cost on account of "Minimum Off Take Guarantee" / "Take or Pay" obligation) from the respective beneficiaries.
- 5.2 The Commission directs the Petitioner to ensure that the fuel procured should be strictly utilized only for the purpose of power generation, failing which the associated cost would be disallowed in full.
- 5.3 The Commission directs the Petitioner to furnish information related to Energy Charge Rate as per Form-21 of Tariff Regulations, 2017 along with monthly invoice to the beneficiaries. Source wise fuel details are to be provided in the said form and the same is to be uploaded on Petitioner's website on monthly basis, failing which the penalty will be imposed as stated at Para 5.4
- 5.4 Save and except the penalty as specifically provided in these directives, in all other cases, the punishment for non-compliance of directions of the Commission shall be dealt as per the Section 142 of the Electricity Act, 2003.



**ANNEXURE - I** 



## DELHI ELECTRICITY REGULATORY COMMISSION

Viniyamak Bhawan, 'C' Block, Shivalik, Malviya Nagar, New Delhi- 110017.

F.11(1367/DERC/2015-16/

#### Petition No. 16/2017

In the matter of: Petition for determination of Generation Tariff and Submission of Business Plan for the MYT period from for FY 2016-17 to FY 2020-21.

Pragati Power Corporation Ltd. Through its : Director (Tech.) Himadri, Rajghat Power House Complex <u>New Delhi 110 002</u>

...Petitioner/Licensee

Coram:

Sh. B. P. Singh, Member.

# ORDER

(Date of Order 26.05.2017)

- M/s Pragati Power Corporation Ltd. (PPCL) has filed the instant Petition for determination of Generation Tariff and Submission of Business Plan for the MYT period from for FY 2016-17 to FY 2020-21. The said Petition has been scrutinised and found generally in order as per the DERC Comprehensive (Conduct of Business) Regulations, 2001. Clarifications/additional information, if and when required would be sought from the Petitioner.
- 2. The Petition is admitted.

Sd/-(B. P. Singh) Member





## DELHI ELECTRICITY REGULATORY COMMISSION

Viniyamak Bhawan, 'C' Block, Shivalik, Malviya Nagar, New Delhi- 110017.

F.11(1480)/DERC/2017-18/

### Petition No. 27/2017

In the matter of: Petition for True up of expenditure for FY 2014-15 and FY 2015-16 as per DERC Tariff Regulation, 2011.

Pragati Power Corporation Ltd. Through its : Director (Tech.) Himadri, Rajghat Power House Complex New Delhi 110 002

...Petitioner/Licensee

Coram:

Sh. B. P. Singh, Member.

# ORDER

(Date of Order 30.05.2017)

- M/s Pragati Power Corporation Ltd. (PPCL) has filed the instant Petition for True up of expenditure for FY 2014-15 and FY 2015-16. The said Petition has been scrutinised and found generally in order as per the DERC Comprehensive (Conduct of Business) Regulations, 2001. Clarifications/additional information, if and when required, would be sought from the Petitioner.
- 2. The Petition is admitted.

Sd/-(B. P. Singh) Member



## ANNEXURE –II

# LIST OF RESPONSES RECEIVED FROM STAKEHOLDERS ON THE TRUE UP OF EXPENSES UP TO FY 2014-15 & FY 2015-16, AND ANNUAL REVENUE REQUIREMENT (ARR) AND TARIFF FOR FY 2017-18

S. No.	R. No.	Name	Address	Date of Receipt
1.	1	Sh. B.S. Vohra	East Delhi RWAs Joint Front F-19/10	09.06.2017
	1A		Krishna Nagar, Delhi 110 051	12.06.2017
	1B		rwabhagidari@yahoo.in	18.07.2017
2.	2	Sh. O.P. Gupta	Advopgupta95@rediffmail.com	14.06.2017
3.	3	Sh. B.S. Sachdev	45, North Avenue,	12.06.2017
	ЗA	President	New Delhi 110 001	29.06.2017
			grahakevraja@rediffmail.com,	
			grahakevraja@gmail.com	
4.	4	Sh. A.K. Dutta	222, Pocket E,	15.06.2017
	4A		Mayur Vihar II	20.06.2017
	4B		Delhi 110 091	20.06.2017
	4C		Mmathur2001@yahoo.com	17.07.2017
5.	5	Sh. S.K. Juneja	sudershankumarjuneja@gmail.com	20.06.2017
6.	6	Sh. Gulshan Desh	gulshanadesh@gmail.com	20.06.2017
7.	7	Sh. Jagjeet Singh	<u>coolmanjagga@gmail.com</u>	20.06.2017
8.	8	Smartjain.vikas	Smartjain.vikas@gmail.com	18.06.2017
9.	9	Sh. Sumit Jaswanil	Sumitjava2008@gmail.com	20.06.2017
10.	10	Sh. Sat Goel	satgoel1947@gmail.com	20.06.2017
	10A	Sh. Sat Goel	satgoel1947@gmail.com	27.06.2017
11.	11	Sh. Saurabh	urdrwas@gmail.com	20.06.2017
	11A	Gandhi		18.07.2017
	11B	General Secretary		18.07.2017
12.	12	Sh. B.B. Tiwari	sarwasharpan@gmail.com	21.06.2016
	12A			22.06.2017
13.	13	Sh. Pankaj Sharma	pankaj.sharma@iitb.ac.in	27.06.2017
	13A			27.06.2017
14.	14	Sh. Manmohan	Rohini EWS Flats Residents Welfare	27.06.2017
	14A	Verma	Association, C-1/128, Sec5, Rohini,	18.07.2017
			Delhi 110 085	
	4-		mmverma.rwc@gmail.com	
15.	15	Sh. Ashok Bhasin	North Delhi Resident Welfare	27.06.2017
	15A		Federation	28.06.2017
	15B		1618, Main Chandrawal Road,	29.06.2017
			Delhi 110 017	
			Ashok.bhasin2015@gmail.com	



S. No.	R. No.	Name	Address	Date of Receipt
16.	16	Sh. Anil Kumar Jha	Jan Chetna Sangam (Regd.) A-4, Gali No. 13, Mandawali Unchepar, Delhi 110 092	27.06.2017
17.	17	Sh. Rajiv Kakria	E-230, Greater kailash, New Delhi 110 048	27.06.2017
18.	18 18A	Sh. Sudhir Aggarwal	C-3/2, Model Town III, Delhi 110 009	22.06.2017 18.07.2017
19.	19 19A 19B 19C	Sh. V.K. Malhotra General Secretary	DVB Engineers' Association D-3, Vikas Puri, New Delhi 110 018	27.06.2017 27.06.2017 27.06.2017 19.07.2017
20.	20	Sh. Anil Grover President	Resident's Welfare Society (Regd.) Pocket-C, Mayur Vihar Phase II, Delhi 110 091	27.06.2017
21.	21	Sh. P.S. Tomar Secretary	Resident's Welfare Association C-7/89, Yamuna Vihar, Delhi	27.06.2017
22.	22	Sh. Kailash Katyal Patron President	Senior Citizens Welfare Association 49-B Pocket-1, Mayur Vihar, Phase- 1, Delhi 110 091	27.06.2017
23.	23	Sh. Kulwant Singh President	Dilshad Colony Residents Welfare Association (Regd.) G-87, List Floor, Dilshad Colony, Delhi 110 095	27.06.2017
24.	24	Sh. Sarvesh Kumar Verma	Resident Welfare Association A-2/219, New Kondli, Delhi 110 096	27.06.2017
25.	25	Rohit Arora President	Resident's Welfare Association 12A, Gyan Park Chander Nagar, Near Krishna Nagar, Delhi 110051 gyanparkwelfaresociety@gmail.com	27.06.2017
26.	26	Sh. S. Hassan Retired Officer Ministry of Defence	F-172, Dilshad Colony, Delhi 110095 <u>shassanrwa@gmail.com</u>	29.06.2017
27.	27	Ms. Ritu Bhatia	Mahila Pragatisheel Association (Regd.) B-186, Vivek Vihar Phase-I, Delhi 110095	28.06.2017
28.	28	Sh. D.M. Narang President	Joint RWAs, R-Block & Double Storey New Rajinder Nagar, New Delhi	28.06.2017



S. No.	R. No.	Name	Address	Date of
29.	29	Sh. Kunwar Pratap Singh	Bhajan Pura Jan Sahyog Sabha D-10, Dispensary Chowk,	Receipt 29.06.2017
		General Secretary	Bhajan Pura, Delhi 110053	
30.	30	Sh. Umardin Gen. Secretary	The Consortium An Alliance of the Registered RWA's of the Walled City 1570, Ground Floor, Pataudi House, Darya Ganj, New Delhi 110002	28.06.2017
31.	31	Sh. Haji Mohd. Rais President	Resident's Welfare Association 3199, Kucha Tara Chand, Darya Ganj, New Delhi 110002	28.06.2017
32.	32	Sh. Farooq Engineer	Rehayeshi Welfare Anjuman Shivaji Road, Azad Market, Delhi 110006	28.06.2017
33.	33	Sh. Sudhir Kalra Addl. Secretary	E-93, Greater Kailash-I New Delhi 110048 <u>kalrasudhir@gmail.com</u>	28.06.2017
34.	34	Sh. Rajan Gupta	355, Udhyan, Narela, Delhi 110040	27.06.2017
35.	35	Sh. Rajesh Agarwal	Shahdara Resident Welfare Association, 356, Farsh Bazar, Shahdara, Delhi 110032 <u>shahdararwa@gmail.com</u>	29.06.2017
36.	36	Sh. Sanjeev Bhatnagar	Resident's Welfare Association New MIG Flats, Prasad Nagar, New Delhi 110005	28.06.2017
37.	37	Sh. Naeem Bhartee Vice President	Nai Subah Welfare Society 3731, Chowk Shah Ganj, Ajmeri Gate, Delhi 110006	28.06.2017
38.	38	Sh. Mohammad Shadab Qureshi President	Resident's Welfare Association 7642, Al-quresh Library, Near Badi Masjid, Qasab Pura, Delhi 110006	28.06.2017
39.	39	Haveli Azam Khan Welfare Society	849, Gali Godowali, Haweli Azam Khan, Chitli Qubar, Jama Masjid, Delhi 110006	28.06.2017
40.	40	Sh. Dayaram Dwivedi Vice President	Nidhi Fabrics, 262, Katra Pyarelal, Chandni Chowk New Delhi 110006	29.06.2017



S. No.	R. No.	Name	Address	Date of Receipt
41.	41	Sh. Arvind Mehta	Joint RWAs, R-Block & Double Storey, New Rajinder Nagar, New Delhi	30.06.2017
42.	42	Sh. Balkishan	Sudhar Smiti Durgapuri (Regd.)30.06.201449/22, Gali No. 9,Durgapuri,Shahdra, Delhi 110093	
43.	43	Sh. M.P. Singh President	Jan-Hit Residents Welfare 30.06.20 Association, Pocket-I, 47a, Dilshad Garden, Delhi 110095	
44.	44.	Sh. Kamal Kiran Seth Addl. Secretary General	Apex Chamber of Commerce & Industry of NCT of Delhi A-8, Naraina Industrial Area, Phase-II New Delhi 110028 <u>delhichamber@airtelmail.in</u>	30.06.2017
45.	45	Sh Samson Frederick General Secretary	All India Minorities Fundamental Rights Protection Committee 2109/18, Turkman Gate, New Delhi 110092	
46.	46	Sh. Shashi Goyal Sr. Manager- Regulatory Affairs	BSES Rajdhani Power Ltd.29.06.2NSES BHawan, Nehru PlaceNew Delhi 110019	
47.	47	Sh. Satya Narain Rohtagi Sr. Citizen	618F-2/2/1, Shankar Gali 29.06.201 Vishwas Nagar, Delhi – 110032	
48.	48	Sh. Shiv Kumar Sharma	Brijpuri Resident Welfare Association (Regd.) D-8/154, Brij Puri, Delhi 110094	03.07.2017
49.	49	Sh. Chaman Singh Gen. Secretary		
50.	50	Sh. Sanjay Dhingra		
51.	51	Dr. Faheem Benoj Gen. Secretary	Jafrabad Resident Welfare Association (RWA) 1202, Street No. 39/4, Jafrabad, Delhi 110053 Jafrabadrwa2006@gmail.com	14.07.2017



S. No.	R. No.	Name	Address	Date of Receipt
52.	52	Sh. Jagadish Prasad	A-129, Pul Prahalad 17.07.20 New Delhi 110044	
53.	53	Sh. V.S. Mahindra	H3/45, Vikaspuri, 17.07.201 New Delhi 110018	
54.	54	Sh. Rajeshwar Kapoor	A-35, Nizamuddin East, 17.07.202 New Delhi	
55.	55	Sh. J.N. Bagehi	F-1152, C.R. Park New Delhi 110019	17.07.2017
56.	56	Sh. J.B. Sahdev Area Representative	Qutab Enclave17.07.20MIG Residents Welfare Association,Qutab Enclave, Phase-INew Delhi 11001610016	
57.	57	Sh. Sushil	Sofia Education and Welfare Society17.07.201773, Street No. 9,Main Brijpur Road,Old Mustafabad, Delhingosofia@gmail.com	
58.	58	Sh. A.K. Jain	DDA Flats, Kalkaji, New Delhi 110019	17.07.2017
59.	59	Sh. V.P. Garg	B-2/48/A, Keshav Puram 17.07.20 New Delhi 110035	
60.	60	Sh. P.S. Gupta	C-5A/209, 17.07.201 Janakpuri, New Delhi	
61.	61	Sh. S.K. Bhatia	3/102, Subhash Nagar,         17.07.201           New Delhi 110027         17.07.201	
62.	62	Sh. Anil Sharma	V.T. Enterprises,17.07.20171124-E-1/46, MolarbandExtn. Badarpur, Delhi	
63.	63 63A	Sh. B.P. Agarwal	Delhi Bar Association17.07.2017Through its Secretary19.07.2017Sh. Jaiveer SinghChauhan,Tis Hazari CourtsDelhi 11005419.054	
64.	64	Ms. Asha Uniyal	B-20, Street Nagar,         18.07.2017           New Delhi 110092         18.07.2017	
65.	65	Sh. Manmohan Verma Chairman	Rohini EWS Flats Residents Welfare Association C-1/128, Sector-5, Rohini, Delhi 110085 <u>Urdrwas@gmail.com</u>	18.07.2017



S. No.	R. No.	Name	Address	Date of
66	66	Ch. Ashali Chairea		Receipt
66.	66	Sh. Ashok Sharma	House No. A-87,         18.07.2017           Gali #, Brahmpuri,         New Delhi 110 053	
67.	67	Sh. Sanjeev Tyagi	House No. A-9618.07.24Ashok Nagar, Gali # 4Shahdara, New Delhi 110093	
68.	68	Sh. Ishwar Dutt	V-1150, Vijay Park,         18.07.202           Maujpur, New Delhi -53         18.07.202	
69.	69	Sh. Deepak Kumar,	A Block, 387 Gokal Puri, Delhi 110094	18.07.2017
70.	70	Sh. Ram Udgar	House No. 27/103, Bajar Gali, Vishwas Nagar, Delhi 110003	18.07.2017
71.	71	Sh. Sanjay Sharma	House No. 298,Gali No. 1, Chanderlok, Durgapuri Delhi 110032	18.07.2017
72.	72	Sh. Umesh	House No. WS 33, Sudamapuri, 18.07.201 Babarpur, Delhi 110032	
73.	73	Sh. Karan	House No. 8/242         18.07.20           Khichdipur, Delhi 110091         18.07.20	
74.	74	Sh. Vimal	House No. 495, Jwala Nagar, Badi Ramleela Ground Shahdara, Delhi 110032	
75.	75	Sh. Dushyant Kumar	RWA Nagar Market,18.07.201Harsh Vihar Hari Nagar,Part III, Welfare SocietyBadarpur, New Delhi 110044	
76.	76	Sh. K.K. Singh President	Badarpur, New Denn 110044Shakti Vihar , A Block Rahaysi18.07.201Welfare Association (Regd.)0ffice No. 15, Street No. 5/2A Block, Shakti Vihar,Badarpur, New Delhi 110044	
77.	77	Sh. S.P. Rana President	Woman Exploit Grievance18.07.201FederationI-Block, H.O. 456/12B, Harnagar, Jaitpur, New Delhi 110044	
78.	78	Nilothi Extention Kalyan Sangthan	C-2/2 Himgiri Enclave, Gali No. 6, Nilothi Extension, Delhi 110041	
79.	79	Sh. Anil Chandi Gen. Secretary	Maharana Pratap Bagh, RWA, C-Block, C-8/1 Rana Pratap Bagh, Delhi 110007	18.07.2017



S. No.	R. No.	Name	Address	Date of Receipt
80.	80	Sh. Tej. B. Khattar Vice President	Mother.decghs@gmail.com	18.07.2017
81.	81	Sh. Vivek Aggarwal General Manager	Delhi Metro Rail Corporation Ltd. Metro Bhawan, Fire Brigade Lane, Barakhamba Road, New Delhi 110001	18.07.2017
82.	82	Sh. G. S. Kohli	C-6/6468, Vasant Kunj         18.07.20           New Delhi 110 070         18.07.20	
83.	83	Sh. Ram Babu Gupta	Jan Nyaya Bhomi 227, Nilgiri Apartment Alaknanda New Delhi -110019	18.07.2017
84.	84	Sh. Gulshan Bawa	E-14/8 Vasant Vihar, New Delhi	18.07.2017
85.	85	Sh. Vivek Goel	C-2/66 Janak Puri, Delhi	18.07.2017
86.	86	Sh. D.N Gopal	C-2/167 Janakpuri, New Delhi	18.07.2017
87.	87	Sh. S.C. Dua	R/o 21, Kailash Hills New Delhi 110065	18.07.2017
88.	88	Sh. N.G. Dagar President	RWA Gopal Nagar, D-Block Najafgarh, New Delhi	18.07.2017
89.	89	Sh. S.D Bhatt	Mahavir Enclave Residents Welfare Society, H-2/109, Mahavir Enclave-I New Dlhi 110045	18.07.2017
90.	90	Sh. Yugul Kishore Dwivedi Chairman	RZ-935, St. No. 14/3 Sadh Nagar, Palam Colony New Delhi 110045	18.07.2017
91.	91	Sh. Satvir Singh	Shri Ganga Vihar Resident's Welfare Association, Village Dindar Pur, Najafgarh, New Delhi 110043	18.07.2017
92.	92	Sh. Manoj Mautiyal	Shri Ganga Vihar Resident's Welfare Association, Village Dindar Pur, Najafgarh, New Delhi 110043	18.07.2017
93.	93	Sh. Gurpreet Singh President	Residents welfare Association WZ-958, Shop No. 2, Gali No. 10, Guru Nanak Nagar, New delhi 110018	18.07.2017
94.	94	Sh. Muni Raj Chairman	Residents welfare Association WZ-958, Shop No. 2, Gali No. 10, Guru Nanak Nagar, New delhi 110018	18.07.2017
95.	95	Ms. Sushma Sharma	sushmayanv@gmail.com	20.07.2017
96.	96	Sh. Jitender Agarwal	bawanacri@gmail.com	20.07.2017



S. No.	R. No.	Name	Address	Date of Receipt
97.	97	Smt. Huma Vice President	Jan Kalyan Mahila Samiti Community Centre DDA Flats Turkman Gate, Asaf Ali Road, Delhi 110006	20.07.2017
98.	98	Sh. A.K. Singh	Plot No. 669, Near Shahadr20.07.2017Metro, Sahadar, Delhi20.07.2017	
99.	99	Sh. Yog Raj Goswami	Resident Welfare Association18.07.20GH-1/231, Archna ApartmentsPaschim Vihar, New Delhi-63	
100.	100	Sh. B.D. Sharma	H. No. 69, Extn1 B, Nangloi New Delhi-110041	18.07.2017
101.	101	Sh. Ompal Singh Ahlawat President	Resident Welfare Association Kh. No. 826, VIII Chhattarpur, The.: Mehrauli, New Delhi	18.07.2017
102.	102	Sh. Krishan Kumar	Resident Welfare Society 455, Kakrola Housing Complex, Najafgarh Road, Near Metro Pillar No. 796, New Delhi 110059.	18.07.2017
103.	103	Sh. Veerpal Singh President	F-2 Block Residential Welfare18.07.2017Association, F-2/544A, SangamVihar, New Delhi 110062	
104.	104 104A	Jyotish Kumar Sinha, HoD Regulatory	Tata Power Delhi Distribution Ltd.18.07.20NDPL House, Hudson Lines18.07.20Kingsway Camp Delhi 11000918.07.20	
105.	105	Sh. Rajeev Chowdhury Head Regulatory Affarirs	BSES Rajdhani Power Ltd. BSES Bhawan, Nehru Place, New Delhi 110019	
106.	106 106A	Sh. Sunil Kakkar Addl. Vice President	BSES Yamuna Power Ltd. 2 <sup>nd</sup> Floor, B-Block, Shakti Kiran Building, Karkardooma, New Delhi 110092	18.07.2017 18.07.2017
107.	107	Sh. Ved Kumar Arya	Samaj Sudhar Simiti18.07.2017Islam Colony, 895A/ Ward No. 06,Mahrauli, New Deli 110 030	
108.	108	Sh. Brij Mohan Mehta	Chamber No. 320.07.2017Lawyers Chamber Block20.01Rohini Courts Complex20.01Delhi 11008620.01	
109.	109 109A	Flt. Lt. I.D. Sharma General Secretary	Arjun Nagar House Owners Welfare Association, 150, Arjun Nagar, New Delhi 110029	21.07.2017 21.07.2017



S. No.	R. No.	Name	Address	Date of Receipt
110.	110	Sh. Rajeev Goel Coordinator	Confederation of Relocated Industries Bawana G-1, Sector-5 DSIIDC Bawana Industrial Complex, Bawana, Delhi 110039 <u>bawanacri@gmail.com</u>	21.07.2017
111.	111	Sh. Satish Nabardar	H. No. 760, Panna Mojan, Bawan,Delhi 110039	21.07.2017
112.	112	Sh. Dharmendra Kumar	Federation of VIkas Nagar Residents Welfare Association (Regd.), F-126, Shiva Enclave (Shiv Mandir Road), Vikas Nagar, New Delhi – 59	21.07.2017



### ANNEXURE-III

STAKEHOLDERS WHO HAVE ATTENDED THE HEARING FOR THE PETITION FILED BY DISCOMS FOR TRUE UP OF EXPENSES UP TO FY 2014-15 & FY 2015-16, AND ANNUAL REVENUE REQUIREMENT (ARR) AND TARIFF FOR FY 2017-18

S. No.	Name	Organization
1	Sh. Sharad Sharma	DMRC
2	Sh. Subodh Pandey	DMRC
3	Sh. Vivek Aggarwal	DMRC
4	Sh. Ved Parkash Arya	Consumer
5	Ms. Manuj Singhal	DMRC
6	Mr. Pawan Kumar	DMRC
7	Ms. Savita Swami	Consumer
8	Sh. G. S. Kohli	Consumer
9	Sh. Dr. S. P. Rana	Consumer
10	Sh. Shubham Kumar	DMRC
11	Sh. R. S. Jarout	DMRC
12	Sh. Vivek Bhandari	DMRC
13	Flt. Lt. I.D. Sharma	RWA
14	Sh. Om Pal Singh	RWA
15	Sh. S. R. Abrol	Consumer
16	Sh. K. K. Singh	RWA
17	Sh. Iqbal Ahmed	RWA
18	Sh. Farooq Engineer	Consumer
19	Sh. M. Shadab Qureshi	Consumer
20	Sh. Yograj Goswami	RWA
21	Sh. Sat Goel	RWA
22	Sh. Rajeev Kakaria	RWA
23	Sh. B. S. Vohra	RWA
24	Sh. Anil Kumar Khanna	RWA
25	Sh. Vinay Kumar	RWA
26	Sh. V.K. Malhotra	Pension Trust, DVB
27	Sh. R.K. Khurana	RWA
28	Sh. Anil Wadhera	RWA
29	Dr. Faheem BIG	RAW
30	Sh. Sohail Khan	Sophia NGO
31	Sh. Daya Ram Diwedi	Daily Passengers Association
32	Sh. Saurabh Gandhi	RWA
33	Sh. Dilip Chadha	RWA
34	Sh. Atul Gola	RWA
35	Sh. Tej B Khattar	Mother Dairy
36	Dr. M.K. Aggarwal	URD
37	Sh. Bal Krishan Gupta	RWA
38	Sh. Ram Pal Saini	RWA
39	Sh. Balbir Singh	RWA



S. No.	Name	Organization
40	Sh. M.C. Sharma	RWA
41	Sh. Damodar Keshyap	RWA
42	Kusum Sharma	Consumer
43	Sh. Rajeev Sharma	Consumer
44	Naeem Bharti	RWA
45	Satyaveer Singh	RWA
46	Sh. Manoj Nautiyal	RWA
47	Ms. Sushila Bansal	RWA
48	Sh. Manmohan Verma	RWA
49	Sh. P.S. Tomar	RWA
50	Sh. Jitender Aggarwal	CRI
51	Sh. Ashok Bhasin	NDRWF
52	Sh. Sanjay Gupta	CRI
53	Sh. Prem Kumar Sharma	NBCC
54	Sh. Lal Keshwar Shah	NBCC
55	Sh. Anil Kumar Jha	RWA
56	Sh. S.K. Sharma	RWA
57	Sh. Shabhonath Thakur	RWA
58	Sh. Shushil Kumar	RWA
59	Sh. Harish Kumar	RWA
60	Sh. Sanjay Gupta	IWA
61	Ms. Reena Kori	IDAM
62	Sh. P.K. Singhal	RWA
63	Sh. Shiv Kumar Sharma	NBCC
64	Sh. S.L. Gosain	RWA
65	Sh. Jitender Tyagi	URD
66	Sh. Jawed	URD
67	Smt. Sarla Rani	RWA
68	Ms. Arti	RWA
69	Sh. Sunil Kumar	RWA
70	Sh. Pramod Kapoor	RWA
71	Sh. Om Prakash Ahuja	RWA
72	Sh. Sandeep Bhatnagar	RWA
73	Sh. Surender Tomar	URD
74	Ms. Poonam Taneja	MMTC
75	Ms. Anita Guptrishi	MMTC
76	Ms. Radha Bhardwaj	RWA
77	Ms. Geeta Mahour	RWA
78	Sh. D.M. Narang	RWA
79	Sh. Arvind Mehta	RWA
80	Sh. Sukhveer Singh	RWA
81	Sh. Satish Nambardar	RWA
82	Sh. Sukhveer Singh	RWA
83	Sh. Sunny	RWA



S. No.	Name	Organization
84	Sh. Satveer Singh Fauji	RWA
85	Sh. Karanvir Singh	Delhi Pradesh
86	Sh. Rajan Gupta	Consumer
87	Sh. Balram	Consumer
88	Sh. Shiv Kumar Sharma	Consumer
89	Sh. Parvinder	Consumer
90	Dr. Ompal Singh Dhingan	RWA
91	Sh. Balvinder Singh Thappar	RWA
92	Ms. Jyoti Nanda	IERS
93	Ms. Priya Diwedi	IERS
94	Ms. Sushma Sharma	RWA
95	Sh. Vineet Goel	RWA
96	Sh. V. K. Sharma	RWA
97	Sh. Bhudev Sharma	RWA
98	Sh. Krishan Kumar	RWA
99	Sh. R. P. Sharma	RWA
100	Sh. S. C. Dua	Consumer
101	Sh. J. S. Marwah	Consumer
102	Sh. Subash Goel	Consumer
103	Sh. Basant Somani	Consumer
104	Sh. Ashish Garg	Consumer
105	Sh. A.K. Dutta	Consumer
106	Ms. Roshni	Consumer
107	Sh. H.R. Bhardwaj	DVB Pensioner
108	Sh. B. M. Mehta	Advocate

