

## DELHI ELECTRICITY REGULATORY COMMISSION

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

EJT (ESS6)/DERC/2017-18/

#### Petition No. 06/2018

In the matter of

Petition for Truing up of Tariff for FY 2016-17 and ARR for FY 2018-19 for PPS-1 of PPCL.

Progali 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: 28.03.2018]

M/s Progali Power Corporation Ltd. (PPCL) has filed the instant Perition for Truing up of Tariff for the FY 2016-17 and approval of Annual Revenue Requirement for FY 2018-19 for PPS-1 of PPCL. The Petition was admitted by the Commission vide Order acted 02:02:2018. The Petition along with Executive summary was uploaded on the website of the Commission seeking response of the stakeholders; and was also widely publicised through advertisement in newspapers.

The comments and suggestions of the staxeholders, the submissions made during the public hearing held on 23,03,2018 and the arguments advanced by the Petitioner have been duly considered and 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 28,03,2018.

The Petitioner shall take immediate steps to implement the said Order, so as to make the revised tartts applicable from 01,04,2018.

This Tariff Order shall remain in force till replaced by a subsequent fartt 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	
DPCL	Delhi Power Company Limited	
DTL	Delhi Transco Limited	
=		

Abbreviation	Explanation	
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	
MoP	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	
NGO	Non Government Organisation	
NHPC	National Hydroelectric Power Corporation	
NPCIL	Nuclear Power Corporation of India Limited	



Abbreviation	Explanation			
NRPC	Northern Regional Power Committee			
NTI	Non Tariff Income			
NTP	National Tariff Policy			
O&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			
PTC	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			



#### 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 2016-17 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 2018-19 in terms of Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2017 (hereinafter referred to as the 'Tariff Regulations, 2017') and Delhi Electricity Regulatory Commission (Business Plan) Regulations, 2017 (hereinafter referred to as the 'Business Plan 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, 2017 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 Business Plan Regulations, 2017 for the period FY 2017-18 to FY 2019-20 under Tariff Regulations 2017.

- 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 control period of FY 2012-13 to FY 2014-15 for a further period of one year till FY 2015-16.
- 1.8 The Commission has extended the applicability of MYT Generation Regulations, 2011 for FY 2016-17 in Tariff Regulations, 2017 as follows:

"NORMS OF OPERATION AND TRUING UP

139. Performance review and adjustment of variations in the ARR and Revenue for the Utilities for FY 2016-17 shall be considered in accordance with the Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Generation Tariff) Regulations, 2011, Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2011 and Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2011."

Filing of Petition for True-Up of Expenses for FY 2016-17 and Approval of Aggregate Revenue Requirement & Tariff for FY 2018-19

### **Filing and Acceptance of Petition**

- 1.9 PPCL has filed its petition before the Commission on 30.01.2018 for True Up of expenses for FY 2016-17 and Annual Revenue Requirement of FY 2018-19.
- 1.10 The Commission admitted the petition vide its Order dated 02.02.2018 for True Up and Tariff Determination 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's 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 23.03.2018 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 and the same was conveyed 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) etc. The Petitioner submitted additional information through various letters/ Emails.
- 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 correspondence with the Petitioner, as mentioned in the Table 1 as follows has been considered for approval of the True Up and ARR of the Petitioner:



Table 1: List of Correspondence with the Petitioner

Sr. No.	Letter No./ Email	Letter/ Email Date	Subject	
1	Email	03.01.2018	Prudence Check Session at DERC	
			Office at 11.00 AM on 07.03.2018	
2	IPGCL-	12.03.2018	Submission of additional	
	PPCL/Comml.201		documents to DERC for prudence	
	7-18/F.12/260		check	

#### **Public Notice**

1.17 The Commission published a Public Notice on its website and in the following newspapers on 26.02.2018 inviting comments from stakeholders on the Tariff petitions filed by the Petitioner by 09.03.2018:

(i) Indian Express (English) 26.02.2018 : (ii) Hindustan Times (English) : 26.02.2018 (iii) Times of India (English) 26.02.2018 (iv) Navbharat Times (Hindi) 26.02.2018 (v) Dainik Jagaran (Hindi) 26.02.2018 Educator (Punjabi) (vi) 26.02.2018 (vii) Jadid-in-dinon (Urdu) 26.02.2018

The copies of 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 09.03.2018 in the following newspapers on the respective dates mentioned alongside:

(i) Indian Express (English) 25.02.2018 (ii) Business Standard (English) 25.02.2018 (iii) Dainik Jagran (Hindi) 25.02.2018 (iv) The Daily Milap (Urdu) : 25.02.2018 (v) Daily Educator (Punjabi) : 25.02.2018

The copies of 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 11:00 A.M. and 04:00 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 In order to extend help to the stakeholders in understanding the ARR Petition and filing their comments, the Commission prepared an Executive Summary highlighting salient features of the Tariff Petition filed by the Petitioner, which was uploaded on the Commission's website. This was duly highlighted in the Public Notices published by the Commission.
- 1.21 Further, the Commission published a Public Notice indicating the venue, date and time of public hearing held on 23<sup>rd</sup> March, 2018 in the following newspapers on the respective dates mentioned alongside:

(i) Hindustan Times (English) : 09.03.2018 (ii) Mail Today (English) 09.03.2018 : The Times of India (English) (iii) 09.03.2018 (iv) The Hindu (English) 13.03.2018 (v) Punjab Kesari (Hindi) 09.03.2018 (vi) Navbharat Times (Hindi) 09.03.2018 (vii) Dainik Jagran (Hindi) : 09.03.2018 (viii) Jadid Indino (Urdu) 09.03.2018

Jan Ekta (Punjabi)

(ix)

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

09.03.2018

1.22 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 2016-17 and approval of Aggregate Revenue Requirement & Tariff for FY 2018-19 is enclosed as **Annexure II** 



to this Order.

1.23 The public hearing was held at the Auditorium of Scope Convention Centre, Scope Complex, New Delhi for all stakeholders on 23.03.2018 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**

- 1.24 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 2016-17 for PPS-I Station;
  - (d) Chapter A4 provides determination of tariff for FY 2018-19 for PPS-I Station;
  - (e) **Chapter A5** provides summary of all the directives issued by the Commission in this Order.
- 1.25 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 2016-17 and approval of Aggregate Revenue Requirement & Tariff for FY 2018-19.
  - (c) **Annexure III** List of Stakeholders/consumers who attended the public hearing.

## **APPROACH OF THE ORDER**

### Approach for FY 2016-17

1.26 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.

1.27 The Commission has accordingly, trued up the uncontrollable based on the audited accounts and other information submitted by the Petitioner for FY 2016-17 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 2018-19

- 1.28 The Commission vide notification dated January 31, 2017 issued the Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2017.
- 1.29 Further, the Commission has issued the Delhi Electricity Regulatory Commission (Business Plan) Regulations, 2017.
- 1.30 The Commission has evaluated the ARR submitted by the Petitioner on the basis of the provisions of Tariff Regulations, 2017 read with 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 23<sup>rd</sup> March, 2018 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: True up based on actual norms of operations and expenses Stakeholder's View

2.6 PPCL in its Tariff Petition has prayed for truing up of FY 2016-17 on actual basis.

Relevant extract of the Prayer Part is reproduced below:

"Chapter 6: Prayer

To Approve parameters for financial and operations for FY 2016-17 as per actual and as projected for FY 2018-19."(Statement 1)



Further, it is worth to mention that on Page no 7 of the tariff petition PPCL has clearly written that "As per clause 139 of MYT Regulations, 2017 true up of FY 2016-17 is to be carried out as per DERC Regulations 2011.

Performance review and adjustment of variation in the ARR and Revenue for the Utilities for FY 2016-17 shall be considered in accordance with the Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Generation Tariff Regulations, 2011.

- 2.7 Accordingly, petitioner is filing the present petition in line with provisions of above Regulations for true up of expenditure for FY 2016-17."(Statement 2)
- 2.8 From the above two statement given by PPCL in its Petition, it can be inferred that both statement are contradictory to each other, therefore, it is requested to the Commission to do the True up as per applicable MYT Regulations, 2011 instead of actual norms of operations/ expenses.
- 2.9 Further, PPCL seeks relaxation/excess in SHR for FY 2016-17. The Petitioner has claimed heat rate of 3135 for Open Cycle Operations. However Commission in MYT Regulations 2011 (which were effective up to FY 2015-16) and in Business Plan Regulations, 2017 (Which is effective from FY 2017-18 to FY2019-20) has provided heat rate of 2900 Open Cycle Operations.
- 2.10 Further, percentage generation is mere 0.34% in Open Cycle which as stated by PPCL runs only on as and when requisitioned by SLDC.
- 2.11 For period of FY 2007-08 to 2010-11, PPCL also challenged the DERC order dated 14.12.2007 in APTEL in Appeal No. 25 of 2008 which was rejected by ATE.
- 2.12 Therefore, the Commission is requested not to consider the relaxation in Station Heat Rate.

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

2.13 The Statement is not contradictory. In this regard, PPCL is like to submit that the state commission in its tariff regulation 2017, Part 7 under Norms of Operation and Truing up clause 139 has mentioned that revenue for utilities for FY 2016-17 shall be considered in accordance with DERC tariff regulation, 2011. The content of the same are re-produced as under:-



- " 139. Performance review and adjustment of variations in the ARR and revenue for the utilities for FY 2016-17 shall be considered in accordance with the Delhi Electricity Regulatory Commission (term and Conditions for determination of Generation tariff) Regulations, 2011. Delhi Electricity Regulatory Commission (terms and conditions for determination of Transmission Tariff) Regulations, 2011 and Delhi Electricity Regulatory Commission (terms and conditions for determination of Wheeling Tariff and Retail supply Tariff) Regulations, 2011."
- 2.14 Accordingly, PPCL has filed true-up petition in line with above provisions. The actual parameter has been mentioned as per clause 8.7 of DERC Regulation, 2011 which reads as under:
  - "8.7 The applicant shall submit information as part of annual review on actual performance to assess its performance vis-a-vis performance targets approved by the commission at the beginning of the control period. The applicant shall submit information on performance on controllable parameters (NAPAF, Station Heat Rate, Secondary Fuel Oil Consumption, Auxiliary Power Consumption, O&M Expenses, Capital Investment, Capitalisation, Depreciation, RoCE, etc."
- 2.15 Further it is submitted that normative heat rate may be achieved only in the cases of continuous running without frequent start/stop and backing downs of the plant. However as submitted in the petition the station has been subject to open cycle operation, part load operation and frequent start/stops resulting in higher SHR & APC. Since the reasons of higher Heat rate is on account of erratic scheduling by SLDC due to frequent change of demands by DISCOMs including BYPL. Therefore, PPCL has requested the Commission to relax the norms of SHR as the same is attributed to SLDC/DISCOMs.

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

2.16 The Commission has considered the principles specified in MYT Generation Regulations, 2011 for truing up of FY 2016-17.

# Issue 2: Additional expenses on account of STP Stakeholder's View

2.17 PPCL in its True up Petition has sought additional amount of Rs 3.35 Cr on account of expenses done toward STP. (Refer Table no 15 on page 22 of the Petition)



2.18 PPCL in its petition has not provided any evidence/ justification for claiming such expenses, hence the STP expenditure should not be allowed over and above the O&M expenses.

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

- 2.19 In this regard, it is to submit that the STP expenditure is part of additional/special expenditure being allowed by state commission as per clause 7.9(h) of DERC Regulation, 2011. Moreover, as per National Tariff Policy, 2016 of Govt. of India, the expenditure on sewage treated water uses is additionally allowed/should be allowed. The relevant content of provisions of tariff policy 2016, Clause 6.2 (5) is reproduced as under:-
  - "(5) The thermal power plant(s) including the existing plants located within 50 km radius of sewage treatment plant of Municipality/local bodies/similar organization shall in the order of their closeness to the sewage treatment plant, mandatorily use treated sewage water produced by these bodies and the associated cost on this account be allowed as a pass through in the tariff. Such thermal plants may also ensure back-up source of water to meet their requirement in the event of shortage of supply by the sewage treatment plant. The associated cost on this account shall be factored into the fixed cost so as not to disturb the merit order of such thermal plant. The shutdown of the sewage treatment plant will be taken in consultation with the developer of the power plant."
- 2.20 Accordingly, the expenditure on STP is passing through to the beneficiaries of the plant. The expenditure towards STP has already been submitted to DERC vide letter no. IPGCL-PPCL/Comml./2017-18/F.12/183 dated 06.03.2018. Copy of the same is annexed as Annexure 'A'.

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

2.21 The Commission has allowed the expenses based on the prudence check.

# Issue 3: Non-Tariff Income Stakeholder's View

2.22 PPCL in its petition has not offered any non-tariff income towards ARR for FY 2016-17. Therefore it is requested to the Commission to do the prudence check of the balance sheet of PPCL.



#### Petitioner's Submission

2.23 The respondent PPCL has no any additional income, as non-tariff income for the plant; as no any other activity is undertaken by the plant. The Balance sheet/Annual audited accounts of the respective year has already been provided during truing up to state commission vide PPCL letter no. IPGCL-PPCL/Comml/2017-18/F.12/183 dated 06.03.2018. Copy of the same is annexed as Annexure 'A'.

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

2.24 DERC MYT Generation Regulations, 2011 do not provide for non-tariff income for Generation Companies.

## Issue 4: Balance Sheet Stakeholder's View

2.25 PPCL has not provided copy of its Audited Financial Statement, hence our response is limited to the extent of information provided in Tariff Petition. It is requested to the Commission to issue directive to Generation companies to provide copy of their financial statement to DISCOMs.

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

2.26 The Balance sheet/Annual audited accounts for FY 16-17 has been provided to state commission vide letter no. IPGCL-PPCL/Comml/2017-18/F.12/183 dated 06.03.2018.
Copy of the same is being forwarded here with for necessary information and records to TPDDL as Annexure 'A'.

### **Commission's View**

2.27 The Petitioner has submitted the required Financial Statement to the Commission.

## Issue 5: Gross Generation and Net Generation of PPS I Station for FY 2018-19 Stakeholder's View

2.28 The petitioner has calculated Net generation for FY 18-19 based on Auxiliary Consumption of 2.5% which is incorrect. The same should be calculated based on Auxiliary Consumption of 2% while calculating Variable Cost. Accordingly, the Net Generation shall be 2408.036 MUs

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

2.29 In this regard, it is to submit that since the auxiliary consumption of the station is



2.5% on normative basis as given in Business Plan Regulation, 2017 clause 8(3)(a) and 8(3)(b). It is clear from the content that total auxiliary consumption is 2.5%. However, while arriving the calculation for expenses on account of auxiliary consumption 0.5% will be part of fixed expenses and 2 % will be as per actual generation. The relevant content of Business Plan Regulation, 2017 is reproduced as under:-

- "(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% in Combined Cycle mode and 0.5% in Open Cycle mode of the actual generation which shall form part of computation of energy charge rate of the respective month."

Further submission is also in line with DERC Tariff Regulation 2017 as per part 1 preliminary clause 7 as given for definition of Auxiliary Energy Consumption which reads as under:-

- "(7) Auxiliary Energy consumption or "Aux" in relation to a period in case of a generating station means the quantum of energy consumed by auxiliary equipment of the generating station, such as the equipment being used for the purpose of operating plant and machinery including switchyard of the generating station and the transformer losses within the generating station, expressed as a percentage of the sum of the gross energy generated at the generator terminals of all the units of the generating station."
- 2.30 Accordingly, while calculating ex-bus energy or scheduled energy; total auxiliary consumption of 2.5% is to be deducted. The petitioner PPCL have accordingly calculated ex-bus energy, as in case 0.5% of the APC is excluded from the gross generation to arrive ex-bus sent out energy, it will compute to 98% of the gross generated energy instead of 97.5% in case total APC of 2.5% is used for arriving ex-bus. The later is not possible as the auxiliary consumption always remains more than 2.5%.

#### Commission's View

2.31 The Commission has considered the Aux. Consumption as specified in Business Plan



Regulations, 2017 for determining the Net Generation for FY 2018-19.

## Issue 6: Variable Cost for PPS-I Station Stakeholder's View

2.32 The Petitioner has calculated the Variable Cost considering the Auxiliary Consumption of 2.5% which is incorrect. The Variable Cost needs to be calculated based on Auxiliary Consumption of 2%.

**Table 2: Variable Cost** 

Particulars	Unit	Variable Cost	
		Petitioners	Respondents
		Submission	Submission
Total Consumption	MMSCM	522.64	522.64
Average Gas Price	Rs./SCM	18.861	18.861
Total Gas Cost	Rs. Crores	985.75	985.75
Net Generation	MU	2395.751	2408.036
Variable Cost – CC	Rs. kWh	4.114	4.093

2.33 Further, the following is submitted in respect of Variable cost of PPS I Station:

Month	Plants	Туре	Contribution of
			RLNG Fuel (%)
Apr-16			29%
May-16			42%
June-16			51%
July-16		RLNG	44%
Aug-16	PPCL-I		39%
Sep-16			19%
Oct-16			13%
Nov-16	1100-1	KLIVO	43%
Dec-16			47%
Jan-17			62%
Feb-17			179
Mar-17			15%

2.34 During the financial year it is observed that PPS I Station has tremendously increased the contribution of RLNG fuel to the tune of 15 to 60% rather than domestic gas. However, the cost of RLNG is very high and therefore the Commission is requested to put a cap on use of RLNG fuel.



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

- 2.35 In this regard it is to submit that the ECR as calculated and submitted in tariff petition is arrived as per above submission in Pt. no. (V).
- 2.36 The Petitioner has submitted that it had always forwarded the actual bill paid to gas supply by GAIL on monthly basis and also uploads the same on regular basis along with FORM-15 in its website http://ipgcl-ppcl.gov.in/ as per direction of DERC. Therefore, all the DISCOMs including BYPL are well aware of trend of gas price increase on month-to-month in real time basis. Further as regards increasing share of RLNG consumption it is to submit that spot RLNG has been used only in cases of cuts in domestic gas supply, which is not in the preview of the generator. The generation on RLNG has been done only on request of DISCOMs including BYPL as per schedule given by Delhi SLDC.

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

2.37 The Commission has considered the Aux. Consumption as specified in Business Plan Regulations, 2017 for determining the Variable Cost for FY 2018-19.

## Issue 7: Excess Depreciation claimed for FY 2018-19 Stakeholder's View

2.38 PPCL has sought depreciation of Rs 15.12 Cr. for FY 2018-19. The Commission has allowed Rs 13.63 Cr. as depreciation for FY 2017-18. It is submitted that as the deprecation is allowed on straight line method, thus, same amount of depreciation should be allowed for FY 2018-19 in the absence of any addition in Gross Fixed Assets.

## **Petitioner's Submission**

2.39 In this regard it is to submit that the amount of deprecation of Rs 13.63 crores as allowed by DERC for FY 17-18 is based upon GFA ending FY 15-16. Since GFA for FY 16-17 was not trued up by DERC at the time of issuing of tariff order for FY 17-18. However the present petitions of PPCL includes true up for FY 16-17 including capital



expenditure of Rs 12.61 crores during FY 16-17. Accordingly, the amount of depreciation will work out to be Rs 15.12 crores for FY 18-19. As GFA ending FY 16-17 will change and affect the amount of depreciation recoverable in FY 18-19. Commission's View

#### Commission's View

2.40 The issue has been dealt in detail in the relevant section of this Order.

## Issue 8: Component wise Interest on Loans/ Return on Equity/ Interest on Working capital Stakeholder's View

2.41 PPCL in its true up Petition has claimed component wise return in line with MYT Regulations, 2011. The ARR for FY 2018-19 is not prepared in accordance with the applicable MYT Regulations, 2017. As per MYT Regulations, Return in the form of ROCE shall be allowed instead of allowing separate claim for each parameter.

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

2.42 This is contradictory statement at one place TPDDL has quoted that "PPCL in its true up Petition has claimed component wise return in line with MYT Regulations, 2011", however, while making comments under "TPDDL comments." TPDDL has commented on ARR for FY 18-19. Thus it is to submit that the ARR for FY 18-19 has been submitted as per clause 3, 4, 5, 6, 7, 8 of DERC Business Plan regulation 2017.

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

2.43 The Commission has followed the principles specified in Tariff Regulations, 2017 and Business Plan Regulations, 2017 for determining the Return on Capital Employed (RoCE) for FY 2018-19.

# Issue 9: Additional expenses on account of STP Stakeholder's View

- 2.44 PPCL in its True up Petition has sought additional amount of Rs 3.35 Cr on account of expenses done toward STP. (Refer Table no 15 on page 22 of the Petition)
- 2.45 PPCL in its petition has not provided any evidence/ justification for claiming such



expenses, hence the STP expenditure should not be allowed for FY 2018-19.

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

2.46 In this regard it is to inform that PPCL has already submitted the details of expenditure on STP and other expenditures as per directions of DERC received vide email dated 01.03.2018. The copy of the same is also attached as Annexure 'A' to present reply.

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

2.47 The expenses towards STP are recurring in nature and therefore the Commission allows the same for FY 2018-19.

## Issue 10: Interest on Working Capital Loans Stakeholder's View

- 2.48 PPCL in its true up Petition has sought working capital interest rate @ 13.50% for FY 2018-19. The Rate of Interest for working capital loans shall be fixed as per the methodology prescribed in Delhi Electricity Regulatory Commission Business Plan Regulations, 2017.
- 2.49 Further, the Fuel Cost for Working Capital needs to be calculated considering Auxiliary Consumption of 2% in place of 2.5% as considered by the Petitioner.

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

- 2.50 In this case also, TPDDL has given contradictory comments by referring true up petition that too referring FY 18-19 which is in fact ARR petition for FY 18-19. In this regard it is to submit that interest on working capital for FY 18-19 has been taken as per clause 85 & 86 DERC Tariff Regulation 2017 which reads as under:-
  - "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.....
  - 86. Interest on working capital shall be payable on normative basis notwithstanding that the utility has availed any loan for the working capital."



#### Commission's View

2.51 The Commission has considered the provisions as specified in Business Plan Regulations, 2017 for computing the Interest on Working Capital for FY 2018-19.

## Issue 11: Higher Gas Price for FY 2018-19 Stakeholder's View

2.52 PPCL in its true up Petition has considered Rs 18.861/SCM for the purpose of computation of fuel cost for FY 2018-19. The Commission has considered Rs. 12.99/SCM for FY 2017-18 in its Tariff order dated August, 2017. Considering the fuel cost of Rs 18.861/SCM there is an increase of 45% in fuel cost over the previous year cost of 12.99/SCM. Further, in the Tariff Petition, PPCL has not provided any specific reason for such increase. Therefore, it is requested to PPCL to provide the justification for such higher increase in fuel cost.

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

2.53 In this regard it is to also submit that the comments does not relate to true up petition rather ARR petition for FY 18-19. However the fuel cost of Rs 12.99/SCM as referred for FY 17-18 in DERC tariff order dated 31.08.2017 is not related in any way while arriving gas cost for FY 18-19. The TPDDL is well aware of the trends of gas cost as PPCL always submits gas related information in the form FORM-15 and uploads the copy of paid gas bills as per the direction of State Commission. It is further to submit that fuel cost for arriving applicable gas cost is based upon clause 107 of DERC tariff regulation 2017 which reads as under:-

"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."

2.54 Accordingly, PPCL has calculated weighted moving average fuel cost for FY 18-19 is based upon moving average fuel cost of three months of September, October & November 2017. This is in line with FORM-15 of DERC Regulation 2017 calculating average fuel cost of three months prior to COD for new generating station and as on 1st April for existing stations.



2.55 In this regard it is further to submit that during finalisation of the tariff petitions the fuel cost for January, February and March 2018 i.e 03 months prior to 01.04.2018 was not available (as required in form 15), therefore, PPS-I has calculated weighted average cost for September, October & November 2017. A copy of working sheet in arriving landed fuel cost of Rs 18.861 per SCM is attached herewith as per Annexure 'B'. The content of the gas composition, quantity & cost are same as available in FORM-15 of the respective months for PPS-I.

### **Commission's View**

2.56 The Commission has followed the principles specified in Tariff Regulations, 2017 for considering the Gas Price for determination of Energy Charge Rate for FY 2018-19.



#### A3: TRUE UP OF FY 2016-17

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 5.10 of MYT Generation Regulations, 2011 specifies the following:

"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 include:

- (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"
- 3.3 Regulation 5.11 of MYT Generation Regulations, 2011 specifies the following:
  - "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."
- 3.4 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"



3.5 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 2016-17.

## **Norms of Operation**

#### **Availability**

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

3.6 Actual Availability submitted by the Petitioner is as follows:

**Table 3: Petitioner Submission - Actual Availability** 

Sr.No.	Station	UoM	FY 2016-17
1	PPS-I	%	90.62%

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

## **Commission's Analysis**

- 3.8 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 2016-17 for the purpose of Performance review and adjustment of variations in the ARR and Revenue in Tariff Regulations, 2017.
- 3.9 The Commission has verified the data regarding plant availability for true up of PPS-I for FY 2016-17 from Annual Report of SLDC Delhi and has approved the plant availability for the purpose of truing up of FY 2016-17 as follows:

**Table 4: Commission Approved - Plant Availability** 

Sr.No.	Station	UoM	FY 2016-17		
					Approved for True Up
1	PPS-I	%	85.00	90.62	90.62

### Station Heat Rate (SHR)

### **Petitioner's Submission**

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

**Table 5: Petitioner Submission - Station Heat Rate** 

Sr.No.	Mode of Operation	UoM	FY 2016-17
1	Combined Cycle	kCal/kWh	1972
2	Open Cycle	kCal/kWh	3135



- 3.11 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, in its report on technical standards on operational norms for Gas Turbine stations, 2004, has considered the open cycle heat rate of 3075.30 kCal/kWh at 100% PLF.
- 3.12 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.
- 3.13 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.
- 3.14 The petitioner has requested the Commission to approve actual SHR achieved in open cycle mode during FY 2016-17.

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

- 3.15 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%

3.16 The Commission has extended the applicability of MYT Generation Regulations, 2011 for FY 2016-17 for the purpose of Performance review and adjustment of variations in the ARR and Revenue in Tariff Regulations, 2017.



- 3.17 It is observed that Gross Station Heat Rate has been indicated as a controllable parameter in Regulation 5.10 (a) of MYT Generation Regulations, 2011 and Regulation 5.11 of MYT Generation Regulations, 2011 provides that any financial loss on account of underperformance on targets for parameters specified in Clause 5.10 (a) to (e) is not recoverable through tariffs.
- 3.18 In view of the above, the Commission approves the normative Gross Station Heat Rate for PPS-I for true up of FY 2016-17 as per the approved norms in MYT Generation Regulations, 2011 as follows:

**Table 6: Commission Approved -Station Heat Rate** 

Sr.No	Station	Mode of	UoM	FY 2016-17		
		Operation		MYT Order July 2012	Actual as submitted by Petitioner	Approved for True Up
1	PPS-I	Combined Cycle	kCal/ kWh	2000	1972	2000
1	rr3-1	Open Cycle	kCal/ kWh	2900	3135	2900

### **Auxiliary Power Consumption (APC)**

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

3.19 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. Actual Auxiliary Power Consumption submitted by the Petitioner is as follows:

**Table 7: Petitioner Submission - Actual Auxiliary Power Consumption** 

Sr.No.	Mode of Operation	UoM	FY 2016-17
1	Combined Cycle	%	2.58

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

- 3.20 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 2016-17 in Tariff Regulations, 2017.
- 3.21 Accordingly, the Commission approves the Normative Auxiliary Power Consumption for PPS-I for FY 2016-17 as follows:



FY 2016-17 Sr.No. **Station** Mode of **UoM** Operation MYT Order Actual as Approved for July 2012 submitted by **True Up** Petitioner % **Combined Cycle** 3.00 2.58 3.00 PPS-I 1 Open Cycle % 1.00 1.00

Table 8: Commission Approved - Auxiliary Power Consumption

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

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

3.22 The Petitioner has submitted the Net Generation for PPS-I Station as follows:

FY 2016-17 Description Sr.No. **UoM** MW330 Capacity 2 **Gross Generation** MU 1805.67 2.58 **Auxiliary Consumption** % 4 **Net Generation** MU 1759.05

**Table 9: Petitioner Submission - Net Generation** 

3.23 The Petitioner has submitted the details of total gas consumption, rate per SCM and total cost of the gas for FY 2016-17 as per actual as under:

Particulars	Unit	2016-17
Total Gas Consumption	MMSCM	377.82
Average Gas Price	Rs./SCM	13.961
Total Gas Cost	Rs. Crores	527.49
Net Generation	MU	1759.051
Variable Cost - CC	Rs./kWh	2.999

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

3.24 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."

3.25 Further, the Commission vide its e-mail dated 01/03/2018 has sought the authenticity of energy charge rate billed by PPS-I Station from the beneficiary DISCOMs. It is observed that beneficiary has submitted that the computation of energy charge rate billed by PPS-I Station during FY 2016-17 is as per the provisions of MYT Generation Regulations, 2011. Accordingly, the Commission has not considered true up of fuel cost for FY 2016-17.

### **Fixed Cost**

## Operation & Maintenance (O&M) Expenses

#### Petitioner's Submission

- 3.26 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. 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. Further, Operation and Maintenance of this Plant is entrusted to originally equipment manufacturer M/s. Degremont on year to year on contract basis. Being in operation for more than 16 years some of the major equipments requires replacement / extensive maintenance to ensure continuous smooth operation of plant.
- 3.27 Petitioner 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 expenses towards R&M of DLN burners and for critical components of Gas Turbines are required to be incurred by PPS-I for 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. The same has been allowed by the Commission at Rs.15 Crore additional R&M expenses every year during the Control period FY 2012-13, 2013-14 & 2014-15. During financial year 2013-14 and 2014-15 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 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 15-16 was Rs.65.5 Cr. The Commission though principally approved and allowed above expenditure however actual recovery has not been allowed in previous true up order for FY 2015-16. The Petitioner has requested to allow expenditure met in FY 2105-16 on account of DLN in true up order for FY 2016-17 with carrying cost.

- 3.28 Regarding the Impact of 7<sup>th</sup> Pay Commission Implementation, the Petitioner has submitted that pay and perks of employees of the petitioner Company is determined in line with Central Pay Commission Recommendations. The Central pay Commission's 7<sup>th</sup> pay recommendations are already notified and implemented at Central and State level employees. In case of the Petitioner, the same has been partially implemented in FY 2017-18. Therefore, the expenditure as given above does not include the impact of 7<sup>th</sup> Central Pay Commission implementation.
- 3.29 Actual and Normative O&M Expenses submitted by the Petitioner is as follows:

Table 11: Petitioner Submission - Actual and Normative O&M Expenses

Sr.No.	Description	UoM	Normative	Actual
1	Repairs and Maintenance (R&M)	Rs Cr	19.97	23.51
2	Employee Expenses	Rs Cr	32.91	27.48
3	Administrative and General Expenses	Rs Cr	14.19	12.78
4	O&M Expenses	Rs Cr	67.07	63.77
5	Special R&M Expenses (DLN AGP)	Rs Cr	16.12	16.12
6	STP	Rs Cr	3.35	3.35



	Sr.No.	Description	UoM	Normative	Actual
ĺ	7	Total O&M Expenses	Rs Cr	86.54	83.24

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

3.30 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."

3.31 The MYT Regulations 2011 specify that R&M expenses for existing generating stations shall be determined using the following formula:

"R&Mn = K \* GFAn-1;

Where,

R&Mn is Repair and Maintenance Costs of the Licensee for the nth year;

"K" is a constant (could be expressed in %). Value of K for each year of the Control Period shall be determined by the Commission in the MYT Tariff order based on Applicant's filing, benchmarking, approved cost by the Commission in past and any other factor considered appropriate by the Commission"

3.32 The Commission had approved the K factor for the purpose of R&M Expenses at 1.29% in MYT Order dated 13.07.2012 and closing GFA of FY 2015-16 at Rs 1050.38 Cr in Tariff Order dated 31.08.2017. Accordingly, the Commission has determined R&M Expenses as per MYT Regulations 2011 as follows:



Sr.No. **Particulars** Normative as Actual as Trued up Remarks submitted by submitted Petitioner by Petitioner Tariff Order 31.08.2017 Opening GFA 1050.38 Α "K" Factor MYT order 13.07.2012 В 1.29% R&M 19.97 23.51 13.55 C = A\*B

Table 12: Commission Approved - R&M Expenses as per MYT Regulations, 2011

- 3.33 The Commission had prorated the expenses against DLN Burner (Advanced Gas Path) to be allowed into four years starting from FY 2015-16 and considered Rs. 16.12 Cr for FY 2015-16 in tariff order dated 31/08/2017. Accordingly, additional R&M on account of DLN Burner is allowed in FY 2016-17 of Rs. 16.12 Cr.
- 3.34 The Petitioner has submitted claim of Rs. 3.35 Cr as expenses on account of Sewage Treatment Plant as an additional R&M Expenses for FY 2016-17. Accordingly, the Commission has considered Rs 3.35 Cr against STP Expenses based on prudence check of the expenditure.
- 3.35 As per MYT Regulations 2011, the employee expenses for the Control Period shall be projected using the following formula:

$$\mathsf{EMPn} + \mathsf{A\&Gn} = (\mathsf{EMPn}\text{-}1 + \mathsf{A\&Gn}\text{-}1) * (\mathsf{INDX}); \mathsf{and}$$

EMPn – Employee Costs of the Licensee for the nth year;

A&Gn – Administrative and General Costs of the Licensee for the nth year;

Where,

INDX - Inflation Factor to be used for indexing. Value of INDX shall be a combination of the Consumer Price Index (CPI) and the Wholesale Price Index (WPI) for immediately preceding five years before the base year

3.36 The Commission had approved escalation factor as 8% for Employee Expenses and A&G Expenses in its MYT order dated 13.07.2012 and the Petitioner has considered the escalation factor at 6% for FY 2016-17. Further, the Employee Expenses and A&G Expenses approved for FY 2015-16 in Tariff Order dated 29.09.2015 was Rs. 31.05 Cr. and Rs. 18.84 Cr respectively. Accordingly, the Commission has considered the



Employee Expenses and A&G Expenses for FY 2016-17 based on escalation factor of 8% as approved by the Commission and as approved in FY 2015-16 in the table below:

Table 13: Commission Approved - Employee and A&G Expenses for FY 2016-17 (Rs.Crore)

Particulars	Normative as submitted by Petitioner	Actual as submitted by Petitioner	Approved for FY 2015-16 (A)	Escalation Factor (B)	Approved for FY 2016-17 (C)	Remark
Employee Expenses	32.91	27.48	31.05	1.08	33.53	C = A*B
A&G Expenses	14.19	12.78	18.84	1.08	20.35	C - A B

3.37 In view of the above, the O&M Expenses approved by the Commission are as follows:

Table 14: Commission Approved - O&M Expenses for FY 2016-17

Sr.No.	Particulars	UoM	Normative as submitted by Petitioner	Actual as submitted by Petitioner	Approved for true up
Α	Employee Expenses	Rs Cr	19.97	23.51	33.53
В	A&G Expenses	Rs Cr	32.91	27.48	20.35
С	R&M Expenses	Rs Cr	14.19	12.78	13.55
D	Base O&M	Rs Cr	67.07	63.77	67.43
E	Special R&M on DLN Burner (AGP)	Rs Cr	16.12	16.12	16.12
F	STP	Rs Cr	3.35	3.35	3.35
G	Total O&M Expenses	Rs Cr	86.54	83.24	86.90

# **Capital Expenditure**

# **Petitioner's Submission**

3.38 The capitalization submitted by the Petitioner during FY 2016-17 is as follows:

Table 15: Petitioner Submission - Capitalization for FY 2016-17

Sr.No.	Particulars	UoM	FY 2016-17
1	Opening GFA	Rs Cr	1050.38
2	Addition	Rs Cr	12.61
3	Deletion	Rs Cr	0.15
4	Closing GFA	Rs Cr	1062.84

# **Commission's Analysis**

3.39 The Commission had sought the details of capitalisation and de-capitalisation during FY 2016-17 from the Petitioner. It is observed that the capitalization expenses claimed are of O&M in nature, therefore the Commission has not approved the same under Capitalisation.



FY 2016-17 Sr.No. **Particulars UoM** Petitioner Approved for Submission True up Opening GFA Rs Cr 1050.38 1050.38 Α В Addition Rs Cr 12.61 0 Deletion C 0.15 0 Rs Cr 1050.38 Closing GFA 1062.84 D Rs Cr Ε **Net Capitalization** 12.46 0 Rs Cr

Table 16: Commission Approved - Capitalization for FY 2016-17

# Depreciation

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

3.40 The Depreciation amount for FY 2016-17 submitted by the petitioner is as follows:

Table 17: Petitioner Submission - Depreciation for FY 2016-17

Sr.No.	Station	UoM	FY 2016-17
1	PPS-I	Rs Cr	13.63

# **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 2015-16 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 2016-17.
- 3.43 Further, it is observed that PPS-I Station got commissioned in FY 2002-03 and shall complete its useful life by FY 2027-28.
- 3.44 The Depreciation approved by the Commission for true up for FY 2016-17 is as follows:

Sr. No. **Particulars UoM** Petitioner's Approved for Ref. **Submission True Up** Opening GFA 1050.38 1050.38 Table 16 Rs. Cr. Table 16 В Additions Rs. Cr. 12.61 0 C 0.15 Table 16 **Deletions** Rs. Cr. 0 1050.38 D Closing GFA Rs. Cr. 1062.84 Table 16 Ε Average GFA Rs. Cr. 1056.61 1050.38 (A+D)/2F Depreciation Rs. Cr. 13.63 13.63 Para 3.42 Rs. Cr. Opening Accumulated G 781.75 Tariff Order depreciation %age of Accumulated % Η Depreciation to the GFA at 74.43 G/A opening of FY 2016-17 Closing Accumulated Rs. Cr. Ī 795.39 F+G depreciation Average Accumulated Rs. Cr. J 788.57 (G+I)/2depreciation % Κ Depreciation Rate (%) 1.30 (F/E)x100

Table 18: Commission Approved - Depreciation for FY 2016-17

#### **Interest on Loan**

# **Petitioner's Submission**

3.45 The Petitioner has submitted that interest expenditure on account of long-term loans depends on the outstanding loan, repayments and applicable interest rates. As per Regulations, 70% of the capital additions have been considered to be funded through



Loans. Accordingly, interest on loan has been computed by considering rate of interest @ 11.65% as follows:

**Table 19: Petitioner Submission - Interest on Loan** 

Particulars (Rs Crores)	FY 2016-17
Interest Charges	2.64

# **Commission's Analysis**

- 3.46 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;"
- 3.47 Regulation 5.12 of MYT Generation Regulations, 2011 has specified the provisions related to true up of 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."

3.48 The quantum of loan required for funding of capital asset has been dealt in regulation 6.13 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."

3.49 Further, Regulation 6.18 of MYT Generation Regulations, 2011 specifies the principle for determination of rate of interest on Loan as follows:

"6.18 The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each year applicable to the project.

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

Provided further that if the generating station, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company as a whole shall be considered;"

3.50 It is observed from reading of the above provisions and the fact that Accumulated Depreciation has already exceeded 70% of the value of Gross Fixed Asset at the opening of FY 2016-17 and no Capitalization is approved for FY 2016-17, there is no loan required for FY 2016-17. Accordingly, the Commission has not considered Interest on Loan for FY 2016-17.

#### Return on Equity (ROE)

# **Petitioner's Submission**

3.51 The Petitioner has submitted that the Return on equity has been computed on approved equity of Rs. 328.83 by the Commission, for FY 2016-17 in table below:

Table 20: Petitioner Submission – Return on Equity for FY 2016-17

Sr.No	Particulars (Rs. Cr.)	FY 2016-17
1	Equity (Opening Balance)	328.83
2	Net additions during the year	3.74



Sr.No	Particulars (Rs. Cr.)	FY 2016-17
3	Equity(Closing Balance)	332.57
4	Average Equity	330.70
5 Rate of Return on Equity (%)		14.00
Return	on Equity (Grossed up) %	17.80

3.52 Further, the Petitioner has considered income tax rate of 21.34 % in grossing up of ROE of 14.00 % accordingly grossed up ROE is 17.80%. The details of grossed up ROE being claimed for FY 2016-17 is as under:

Table 21: Petitioner Submission - Details of Grossed up ROE for FY 2016-17

Particulars		FY 2016-17
Average Equity (Rs. Cr.)	Α	330.70
Base Rate of return on equity i.e @ 14 (%) (Rs Cr.)	В	46.30
Normal Income tax Rate as considered by Commission (%)	С	21.34
Gross up return on equity (%)	D= (base rate/(1-C)	17.80
Return on equity (Rs. Cr.)	E=(AxD)	58.86

# **Commission's Analysis**

3.53 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."

3.54 As there is no capitalization approved for FY 2016-17, the Commission has allowed the return on equity on the closing balance of equity for FY 2015-16 as approved by the Commission in Tariff order dated 31.08.2017 for true up of FY 2016-17 in accordance with the provisions of MYT Generation Regulations, 2011 as follows:

Table 22: Commission Approved - Return on Equity for FY 2016-17

Sr.	Particulars	UoM	FY 2016-17		Ref
No.			Petitioner's	Approved for	
			Submission	True Up	
Α	Average Equity	Rs Cr		328.83	Tariff Order and
			330.70	320.03	Para 3.54
В	Base Rate of return on	%			MYT
	equity (%)		14.00%	14.00%	Regulations,
					2011



Sr.	Particulars	UoM	FY 2016-17		Ref
No.			Petitioner's	Approved for	
			Submission	True Up	
С	Income Tax Rate (%)	%	21.34%	21.34%	
D	Effective Rate of Return on	%	17.80%	17.80%	B/(100-C)
	Equity (%)		17.60%	17.80%	B/(100-C)
Ε	Effective Return on Equity	Rs Cr	58.86	58.53	AxD

# **Interest on Working Capital (IoWC)**

#### Petitioner's Submission

- 3.55 The Petitioner has submitted the Interest on Working Capital as per the following norms:
  - 1. Cost of fuel for 1 month
  - 2. O&M expenses for 1 month
  - 3. Receivables equivalent to 2 months average billing
  - 4. Maintenance spares @ 30% of the O&M expenses
- 3.56 The Petitioner has further submitted that as per clause 6.27 of DERC tariff regulation 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, March of the respective year. The relevant content 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."
- 3.57 Accordingly, the Petitioner has computed interest on working capital for FY 2016-17 taking applicable rate of fuel as per tariff regulation 2011. The same is given in following table:

Table 23: Petitioner Submission - Interest on working capital for FY 2016-17

For Open-cycle Gas Turbine/ Combined Cycle generating stations		FY 2016-17
Fuel expenses for 1 month	Rs Crores	70.03
Liquid fuel stock for ½ month	Rs Crores	0
Maintenance spares @ 30% of O&M	Rs Crores	25.96
O&M expenses for 1 month	Rs Crores	7.21



For Open-cycle Gas Turbine/ Combined Cycle generating stations		FY 2016-17
Receivables equivalent to 2 months of capacity and energy charge	Rs Crores	176.54
Total Working Capital	Rs Crores	279.74
Rate of Interest	%	13.50
Interest on Working Capital	Rs Crores	37.77

# **Commission's Analysis**

- 3.58 MYT Generation Regulations 2011 specifies the principles for determination of working capital requirement and rate of interest applicable on working capital as following:
  - "6.26 For Open-cycle Gas Turbine/Combined Cycle thermal generating stations, the working capital requirements shall be calculated using the following components:
  - (a) Fuel expenses for 1 month 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;
  - (b) Liquid fuel stock for ½ month corresponding to the Normative Annual Plant Availability Factor duly taking into account mode of operation of the generating station of gas fuel and liquid fuel, and in case of use of more than one liquid fuel, cost of main liquid fuel;
  - (c) Maintenance spares @ 30% of operation and maintenance expenses specified in clause 6.39- 6.44 of these Regulations;
  - (d) Receivables equivalent to two months of capacity charge and energy charge for sale of electricity calculated on Normative Annual Plant Availability factor, duly taking; and
  - (e) O&M expenses for 1 month.
  - 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.
  - 6.28 Rate of interest on working capital shall be on normative basis and shall be equal to Base Rate of State Bank of India plus 350 basis points as on 1.4.2012 or on 1st April of the year in which the generating station or a unit thereof is declared under commercial operation, whichever is later.
  - 6.29 Interest on working capital shall be payable on normative basis notwithstanding that the generating company has not taken working capital



loan from any outside agency or has exceeded the working capital loan based on the normative figures."

3.59 Further, Regulation 5.12 of MYT Generation Regulations 2011 specifies the principles for true up of rate of interest on working capital as 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."

3.60 It is observed that the working capital and rate of interest was not determined for FY 2016-17 due to non issuance of tariff order for FY 2016-17 for the Petitioner. Therefore, the Commission has determined the requirement of working capital and rate of interest on working capital based on the provisions of MYT Generation Regulations 2011 as follows:

Table 24: Commission Approved - Interest on Working Capital for FY 2016-17

Particulars	Unit	Petitioner Submission	Commission's Analysis	Ref.
Fuel Expenses for 1 month	Rs Crores	70.03	70.03	
Maintenance spares @ 30% of O&M	Rs Crores	25.96	26.07	
O&M expenses for 1 month	Rs Crores	7.21	7.24	
Receivables equivalent to 2 months of capacity and energy charge	Rs Crores	176.54	172.78	
Total Working Capital	Rs Crores	279.74	276.12	
Rate of Interest	%	13.50%	13.50%	Tariff Regulations, 2011
Interest on Working Capital	Rs Crores	37.77	37.28	FxH

# **Summary of Fixed Cost**

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

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

Table 25: Petitioner Submission - Fixed Cost for FY 2016-17

Sr.No.	Particulars	UoM	Normative	Actual
1	O&M Expenses	Rs Cr	86.54	63.77



Sr.No.	Particulars	UoM	Normative	Actual
2	Depreciation	Rs Cr	13.63	13.63
3	Interest Charges	Rs Cr	2.64	2.64
4	Return on Equity	Rs Cr	58.86	58.86
5	Interest on Working Capital	Rs Cr	37.77	37.77
6	Sp. R&M on account of DLN (AGP)	Rs Cr	16.12	16.12
7	STP	Rs Cr	3.35	3.35
8	Total Fixed Cost	Rs Cr	218.91	196.13
9	Net Generation (MU)	MU	2383.46	1759.051
10	Fixed Cost (Rs/ kWh)	Rs/ kWh	0.918	1.115

# **Commission's Analysis**

- 3.62 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
- 3.63 The Commission has considered the Net Generation as specified in the Annual Report of SLDC for the purpose of truing up of FY 2016-17.
- 3.64 Based on the analysis of various components by the Commission, the Annual Fixed Cost for FY 2016-17 as follows:

Table 26: Commission Approved - Annual Fixed Cost for FY 2016-17

Sr.No.	Particulars	UoM		FY 2016-17		
			Actual as	Normative	Trued	
			submitted by	submitted by	up	
			Petitioner	the Petitioner		
А	O&M Expenses (incl. DLN (AGP) and STP)	Rs. Cr.	63.77	86.54	86.90	Table 14



Sr.No.	Particulars	UoM		FY 2016-17		Ref.
			Actual as submitted by Petitioner	Normative submitted by the Petitioner	Trued up	
В	Depreciation	Rs. Cr.	13.63	13.63	13.63	Table 18
С	Interest Charges	Rs. Cr.	2.64	2.64	-	Para 3.50
D	Return on Equity (incl. income tax)	Rs. Cr.	58.86	58.86	58.53	Table 22
Е	Interest on Working Capital	Rs. Cr.	37.77	37.77	37.28	Table 24
F	Sp. R&M on account of DLN (AGP)	Rs. Cr.	16.12	16.12	1	
G	STP	Rs. Cr.	3.35	3.35	-	
Н	Total Annual Fixed Cost	Rs. Cr.	196.13	218.91	196.34	A+B+C+D+E
I	AFC as per achieved Availability	Rs. Cr.			209.32	
J	Net Generation	MU	1759.05	2383.46	1764.74	Para 3.63
K	Fixed Cost	Rs/ kWh	1.115	0.918	1.186	(H/J)x10

3.65 The Petitioner is directed to recover/refund, if any, based on the true up of Annual Fixed Cost as indicated in the above table in the next bill to the respective beneficiaries after the issuance of this order.



# 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 has 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 2018-19 as follows:

Table 27: Petitioner Submission - Plant Availability for FY 2018-19

Sr.No.	Particulars	UoM	FY 2018-19
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 Load Factor as approved in Business Plan Regulations, 2017.

#### **Station Heat Rate**

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

4.6 The Petitioner has proposed Station Heat Rate for FY 2018-19 as follows:



Table 28: Petitioner Submission - Station Heat Rate for FY 2018-19

Sr. No.	Particulars	UoM	FY 2018-19
1	Station Heat Rate (Combined Cycle)	kCal/ kWh	2000
2	Station Heat rate (Open Cycle)	kCal/ kWh	2900

# **Commission's Analysis**

- 4.7 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:

Table 5: Gross Station Heat Rate (GHR)

SI.No	Generating Station	Combined Cycle Open Cycl	
		(kCal/ k	Wh)
1	Gas Turbine Power Station (GTPS)	2450	3125
2	Pragati Power Station I (PPS-I)	2000	2900

4.8 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**

4.9 The Petitioner has submitted Auxiliary Power Consumption for FY 2018-19 as follows:

Table 29: Petitioner Submission – Auxiliary Power Consumption

Sr. No.	Particulars	UoM	FY 2018-19
1	Auxiliary power consumption in CC mode	%	2.5%

# **Commission's Analysis**

- 4.10 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:

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...



# (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% in Combined Cycle mode and 0.5% in Open Cycle mode of the actual generation which shall form part of computation of energy charge rate of the respective month."
- 4.11 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

4.12 The Petitioner has submitted Gross and Net Generation for PPS-I Station for FY 2018-19 as follows:

Table 30: Petitioner Submission - Gross and Net Generation For FY 2018-19

Sr. No.	Particulars	UoM	FY 2018-19
1	Gross Generation	MU	2457.18
2	Auxiliary Consumption	%	2.50
3	Net Generation	MU	2395.75

# **Commission's Analysis**

4.13 Gross and Net Generation for FY 2018-19 approved by the Commission based on the norms of operation specified in Business Plan Regulations, 2017 is as follows:

Table 31: Commission Approved - Gross and Net Generation for FY 2018-19

Sr.No.	PPS-I	UOM	FY 2018-19	Ref.
Α	Capacity	MW	330	
В	NAPLF	%	85	Para 4.5
С	Gross Generation	MU	2457.18	(AxBx365x24)/1000
D	<b>Auxiliary Consumption</b>	%	2.0%	Para 4.11
Е	Auxiliary Consumption	MU	49.14	CxD
F	Net Generation	MU	2408.04	C-E

# **Energy Charge Rate and Variable Cost**

#### Petitioner's Submission

4.14 The Petitioner has submitted total fuel cost considering the Net Generation of the plant, SHR of the station, Gross Calorific Value and the Fuel Prices as follows:



Sr.No. FY 2018-19 **Particulars UoM** 1 **Total Gas Consumption** MMSCM 522.63 2 Average Gas price Rs./SCM 18.86 3 **Total Gas Cost** Rs. Cr 985.75 4 **Net Generation** MU2395.75 Variable Cost per unit Rs./kWh 4.11

Table 32: Petitioner Submission - Fuel Cost for PPS-I

# **Commission's Analysis**

4.15 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:

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

(b) For gas and liquid fuel based stations

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

Where,

AUX =Normative auxiliary energy consumption in percentage

CVPF=(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.

-----

- 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"
- 4.16 Landed Price of Primary fuel and Gross Calorific Value has been computed as per the information available in Form 15 of January 2018, December 2017 and November 2017 submitted by the Petitioner on its website as follows:

Table 33: Commission Approved - Fuel Parameters considered for determination of ECR

Sr.No.	Particulars	UoM	Nov-17	Dec-17	Jan-18	
1	Quantum	000'SCM	40181	42370	42769	
2	Cost	Rs Cr	74.74	84.02	88.9	
3	GCV	kCal/ SCM	9384.51	9351.50	9320.81	
4	LPPF	Rs/ SCM	18.60	19.83	20.79	
5	Weighted Average LPPF	Rs/ SCM	19.76			
6	Weighted Average GCV	kCal/ SCM	9351.61			

4.17 Accordingly, the Commission approves the Energy Charge Rate (ECR) and Fuel Cost for FY 2018-19 as follows:

Table 34: Commission Approved - ECR and Fuel Cost for FY 2018-19

Sr.No.	Particulars	UoM	Petitioner's	Approved	Ref.
			Submission	Value	
Α	Net Generation	MU	2395.75	2408.04	Table 31
В	ECR	Rs/ kWh	4.11	4.313	
С	Fuel Cost	Rs Cr	985.75	1038.52	(AxB)/10

# **Fixed Cost**

# Operation and Maintenance (O&M) Expenses

# **Petitioner's Submission**

4.18 The Petitioner has submitted that pay and perks of employees of the petitioner is determined in line with Central Pay Commission. The Central Commission's 7<sup>th</sup> pay recommendations are already notified and implemented at Central and State level employees. In case of Petitioner, the same has been partially implemented in FY 2017-18. The petitioner therefore has requested the Commission to kindly consider



the impact of 7<sup>th</sup> Pay Commission while deciding the ARR for FY 2018-19 as final implementation of pay commission's recommendations is likely to be implemented during FY 2018-19.

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

Table 35: Petitioner Submission - O&M Expenses

Sr.	Particulars (Rs.Cr.)	UoM	2018-19
No.			
Α	O&M expenses	Rs Cr	61.14
В	Additional Expenditure on DLN Burners	Rs Cr	16.12
С	Additional Expenditure on Water from Sewage	Rs Cr	3.35
	Treatment Plant		
	Total Cost	Rs Cr	80.61

# **Commission's Analysis**

- 4.20 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:

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

Station	2017-18	2018-19	2019-20
GTPS	29.66	31.32	33.08
PPS-I	17.69	18.68	19.73

...

- (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."
- 4.21 Accordingly, the Commission approves the O&M Expenses for the Petitioner for FY 2018-19 except the impact of seventh pay commission on Employee Cost (as the Petitioner has not submitted the amount due on account of same) as follows:

Table 36: Commission Approved - O&M Expenses

Sr.No.	Particulars	UoM	Amount	Ref
Α	Base O&M Expenses	Rs Cr	61.64	
В	Additional R&M Expenses against	Rs Cr	16.12	Business Plan



Sr.No.	Particulars	UoM	Amount	Ref
	Advanced Gas Path (AGP)			Regulations
С	STP Expenses	Rs Cr	3.35	
D	Total O&M Expenses	Rs Cr	81.11	A+B+C

4.22 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**

4.23 The capitalization plan submitted by the Petitioner during FY 2018-19 is as follows:

Table 37: Petitioner Submission- Capital Expenditure for FY 2018-19

Sr.No.	Particulars	UoM	FY 2018-19
1	Opening GFA	Rs Cr	1065.97
2	Addition	Rs Cr	2.00
3	Deletion	Rs Cr	0.00
4	Closing GFA	Rs Cr	1067.97

# **Commission's Analysis**

4.24 The Petitioner has submitted the details of the schemes to be capitalized during FY 2018-19 for PPS-I. Accordingly, the GFA approved by the Commission for FY 2018-19 is as follows:

Table 38: Commission Approved - Capital Expenditure for FY 2018-19

Sr.No.	Particulars	UoM	FY 201	8-19	Ref.
			Petitioner Submission	Approved	
Α	Opening GFA	Rs Cr	1065.97	1050.38	Table 16
В	Addition	Rs Cr	2.00	2.00	
С	Deletion	Rs Cr	0.00	0.00	
D	Closing GFA	Rs Cr	1067.97	1052.38	A+B-C
E	Average GFA	Rs Cr	1066.97	1051.38	(A+D)/2

# Depreciation

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

4.25 The Petitioner has claimed depreciation amount as per provisions of DERC Tariff Regulation 2011 and Tariff and Business Plan Regulation 2017 as under:



Table 39: Petitioner Submission - Depreciation (Rs. Crore)

Particulars	FY 2018-19	
Depreciation	15.12	

# **Commission's Analysis**

4.26 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."
- 4.27 Further, it is observed that PPS-I Station got commissioned in FY 2002-03 and shall complete its useful life by FY 2027-28.
- 4.28 Accordingly, the Commission has approved the depreciation for FY 2018-19 as follows:

Table 40: Commission Approved - Depreciation for FY 2018-19

Sr.No.	Particulars	UoM	Approved	Ref.
Α	Average GFA	Rs Cr	1051.38	Table 38
В	Opening Accumulated Depreciation	Rs Cr	809.02	Table 18
С	Balance Depreciation	Rs Cr	137.22	(90%xA)-B
D	Balance useful life at opening of FY 2018-19	Years	10	Para 4.27



Sr.No.	Particulars	UoM	Approved	Ref.
E	Depreciation	Rs Cr	13.72	C/D
F	Closing Accumulated Depreciation		822.74	B+E
G	Average Accumulated Depreciation		815.88	(B+F)/2
Н	Average Net GFA		235.50	A-G

# **Working Capital**

# **Petitioner's Submission**

- 4.29 The Petitioner has submitted that Interest on Working Capital has been calculated as per the following norms:
  - Cost of fuel for 1 month
  - O&M expenses for 1 month
  - Maintenance spares @ 30% of O&M
  - Receivables equivalent to 2 months average billing
- 4.30 Accordingly, the Petitioner has submitted the requirement of Working Capital as follows:

Table 41: Petitioner Submission - Requirement of Working Capital

Sr.No.	Particulars	UoM	FY 2018-19
1	Cost of Fuel for 1 month	Rs Cr	82.14
2	Maintenance spares @ 30% of O&M	Rs Cr	18.49
3	Liquid fuel stock for ½ month	Rs Cr	0
4	O&M expenses for 1 month	Rs Cr	5.13
5	Receivables equivalent to 2 months average billing	Rs Cr	197.55
6	Total Working Capital	Rs Cr	303.33

# **Commission's Analysis**

- 4.31 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:
  - (a) 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;
  - (b) 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;



- (c) Maintenance spares @ 30% of Operation and Maintenance expenses specified in this Regulation;
- (d) 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
- (e) Operation and maintenance expenses for one month."
- 4.32 Accordingly, Working Capital requirement for FY 2018-19 has been computed as follows:

Table 42: Commission Approved - Working Capital for FY 2018-19

Sr.No.	Particulars	UoM	FY 2018-19		Ref.
			Petitioner Submission	Approved	
Α	Fuel expenses for 1 month	Rs Cr	82.14	86.54	Table 34
В	Maintenance spares @ 30% of O&M	Rs Cr	18.49	24.33	Table 36
С	O&M expenses for 1 month	Rs Cr	5.13	6.76	Table 36
D	Receivables equivalent to 2 months of	Rs Cr			
	capacity and energy charge		197.55	200.84	
Е	Total Working Capital	Rs Cr	303.33	318.48	A+B+C+D

# Return on Capital Employed Petitioner's Submission

4.33 The Petitioner has submitted the details of return on equity for FY 2018-19 as under:

Table 43: Petitioner Submission - Gross up Return on Equity of PPS-1

Sr. No.	Particulars (Rs. Cr.)	FY 2018-19
1	Equity (Opening Balance)	333.51
2	Net additions during the year	0.60
3	Equity(Closing Balance)	334.11
4	Average Equity	333.81
5	Rate of Return on Equity (%)	14.00
Return or	n Equity (Grossed up) %	17.80

4.34 The Petitioner has taken income tax rate of 21.34 % in grossing up of ROE of 14.00 % accordingly grossed up ROE is 17.80% and claimed for respective year. The details of grossed up ROE as under:

Table 44: Petitioner Submission- Grossed up Return on Equity

Particulars		FY 2018-19
Average Equity (Rs. Cr.)	Α	333.81
Base Rate of return on equity i.e @ 14 (%)(Rs in Cr.)	В	46.73
Normal Income tax Rate as considered by Commission (%)	С	21.34



Particulars		FY 2018-19
Gross up return on equity (%)	D= (base rate/(1-C)	17.80
Return on equity (Rs. Cr.)	E=(AxD)	59.41

# **Commission's Analysis**

4.35 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:

- (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."
- 4.36 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."

4.37 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 2018-19.

4.38 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."

4.39 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."

4.40 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 11.13% on the basis of SBI MCLR of 8.15% as on 1<sup>st</sup> March, 2018 plus margin of 2.98%.



- 4.41 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  $i^{th}$  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  $i^{th}$  Year;

RRB i-1: Closing Regulated Rate Base for the Financial Year preceding 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."

4.42 Accordingly, the Commission has computed Return on Capital Employed for FY 2018-19 as follows:

Table 45: Commission Approved - Return on Capital Employed for FY 2018-19

Sr.No.	Particulars	UoM		18-19	Ref.
			Petitioner Submission	Approved	
Α	Average Net Fixed Asset	Rs Cr		235.50	Table 40
В	Average Equity	Rs Cr	15.12	70.65	30% of A
С	Average Capex Loan	Rs Cr		164.85	70% of A
D	Working Capital Loan	Rs Cr		318.48	Table 42
E	Average Loan Requirement	Rs Cr		483.33	C+D
F	Average RRB			553.98	E+B
G	Grossed up Rate of Return on Equity	%		17.80%	
Н	Rate of Interest on Loan	%		11.13%	Tariff Regulations, 2017
I	Weighted Average Cost of Capital (WACC)	%		11.98%	(B/F)*G+(E/F)*H
J	RoCE	Rs Cr		66.37	I*F

# **Fixed Auxiliary Consumption Expenses**

# **Petitioner's Submission**

4.43 The Petitioner has submitted Fixed Auxiliary Consumption of Rs. 5.05 Crore for FY 2018-19.

# **Commission View:**

4.44 The Commission allows Fixed Auxiliary Consumption Expenses as per the Regulation 3 of DERC (Business Plan) regulations, 2017. The relevant extract is as follows:

# "(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 and 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% in Combined Cycle mode and 0.5% in Open Cycle mode of the actual generation which shall form part of computation of energy charge rate of the respective month."
- 4.45 Accordingly, Fixed Auxiliary Consumption Expenses has been determined for FY 2018-19 as follows:

Table 46: Commission Approved - Fixed Auxiliary Consumption Expenses for FY 2018-19

Sr. No.	Particulars	UoM	FY 2018-19	Ref
Α	Plant Capacity	MW	330	
В	Normative PLF	%	85%	Para 4.5
С	Gross Generation	MU	2457.18	Table 31
D	Fixed Auxiliary Consumption	%	0.5%	Para 4.11
E	Fixed Auxiliary Consumption	MU	12.29	CxD
F	Energy Charge Rate	Rs/kWh	4.313	Table 34
G	Fixed Auxiliary Consumption	Rs Cr	5.30	(ExF)/10

# **Summary of Fixed Cost**

# **Petitioner's Submission**

4.46 Annual Fixed Cost for FY 2018-19 submitted by the Petitioner is as follows:

Table 47: Petitioner Submission - Total Fixed Cost for FY 2018-19

Sr.No.	Particulars	UoM	FY 2018-19
1	O&M Charges	Rs Cr	61.64
2	Depreciation	Rs Cr	15.12
3	Interest on Loans	Rs Cr	2.98
4	Grossed up Return on Equity	Rs Cr	59.41
5	Interest on Working Capital	Rs Cr	40.95
6	Sp. R&M on account of DLN	Rs Cr	16.12
7	STP	Rs Cr	3.35
8	Fixed APC	Rs Cr	5.05
9	Total Fixed Cost	Rs Cr	199.57
10	Net Generation	MU	2395.75
11	Fixed Cost Per Unit	Rs/ kWh	0.833

# **Commission's Analysis**

- 4.47 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."

4.48 Accordingly, the Commission approves the Annual Fixed Cost for FY 2018-19 by considering the various components as follows:

Table 48: Commission Approved - Annual Fixed Cost for FY 2018-19

Sr.No.	Particulars	UoM	FY 2018-19		Ref.
			Petitioner's Approved		
			Submission		
Α	Return on Capital Employed	Rs Cr	103.34	66.37	Table 45
В	Depreciation	Rs Cr	15.12	13.72	Table 40
С	Operation and Maintenance Expenses (Incl. DLN (AGP) and STP)	Rs Cr	81.11	81.11	Table 36
D	Fixed Auxiliary Consumption	Rs Cr	5.05	5.30	Table 46
E	Annual Fixed Cost	Rs Cr	199.57	166.51	A+B+C+D



#### 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.
- 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(1556)/DERC/2017-18/

#### Pettion No. 06/2018

In the matter at: Petition for Truing up of Tartff for FY 2016-17 and ARR for FY 2018-19

for PPS-1 of PPCL.

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

...Pettfloner/Licensee

Coramo

Sh. B. P. Singh, Member.

# ORDER

(Date of Order: 02.02.2018)

- M/s Pragati Power Corporation Ltd. (PPCL) has filed the instant Petition for Truing
  up of Tariff for the FY 2016-17 and ARR for FY 2018-19 for PPS-1 of PPCL. 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.
- The Petition is admitted.

Sd/-(B. P. Singh) Member



Annexure-II

# LIST OF RESPONSES RECEIVED FROM STAKEHOLDERS ON THE TRUE UP OF EXPENSES UPTO FY 2016-17 AND ANNUAL REVENUE REQUIREMENT (ARR) AND TARIFF FOR FY 2018-19.

S. No.	R. No.	Name	Address	Date of Receipt
1.	1	Sh. Raj Kumar Member	rajkumaraapka@gmail.com	03.01.2018
2.	2	Sh. S.R. Abrol	L-2-97B, DDA, LIG Kalkaji, New Delhi 110 019 Nyayabhoomi2003@gmail.com	04.01.2018
3.	3	Sh. Jagdish Khetarpal	jagdishpowerip@yahoo.co.in	04.01.2018
4.	4	Dr. Pradeep Gupta	Plot No. 4, Sukhbir Nagar, Karala, Delhi 110 081 pradeepgupta111@yahoo.in	04.01.2018
5.	5 5A 5B	Sh. Vivek Agarwal General Manager/Electrical	Metro Bhawan, Fire Brigade Lane, Barakhamba Road, New Delhi 110 001	12.01.2018
6.	6	Sh. Anil Sood Hony President CHETNA	A-403-414-415, Somdutt Chamber-1 5 Bhikajicama Place, New Delhi anilsood@spchetna.com	15.01.2018
7.	7	Sh. S.K. Jain	4509, Trilok Bhawan, 7 Darya Ganj, New Delhi 110 002	16.01.2018
8.	8	Sh. Ashok Bhasin	North Delhi Residents Welfare Association 1618, Main Chandrawal Road Delhi 110 007	19.01.2018
9.	9	Sh. Kanwar Ajay Singh	Kanwarajaysingh74@icloud.com	19.01.2018
10.	10	Sh. R.D. Singh	J6C, East Vinod Nagar, Delhi 110 091 Rdsingh1949@gmail.com	19.01.2018
11.	11 11A	Sh. B.S. Sachdev President	B-2/13A, Keshav Puram, Delhi 110 035	23.01.2018 12.03.2018
12.	12 12A 12B 12C	Sh. V.K. Malhotra General Secretary	DVB Engineers' Association D-3, Vikas Puri, New Delhi 110 018	29.01.2018
13.	13	Sh. Harmeet Singh	Koshish Resident's Welfare	29.01.2018



S. No.	R. No.	Name	Address	Date of
				Receipt
		President	Association (regd.)	
			2462, Basti Punbian,	
			Roshnara Road, Subzi Mandi	
1.4	1.4	Ch. lacdish Khatawaal	Delhi 110 0017	20.01.2010
14.	14	Sh. Jagdish Khetarpal	jagdishpowerip@yahoo.co.in	29.01.2018
15.	15	Sh. Sanjay Dangi	Gali No. 20, Plot 12	30.01.2018
			Uttam Nagar, Delhi	
16.	16	Sh. Kuldeep Kumar	Sanjudangi88@yahoo.in  Delhi State Electricity Workers	30.01.2018
10.	10	General Secretary	Union, Genco, Transo DISCOM iii	30.01.2016
		General Secretary	L-2, Main Road, Brahmpuri,	
			Delhi	
17.	17	Sh. Bittu Bhardwaj	Bittoobhardwaj42@gmail.com	30.01.2018
18.	18	Sh. Krishan Kumar	Krishankumar2360@gmail.com	31.01.2018
19.	19	Dr. Pradeep Gupta	Plot No. 4, Sukhbir Nagar,	31.01.2018
			Karala, Delhi 110 081	
			Pradeepgupta111@yahoo.in	
20.	20	Sh. B.B. Tiwari	sarwasharpan@gmail.com	20.02.2018
21.	21	Sh. A.K. Datta	222, Pocket E,	20.02.2018
			Mayur Vihar, Phase 2	
	21A		Delhi 110 091	
			Mmathur2001@yahoo.com	
22.	22	Sh. Saurabh Gandhi	United Residents of Delhi	21.02.2018
		Gen. Secretary	C-6/7, Rana Pratap Bagh	
	22A		Delhi 110 007	
			urdwas@gmail.com	
23.	23	Sh. Sudhir Aggarwal	Brotherhood Society	21.02.2018
	23A	Secretary	G-3/5, Model Town III	
	23B		Delhi 110 009	
24.	24	Sh. Anil Chandi	C-8/1, Rana Pratap Bagh,	21.02.2018
		Gen. Secretary	Delhi 110 007	
25.	25	Sh. Rajan Gupta	H. No. 355, Udyan, Nerala	16.02.2018
			Delhi 110 040	
26.	26	Ms. Neeta Gupta	A-17, Antriksh Apartments	20.02.2018
			New Town Co-op. Group	
			Housing Society Ltd.	
			Sector: 14 Extn. Rohini,	
			Delhi 110 085	
		CL D L'I A	Neetagupta.vg111@gmail.com	24 02 2242
27.	27	Sh. Rohit Arora	Gyan Park Welfare Society (Regd.)	21.02.2018
		President	12A, Gyan Park, Chander Nagar,	
			Krishna Nagar, Delhi 110 051	



S. No.	R. No.	Name	Address	Date of
				Receipt
28.	28	Sh. Vipin Gupta	A-17, Antriksh Apartments New Town Co-op. Group	20.02.2018
			Housing Society Ltd.	
			Sector : 14 Extn. Rohini,	
			Delhi 110 085	
			Vipin.bfi@gmail.com	
29.	29	Sh. Mukesh Rikhi	Resident Welfare Association Hakikat	22.02.2018
		Gen. Secretary	Nagar, (Regd.)	
			97, Hakikat Nagar, GTB Nagar, Delhi 110 009	
30.	30	Sh. Chander Singh Kataria	Keshav Nagar Jan Kalyan Samiti Regd.	22.02.2018
30.	30	Gen. Secretary	B-246/4, Keshav Nagar,	22.02.2018
		Gen. Secretary	Near Mukti Ashram	
			Burari Road,Delhi 110 036	
31.	31	Sh. Rajiv Kakria	A-403-414-415, Somdutt Chamber-1,	22.02.2018
		Hony President	5, Bhikajicama Place	
		Chetna	New Delhi	
			Rkakria2@gmail.com	
32.	32	Sh. Anil Sood	A-403-414-415, Somdutt Chamber-	22.02.2018
		Hony President	1,5, Bhikajicama Place	
		Chetna	New Delhi	
33.	33	Sh. Alam Gir	Rani Garden Resident's Welfare	23.02.2018
		President	Association REgd.	
			C-17, Rani Garden,	
			Geeta Colony, Near Taj Enclave Delhi 110 031	
34.	34	Ms. Madhu Malhotra	Krishna Nagar Janhit Vikas Samiti	23.02.2018
54.	34	President	E-7/12, Krishna Nagar,	23.02.2018
		resident	Delhi 110 051	
35.	35	Sh. Sarvesh Kumar Verma	Resident Welfare Association	26.02.2018
		President	A-2/219, New Kondli	
			Delhi 110 096	
36.	36	Sh. P.S. Tomar	C-7/89 Yamuna VIhar,	26.02.2018
			Delhi 110 053	
37.	37	Sh. K. Pratab Singh	D-408, St. No. 90	26.02.2018
			Bhajan Pura,	
		CL DAA	Delhi 110 53	26.62.26.5
38.	38	Sh. D.M. Narang	R-Block Welfare Assocaition	26.02.2018
	38A	President	R-599, New Rajinder Nagar,	
20	20	Dr. Fahaam Paig	New Delhi 110 060	27.02.2019
39.	39	Dr. Faheem Baig Gen. Secretary	Jafirabad Resident Welfare Association	27.02.2018
		Gen. Secretary	1202, Street No. 39/4	
		1	1202, JUECUNU. 33/4	



S. No.	R. No.	Name	Address	Date of
				Receipt
			Jafirabad, Delhi 110 053	
40.	40	Smt Sushma Sharma President	Resident's Welfare Assocaition, Control Romm Gate No. 1 Pocket B, Dilshad Garden, Delhi 110 095	28.02.2018
41.	41	Sh. Anil Kumar Jha	A-4, St. No. 13 Mandawali Unchepar, Delhi 110 092	27.02.2018
42.	42	Sh. K.K. Verma	33KV Grid S/Station Building,	22.02.2018
	42A	Gen. Manager (C&RA)	IP Estate, New Delhi 110 002	06.03.2018
43.	43	Sh. Bharat Kumar	Tata Power Delhi Distribution Ltd.	23.02.2018
	43A	Bhadawat	NDPL House Hudson Lines Kingsway	12.03.2018
	43B	HoD Regulatory	Camp, Delhi 110 009	12.03.2018
44.	44	Sh. Abhishek Srivastava Authorised Signatory	BSES Yamuna Power Ltd. Shakti Kiran Building, Karkardooma, Delhi 110 032	28.02.2018
45.	45	Sh. Deepak Narang LPresident	Resident's Welfare Association, Pkt H-164A, Dilshad Garden, Delhi 110 095	28.02.2018
46.	46	Sh. Syed Khalid Akbar Gen. Secretary	DVB Pensioners Association 85, Ram Nagar, Krishna Nagar, Delhi 110 051	28.02.2018
47.	47	Sh. Kulwant Rana President	Dilshad Colony Residents Welfare Association G-87, Ist Floor, Dilshad Colony Delhi 11 095	05.03.2018
48.	48	Sh. Harbansh Sharma	RWA, 295 Kucha Ghasi Ram, Chandni Chowk, Delhi 110 006	05.03.2018
49.	49	Sh. Kishan Kumar	Kucha Brijnath Resident Welfare Association, 420, Kucha Brijnath, Chandni Chowk, Delhi 110 006	05.03.2018
50.	50	SH. Daya Ram Dwivedi Vide President	Daily Passengers Association 262, Katra Pyare Lal Chandni Chowk, Delhi 110 006	05.03.2018
51.	51	Sh. Vijay S. Rawat	DDA Janta Flats Resident Welfare	05.03.2018



S. No.	R. No.	Name	Address	Date of
				Receipt
		Vice President	Association 12-A, Pkt. D2, Mayur Vihar Phase III, Delhi 110 096	
52.	52	Sh. Gyanender Kaushik Vice President	East Babarpur Residential Welfare Association E-1044-4/F, Inder Gali, Babarpur, Shahdara, Delhi 110 032	05.03.2018
53.	53	SH. Pradeep Arora President	Resident Welfare Association A-87, East Nathu Colony, Main Mandoli Road, Delhi 110 093	05.03.2018
54.	54	Sh. Pawan Salwan President	Residents' Welfare Association Pocket IV, Mayur Vihar, Phase -1 Delhi 110 091	05.03.2018
55.	55	Sh. Mini Shreekumar President	Residents' Welfare Assocaition Pocket-2, Mayur Vihar, Phase-1 Delhi 110 091	05.03.2018
56.	56	Sh. Sanjeev Singh Tomar President	Vikas Simiti, Durga Puri Vistar Loni Road, Delhi 110 093	05.03.2018
57.	57	Sh. Subhash Chand Saxena	Resident Welfare Assocaition 4996, Ground Floor, Ghas Mandi Ahata Kidara Pahari Dhiraj, Delhi-110 006	05.03.2018
58.	58	Sh. Shivkumar Sharma	Brijpuri Residents Welfare Association D-8/154, Brij Puri, Delhi 110 094	05.03.2018
59.	59	Dr. Arjun Kumar Founder Chairman	Dignity Restoration & Grievance Settlement Association B-4/84/2, Safdarjung Enclave, New Delhi 110 029	05.03.2018
60.	60	Sh. Arvind K. Mehta President	Residents Welfare Association 542, Double Storey, New Rajinder Nagar, New Delhi	28.02.2018
61.	61	Sh. Farooq Engineer	Rehayeshi Welfare Anjunman Shivaji Road, Azad Market, Delhi 110 006	28.02.2018
62.	62	Sh. B.S. Vohra President	East Delhi RWAs Joint Front- Federation F-19/10, Krishna Nagar, Delhi-51	06.03.2018



S. No.	R. No.	Name	Address	Date of
				Receipt
			rwabhagidari@yahoo.com	
63.	63	Sh. Samson Frederick Joseph Gen. Secretary	All India Minorities Fundamental Rights Protection Committee 2109/18, Turkman Gate, New Delhi	06.03.2018
64.	64	Sh. Ompal Singh	New Chauhan Pur Residents Welfare Assocaition 40/240, New Chauhanpur, Karawal Nagar Road, Delhi 110 094	06.03.2018
65.	65	Sh. Vivek Agarwal General Manager	Delhi Metro Rail Corporation Ltd. Metro Bhawan, Fire Brigade Lane, Barakhamba Road, New Delhi 110 001	07.03.2018
66.	66 66A 66B	Sh. B.B. Tiwari	sarwasharpan@gmail.com	07.03.2018 12.03.2018 14.03.2018
67.	67	Sh. Sanjeev Bhatnagar President	Resident's Welfare Assocaition New MIG Flats Prasad Nagar, New Delhi	08.03.2018
68.	68	Sh. Prem Nagpal Vice President	E-221, West Patel Nagar, New Delhi 110 008	08.03.2018
69.	69	Sh. Deepak Kumar Goyal President	Delhi Dall Mill Association 4122, Ground Floor, Main Raod Naya Bazar, Delhi 110 006	12.03.2018
70.	70	Sh. Rajesh Chhabra Vice President	West Patel Nagar Veopar Mandal A/31, West Patel Nagar, Main Market, New Delhi 110 008	08.03.2018
71.	71	Sh. Sushil Mishra Patrons	Jhilmil DDA Flats Residents Welfare Assocaition Gate No. 2, Satyam Enclave, Delhi 110 095	09.03.2018
72.	72	Sh. G.R. Luthra Secretary	Vivek Vihar Phase-II, A-Block Residents Welfare Association A-98, Vivek Vihar, Phase II, Delhi 110 095	12.03.2018
73.	73	Choori Walan Welfare Society	Choori Walan, Tokri Walan, Pahari Imli, Chitla Gate, Delhi 110 006	09.03.2018
74.	74	Sh. Mazar Ullah President	Resident Welfare Assocaition 1855, Gali Pattey Wali Sui Walan, Darya Ganj New Delhi 110 002 galipatteywalidaryaganj@in.com	08.03.2018



S. No.	R. No.	Name	Address	Date of
			W 11 K 1 5 1 1	Receipt
75.	75	Sh. Mahesh Chand	Khatik Kalyan Parisad	09.03.2018
		General Secretary	1820, Gali Khatikan,	
			Chowk Shan Mubarak,	
			Baar Sita Ram,	
			Delhi 110 006	
76.	76	Ms. Kalpana Chawla, Adv.	Wall City Mahila Panchayat Samiti	09.03.2018
		President	1831-32, Gali Mandir Wali,	
			Chowk Shah Mubarak,	
			Bazar Sita Ram,	
			Delhi 110 006	
77.	77	Sh. Atul Chawla	Chawla.atul@yahoo.com	09.03.2018
78.	78	Sh. Arun Kumar	Dignity Restoration & Grievance	18.03.2018
		Chairman	Settlement Association	
			B4/84/2, Safdarjung Enclave,	
			New Delhi110 029	
			director@dignityindia.org	
79.	79	Sh. J.B. Sahdev	Qutab Enclave MIG Residents Welfare	19.03.2018
			Association	
			Qutab Enclave, Phase-1	
			New Delhi 110 016	
80.	80	Sh. V.S. Mahindra	H-3/45, VIkaspuri,	19.03.2018
			New Delhi 110 018	
81.	81	Sh. S.K. Bhatia	3/102, Subhash Nagar,	19.03.2018
			New Delhi 110 027	
82.	82	Sh. Suresh Gupta	B-71, New Town Cooperative Gourp	19.03.2018
			Housing Society Limited	
			Sector – 14 Extension	
			Rohini, New Delhi 110 085	
83.	83	Sh. V.P. Garg	B-2/48A, Keshavpuram	19.03.2018
			New Delhi 110 035	
84.	84	Sh. A.K. Jain	DDA Flats, Kalkaji	19.03.2018
			New Delhi 110 019	
85.	85	Sh. Jagdish Prasad	A-129, Pulprhalad	19.03.2018
			New Delhi 110 019	
86.	86	Sh. J.N. Bagehi	F-1152, C.R. Park	19.03.2018
			New Delhi	
87.	87	Sh. Vishvas, President,	1, North West Avenue, Punjabi	19.03.2018
			Bagh, New Delhi-110026	
88.	88	Sh. Gyanender Kaushik	RWA, Babur Pur,	23.03.2018
			Delhi	
89.	89	Sh. Ashok Bhasin	President, North Delhi Residents	23.03.2018
			Welfare Federation	
			1618, Main Chandrawal Road,	



S. No.	R. No.	Name	Address	Date of
				Receipt
			Delhi-110007	
90.	90	Sh. Deepak Joshi	17D, Pocket B Dilshad Garden, Delhi	23.03.2018
91.	91	Sh. K.K. Verma	DVB-ETBF-2002, Pre-Fabricated Building, Rajghat Power House, New Delhi-110002	23.03.2018
92.	92	Sh. Harmeet Singh	Koshish Residents' Welfare Association(Regd.) 2462 Basti Punjabian, Roshanara Road, Subzi Mandi , Delhi-110007	23.03.2018
93.	93	Sh. Hemanta Madhab Sharma	146 Vinobha Puri(FF), Lajpat Nagar-II, New Delhi-110024	23.03.2018
94.	94	Sh. Narender Kumar	RWA, New Usman Pur, Delhi	23.03.2018
95.	95	Sh. Ompal Singh Ahlawat	E-186, Chhattarpur Ext., New Delhi-110074	23.03.2018
96.	96	Sh. Ved Prakash Arya	RWA, 895A-1 Ward, No 8, Mehrauli-110030	23.03.2018



# Annexure-III

# STAKEHOLDERS WHO HAVE ATTENDED THE HEARING FOR THE PETITION FILED BY DISCOMS, GENCOS, AND TRANSCO ON THE APPROVAL PETITION FOR TRUING UP OF EXPENSES UPTO FY 2016-17 AND ANNUAL TARIFF PETITION FOR FY 2018-19

Sr. No.	Name	Address
1	Sh. Vivek Aggarwal	DMRC
2	Sh. Manoj Singhal	DMRC
3	Sh. Subodh Pandey,	DMRC
4	Sh. Satish Moza	DMRC
5	Sh. Reddy Sai Raj	DMRC
6	Sh. Sukhdev Raj, Kalkaji	South Delhi
7	Sh. Om Pal Singh Ahlawat	RWA Chhattapur Extn.
8	Sh. Ved Prakash Arya	RWA Mehrauli
9	Sh. Shankar Swami	RWA Mehrauli
10	Sh. Gyanedra	RWA Babar Pur
11	Sh. G. S. Kohli	RWA Vasant Kunj
12	Mrs. Mini Sree Kumar	RWA Pkt2, Mayur Vihar-I
13	Sh. Vishal Malhotra	Naraina
14	Sh. Harsh Puri	Galaxy Print Process
15	Sh. Rajender Singh	DMRC
16	Sh. Gokul Chander Mittal	Model Town
17	Sh. Gaurav Mittal	
18	Sh. Rohit Arora	RWA Krishan Nagar
19	Sh. Noor Mohd. Khurashi	Krishna Nagar
20	Sh. Shubham	DMRC
21	Sh. B. B. Tiwari	URD
22	Sh. Narender Kumar	RWA North East, Usman Pur
23	Sh. Kunwar Pratap Singh	RWA Bhajan Pura
24	Sh. Vijay Singh Rawat	RWA, Mayur Vihar Phase-II
25	Sh. Rajeev Kakaria	GK-I, RWA
26	Sh. Ashok Bhasin	NDRWF, Delhi
27	Sh. Harban Sharma	RWA Chandni Chowk
28	Sh. Kishan Kumar	RWA Chandni Chowk
29	Sh. Harsh Swaroop Bakshi	RWA Rohini
30	Sh. Dharmender Gupta	RWA Mangol Puri

Sr. No.	Name	Address
31	Sh. H. M Sharma	Lajpat Nagar, Delhi
32	Sh. Saurav Gandhi	URD
33	Sh. Ramesh Chand	RWA Karol Bagh
34	Sh. Har Bhajan Singh	RWA Shashtri Nagar
35	Sh. Dharminder Kumar	RWA Pritam Pura
36	Sh. Jatin	ES&S Hospitality Services Inc.
37	Sh. Deepak Joshi,	RWA Dilshad Garden
38	Sh. J. G. Abrol	RWA Jasola
39	Sh. Mahesh Chand Chola	RWA Darya Ganj
40	Sh. Daya Ram Diwedi	Chandani Chowk RWA
41	Md. Etbar Ahmed	RWA Darya Ganj
42	Smt. Sudha Sharma	Mahila Panchayat Sumiti
43	Sh. Mazhar Ullah	RWA Gali Pattey Wali Darya Ganj
44	Sh. Man Mohan Verma	RWA Rohini
45	Sh. H. C. Dhupar	RWA Rohini
46	Sh. Prem Pal Sharma	RWA Sultan puri
47	Sh. Dharamveer	RWA Sultan Puri
48	Sh. Dharam Pal Pawar	RWA Sultan Puri
49	Sh. Harmeet Singh	RWA Subzi Mandi
50	Sh. Dilip Chadha	RWA RP-I
51	Sh. Surender	RWA N.W. Sultan Pur
52	Sh. Mohan Kumar	D-1/249, Sultan Pur
53	Sh. Jagjeet Singh	RWA Hudson Line GTB Nagar
54	Sh. Prem Singh	RWA Khanpur
55	Sh. Balvinder Singh Thaper	RWA Vikas Puri
56	Sh. Paramjeet Singh	RWA Vikas Puri
57	Sh. Dharmender Kumar	RWA Vikas Nagar
58	Sh. Shushil Kumar	RWA, Nagloi
59	Sh. Harish Kumar	RWA Nagloi
60	Sh. Surender Saini	RWA Nangloi
61	Sh. Satya Galla.	Mercados Energy Markets India Pvt. Ltd
62	Sh. Shiv Kumar	RWA, Brijpuri
63	Sh. Surendra Sharma	RWA, Brijpuri
64	Sh. Rakesh Sharma	RWA Prem Nagar, Karawal Nagar



Sr. No.	Name	Address
65	Sh. Vijay Batra	Kirti Nagar, Industrial Association
66	Sh. V. K. Malhotra,	DVB Pension Trust
67	Sh. Rajan Gupta	DVB Pension Trust
68	Capt. Anju	Dwarka Sector- 8
69	Dr. Naresh	Dwarka, Sector – 8
70	Sh. A. K. Dutta	Mayur Vihar Phase-II
71	Sh. Ashok Sikka	Kirti Nagar Industrial Association.
72	Sh. Jitender Tyagi	President URD
73	Sh. Karnail Singh	Kirti Nagar Indl. Area
74	Sh. Balbir Singh	Kirti Nagar Indl. Area
75	Smt. Poonam	ММТС
76	Smt. Anita Guptrishi	ммтс
77	Sh. B.D. Sharma	RWA Mundka Division
78	Sh. Dharamveer	RWA Mundka Division