

DELHI ELECTRICITY REGULATORY COMMISSION

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

F.11(1662) /DERC/2018-19/

Petition No. 11/2019

In the matter of: Petition for Truing Up for FY 2017-18, and determination of ARR for the Financial Year 2019-20 for GTPS.

Indraprastha Power Generation Company Ltd. Through its: **Director (Technical)** Himadri. Rajghat Power House Complex New Delhi 110 002.

...Petitioner/Licensee

Coram:

Hon'ble Mr. Justice S S Chauhan, Chairperson

ORDER

(Date of Order: 31.07.2019)

M/s. Indraprastha Power Generation Company Ltd. (IPGCL) has filed the instant Petition for Truing Up for FY 2017-18, and determination of ARR for the Financial Year 2019-20 for GTPS. The Petition was admitted by the Commission vide Order dated 21.02.2019. The Petition along with Executive summary was uploaded on the website of the Commission and publicised through advertisement in newspapers for seeking response of the stakeholders.

The comments and suggestions of the stakeholders including the submissions made during the public hearing held on 10.07.2019 and the arguments advanced by the Petitioner have been duly considered by 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, the Commission hereby pass this Tariff Order signed, dated and issued on 31.07.2019.

The Petitioner shall Take immediate steps to implement this Tariff Order, so as to make the revised tariffs applicable from 01.08.2019.

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

(Justice & S Chauhan) Chairperson

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LIST OF	ABBREVIATIONS
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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
CPI	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)



Abbreviation	Explanation
DMRC	Delhi Metro Rail Corporation
DPCL	Delhi Power Company Limited
DTL	Delhi Transco Limited
DVB	Delhi Vidyut Board
DVC	Damodar Valley Corporation
EHV	Extra High Voltage
EPS	Electric Power Survey
FBT	Fringe Benefit Tax
FPA	Fuel Price Adjustment
GFA	Gross Fixed Assets
GIS	Geographical Information System
GoNCTD	Government of National Capital Territory of Delhi
GTPS	Gas Turbine Power Station
НЕР	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



Abbreviation	Explanation
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
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
РРА	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



Abbreviation	Explanation
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 Indraprastha Power Generation Company Limited (hereinafter referred to as 'IPGCL' or the 'Petitioner') for True-up of expenses for FY 2017-18 for Generation Business in terms of Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2017 (hereinafter referred to as 'Tariff Regulations, 2017') and Delhi Electricity Regulatory Commission (Business Plan) Regulations, 2017 (hereinafter referred to as 'Business Plan Regulations, 2017') and approval of Aggregate Revenue Requirement & Tariff for FY 2019-20 in terms of Tariff Regulations, 2017 and Business Plan Regulations, 2017.

INDRAPRASTHA POWER GENERATION COMPANY LIMITED

- 1.2 IPGCL is wholly owned by the Government of National Capital Territory of Delhi and operates the following Generating Stations:
 - (a) Indraprastha Thermal Power Station (IP Power Station) having capacity of 247.5 MW
 (which was decommissioned on December 31, 2009);
 - (b) Rajghat Thermal Power House (RPH) having capacity of 135 MW (which was decommissioned on 31st May, 2015 as informed by Department of Power, NCT of Delhi vide letter dated 25.07.2019); and
 - (c) Indraprastha Gas Turbine Power Station (GTPS) having capacity of 270 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.

THE STATE ADVISORY COMMITTEE MEETING

1.5 The Commission has, since constitution of the State Advisory Committee on 27/03/2003, held 18 meetings so far. In the 18th State Advisory Committee meeting held on 02/07/2019, the Commission discussed the following:

S. No.	Issues Discussed
5. NO.	155465 Discussed
i.	Tariff Petitions for True Up of FY 2017-18 and ARR for FY 2019-20 for
	GENCOs, TRANSCO and DISCOMs
ii.	Draft DERC (Power System Development Fund) Regulations, 2019
iii.	DERC (Supply Code and Performance Standards) (Second, third & fourth
	Amendment) Regulations, 2018 & Manual of practice for handling
	consumers' complaints.

MULTI YEAR TARIFF REGULATIONS

- 1.6 The Commission issued Tariff Regulations, 2017 vide its 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 has also been approved by the Commission in Business Plan Regulations, 2017 under Tariff Regulations, 2017 for the period FY 2017-18 to FY 2019-20.
- 1.7 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.
- The Commission vide order dated October 22, 2014 has extended the control period of
 FY 2012-13 to FY 2014-15 for a period of one year till FY 2015-16.
- 1.9 The Commission has further extended the applicability of MYT Generation Regulations,2011 for FY 2016-17 in Tariff Regulations, 2017.



FILING OF PETITION FOR TRUE-UP OF FY 2017-18 AND ARR FOR FY 2019-20

FILING AND ACCEPTANCE OF PETITION

- 1.10 IPGCL has filed its petition before the Commission on 26.12.2018 for True Up of FY 2017-18 and Annual Revenue Requirement of FY 2019-20.
- 1.11 The Commission admitted the Petition vide its Order dated 21.02.2019 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

- 1.12 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 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.
- 1.13 For this purpose, the Commission's Officers held discussions with the Petitioner, obtained information/clarifications wherever required and carried out technical validation with regard to the information provided.
- 1.14 The Commission held public hearing on 10.07.2019 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 in arriving at its final decision. The use of the term "Commission" may, therefore, be read in the context of the above clarification.
- 1.15 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.

1.16 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.

PUBLIC NOTICE

1.17 The Commission published a Public Notice on its website and in the following newspapers on 07.03.2019 inviting comments from stakeholders on the Tariff petitions filed by the Petitioner latest by 05.04.2019:

(a)	Hindustan Times (English)	:	07/03/2019
(b)	The Pioneer (English)	:	07/03/2019
(c)	Times of India (English)	:	07/03/2019
(d)	Navbharat Times (Hindi)	:	07/03/2019
(e)	Dainik Jagran (Hindi)	:	07/03/2019
(f)	Roznama Rashtriya Sahara (Urdu)	:	07/03/2019
(g)	Educator (Punjabi)	:	07/03/2019

- 1.18 The copies of above Public Notices are available on Commission's website (<u>www.derc.gov.in</u>)
- 1.19 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 10.07.2019 in the following newspapers on the respective dates mentioned alongside:

(a)	Indian Express (English)	:	11/06/2019
(b)	Business Standard (English)	:	11/06/2019
(c)	Dainik Jagran (Hindi)	:	11/06/2019
(d)	The Daily Milap (Urdu)	:	11/06/2019
(e)	Daily Educator (Punjabi)	:	11/06/2019

1.20 The copies of above Public Notices are available on Commission's website



(www.derc.gov.in)

- 1.21 A soft copy of the petition was made available in CD on payment of Rs. 25/- per CD or a copy of the petition was also made available for purchase from the IPGCL office on working day till 10.07.2019 between 11 A.M. and 4 P.M. on payment of Rs.100/- either by cash or by 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.
- 1.22 At the request of the stakeholders, the Commission extended the last date for filing objections and suggestions up to 10/07/2019 for which the public notice was issued in the following newspapers on the respective dates mentioned along side:

(a)	Hindustan Times (English)	:	07/06/2019
(b)	Times of India (English)	:	07/06/2019
(c)	Mail Today (English)	:	07/06/2019
(d)	The Hindu (English)	:	07/06/2019
(e)	Navbharat Times (Hindi)	:	07/06/2019
(f)	Punjab Kesari (Hindi)	:	07/06/2019
(g)	Dainik Jagran (Hindi)	:	07/06/2019
(h)	Jadid-In Dinon (Urdu)	:	07/06/2019
(i)	Qaumi Patrika (Punjabi)	:	07/06/2019

- 1.23 The Public Notice is available on Commission's website www.derc.gov.in
- 1.24 In order to extend help to the stakeholders in understanding the ARR Petition and filing their comments, the Commission prepared a Executive Summary highlighting salient features of the Tariff Petition filed by the Petitioner, which was uploaded on the Commission's website. In this regard, four officers of the Commission viz. Joint Director (PS&E), Joint Director (Engineering), Deputy Director (TA-FA) and Deputy Director (T-E) were nominated for discussion on the ARR Petitions. This was duly highlighted in the Public Notices published by the Commission.
- 1.25 Further, the Commission published a Public Notice indicating the venue, date and time of public hearing held on 10.07.2019 in the following newspapers on the respective dates mentioned alongside:



INDRAPRASTHA POWE	ER GENERATION COMPANY LIMIT	ED	TARIFF ORDER FY 2019-20
(a)	Hindustan Times (English)	:	07/06/2019
(b)	Times of India (English)	:	07/06/2019
(c)	Mail Today (English)	:	07/06/2019
(d)	The Hindu (English)	:	07/06/2019
(e)	Navbharat Times (Hindi)	:	07/06/2019
(f)	Punjab Kesari (Hindi)	:	07/06/2019
(g)	Dainik Jagran (Hindi)	:	07/06/2019
(h)	Jadid-In Dinon (Urdu)	:	07/06/2019
(i)	Qaumi Patrika (Punjabi)	:	07/06/2019

- 1.26 The copies of above Public Notices are available on Commission's website (<u>www.derc.gov.in</u>).
- 1.27 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.
- 1.28 The public hearing was held at the Auditorium of Scope Convention Centre, Scope Complex, New Delhi for all stakeholders on 10.07.2019 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.

LAYOUT OF THE ORDER

- 1.29 This Order is organised into five Chapters:
 - (a) Chapter A1 provides the approach of the Order;
 - (b) Chapter A2 provides a brief comments of various stakeholders including comments during the Public Hearing, the Petitioner's response and views of the Commission thereon;
 - (c) Chapter A3 provides analysis of truing up for FY 2017-18 for Gas Turbine Power



Station;

- (d) Chapter A4 provides determination of tariff for FY 2019-20 Gas Turbine Power Station;
- (e) **Chapter A5** provides summary of all the directives issued by the Commission in this Order.
- 1.30 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 2017-18 and approval of Aggregate Revenue Requirement & Tariff for FY 2019-20.
 - (c) Annexure III List of Stakeholders/consumers who attended the public hearing.

APPROACH OF THE ORDER

APPROACH FOR FY 2017-18

1.31 The Commission in its Business Plan Regulations, 2017 has indicated that Regulations shall remain in force for a period of three (3) years. The relevant Regulation of Business Plan Regulations, 2017, in this regard, is as follows:

"1(2) These Regulations, shall remain in force for a period of 3 (three) years i.e., for FY 2017-18, FY 2018-19 and FY 2019-20, unless reviewed earlier." 1.31 The Commission in its Tariff Regulations, 2017 has specified that Regulations shall be deemed to have come into effect from 1st February, 2017. The relevant Regulation of Tariff Regulations, 2017, in this regard, is as follows:

"(4) These Regulations shall be deemed to have come into force from 1st February, 2017 and shall remain in force till amended or repealed by the Commission. "

1.32 Accordingly, ARR for FY 2017-18 has been trued as per Tariff Regulations, 2017 and Business Plan Regulations, 2017.

APPROACH FOR ARR AND TARIFF FOR FY 2019-20

1.33 The Commission vide its Notification dated January 31, 2017 had issued Tariff



Regulations, 2017. Further, the Commission has issued Business Plan Regulations, 2017.

1.34 The Commission has evaluated the ARR submitted by the Petitioner on the basis of the provisions in 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 the Petitioner (Indraprastha Power Generation Company 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 10th July, 2019 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: Station Heat Rate (SHR)

Stakeholder's View

- 2.6 The Petitioner has claimed Station Heat Rate for Combined Cycle as 2472 kcal/kwh and Open Cycle as 3444 kcal/kWh for FY 2017-18.
- 2.7 As per Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2017 and Delhi Electricity Regulatory Commission



(Business Plan) Regulations, 2017, the approved Station Heat Rates are Combined Cycle-2450 kcal/kWh and Open Cycle-3125 kcal/kWh. Hence, it is requested to the Commission to consider ceiling Heat Rate as per Regulations.

2.8 The Petitioner has not given any monthly adjustment to the beneficiaries as per Regulation 148 and 149 of Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2017.

Petitioner's Submission

- 2.9 Normative Heat Rate may be achieved only when the scheduled generation of the plant is @ normative NAPLF i.e. 85% or in the cases of continuous running of full module without frequent starts/stops and backing down. However, as submitted in the petition, the station is capable of generating 1964.77 MU @ 83.07% Annual Plant availability factor out of which the gross generation was only 578.977 MU for FY 2017-18. Thus it is clear that the station was running at part load operation most of the time during the year and there were also frequent start and stops of the machines resulting in higher Station Heat Rate both in combined cycle and open cycle mode. Also, the PLF of the plant has been very low i.e. 24.48% as compared to annual availability of 83.07%. Accordingly, Petitioner has requested to relax the norms for SHR.
- 2.10 Regarding sharing of saving in normative parameters, being lesser than normative value is not as per Tariff Regulations, 2017 as in case of O&M expenditure same is allowed on normative basis and cannot be trued up. In this regard content of clause 87 of Tariff Regulations, 2017 clearly mentions that normative O&M expenditure for respective control period shall not be trued up. The relevant content of the applicable clause of Tariff Regulation 2017 is reproduced as under:

*"*87. The Utilities shall be allowed Operation and Maintenance expenses on normative basis including expenses for raising the loan for funding of Working Capital and Regulatory Asset as specified by the Commission in the Business Plan Regulations for the respective Control Period:

Provided that the Normative O&M expenses for the respective Control Period shall not be trued up;



Provided further that the water charges, statutory levy and taxes under O&M expenses if indicated separately in the audited financial statement shall not form part of Normative O&M expenses.

- 2.11 Regarding Sharing of saving in normative parameters, the operative parameters of the Petitioner are more than the normative parameters hence there is no question of sharing/adjustment.
- 2.12 Moreover in Business Plan Regulation, 2017 of DERC, the concept of such sharing has been dropped by the Commission.

Commission's View

2.13 The Commission has considered the SHR as approved in the Business Plan Regulations,2017

Issue 2: Plant Availability Factor

Stakeholder's View

- 2.14 The petitioner has mentioned that 78 MMSCM of APM gas was utilized by it in 2017-18. The actual contracted quantity of APM gas is not provided by the petitioner. It may be noted that the plant is rarely scheduled beyond 30% of its installed capacity & as such the petitioner should manage with the APM gas only. Moreover, APM gas from Pragati-1 can be diverted as per requirement.
- 2.15 Procurement of Spot R-LNG seems irrelevant owing to the fact that only 16% of the R-LNG gas was utilized during the year when it is mentioned that there is take or pay clause also associated. Hence the Availability needs to be examined in a holistic manner.
- 2.16 As per clause 2.53 and directives of 5.1 of DERC tariff order dt 31.08.2017 and 28.03.2018, where as DERC has clearly stated that IPGCL shall not be allowed to bill "Take or pay charges" to the beneficiaries.

Petitioner's Submission

2.17 The actual contracted quantity has been provided time and again by the petitioner at various occasions to DISCOMs. There is regular cut on the APM quantity of the gas.



There has been never any occasion when even after the availability of APM gas generation has been done on costlier gas. The spot gas has been utilised only when there was schedule given by SLDC over and above generation possible on APM gas. Also IPGCL provides available generation from different gases and their rates to the DISCOMs on a day ahead basis. As per existing permission of GAIL, only gas from lesser efficient power plants to higher efficient power plant can be diverted in case same is surplus to meet out its scheduled generation. Thus diversion of APM gas from higher efficient plant (PPS-I) to lower efficient plant (GTPS) is not possible as per existing provisions and permissions of the relevant authorities. The details of gas consumption are being regularly uploaded on the website of the Petitioner along with gas bills raised by GAIL.

Commission's View

- 2.18 The Commission's directive on clause of 'Take or Pay' is for future Gas Supply Agreements. Further, the Petitioner must run the power plant of cheaper fuel before moving on to costlier fuel in order to cater to its scheduled generation.
- 2.19 The Commission has considered the auxiliary consumption as approved in BUSINESS PLAN REGULATIONS, 2017. Further, the net generation has been computed considered auxiliary consumption as 2%

Issue 3: Auxiliary Consumption

Stakeholder's View

2.20 In the Tariff Petition, the Petitioner has claimed Auxiliary consumption of 3.78% against Normative 2.5% without bifurcating it into two parts (i.e Fixed & Variable). IPGCL is requested to bifurcate the Auxiliary consumption into two parts and for the purpose of tariff fixation the auxiliary consumption limit would not be higher than the normative targets as specified in the Business Plan Regulations, 2017. Further, the target Auxiliary consumption of 2.5% is only the ceiling limit and the actual auxiliary consumption may be less than 2.5%. It is suggested to do periodic energy audit for



auxiliary consumption by installing meters on UAT and station transformers to rule out any possibility of abuse of such auxiliary electricity.

2.21 Further, Double claim has been sought by the Petitioner on portion of fixed part of Auxiliary Consumption. The fixed part of Auxiliary Consumption of 0.5% has been included while computing net generation and also claimed fixed cost for the same as a part of ARR.

Petitioner's Submission

- 2.22 As per DERC BUSINESS PLAN REGULATIONS, 2017, the auxiliary consumption has two parts i.e. 2% and 0.5% of gross generation. The 0.5% of gross generation is recoverable as part of fixed component of the tariff at the rate approved by DERC at the time of issue of tariff order for FY 2017-18. However in truing up due to change in fuel cost, the overall ECR for the year has been changed, therefore, amount of recovery of auxiliary consumption against 0.5% of fixed part has also increased/changed. The Petitioner has calculated revised total amount of fixed part of auxiliary consumption. However additional amount recoverable will be difference of value submitted by IPGCL in present petition and already recovered during FY 2017 18.
- 2.23 Further, the normative APC may be achieved only when the schedule generation of the plant is @ normative NAPLF i.e. 85% or in the cases of continuous running of full module without frequent starts/stops and backing down. However as submitted in the petition, the station will consume of 2.5% of auxiliary energy or lesser only in case of optimum loading and continuous operation. However the station was running at part load operation most of the time during the year and there were also frequent start and stops of the machines resulting in higher APC.

Commission's View

2.24 The Commission has considered the auxiliary consumption as approved in the Business Plan Regulations, 2017



Issue 4: Weighted Average LPPF:

Stakeholder's View

- 2.25 Petitioner has sought approval of higher LPPF impacting the ECR, actual is 12.426 Rs./SCM against 11.75 Rs./SCM considered by the Commission.
- 2.26 Spot-R-LNG was also procured which is expensive when compared to R-LNG, stating shortage of Gas. The Petitioner needs to relook at their procurement strategy and manage within the approved figures in the interest of consumers.

Petitioner's Submission

2.27 In this regard it is to submit that LPPF of Rs.11.75 Rs/SCM was approved by State Commission in its Tariff Order dated 31.08.2017. However due to change in fuel prices during the period of FY 2017-18 by GAIL the weighted average landed price for FY 2017-18 is Rs.12.426 Rs/SCM. It is to further to submit that as per clause 103 of Tariff Regulations, 2017, the LPPF is weighted average landed price of primary fuel in Rs/Kg, per litre or per standard cubic meter or as applicable during the month. The relevant provision in clause 103 of DERC regulation, 2017 is reproduced as under:

> "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:

> (b) For gas and liquid fuel based stations ECR = GHR x LPPF x 100 / {CVPF x (100 – AUX)}

Where, AUX =Normative auxiliary energy consumption in percentage

CVPF=(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.

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

2.28 Accordingly, the Petitioner has recovered ECR from DISCOMs in respective bills. The details of the same are also uploaded on monthly basis in Form-27 as per DERC order. The advice to ensure management strategy for procurement of APM gas other than



balance RLNG is irrelevant and ignores actual position of availability of cheaper domestic gas including APM.

Commission's View

- 2.29 The Commission has considered the prices of the fuel in the relevant section of this Order in line with the provisions of Tariff Regulations, 2017 and Business Plan Regulations, 2017
- 2.30 The Petitioner must run the power plant of cheaper fuel before moving on to costlier fuel in order to cater to its scheduled generation.

Issue 5: Energy Charge Rate

Stakeholder's View

2.31 The Petitioner has sought approval of 3.4 Rs./unit against 2.66 Rs./unit approved which is approximately 27% higher than the approved figures. This is leading to higher cost of power purchase procurement. The Petitioner needs to relook at their procurement strategy and manage within the approved figures.

Petitioner's Submission

- 2.32 These issues were raised earlier also vide various letters addressed to Secretary (Power) and Director (T) of the Petitioner Company. The reply of the same has already been submitted with all facts and figures.
- 2.33 Further, the Petitioner is seamlessly trying to get allocated cheaper domestic gas to its power stations. However, in the overall interest of consumers of Delhi any such arrangement of additional gas/stoppage of daily cuts are being allowed only in case of new and highly efficient gas turbine power plants.

Commission's View

2.34 ECR is determined in the Tariff Order based on the prices of fuel during the applicable period as per the provisions of Tariff Regulations, 2017 and Business Plan Regulations, 2017 and the same is subject to change during the course of time. The Commission has appropriately considered the prices of the fuel in the relevant section of this Order.



Issue 6: Sharing of O&M expenses

Stakeholder's View

- 2.35 Regulation 148 of the DERC (Terms and Conditions for Determination of Tariff) Regulations, 2017 provides that "the financial gain to a generating company or the transmission licensee, as the case may be, on account of normative parameters shall be shared between generating company/ transmission licensee and the beneficiaries on monthly basis with annual reconciliation."
- 2.36 Thus, in the above case if the Commission trued up normative O&M expenses more than the actual O&M expenses, the differential amount should be shared with the beneficiaries.

Petitioner's Submission

2.37 Sharing of O&M expenses being lesser than normative value is not as per Tariff Regulations, 2017. As in case of O&M expenditure, same is allowed on normative basis and cannot be trued up. In this regard, clause 87 of Tariff Regulations, 2017 clearly mentions that normative O&M expenditure for respective control period shall not be trued up.

Commission's View

2.38 The Commission has considered the provisions of Tariff Regulations, 2017 and Business Plan Regulations, 2017 while considering the O&M Expenses for the Petitioner.

Issue 7: Working capital

Stakeholder's View

- 2.39 The Petitioner has claimed Fuel cost of Rs. 595.27 Cr. for FY 2017-18 on actual basis.
- 2.40 As per Regulation 146 of Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2017:

"146. The Commission shall carry out truing up of tariff based on the performance for generating stations and taking into account of the following Uncontrollable parameters:



i) Force Majeure;

ii) Change in Law;

iii) Re-financing of Loan; and

iv) Primary Fuel Cost."

- 2.41 Accordingly, it is requested to the Commission to True-up the actual Primary fuel cost and which is Rs 189.53 Cr and not Rs 595.27 Cr.
- 2.42 Also, effectively the Petitioner has utilized merely 29% of gas during FY 2017-18. Therefore, it is requested to the Commission to consider revised working capital (based on actual cost of fuel) for determining other components of ARR as well like working capital, loan on working capital, RRB and WACC etc.
- 2.43 Regulation 148 of the DERC (Terms and Conditions for Determination of Tariff) Regulations, 2017 provides that the financial gain to a generating company or the transmission licensee, as the case may be, on account of normative parameters shall be shared between generating company/ transmission licensee and the beneficiaries on monthly basis with annual reconciliation. The Petitioner has sought working capital on actual basis, hence any saving in working capital interest should be shared with beneficiaries.

Petitioner's Submission

2.44 Landed fuel price for determination of tariff for FY 2017-18 was taken as weighted average landed price and GCV for March, April & May 2017 being 11.75 Rs/SCM @ GCV of 9461.93 kCal/SCM available at the time of determination of tariff. However as per clause 107 of Tariff Regulations, 2017 the landed fuel cost for tariff determination is to be taken as moving average cost of fuel before the start of tariff period. The relevant clause is reproduced 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."



- 2.45 Accordingly, the petitioner has calculated moving average of previous three months i.e. Jan, Feb & March 2017 (in absence of clarity on duration for moving average). The value of primary fuel price thus arrived as per regulation is lesser than already approved by the commission. Thus, the petitioner submission for revision in working capital is in line with clause 107 as above.
- 2.46 Sharing of Interest on Working capital is not as per Tariff Regulations, 2017. As in case of interest on Working capital, same is allowed on normative basis and cannot be trued up. In this regard content of clause 86 of Tariff Regulations, 2017 is reproduced as under:

"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

2.47 The Commission has determined the Working Capital for FY 2017-18 in line with the provisions of Tariff Regulations, 2017 and Business Plan Regulations, 2017

Issue 8: Actual Interest Rate

Stakeholder's View

2.48 Actual interest rate is not provided. As per the DERC (Business Plan) Regulations, 2017. If the actual cost is lower than the approved cost of debt, incentive sharing should be done with beneficiaries.

Petitioner's Submission

2.49 The petitioner has no outstanding Capital Loan for the period. Therefore the same has not been mentioned in the tariff petition.

Commission's View

2.50 The Commission has appropriately considered the rate of interest on loan in line with the provisions of Tariff Regulations, 2017 and Business Plan Regulations, 2017



Issue 9: Weighted Average Cost of Capital (WACC) for the purpose of computing ROCE Stakeholder's View

- 2.51 WACC has been wrongly computed by the Petitioner. It is submitted that as per DERC (Terms and Conditions for Determination of Tariff) Regulations, 2017
 - Working capital should be considered as 100% debt financing and
 - the remaining part of RRB should be computed in 70: 30 Debt equity ratio for the purpose of Computation of WACC.

Petitioner's Submission

2.52 The Petitioner has submitted its stand on arriving weighted average cost of capital and computation of RoCE in clause 4.5 of the tariff petition. It is reiterated that the current petition has been filed by petitioner without prejudice to submission against commission tariff order dated 31.08.2017 in RP No. 59 of 2017 & 41 of 2018 against DERC tariff order dated 28.03.2018 on the matter.

Commission's View

2.53 The Commission has considered the provisions of Tariff Regulations, 2017 and Business Plan Regulations, 2017 while determining the WACC and RoCE

Issue 10: Income Tax

Stakeholder's View

2.54 Income tax shall be limited to actual tax paid or Tax on RoE whichever is lower in line with Regulation 72 of DERC (Terms and Conditions for Determination of Tariff) Regulations, 2017.

Commission's View

2.55 The Commission has considered the Income Tax paid for FY 2017-18 in line with the provisions of Tariff Regulations, 2017 and Business Plan Regulations, 2017



Issue 11: Non-Tariff Income (NTI):

Stakeholder's View

2.56 The Petitioner has not provided any information towards non-tariff income for the purpose of determination of tariff. Non-Tariff Income may be considered based on actual of FY 2017-18 for the purpose of computation of ARR for FY 2019-20.

Petitioner's Submission

- 2.57 As per clause 94 of Tariff Regulations, 2017, the non tariff income consists of following:
 - i. Income from rent of land or buildings;
 - ii. Net Income from sale of de-capitalised assets;
 - iii. Net Income from sale of scrap;
 - iv. Income from statutory investments;
 - v. Net Interest on delayed or deferred payment on bills;
 - vi. Interest on advances to suppliers/contractors;
 - vii. Rental from staff quarters;
 - viii. Rental from contractors;
 - ix. Income from Investment of consumer security deposit;
 - x. Income from hire charges from contactors and others, etc.

Commission's View

2.58 The Commission has considered the NTI for the Petitioner in line with the provisions of Tariff Regulations, 2017 and Business Plan Regulations, 2017

Issue 12: Sharing of Financial gain to a generating company on account of operational parameters

Stakeholder's View

2.59 Regulation 149 of the DERC (Terms and Conditions for Determination of Tariff) Regulations, 2017 provided that "the financial gain to a generating company or the transmission licensee, as the case may be, on account of operational parameters shall



be shared in the ratio as specified by the Commission in the Business Plan Regulations, 2017." Thus, the Petitioner is requested to share the benefit with beneficiaries on account of any saving in operation parameters.

Petitioner's Submission

2.60 There is no gain on operational parameters i.e. SHR, APC & rather than the same has been worst due to erratic scheduling by SLDC on account of illogical demand of power by DISCOMs. The PLF has been lower on account of lesser scheduling, therefore, there is not any gain on account of operational parameters which need to be shared for FY 2017-18.

Commission's View

2.61 The Commission has considered the provisions of Tariff Regulations, 2017 and Business Plan Regulations, 2017 while considering the operational norms and their impact for the Petitioner.

Issue 13: Requirement of Loan and Equity

Stakeholder's View

2.62 As per Regulation 63 of Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2017 the Debt to equity ratio will be 70:30 for determination of Tariff. Relevant extract is:

"DEBT-EQUITY RATIO

"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."

64. The Utility shall submit the audited statement regarding reconciliation of equity required and actually deployed to meet the capital expenditure of the project or scheme and funding of regulatory asset:

Provided that the reconciliation statement shall indicate the movement of equity with details of return on equity, incentive/disincentive, additional equity infused, distribution of dividend, normative loan etc."

2.63 In view of the above, the Petitioner is requested to provide copy of audited statement regarding reconciliation of equity and its movement. Also the Commission is requested to consider debt-equity ratio as per applicable Regulations.

Petitioner's Submission

- 2.64 Since accumulated depreciation over and above 70% of Gross Fixed asset during FY 2017-18, the remaining value is treated as 100% equity. Accordingly, the Petitioner has treated the net fixed asset as opening equity.
- 2.65 There is no outstanding capital loan as on date. The total GFA is only part of Equity. Petitioner has submitted the details of arriving weighted average cost of capital and computation of RoCE in clause 4.5 of the tariff petition. It is reiterated that the current petition has been filed by petitioner without prejudice to submission against commission tariff order dated 31.08.2017 in RP No. 59 of 2017 & 41 of 2018 against DERC tariff order dated 28.03.2018 on the matter.

Commission's View

2.66 The Commission has considered the requirement of loan and equity as per the provisions of Tariff Regulations, 2017 and Business Plan Regulations, 2017.



Issue 14: Return on Capital Employed

Stakeholder's View

- 2.67 The Petitioner has claimed for 10.34% interest on loan by considering 2.34% as Margin for FY 2017-18.
- 2.68 The Petitioner has miss-quoted the applicable Business Plan Regulation, 2017 as

5. MARGIN FOR RATE OF INTEREST ON LOAN Margin for rate of interest for the Control Period in terms of Regulation 4(2) of the DERC (Terms and Conditions for Determination of Tariff) Regulations, 2017 for the Generating Entity shall be allowed over and above 1(one) year Marginal Cost of Fund based Lending Rate (MCLR) of SBI for computation of rate of interest on loan.

Instead it is:

5. MARGIN FOR RATE OF INTEREST ON LOAN

Margin for rate of interest for the Control Period in terms of Regulation 4(2) of the DERC (Terms and Conditions for Determination of Tariff) Regulations, 2017 for the Generating Entity shall be allowed as the difference in weighted average rate of interest on actual loan as on 1st April 2017 and 1 (one) year Marginal Cost of Fund based Lending Rate (MCLR) of SBI as on 1st April 2017:

Provided that the rate of interest on loan (MCLR plus Margin) shall not exceed approved base rate of return on equity i.e., 14.00%.

2.69 Hence, the Petitioner is requested to share a copy of Financial Audited Accounts of FY 2017-18, so that actual interest of Loan can be computed as per Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2017

Petitioner's Submission

2.70 The Petitioner has quoted the Rates of margin for rate of Interest on Loan as per clause 5 of Business Plan Regulation, 2017 for generating Entity. In this regard submitted that the State Commission in Clause 5 of Explanatory Memorandum/ Business Plan Regulations, 2017 dated 27.06.2017 has clearly mentioned the parameters of business.



Accordingly, Petitioner has taken the same. Moreover, there is no outstanding Capital Loan as on date.

Commission's View

2.71 The Commission has considered the Interest on Loan in line with the provisions of Tariff Regulations, 2017 and Business Plan Regulations, 2017

Issue 15: CAPEX Scheme – RLA study for Life Extension of GTPS

Stakeholder's View

- 2.72 The Petitioner has proposed for life extension of the Station to ensure reliable power supply in VVIP area i.e. beyond March 2021 stating its strategic importance in ensuring reliable operations since it is embedded power with black start facility. However, the number of units which needs to be retained needs to be deliberated upon as it will impact on the fixed cost outflow of the DISCOMs.
- 2.73 In this matter, it is pertinent to state that the cumulative PLF till March-2018 achieved by the Petitioner is only 24.26% against the declared Plant availability of 83% on account of high cost of generation, accordingly, the Commission may kindly disallow any additional R&M, O&M or capital cost which is not in interest of the consumers of Delhi and is being incurred in plant upkeep beyond its requirements. Accordingly, the gas contracts also should not be further extended beyond March 2021.

Petitioner's Submission

2.74 The matter is being deliberated at Department of Power, GNCTD and Grid Coordination Committee (GCC) of the state level. However the suggestions to disallow of any additional R&M, O&M or capital cost and extension of GSA beyond March, 2021 is contrary to TPDDL's view in the meeting held on operation of GTPS beyond March, 2021.

Commission's View

2.75 As submitted by the Petitioner, the matter is being deliberated at Department of Power, GNCTD and Grid Coordination Committee (GCC) of the state level where



beneficiaries also participate. The outcome of the same may decide on the life extension of the Plant

Issue 16: CAPEX Scheme – Expenditure on installation & commissioning of pipeline for taking treated water from STP of – DJB to GTPS for FY 2018-19.

Stakeholder's View

2.76 Such expenditure is not utilized for any life extension of plant hence it should not be a part of capital expenditure and it should be covered under normative O&M.

Petitioner's Submission

2.77 CAPEX schemes are not only meant for life extension. It is to submit that deviation of performance of plant and Equipments, Damage caused by Natural calamities, Obsolescence of technology, need for up gradation of capacity for Technical reason such as increase in fault level, change in law of compliance of existing law, are other reasons allowed for implementation of additional CAPEX schemes for existing plants as per clause 43 of Tariff Regulations, 2017. The proposed system needs to be provided in compliance of National Tariff Policy, 2016. The scheme is admissible as per clause 43(2) of Tariff Regulations, 2017.

Commission's View

 Schemes pertaining to FY 2018-19 shall be appropriately dealt at the time of true up of FY 2018-19.

Issue 17: CAPEX Scheme – Replacement of RTU under CAPEX at GTPS for FY 2018-19.

Stakeholder's View

2.79 Such expenditure is not utilized for any life extension of plant hence it should not be a part of capital expenditure and it should be covered under normative O&M.

Petitioner's Submission

2.80 The proposed system needs to be replaced due to decision taken in NRPC meeting for better communication from the plants for grid reliability and security. The scheme is admissible as per clause 43(2.30) of Tariff Regulations, 2017.



Commission's View

2.81 Schemes pertaining to FY 2018-19 shall be appropriately dealt at the time of true up of ARR for FY 2018-19.

Issue 18: RLNG/Spot RLNG being used for generation

Stakeholder's View

2.82 The Petitioner is using RLNG/Spot RLNG for scheduling of power due to non availability of sufficient firm allocation of APM/PMT gas. In view of that, it is submitted that the Commission may be pleased to direct the Petitioner to restrict on APM/PMT available gas for scheduling of power and Delhi SLDC should follow the MoD principle in these plants also.

Petitioner's Submission

2.83 DISCOMs are aware of existing contract of Gas, its quantum of availability depends on government orders from time to time. The supply of cheaper domestic gas though contracted, to meet out the full requirement of the station of the Petitioner has been reduced due to prioritization of allocation of domestic gas and placing gas based station at inferior priority. Comparing ECR of the Petitioner to other power plant of similar / different technology, size and capacity and situated outside the load centre ignores importance of gas based power plant situated at load centre with the capability of black start, efficient generation, quick start/ stop facility, part load operation in close and open cycle.

Commission's View

2.84 SLDC follows the principles of Merit Order Despatch for scheduling the power from Generating Stations which is essential for ensuring Least cost of power procurement and Grid Stability.



A3: TRUE UP FOR FY 2017-18

3.1 Regulation 9 & 10 of Tariff Regulations, 2017 specifies the following:

"9. The Commission shall issue Annual Tariff Order for each year of the Control Period based on the principles laid down in these Regulations read with Business Plan Regulations for the respective Control Period notified by the Commission.

10. The Commission shall true up various components of the ARR of the Generating Entity and Transmission Licensee at the end of the Financial Year as detailed out in these Regulations."

3.2 Regulation 146 of Tariff Regulations, 2017 specifies the following:

"146. The Commission shall carry out truing up of tariff based on the performance for generating stations and taking into account of the following Uncontrollable parameters:

- i) Force Majeure;
- ii) Change in Law;
- *iii) Re-financing of Loan; and*
- iv) Primary Fuel Cost."
- 3.3 Regulation 62 of Tariff Regulations, 2017 specifies the following:

"62. In case of the existing projects/scheme, the Generating Entity or Transmission Licensee, as the case may be, shall be allowed tariff by the Commission based on the admitted capital cost as on 1st April of the relevant year and projected additional capital expenditure for the respective years of the Control Period in accordance with the Regulation: Provided that:

(i) The Generating Entity or Transmission Licensee, as the case may be, shall continue to bill the beneficiaries at the existing tariff approved by the Commission for the period starting from 1st April of new Control Period till approval of tariff by the Commission for new Control Period in accordance with these Regulations;

(ii) where the capital cost considered in tariff by the Commission on the basis of projected capital cost as on COD or the projected additional capital expenditure


submitted by the Generating Entity or Transmission Licensee, as the case may be,, as the case may be, exceeds the actual capital cost incurred on year to year basis by more than 5%, the Generating Entity or Transmission Licensee, as the case may be shall refund to the beneficiaries/consumers, the excess tariff recovered corresponding to excess capital cost, as approved by the Commission along with interest at 1.20 times of the bank rate as prevalent on April 1 of respective year;

(iii) The Generating Entity or Transmission Licensee, as the case may be, shall file a true up Petition to the Commission, along with all supporting documents for consideration of any upward revision in the tariff, where the capital cost considered in tariff by the Commission on the basis of projected capital cost as on COD or the projected additional capital expenditure falls short of the actual capital cost incurred on year to year basis by more than 5%. The Generating Entity or Transmission Licensee, as the case may be, shall be entitled to recover from the beneficiaries for the shortfall in tariff corresponding to addition in capital cost, as approved by the Commission along with interest at 0.80 times of bank rate as prevalent on 1st April of respective year."

3.4 Therefore, in accordance with Tariff Regulations, 2017 and Business Plan Regulations,2017, the Commission has trued up the expenses of the Petitioner for FY 2017-18.

Gas Turbine Power Station (GTPS) Norms of Operation Availability Petitioner's Submissions

3.5 Actual Availability for GTPS during FY 2017-18 submitted by the Petitioner is as follows:

Table 2: Petitioner Submission: Availability (%) for GTPS					
Particulars UoM FY 2017-18					
Plant Availability	%	83.07			

Commission's Analysis

3.6 The Commission in its Business Plan Regulations, 2017 has approved the availability of 85% for GTPS for FY 2017-18 to 2019-20 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%"

3.7 The Commission has verified the data regarding plant availability for true up of GTPS for FY 2017-18 from SLDC Delhi and has approved the plant availability for the purpose of true up of FY 2017-18 as follows:

			FY 2017-18			
S. No	Station	UoM	Business Plan Regulations, 2017	Actual as submitted by Petitioner	Approved for True Up	
1	GTPS	%	85	83.07	83.06	

Table 3: Commission Approved: Plant Availability for FY 2017-18

STATION HEAT RATE (SHR)

Petitioner's Submission

- 3.8 The Petitioner has submitted that the Commission has approved the station heat rate of 2450 kCal/kWh in combined cycle operation and 3125kCal/kWh in open cycle mode for the Gas Turbine Power Station which is relatively high for FY 2017-18.
- 3.9 The SHR values for GTPS as achieved for FY 2017-18 submitted by the Petitioner is as under:

Particulars	FY 2017-18
Station Heat Rate (Combined Cycle)	2472
Station Heat Rate (Open Cycle)	3444

3.10 The Petitioner has submitted that the turbines of the station are of 30 MW size and more than 32 years old. The guaranteed heat rate in simple cycle mode is 11688 kJ/kWh on NCV at compressor inlet temperature of 15°C and at atmospheric pressure of 1.019 BAR. The guaranteed heat rate at site conditions of 31.5°C is approximately 3188 Kcal/Kwh. Further, taking into account the correction factor of 5.70% on the guaranteed heat rate as recommended by the CEA, the corrected heat rate for simple cycle mode works out to 3370 kCal/kWh.



- 3.11 The Petitioner further submitted that the Central Electricity Regulatory Commission in its latest Tariff Regulations for FY 2014-19 has fixed a heat rate of 3440 Kcal/Kwh in simple cycle mode for similar Assam gas station of NEEPCO having capacity of 291 MW (6 Gas Turbines of 33.5 MW and 3 STG of 30 MW), even though the station was commissioned in 1995-98. Further, CERC in its tariff regulation dated 21.02.2014 had allowed 3440 kCal/Kwh for Assam GPS for FY 2014-15 to 2018-19.
- 3.12 The Petitioner further submitted that the Station Heat Rate of IP-GTPS is also on higher side due to frequent backing by SLDC, resulting in partial operation. The backing down of the station resulted in partial operation of the units. It is further submitted that there has been substantial gap between Availability and PLF of the station due to backing down. The lower PLF has adversely affected the heat rate of the station.
- 3.13 The Petitioner has submitted the details of Backing down and open cycle generation as follows:

S. No.	Parameters	UoM	FY 2017-18
А	Station Heat Rate	kCal/kWh	2483
В	Heat Rate (OC)	kCal/kWh	3444
C	Heat Rate (CC)	kCal/kWh	2472
D	Gross Generation	MU	578.977
E	Open Cycle Gen.	MU	6.837
F	PAF	%	83.07
G	PLF	%	24.48
Н	Backdown Gen.	%	58.59
I	Plant Capacity	MU	1964.77
J	Back down Gen.	MU	1151

Table 5: Details of Back down & Open Cycle Generation

- 3.14 The Petitioner further submitted that it is clear that PLF has been on much lower side as compared to availability which has affected the station heat rate and auxiliary power consumption of the station.
- 3.15 In view of the above, the Petitioner requested the Commission to relax and allow actual heat rate achieved by the Station in Combined Cycle mode and Open cycle mode for FY 2017-18.



Commission's Analysis

3.16 The Commission in Business Plan Regulations, 2017 has approved the SHR for Generating Stations 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:

	Tuble 4.01055 Station neut Nate (Gring)						
Sr. No.	Generating Station	Combined Cycle Open Cyc					
		(kCal/ kWh)					
1	Gas Turbine Power Station (GTPS)	2450	3125				
2	Pragati Power Station I (PPS I)	2000	2900				

Table 4:Gross Station Heat Rate (GHR)

.....″

- 3.17 The Commission observes that the Petitioner had been able to achieve the heat rate of 2439 kCal/kWh and 2416 kCal/kWh for FY 2012-13 and FY 2013-14 respectively under combined cycle mode. Therefore, it is evident that the heat rate of 2450 kCal/kWh is achievable for GTPS.
- 3.18 Further, on Petitioner's submission regarding Heat Rates allowed by CERC for Assam GPS, it is pertinent to mention here that Assam GPS is located at a geographically different location as compared with the location of GTPS and is operating under different atmospheric conditions. Thus, comparing the two plants does not hold good.
- 3.19 In view of the above, the Commission approves the normative Gross Station Heat Rate for GTPS for true up of FY 2017-18 as per the approved norms in Business Plan Regulations, 2017 as follows:

S. No		Mode of Operation	UoM	Busines s Plan Regulat	FY 2017-18 Actual as submitted by Petitioner	Approved for True Up
				ions, 2017	Petitioner	
1	CTDS	Combined Cycle	kCal/ kWh	2450	2472	2450
1	GTPS	Open Cycle	kCal/ kWh	3125	3444	3125

Table 6: Commission Approved: Station Heat rate (kCal/ kWh)



AUXILIARY POWER CONSUMPTION (APC)

Petitioner's Submissions

3.20 The Petitioner has submitted the achieved parameter for Auxiliary Power Consumption (%) in combined cycle mode during FY 2017-18 as 3.78%. The Petitioner has reiterated that due to backing down and open cycle operation of plant, the APC has been increased in FY 2017-18. Accordingly, the Petitioner has requested the Commission to relax APC for FY 2017-18 and allow on actual basis.

 Table 7: Petitioner Submission: Auxiliary Power Consumption in CC mode

	Particulars	UoM	FY 2017-18
А	Auxiliary Consumption	(%)	3.78

Commission's Analysis

- 3.21 The Petitioner has claimed higher auxiliary consumption in comparison to normative auxiliary consumption as approved by the Commission in MYT Generation Regulations, 2011. However on discussing the matter with IPGCL, it was informed that there is no separate arrangement for recording of unit auxiliary transformer consumption, as no meters have been installed for unit auxiliary consumption measurement at GTPS.
- 3.22 The Commission in Business Plan Regulations, 2017 has approved the Auxiliary Power Consumption as follows:

"8. NORMS OF OPERATION FOR GENERATING STATIONS:

(3) AUXILIARY ENERGY CONSUMPTION

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

b) Variable: 2.0% 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."



3.23 Accordingly, the Commission approves the Auxiliary Power Consumption for GTPS for FY 2017-18 as follows:

	S. No.	Station	UoM	FY 2017-18		
				Business	Actual as submitted	Approved for
				Plan	by Petitioner	True Up
				Regulations,		
				2017		
ĺ	1	GTPS	%	0.5*	0.5*	0.5*

Table 8: Commission Approved: Fixed Auxiliary Power Consumption for FY 2017-18

* @ 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

S. No.	Station	Mode of Operation	UoM	Business Actual as Ap		Approved for True Up
1	GTPS	Combined Cycle	%	2.00	3.78	2.00
		Open Cycle	%	0.50	-	0.50

Table 9: Commission Approved: Variable Auxiliary Power Consumption for FY 2017-18

VARIABLE COST FOR GTPS

FUEL CONSUMPTION

Petitioner's Submission

3.24 The Petitioner has submitted that the GT Power Station of IPGCL runs on the Natural Gas supplied by GAIL and Liquid Fuel supplied by IOCL. The total contracted quantity of Gas (APM+PMT+LNG) for GTPS is 1.44 MMSCMD which is sufficient to run six gas turbines. Out of the total allocation, the contracted quantity of R-LNG is 0.60 MMSCMD and balance comes from APM, Non-APM and PMT. However, these quantities are further subject to daily cuts in the range of 20-25% depending on the availability of gas at ONGC platform. The reduced allocation of domestic gas is compensated through SPOT RLNG by making monthly Gas Sale Purchase Notice (GSPN) with Gail India Limited. MoP&NG has further allocated 0.23 MMSCMD non-APM ONGC gases whose supply has been commenced from mid October, 2011.



- 3.25 The Petitioner further submitted that earlier due to importance of plant, Commission has approved the conversion of two Gas Turbines on dual fuel system in FY 2008-09. Thus two out of six gas turbines of the station can run on liquid fuel.
- 3.26 The Petitioner further submitted that they have an agreement with GAIL for supply of 0.6 MMSCMD R-LNG. As per the agreement with GAIL, the contracted quantity is subject to Take or Pay clause. Accordingly, the Petitioner is to bear the cost of this contracted quantity even in case there is no or part consumption of contracted quantity and the same shall be paid by the DISCOMs as per terms and conditions of PPA clause 5.3 signed between petitioner and its beneficiaries. Petitioner is also using spot R-LNG, subject to quantum of scheduling and requirement of spot R-LNG to meet the shortage of gas.
- 3.27 The total gas consumption for GT Power station for FY 2017-18 submitted by the Petitioner is as under:

Particulars	Unit	FY 2017-18
APM Gas	MMSCM	78.93
PMT Gas	MMSCM	10.26
R-LNG Gas	MMSCM	24.21
NAPM Gas	MMSCM	37.35
SPOT Gas	MMSCM	1.76
Total Gas Consumption	MMSCM	152.53

 Table 10: Petitioner Submission: Total Gas Consumption of GTPS

3.28 The Petitioner has further submitted the details of total gas consumption, rate per SCM and total cost of the gas for FY 2017-18 as under:

Table 11: Petitioner Submission: Energy Charge Rate and Fuer Cost					
Particulars	Unit	FY 2017-18			
Total Gas Cons.	MMSCM	152.53			
Average Gas Price	Rs./ SCM	12.43			
Weighted Average GCV	kCal/ SCM	9425.99			
Total Gas Cost	Rs. Crores	189.54			
Net Generation	MU	557.09			
Variable Cost - CC	Rs./kWh	3.402			

 Table 11: Petitioner Submission: Energy Charge Rate and Fuel Cost

Commission's Analysis

3.29 The Commission in Business Plan Regulations, 2017 has specified the norms of operation for generating stations for FY 2017-18 to FY 2019-20. The norms of



operation as applicable govern the performance of the generating station which determines the fuel cost.

3.30 Further, the Commission vide its e-mail dated 29/01/2019 sought the authenticity of energy charge rate billed by GTPS from the beneficiary DISCOMs. In response, the beneficiary DISCOMs submitted that the computation of energy charge rate billed by GTPS during FY 2017-18 is as per the provisions of Tariff Regulations, 2017 and Business Plan Regulations, 2017. Accordingly, the Commission has not considered true up of fuel cost for FY 2017-18.

FIXED COST

OPERATION & MAINTENANCE (O&M) EXPENSES

Petitioner's Submission

3.31 The Petitioner has submitted that the Commission has specified Normative Operation and Maintenance expenses for the control period from FY 2017-18 to FY 2019-20 in Business Plan Regulations, 2017 as under:

Table 12: Petitioner Submission: O&W Expenses (Rs. Lakn/ MW)					
Station 2017-18 2018-19 2019-20					
GTPS	29.66	31.32	33.08		

3.32 Accordingly, the O&M Expenses for FY 2017-18 submitted by the Petitioner is as under:

S. No.	Particulars	UoM	FY 2017-18 (As per Business Plan Regulations, 2017)
А	O&M expenses	Rs Cr.	80.08
В	Total O&M Expenses	Rs Cr.	80.08

Table 13: Petitioner Submission: O&M Expenses

Commission's Analysis

3.33 The Commission in Business Plan Regulations, 2017 has specified the normative O&M Expenses for generating stations as under:

"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 1: O&IVI Expenses (Rs. Lakh/ IVIW)						
Station	2018-19	2019-20				
GTPS	29.66	31.32	33.08			
PPS I	17.69	18.68	19.73			

Table 1. ORNA Expenses (De Lakh (MIM)

(b) Additional R&M Expenses for generating stations shall be as follows:

Table 2: Additional R&M Expenses (in Rs. Cr.)					
Station	2018-19	2019-20			
GTPS	0.00	0.00	0.00		
PPS I	16.12	16.12	0.00		

(2) 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 Generation Entity and shall be allowed by the Commission after prudence check at the time of true up of ARR for the relevant financial year."

- 3.34 Accordingly, the Commission has approved the amount of Rs. 80.08 Cr. (270*29.66/100) as the base O&M Expenses for FY 2017-18.
- 3.35 Further, the Petitioner during the prudence check session submitted that as a result of implementation of the recommendation of 7th Pay Commission, an interim relief (IR) has been disbursed to the employees which forms the part of employee cost. Accordingly, the Commission based on the auditor certificate pertaining to the said IR has approved the amount of Rs 6.37 Cr as the impact of statutory pay revision for FY 2017-18.



3.36 In view of the above, the O&M Expenses approved by the Commission for FY 2017-18 are as follows:

S. No.	Particulars	UoM	FY 202	FY 2017-18		
			Petitioner's Submission	Approved for True Up		
Α	Base O&M Expenses	Rs Cr	80.08	80.08		
В	Impact of Statutory Pay Revision*	Rs Cr	6.38	6.38		
С	Total O&M Expenses	Rs Cr	86.46	86.46	A+B	

Table 14: Commission Approved: O&M Expenses for FY 2017-18

* Submitted during prudence check session

CAPITAL EXPENDITURE

Petitioner's Submission

3.37 The capitalization submitted by the Petitioner for FY 2017-18 is as follows:

S. No.	Particulars	Unit	FY 2017-18			
А	Opening GFA	Rs Cr	425.14			
В	Addition	Rs Cr	0.00			
C	Deletion	Rs Cr	0.00			
D	Closing GFA	Rs Cr	425.14			
E	Average GFA	Rs Cr	425.14			

 Table 15: Petitioner Submission: Capital Expenditure

Commission's Analysis

S.

В

С

D

3.38 The Commission has trued up the closing Gross Fixed Assets (GFA) for FY 2016-17 in the relevant tariff order as Rs 425 Cr. Further, it is observed that the Petitioner has not claimed any capitalization and decapitalisation during FY 2017-18. Accordingly, the Commission has approved the closing and average GFA for FY 2017-18 as follows:

Rs Cr

Rs Cr

Rs Cr

Table 16: Commission Approved: Capitalisation						
No.	Particulars	UoM	FY 20	Ref.		
			Petitioner Submission	Approved for True up		
А	Opening GFA	Rs Cr	425.14	425.14		

0

0

425.14

Addition

Deletion

Closing GFA



0

0

425.14

A+B-C

DEPRECIATION

Petitioner's Submission

3.39 The Petitioner has calculated depreciation for FY 2017-18 as per DERC Regulation 2017. The Petitioner has referred the DERC Regulation 2017 as under:

"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."

- 3.40 The Petitioner has submitted that the GTPS was commissioned in the 1996 in combined cycle and shall complete its useful life by 2021. Since cumulative depreciation has reached 70% of the total depreciation, the petitioner has spread the remaining depreciable value over the remaining life of the asset. The depreciation allowed by Commission till FY 2016-17 is Rs 338.83 Cr.
- 3.41 Accordingly, the depreciation calculated for FY 2017-18 submitted by the Petitioner is as under:

Table 17. Petitionel Submission. Details of Depreciation					
S. No.	Particulars	Unit	FY 2017-18		
Α	Average GFA	Rs Cr	425.14		
В	Opening Accumulated Depreciation	Rs Cr	338.83		
С	Balance Depreciation	Rs Cr	43.80		

Table 17: Petitioner Submission: Details of Depreciation



S. No.	Particulars	Unit	FY 2017-18
D	Remaining useful life at the opening of FY 2017-18	Years	4
E	Depreciation	Rs Cr	10.95

Commission's Analysis

- 3.42 The Commission approved the accumulated depreciation at the closing of FY 2016-17 in the relevant tariff order as Rs 338.83 Cr. It is observed that GTPS was commissioned in year 1996 and shall complete its useful life by year 2021. Accordingly, the Commission has spread the remaining depreciable value over the remaining life of the asset and has considered the depreciation for FY 2017-18 as submitted by the Petitioner.
- 3.43 The Depreciation approved by the Commission for true up for FY 2017-18 is as follows:

S.	Particulars	UoM	FY 20	17-18	Ref.
No			Petitioner's	Approved	
			Submission	for True Up	
Α	Opening GFA	Rs Cr	425.14	425.14	Table 15
В	Additions	Rs Cr	0	0	Table 15
С	Deletions	Rs Cr	0	0	Table 15
D	Closing GFA	Rs Cr	425.14	425.14	Table 15
Е	Average GFA	Rs Cr	425.14	425.14	(A+D)/2
F	Depreciation	Rs Cr	10.95	10.95	Para 3.42
G	Opening Accumulated	Rs Cr		338.83	Tariff Order
0	Depreciation	113 CI		550.05	Tarin Order
	Accumulated Depreciation to				
Н	the GFA at opening of FY 2017-	%		79.69	G/A
	18				
1	Closing Accumulated	Rs Cr		349.78	F+G
	depreciation			_	
J	Average Accumulated	Rs Cr		344.30	(G+I)/2
	depreciation			511160	(0))//=
К	Depreciation Rate	%		2.58%	(F/E)x100

Table 18: Commission Approved: Depreciation for FY 2017-18

WORKING CAPITAL

Petitioner's Submission

3.44 The Petitioner has calculated the Interest on Working Capital as per Tariff Regulations,2017 which reads as under:



"(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.

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 Ist 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."

3.45 The Petitioner has submitted that the fuel cost has increased steeply since FY 2014-15. The increase in price of fuel had substantial impact on certain components considered in the computation of working capital. Therefore, interest on working capital has considerably increased in comparison to the interest allowed by the Commission.



- 3.46 The Petitioner has taken fuel cost for working capital by taking average of three months from Jan-17 to March-17 as per Tariff Regulations 2017 for FY 2017-18. Accordingly, the weighted average landed price of gas for the period is Rs 11.252/ SCM and weighted average GCV is 9310.329 kCal/SCM. The Petitioner has computed the Fuel Cost considering normative parameters as Rs. 595.27 Cr.
- 3.47 Working Capital for FY 2017-18 submitted by the Petitioner is as under:

Table 15. Fettionel Submission. Requirement of Working Capital						
S. No.	Particulars	Unit	FY 2017-18			
Α	Fuel expenses for 1 month	Rs Cr	49.61			
В	Liquid Fuel for 1/2 month	Rs Cr	35.52			
С	Maintenance spares @ 30% of O&M	Rs Cr	24.02			
D	O&M expenses for 1 month	Rs Cr	6.67			
E	Annual Fixed Cost for the year	Rs Cr	136.18			
F	Fuel Cost for the year	Rs Cr	595.27			
G	Receivables equivalent to 2 months of capacity and energy charge	Rs Cr	121.91			
Н	Total Working Capital	Rs Cr	237.73			

Table 19:	Petitioner	Submission:	Requirement	of Working	Capital
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Commission's Analysis

3.48 Regulation 84 (2) of Tariff Regulations, 2017 specify the following:

*"*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."

- 3.49 The Commission in Tariff Order for FY 2017-18 determined the working capital of GTPS based on the above provisions.
- 3.50 Accordingly, the Commission has trued up the working capital for FY 2017-18 as approved in Tariff Order for FY 2017-18:

S. No.	Particulars	Unit	Petitioner Submission	Approved by Commission
А	Fuel expenses for 1 month	Rs Cr	49.61	43.69
В	Liquid Fuel for 1/2 month	Rs Cr	35.52	35.52
C	Maintenance spares @ 30% of O&M	Rs Cr	24.02	24.02
D	O&M expenses for 1 month	Rs Cr	6.67	6.67
E	Annual Fixed Cost for the year	Rs Cr	136.18	127.30
F	Fuel Cost for the year	Rs Cr	595.27	524.30
G	Receivables equivalent to 2 months of capacity and energy charge	%	121.91	108.60
Н	Total Working Capital	Rs Cr	237.73	218.51

REQUIREMENT OF LOAN AND EQUITY

Petitioner's Submission

3.51 The Petitioner has submitted that since the accumulated depreciation over and above 70% of Gross Fixed Asset during FY 2017-18, the remaining value is treated as 100% equity. Accordingly, Petitioner has treated the net fixed asset as opening equity and has computed the requirement of loan and equity as follows:

Table 22. Tetrionel Submission Requirement of Loan & Equity					
S. No.	Particulars	Unit	FY 2017-18		
А	Opening GFA	Rs Cr	425.14		
В	Opening Accumulated Depreciation	Rs Cr	338.83		
C	Opening Net Fixed Asset (NFA)	Rs Cr	86.31		

 Table 21: Petitioner Submission: Requirement of Loan & Equity



INDRAPRASTHA POWER GENERATION COMPANY LIMITED

S. No.	Particulars	Unit	FY 2017-18
D	Opening Equity	Rs Cr	86.31
E	Opening Loan Requirement	Rs Cr	0.00
F	Depreciation for the year	Rs Cr	10.95
G	Closing NFA	Rs Cr	75.36
Н	Closing Equity	Rs Cr	75.36
I	Closing Loan	Rs Cr	0.00
J	Average Loan	Rs Cr	0.00
К	Average Equity	Rs Cr	80.84

Commission's Analysis

3.52 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:

- (v) Where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff;
- (vi) Where equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as notional loan;
- (vii) The equity invested in foreign currency shall be designated in Indian rupees on the date of each investment;
- (viii) 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."
- 3.53 In view of the above, the Commission has determined the requirement of Loan & Equity as follows:

S. No.	Particulars	Unit	Submitted by the Petitioner	Approved by the Commission	Ref.
Α	Opening GFA	Rs Cr	425.14	425.14	Table 18
В	Opening Accumulated Depreciation	Rs Cr	338.83	338.83	Table 18

Table 22: Commission Approved: Requirement of Loan & Equity



INDRAPRASTHA POWER GENERATION COMPANY LIMITED

S. No.	Particulars	Unit	Submitted by the Petitioner	Approved by the Commission	Ref.
С	Opening Net Fixed Asset (NFA)	Rs Cr	86.31	86.31	A-B
D	Opening Equity	Rs Cr	86.31	25.89	30%xC
E	Opening Loan Requirement	Rs Cr	0.00	60.42	70%xC
F	Depreciation for the year	Rs Cr	10.95	10.95	Table 18
G	Closing NFA	Rs Cr	75.36	75.36	C-F
Н	Closing Equity	Rs Cr	75.36	22.61	30%xG
I	Closing Loan	Rs Cr	0.00	52.76	70%xG
J	Average Loan	Rs Cr	0.00	56.59	(E+I)/2
К	Average Equity	Rs Cr	80.84	24.25	(D+H)/2
L	Working capital Requirement	Rs Cr	237.73	218.51	Table 20
М	Average RRB	Rs Cr	318.57	299.34	J+K+L

RETURN ON CAPITAL EMPLOYED

Petitioner's Submission

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3.54 The Petitioner has submitted the Regulated Rate Base (RRB) for FY 2017-18 as follows:-

Table 23: Petitioner Submission: Estimation of RRB					
S. No.	Particulars	Unit	FY 2017-18		
А	Opening GFA	Rs Cr	425.14		
В	Opening Accumulated Depreciation	Rs Cr	338.83		
С	Opening RRB	Rs Cr	86.31		
D	Working Capital	Rs Cr	237.73		
E	Depreciation for the year	Rs Cr	10.95		
F	Net Addition	Rs Cr	0		
G	Closing RRB	Rs Cr	313.09		

Rs Cr

3.55 The Petitioner submitted that the Commission has specified Margin for Rate of Interest on loan in Business Plan Regulations, 2017 as follows:

"5. MARGIN FOR RATE OF INTEREST ON LOAN

(1) Margin for rate of interest in terms of Regulation 4(2) of the DERC (Terms and Conditions for Determination of Tariff) Regulations, 2017 for the Generating Entity shall be allowed over and above 1 (one) year Marginal Cost of Fund based Lending Rate (MCLR) of SBI for computation of rate of interest on loan"

Average RRB



318.57

Table 1: Margin for Rate of Interest on Loan (%)					
Sr. No.	Generating Station	2017-18	2018-19	2019-20	
1	Gas Turbine Power Station	2.34%	2.11%	2.01%	

- 3.56 The Petitioner has submitted that they have considered the rate of interest on loan by considering the Bank Rate as Marginal Cost of Fund based Lending Rate (MCLR) of SBI as notified by the State Bank of India and margin as approved in Business Plan Regulations, 2017. Accordingly rate of interest on loan has been approved at 10.34% on the basis of SBI MCLR of 8% as on 1st April, 2017 plus margin of 2.34% for FY 2017-18.
- 3.57 The Petitioner has considered the base rate of return on equity at 14% and the same has been grossed up with rate of income tax at 33.99%. Accordingly grossed up rate of return on equity has been computed at 21.21% for FY 2017-18.
- 3.58 In view of the above, the Petitioner has computed Weighted Average Cost of Capital (WACC) and Return on Capital Employed (RoCE) as under:

S. No.	Particulars	Unit	FY 2017-18
А	Average RRB	Rs Cr.	318.57
В	Average Loan Requirement for Capital Investment	Rs Cr.	0.00
С	Loan for Working Capital Requirement	Rs Cr.	237.73
D	Total Loan	Rs Cr.	237.73
E	Average Equity	Rs Cr.	80.84
F	Cost of Debt, Rd	%	10.34
G	Return on Equity, Re	%	21.21
Н	WACC	%	13.10
I	RoCE	Rs Cr.	41.73

Table 24: Petitioner Submission: WACC and RoCE

Commission's Analysis

3.59 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."

- 3.60 It is observed during the prudence check sessions with the Petitioner, that the Petitioner has not paid any income tax for AY 2018-19. Accordingly, the Commission has considered the grossed up rate on return on equity as 14% for FY 2017-18.
- 3.61 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."

- 3.62 It is observed that the Petitioner has not availed loan for FY 2017-18. Accordingly, the Commission has considered the rate of interest on loan as 10.34% as approved for FY 2017-18 in relevant Tariff Order.
- 3.63 Regulation 85 and 86 of Tariff Regulations, 2017 deal with the Interest on Working Capital and the 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."

3.64 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 ith year of the Control Period;

RRBi: Average Regulated Rate Base for the i^{th} year of the Control Period; ΔWCi : 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 ith year of the



Control Period and approved;

Di: Amount set aside or written off on account of Depreciation of fixed assets for the ith year of the Control Period;

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

Ret_i: Amount of fixed asset on account of Retirement/ Decapitalisation during ith Year;

RRB i-1: Closing Regulated Rate Base for the Financial Year preceeding the ith 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)th year of the Control Period.

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

RoCE=WACC_i* RRBi

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."



3.65 Accordingly the Commission has trued up the Return on Capital Employed for FY 2017-18 as follows:

S.	Particulars	Unit	FY 2017-18	Approved by	Remarks	
No.				Commission		
Α	Average RRB	Rs Cr.	318.57	299.34	Table 22	
в	Average Loan Requirement for Capital Investment	Rs Cr.	10.34	56.59	Table 22	
С	Cost of Loan for Capital Investment	%	10.34	10.34	Para 3.62	
D	Loan for Working Capital Requirement	Rs Cr.	237.73	218.51	Table 20	
E	Cost of Loan for Working Capital	%	10.34	10.34	Para 3.62	
F	Average Equity	Rs Cr.	80.84	24.25	Table 22	
G	Return on Equity, Re	%	21.21	14.00	Para 3.60	
н	WACC	%	13.10	10.64	Tariff Regulations , 2017	
I	RoCE	Rs Cr.	41.73	31.84	I = A * H	

Table 25: Commission Approved: WACC and RoCE

FIXED AUXILIARY CONSUMPTION EXPENSES

Petitioner's Submission

3.66 The Petitioner has submitted that the Commission has allowed Fixed Auxiliary Consumption (0.5%) @ Normative PLF. Accordingly, the Petitioner has calculated Fixed Auxiliary Consumption Expenses for FY 2017-18 is as under:

 Table 26: Petitioner Submission: Fixed Auxiliary Consumption Expenses

S. No.	Particulars	Unit	FY 2017-18
А	Plant Capacity	MW	270
В	Normative PLF	%	85
C	Gross Generation	MU	2010.42
D	Fixed Auxiliary Consumption	%	0.5
E	Fixed Auxiliary Consumption	MU	10.05
F	Energy Charge Rate	Rs/kWh	3.402
G	Fixed Auxiliary Consumption	Rs Cr	3.42



Commission's Analysis

3.67 The Commission has specified the Auxiliary Energy Consumption for existing generating stations of Delhi in Business Plan Regulations, 2017 and relevant extract is as follows:

"8. NORMS OF OPERATION FOR GENERATING STATIONS:

····

(3) AUXILIARY ENERGY CONSUMPTION

Auxiliary Energy Consumption shall be computed in two parts:

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

b) Variable: 2.0% 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."

3.68 Accordingly, the Commission based on the landed price of primary fuel (LPPF) and the weighted average GCV has trued up the Fixed Auxiliary Consumption as follows:

	Table 27. Commission Approved. Fixed Auxiliary Consumption Expenses					
S. No.	Particulars	UoM	FY 2017-18	Ref.		
Α	Gross Generation at Normative PLF	MU	2010.42			
В	Fixed Auxiliary Consumption	%	0.5%	Business Plan Regulations, 2017		
С	Fixed Auxiliary Consumption	MU	10.05	AxB		
D	Energy Charge Rate	Rs/ kWh	3.296			
E	Fixed Auxiliary Consumption Expenses	Rs Cr	3.31	(DxC)/10		

 Table 27: Commission Approved: Fixed Auxiliary Consumption Expenses



NON-TARIFF INCOME

Commission's Analysis

3.69 Para 94 of the Tariff Regulations, 2017 specifies the following about Non-Tariff Income (NTI):

"94. The Utility shall submit forecast of Non-Tariff Income to the Commission, in such form as may be stipulated by the Commission from time to time, whose tentative list is as follows:

- (i) Income from rent of land or buildings;
- (ii) Net Income from sale of de-capitalised assets;
- (iii) Net Income from sale of scrap;
- *(iv) Income from statutory investments;*
- (v) Net Interest on delayed or deferred payment on bills;
- (vi) Interest on advances to suppliers/contractors;
- (vii) Rental from staff quarters;
- (viii) Rental from contractors;
- *(ix) Income from Investment of consumer security deposit;*
- (x) Income from hire charges from contactors and others, etc.

95. The Non Tariff Income shall be reduced from ARR."

3.70 Accordingly, the Commission based on the Audited Financial Statements submitted by the Petitioner, has considered the NTI for the Petitioner for FY 2017-18 as follows:

Table 28: Commission Approved: LPSC to be considered as NT	Ί
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S. No.	LPSC Details for FY 2017-18	Amount (Rs Cr)
А	LPSC Amount Collected	33.16
В	Principal Amount @18%	184.21
С	LPSC Amount allowed for retention @10.34% (Interest Rate allowed on Working Capital)	19.05
D	LPSC amount considered as NTI	14.11

Table 29: Commission Approved: Computation of NTI

S. No.	Components of NTI for FY 2017-18	Amount (Rs Cr)
А	Provisions written back	0.34
В	Income on Insurance	0.00
С	Income from Rent	0.17
D	NTI on account of LPSC	14.11
E	Profit from sale of scrap	1.05



S. No.	Components of NTI for FY 2017-18	Amount (Rs Cr)
F	Profit from sale of de-capitalized assets	0.02
G	Total NTI	15.69

SUMMARY OF ANNUAL FIXED COST (AFC)

Petitioner's Submission

3.71 The Annual Fixed Cost for FY 2017-18 submitted by the Petitioner is as under:

S. No.	Particulars	Unit	FY 2017-18	
А	Return on Capital Employed	Rs Cr	41.73	
В	Depreciation	Rs Cr	10.95	
С	Operation and Maintenance Expenses	Rs Cr	80.08	
D	Fixed Auxiliary Consumption	Rs Cr	3.42	
E	Annual Fixed Cost	Rs Cr	136.18	

Table 30: Petitioner Submission: Annual Fixed Cost

Commission's Analysis

3.72 Regulation 99 of Tariff Regulations, 2017 provides the components for computation of AFC for a generating entity and the relevant clause 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."

3.73 Accordingly, the Commission has trued up the AFC for FY 2017-18 as follows:

S.	Particulars	UoM	FY 2017-18		Ref.
No.			Petitioner's	Approved by	
			Submission	Commission	
А	Return on Capital Employed	Rs Cr	41.73	31.84	Table 25
В	Depreciation	Rs Cr	10.95	10.95	Table 18
с	Operation and Maintenance	Rs Cr	86.46	86.46	Table 14
C	Expenses		00.10	00.10	
D	Fixed Auxiliary Consumption	Rs Cr	3.42	3.31	Table 27
Е	Annual Fixed Cost	Rs Cr	136.18	132.56	A+B+C+D
F	NTI	Rs Cr	0	15.69	Table 29
G	Annual Fixed Cost net of NTI	Rs Cr	142.56	116.87	E-F

Table 31: Commission Approved: Annual Fixed Cost for FY 2017-18



3.74 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 2019-20

NORMS OF OPERATION

4.1 The Commission has specified the target 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 Submissions

4.2 The Petitioner has submitted the plant availability for GTPS for FY 2019-20 as under:

Table 32: Petitioner Submission: Availability (%) for GTPS				
Particulars	UoM	FY 2019-20		
Plant Availability	(%)	85		

Table 32: Petitioner Submission: Availability (%) for GTPS

Commission's Analysis

- 4.3 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%"
- 4.4 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 (SHR)

Petitioner's Submission

4.5 The Petitioner has submitted projected SHR for FY 2019-20 as under:



Table 33: Petitioner Submission: Station Heat Rates (kCal/ kWh)

Particulars	FY 2019-20
Station Heat Rate (Combined Cycle)	2450
Station Heat Rate (Open Cycle)	3125

Commission's Analysis

4.6 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)				
Sr. No	Generating Station	Combined Cycle Open Cycl		
		(kCal/ kWh)		
1	Gas Turbine Power Station (GTPS)	2450	3125	
2	Pragati Power Station I (PPS I)	2000	2900	
"				

Table 5: Gross Station Heat Rate (GHR)

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

AUXILIARY POWER CONSUMPTION

Petitioner's Submissions

4.8 The Petitioner has proposed Auxiliary Power Consumption for FY 2019-20 as follows:

Table 34: Petitioner Submission: Auxiliary Power Consumption in CC Mode

Particulars	UoM	FY 2019-20
Auxiliary Consumption	%	2.50

Commission's Analysis

4.9 The Commission has specified the Auxiliary Energy Consumption for existing generating stations of Delhi in Business Plan Regulations, 2017 and relevant extract is as follows:

"8. NORMS OF OPERATION FOR GENERATING STATIONS:



····

(3) AUXILIARY ENERGY CONSUMPTION

Auxiliary Energy Consumption shall be computed in two parts:

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

b) Variable: 2.0% 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."

4.10 In view of the above, the Commission has considered Auxiliary Power Consumption as approved in the Business Plan Regulations, 2017.

GROSS GENERATION AND NET GENERATION

Petitioner's Submissions

4.11 The Petitioner has submitted Gross and Net Generation for Gas Turbine Power Station for FY 2019-20 as under:

S. No.	Particulars	UoM	FY 2019-20
А	Plant Capacity	MW	270
В	PLF	%	85
C	Gross Generation	MU	2015.93
D	Aux. Cons.	%	2.5
E	Aux. Cons.	MU	50.40
F	Net Gen.	MU	1965.53

Table 35: Petitioner Submission: Gross and Net Generation

Commission's Analysis

4.12 Gross and Net Generation of GTPS for FY 2019-20 approved by the Commission based on the norms of operation specified in Business Plan Regulations, 2017 is as follows:

Table 36: Commission A	Approved: Gross and Net	Generation

S. No.	GT Power Station	UOM	FY 2019-20	Ref.
А	Capacity	MW	270	
В	NAPLF	%	85	Business Plan



S. No.	GT Power Station	UOM	FY 2019-20	Ref.
				Regulations, 2017
С	Gross Generation	MU	2010.42	(AxBx365x24)/1000
D	Auxiliary Consumption	%	2.0	Business Plan Regulations, 2017
E	Auxiliary Consumption	MU	40.21	CxD
F	Net Generation	MU	1970.21	C-E

ENERGY CHARGE RATE AND VARIABLE COST

PROJECTED FUEL COST FY 2019-20

Petitioner's Submission

- 4.13 The Petitioner has estimated total consumption of Gas as 529.30 MMSCM considering GCV of 9331.256 kCal/SCM at 85% PLF.
- 4.14 The Petitioner has submitted that Fuel Cost for FY 2019-20 has been calculated as per Business Plan Regulations, 2017 by considering heat rate of 2450 kCal/kWh in combined cycle mode and 3125 kCal/kWh @ Normative PLF. However, the weighted average price of the Gas has been taken for preceding three months i.e. August to October, 2018 in line with the DERC Regulations for FY 2019-20. The weighted average landed price of gas from August to October, 2018 for GTPS is 17.477 Rs/SCM and weighted average GCV is 9331.256 kCal/SCM.
- 4.15 The Petitioner has computed the fuel cost and variable cost as under:

Particulars	Unit	FY 2019-20
Total Gas Cons.	MMSCM	529.30
Average Gas Price	Rs./ SCM	17.477
Weighted Average GCV	kCal/ SCM	9331.256
Total Gas Cost	Rs. Crores	925.07
Net Generation	MU	1965.53
Variable Cost - CC	Rs./kWh	4.706

Table 37: Petitioner Submission: Energy Charge Rate and Fuel Cost

Commission's Analysis

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



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

(a) For coal based stations:

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

AUX)

(b) For gas and liquid fuel based stations

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

Where,

AUX =Normative auxiliary energy consumption in percentage

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

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

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

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

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

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

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

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

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

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



LPSFi=Weighted Average Landed Price of Secondary Fuel in Rs./ml during the month;

Provided that energy charge rate for a gas/liquid fuel based station shall be adjusted for open cycle operation based on certification of Delhi SLDC for the open cycle operation during the month.

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"

4.17 Landed Price of Primary fuel and Gross Calorific Value has been computed as per the information available in Form 15 of March 2019, April 2019 and May 2019 submitted by the Petitioner is as follows:

	Table 38. Landed Frice of Frinary Fuel and Gross Calornic Value						
S. No.	Particulars	UoM	March-2019	April-2019	May-2019		
1	Quantum	000'SCM	8956.20	11060.10	15004.69		
2	Cost	Rs Cr	11.44	17.30	27.71		
3	GCV	kCal/ SCM	9283.71	9251.05	9381.26		
4	LPPF (Rs/ SCM)	Rs/ SCM	12.77	15.64	18.47		
5	Weighted Average LPPF	Rs/ SCM	16.12				
6	Weighted Average GCV	kCal/ SCM		9315.19			

Table 38: Landed Price of Primary Fuel and Gross Calorific Value

4.18 Accordingly, the Commission approves the Energy Charge Rate (ECR) and Fuel Cost for FY 2019-20 as follows:

S. No. Particulars UoM Petitioner's Approved Re Submission					Ref
А	Net Generation	MU	1965.53	1970.21	
В	ECR	Rs/ kWh	4.706	4.326	
С	Fuel Cost	Rs Cr	925.07	852.26	(AxB)/10

. und. CCD and Fuel Cost



FIXED COST

OPERATION & MAINTENANCE (O&M) EXPENSES

Petitioner's Submission

4.19 The Petitioner has submitted that the Commission has specified Normative Operation and Maintenance expenses for GTPS in Business Plan Regulations, 2017 as follows:

Table 40: Petitioner Submission: O&M Expenses (Rs. Lakh/ MW)					
Station 2017-18 2018-19 2019-20					
GTPS	29.66	31.32	33.08		

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4.20 Accordingly, the O&M expenses submitted by the Petitioner for FY 2019-20 is as under:

Table 41 : Petitioner	Submission: O	&M Exper	ises

Particulars (Rs.Cr.)	UoM	2019-20
O&M Expenses	Rs. Cr.	89.32

Commission's Analysis

4.21 The Commission has specified the normative Operation and Maintenance Expenses for existing generating stations of Delhi in Business Plan Regulations, 2017 and relevant extract is 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:

Tuble 1: O&IVI Expenses (RS. Lakii/ IVIV)					
Station	2017-18	2018-19	2019-20		
GTPS	29.66	31.32	33.08		
PPS I	17.69	18.68	19.73		

Table 1: OSM Expanses (Ps. Lakh/ MM)

....

(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."



4.22 Accordingly, the Commission approves the base O&M Expenses for GTPS for FY 2019-20 as follows:

S. No.	Station	Capacity (MW)	Expenses (Rs. Lakh/ MW)	Amount (Rs Cr)
1	GTPS	270	33.08	89.32

 Table 42: Commission Approved: Base O&M Expenses for FY 2019-20

- 4.23 During the prudence check, the Petitioner submitted that due to the impact of implementation of recommendation of 7th pay commission, an interim relief (IR) is being provided to the employees of the Petitioner. An amount of Rs 3.16 Cr has been estimated for FY 2019-20 based on the submission of the Petitioner.
- 4.24 In view of the above, the Commission has approved the O&M Expenses for FY 2019-20 as follows:

Table 43: Commission Approved: O&M Expenses for FY 2019-20

S. No.	Station	Amount (Rs Cr)
1	Base O&M Expenses	89.32
2	IR Amount	3.16
3	TOTAL O&M Expenses	92.48

CAPITAL EXPENDITURE

Petitioner's Submission

4.25 The Petitioner has submitted the Capital Expenditure for FY 2019-20 as follows:

 Table 44: Petitioner Submission: Capital Expenditure

S. No.	Particulars	Unit	FY 2019-20	
A	Opening GFA	Rs Cr	425.94	
В	Addition	Rs Cr	0	
C	Deletion	Rs Cr	0	
D	Closing GFA	Rs Cr	425.94	
E	Average GFA	Rs Cr	425.94	

Commission's Analysis

4.26 The Commission has approved the closing GFA for FY 2017-18 as Rs. 425.14 Cr. The Commission has not considered any capitalization for FY 2018-19 in line with the


Business Plan Regulations, 2017. Accordingly, the Commission has approved the Capital Expenditure and closing GFA for FY 2019-20 as follows:

S. No.	Particulars	UoM	FY 2019-20		Ref.
			Petitioner Submission	Approved	
А	Opening GFA	Rs Cr	425.94	425.14	Tariff Order
В	Addition	Rs Cr	0	0	
С	Deletion	Rs Cr	0	0	
D	Closing GFA	Rs Cr	425.94	425.14	A+B-C
E	Average GFA	Rs Cr	425.94	425.14	(A+D)/2

Table 45: Commission Approved:	Capital Expenditure
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DEPRECIATION

Petitioner's Submission

4.27 The Petitioner has claimed depreciation for FY 2019-20 as follows:

Table 40.1 etitioner Submission. Details of Depredation				
S. No.	Particulars	Unit	FY 2019-20	
А	Average GFA	Rs Cr	425.94	
В	Opening Accumulated Depreciation	Rs Cr	360.85*	
C	Balance Depreciation	Rs Cr	22.50	
D	Remaining useful life at the opening of FY 2017-18	Years	2	
E	Depreciation	Rs Cr	11.25	

* A depreciation of Rs 11.07 Crore has been considered for FY 18-19

Commission's Analysis

4.28 The Commission has specified provisions pertaining to Depreciation in Regulation 78 to83 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."

- 4.29 Further, it is observed that GTPS was commissioned in year 1996 and shall complete its useful life by year 2021.
- 4.30 Accordingly, the Commission has approved the depreciation for FY 2019-20 by spreading the remaining depreciable value over the remaining useful life as follows:

	Table 47. Commission Approved. Depreciation for 11 2015-20					
S. No.	Particulars	UoM	Approved	Ref		
А	Average GFA	Rs Cr	425.14	Table 45		
В	Opening Accumulated Depreciation	Rs Cr	360.73	Tariff Order		
С	Balance Depreciation	Rs Cr	21.90	(90% x A)-B		
D	Balance useful life at opening of FY 2019-20	Years	2			
E	Depreciation	Rs Cr	10.95	C/D		
F	Closing Accumulated Depreciation	Rs Cr	371.68	B+E		
G	Average Accumulated Depreciation	Rs Cr	366.20	(B+F)/2		
Н	Average Net Fixed Asset	Rs Cr	58.94	A-G		

 Table 47: Commission Approved: Depreciation for FY 2019-20

*A depreciation amount of Rs 10.95 Cr has been considered for FY 2018-19



WORKING CAPITAL

Petitioner's Submission

4.31 The Petitioner has calculated the Interest on Working Capital as per Tariff Regulations,2017 which reads as under:

"(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.

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 Ist 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."



- 4.32 The Petitioner has submitted that the fuel cost has increased steeply since FY 2014-15. The increase in price of fuel had substantial impact on certain components considered in the computation of working capital. Therefore, interest on working capital has considerably increased in comparison to the interest allowed by the Commission.
- 4.33 Accordingly, the Petitioner has submitted the estimated Working Capital for FY 2019-20 as follows:

S. No.	Particulars	Unit	FY 2019-20
А	Fuel expenses for 1 month	Rs Cr	77.09
В	Liquid Fuel for 1/2 month	Rs Cr	30.52
С	Maintenance spares @ 30% of O&M	Rs Cr	26.79
D	O&M expenses for 1 month	Rs Cr	7.44
E	Annual Fixed Cost for the year	Rs Cr	148.83
F	Fuel Cost for the year	Rs Cr	925.07
G	Receivables equivalent to 2 months of capacity and energy charge	Rs Cr	178.98
Н	Total Working Capital	Rs Cr	320.83

Table 48: Petitioner Submissi	on: Requirement of Working Capital

Commission's Analysis

4.34 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."
- 4.35 Accordingly, Working Capital requirement for FY 2019-20 has been computed as follows:

S.	Particulars	UoM	FY 201	9-20	Ref.
No.			Petitioner	Approved	
			Submission		
Α	Fuel expenses for 1 month	Rs Cr	77.09	71.02	
В	Liquid Fuel for 1/2 month	Rs Cr	30.52	30.52	
с	Maintenance spares @ 30% of	Rs Cr	26.79	27.74	Table 43
C	O&M Expenses	KS CI	20.79	27.74	Table 45
D	O&M expenses for 1 month	Rs Cr	7.44	7.71	Table 43
E	Receivables equivalent to 2 months	Rs Cr	178.98	166.60	
E	of capacity and energy charge	ns Cl	176.96	100.00	
F	Total Working Capital	Rs Cr	320.83	303.59	A+B+C+D+E

Table 49: Commission Approved: Working Capital Requirement for FY 2019-20

REQUIREMENT OF LOAN AND EQUITY

Petitioner's Submission

4.36 The Petitioner has submitted the requirement of Loan and Equity for FY 2019-20 as under:

Table 50:	Petitioner Submission	Requirement of Loan & Equity

S. No.	Particulars	Unit	FY 2019-20
A	Opening GFA	Rs Cr	425.94
В	Opening Accumulated Depreciation	Rs Cr	360.85
С	Opening NFA	Rs Cr	65.09
D	Opening Equity	Rs Cr	65.09
E	Opening Loan Requirement	Rs Cr	0.00
F	Depreciation for the year	Rs Cr	11.25
G	Closing NFA	Rs Cr	53.84
Н	Closing Equity	Rs Cr	53.84
I	Closing Loan	Rs Cr	0.00
J	Average Loan	Rs Cr	0.00
К	Average Equity	Rs Cr	59.47



Commission's Analysis

4.37 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."
- 4.38 In view of the above, the Commission has computed the requirement of loan and equity as under:

S. No.	Particulars	UoM	Approved	Ref.
А	Average Net Fixed Asset	Rs Cr	58.94	
В	Average Equity	Rs Cr	17.68	30% of A
С	Average CAPEX Loan	Rs Cr	41.26	70% of A
D	Working Capital Loan	Rs Cr	303.59	Table 49
E	Average Loan Requirement	Rs Cr	344.85	C+D
F	Average RRB		362.53	B+E

Table 51: Commission Approved: Requirement of Loan and Equity

RETURN ON CAPITAL EMPLOYED

Petitioner's Submission

4.39 The Petitioner has submitted that 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."

4.40 The Petitioner has computed the Return on Capital Employed (RoCE) for the year "i" in the following manner:

RoCE=WACCi* RRBi

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.

4.41 The Petitioner has computed the WACC in the following manner:

WACC = [D/(D+E)]*rd + [E/(D+E)]*re

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 The Petitioner further submitted that Commission has specified Margin for Rate of Interest on loan in Business Plan Regulations, 2017 as follows:

"5. MARGIN FOR RATE OF INTEREST ON LOAN

(1) Margin for rate of interest in terms of Regulation 4(2) of the DERC (Terms and Conditions for Determination of Tariff) Regulations, 2017 for the Generating Entity shall be allowed over and above 1 (one) year Marginal Cost of Fund based Lending Rate (MCLR) of SBI for computation of rate of interest on loan"

Table 1: Margin for Rate of Interest on Loan (%)						
Sr. No. Generating Station 2017-18 2018-19 2019-20						
1	Gas Turbine Power Station	2.34%	2.11%	2.01%		

4.43 In view of the above, the Petitioner has submitted the Regulated Rate Base (RRB) for FY 2019-20 is as follows:

S. No.	Particulars	Unit	FY 2019-20
А	Opening GFA	Rs Cr	425.94
В	Opening Accumulated Depreciation	Rs Cr	360.85
С	Opening RRB	Rs Cr	65.09
D	Working Capital	Rs Cr	320.83
E	Depreciation for the year	Rs Cr	11.25
F	Net Addition	Rs Cr	0
G	Closing RRB	Rs Cr	374.67
Н	Average RRB	Rs Cr	380.30

Table 52: Petitioner Submission: RRB

4.44 The Petitioner has submitted that they have 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 calculated at 10.26 by



taking average rate of MCLR from April 2018 to October 2018 i.e. 8.25% plus margin of 2.01% for FY 2019-20.

- 4.45 The Petitioner has considered the base rate of return on equity at 14% and the same has been grossed up with rate of income tax at 21.54%. Accordingly grossed up rate of return on equity has been computed at 17.84% for FY 2019-20.
- 4.46 Accordingly, Petitioner has computed Weighted Average Cost of Capital (WACC) and Return on Capital Employed (RoCE) as under:

S. No.	Particulars	Unit	FY 2019-20
A	Average RRB	Rs Cr	380.30
В	Average Loan Requirement for Capital Investment	Rs Cr	0.00
С	Loan for Working Capital Requirement	Rs Cr	320.83
D	Total Loan	Rs Cr	320.83
E	Average Equity	Rs Cr	59.47
F	Cost of Debt, Rd	%	10.26
G	Return on Equity, Re	%	17.84
Н	WACC	%	11.45
I	RoCE	Rs Cr	43.53

Table 53: Petitioner Submission: WACC and RoCE

Commission's Analysis

4.47 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."

- 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 21.54%.
 Accordingly grossed up rate of return on equity has been computed at 17.84% for FY 2019-20.
- 4.49 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."



4.50 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."

- 4.51 The Commission has considered the rate of interest on loan by considering the Bank Rate as Marginal Cost of Fund based Lending Rate (MCLR) of SBI as notified by the State Bank of India and margin as approved in Business Plan Regulations, 2017. Accordingly rate of interest on loan has been approved at 10.56% on the basis of SBI MCLR of 8.55% as on 1st April, 2019 plus margin of 2.01%.
- 4.52 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 ith year of the Control Period;

RRBi: Average Regulated Rate Base for the i^{th} year of the Control Period; ΔWCi : 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 ith year of the Control Period and approved;

Di: Amount set aside or written off on account of Depreciation of fixed assets for the ith year of the Control Period;

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



assets;

Ret_i: Amount of fixed asset on account of Retirement/ Decapitalisation during ith Year;

RRB i-1: Closing Regulated Rate Base for the Financial Year preceeding the ith 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)th year of the Control Period.

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

RoCE=WACC_i* RRBi

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."

4.53 Accordingly, the Commission has computed Return on Capital Employed for FY 2019-20 as follows:

S.	Particulars	UoM	FY 201	Ref.	
No.			Petitioner's Submission	Approved	
А	Average Net Fixed Asset	Rs Cr	80.84	58.94	Table 47
В	Average Equity	Rs Cr	80.84	17.68	30% of A
C	Average Capex Loan	Rs Cr	0	41.26	70% of A

Table 54: Commission Approved: Return on Capital Employed



S.	Particulars	UoM	FY 201	9-20	Ref.
No.			Petitioner's	Approved	
			Submission		
D	Working Capital Loan	Rs Cr	320.83	303.59	Table 49
E	Average Loan Requirement	Rs Cr	320.83	344.85	C+D
F	Average RRB		380.30	362.53	B+E
G	Grossed up Rate of Return on	%	17.84	17.84	Para 4.48
0	Equity	/0	17.04	17.04	Fala 4.40
	Rate of Interest on Loan				Tariff
Н		%	10.26	10.56	Regulations,
					2017
	Weighted Average Cost of	%	11.45	10.92	(B/F)*G+(E/F)*
I	Capital (WACC)	70	11.45	10.92	Н
J	RoCE	Rs Cr	43.53	39.57	I*F

FIXED AUXILIARY CONSUMPTION EXPENSES

Petitioner's Submission

4.54 The Petitioner has projected Fixed Auxiliary Consumption Expenses for FY 2019-20 is as under:

	Tuble 5511 etitionel Submission Tixeu Auxiliary consumption Expenses					
S. No.	Particulars	Unit	FY 2019-20			
А	Plant Capacity	MW	270			
В	Normative PLF	%	85			
С	Gross Generation	MU	2015.93			
D	Fixed Auxiliary Consumption	%	0.5			
E	Fixed Auxiliary Consumption	MU	10.08			
F	Energy Charge Rate	Rs/kWh	4.71			
G	Fixed Auxiliary Consumption	Rs Cr	4.74			

Table 55: Petitioner Submission: Fixed Auxiliary Consumption Expenses

Commission's Analysis

4.55 The Commission allows Fixed Auxiliary Consumption Expenses as per the Regulation8(3) of DERC (Business Plan) Regulations, 2017. The relevant extract is as follows:

"8. NORMS OF OPERATION FOR GENERATING STATIONS:

•••

...

(3) AUXILIARY ENERGY CONSUMPTION



Auxiliary Energy Consumption shall be computed in two parts:

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

b) Variable: 2.0% 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."

4.56 Accordingly, Fixed Auxiliary Consumption Expenses have been determined for FY 2019-20 as follows:

S. No.	Particulars	UoM	FY 2019-20	Ref.
Α	Gross Generation at Normative PLF	MU	2010.42	
В	Fixed Auxiliary Consumption			Business Plan
		%	0.5%	Regulations,
				2017
С	Fixed Auxiliary Consumption	MU	10.05	A x B
D	Energy Charge Rate	Rs/ kWh	4.326	Table 39
E	Fixed Auxiliary Consumption Expenses	Rs Cr	4.35	(CxD)/10

Table 56: Commission Approved: Fixed Auxiliary Consumption Expenses

NON-TARIFF INCOME

Commission's Analysis

4.57 Para 94 of the Tariff Regulations, 2017 specifies the following about Non-Tariff Income (NTI):

"94. The Utility shall submit forecast of Non-Tariff Income to the Commission, in such form as may be stipulated by the Commission from time to time, whose tentative list is as follows:

- (i) Income from rent of land or buildings;
- (ii) Net Income from sale of de-capitalised assets;
- (iii) Net Income from sale of scrap;
- (iv) Income from statutory investments;



- (v) Net Interest on delayed or deferred payment on bills;
- (vi) Interest on advances to suppliers/contractors;
- (vii) Rental from staff quarters;
- (viii) Rental from contractors;
- *(ix) Income from Investment of consumer security deposit;*
- (x) Income from hire charges from contactors and others, etc.

95. The Non Tariff Income shall be reduced from ARR."

4.58 The Petitioner has not projected NTI in its Tariff Petition. Accordingly, the NTI shall be considered at the time of true up of FY 2019-20.

SUMMARY OF FIXED COST

Petitioner's Submission

4.59 The Petitioner based on the provisions of Tariff Regulations, 2017 has estimated the AFC for FY 2019-20 as follows:

S. No.	Particulars	Unit	FY 2019-20		
А	Return on Capital Employed	Rs Cr	43.53		
В	Depreciation	Rs Cr	11.25		
C	Operation and Maintenance Expenses	Rs Cr	89.32		
D	Fixed Auxiliary Consumption	Rs Cr	4.74		
E	Annual Fixed Cost	Rs Cr	148.83		
F	Net Generation	MU	1965.53		
G	Fixed Cost Per Unit	Rs/ kWh	0.76		

Table 57: Petitioner Submission: Annual Fixed Cost

Commission's Analysis

4.60 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."

4.61 Accordingly, the Commission approves the Annual Fixed Cost for FY 2019-20 by considering the various components as follows:

-							
S.	Particulars	UoM	FY 2	019-20	Ref.		
No.			Petitioner's Approved by				
			Submission	Commission			
А	Return on Capital Employed	Rs Cr	43.53	39.57	Table 54		
В	Depreciation	Rs Cr	11.25	10.95	Table 47		
С	Operation and Maintenance Expenses	Rs Cr	92.48	92.48	Table 43		
D	Fixed Auxiliary Consumption	Rs Cr	4.74	4.35	Table 56		
E	Annual Fixed Cost	Rs Cr	148.83	147.35	A+B+C+D		

Table 58: Commission	Approved: Annual Fixed Cost for FY 2019-20



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 The Commission directs the Petitioner to install separate arrangement for recording of unit auxiliary transformer consumption in order to correctly measure the Auxiliary Consumption of the generating station.
- 5.5 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.



.Petitioner/Licensee

Annexure – I



DELHI ELECTRICITY REGULATORY COMMISSION

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

#.11(1662) /DERC/2018-19/

Petition No. 11/2019

In the matter of: Petition for Truing Up for FY for FY 2017-18, and determination of ARR for the Financial Year 2019-20 for GTPS.

Indraprostha Power Generation Company Ltd. Through its: Director (Technical) Himadri, Rajghat Power House Complex New Delhi 110 002.

Coram:

Hon'ble Mr. Justice S S Chauhan, Chairperson

Appearance:

1, Mr. Amit Kansal, IPGCL

INTERIM ORDER (Date of Hearing: 20.02.2019) [Date of Order: 21.02.2019]

- The representative of the Petitioner states that the instant Petition has been filed by M/s. Indraprastha Power Generation Company Ltd. (IPGCL) for Truing Up for FY for FY 2017-18, and determination of ARR for the Financial Year 2019-20 for GTPS.
- The Petition has been scrutinised and found generally in order as per the DERC Comprehensive (Conduct of Business) Regulations, 2001.
- The Petition is admitted. Further, the Petitioner shall turnish clarifications/additional information, if and when required by the Commission.

(Justice'S S Chauhan)

Chairperson



Annexure - II

LIST OF RESPONSES RECEIVED FROM STAKEHOLDERS ON THE APPROVAL OF TRUE UP OF PETITION FOR TRUING UP OF EXPENSES UPTO FY 2017-18 AND ARR TARIFF PETITION FOR FY 2019-20

S. No.	R.	Name	Address	Date of
1	No.			Receipt
1.	1	Sh. S.R. Abrol	L-2-97B, DDA, LIG Kalkaji,	18.03.2019
			New Delhi 110 019	
2	2		Nyayabhoomi2003@gmail.com	20.02.2010
2.	2	Sh. V.K. Malhotra	DVB Engineers' Association	29.03.2019
	2A 2B	General Secretary	D-3, Vikas Puri, New Delhi 110 018	
	ZD		New Delin 110 018	
3.	3	Sh. Praveen Chawla	praveenkumarchawla@gmail.co	29.03.2019
			<u>m</u>	
4.	4	Sh. B.S. Sachdev	Elderly Peoples Forum	28.03.2019
	4A	President	B-2/13A, Keshav Puram,	30.03.2019
	4B		Delhi 110 035	10.06.2019
	4C			25.01.2019
5.	5	Sh. Ashok Gupta	Udyog Nagar Factory Owner's	28.03.2019
			Association, Z-101, (Opp. H-18),	
			Udhyog Nagar, Rohtak Road,	
			Delhi 110 041	
6.	6	Sh. Ashok	North Delhi Residents Welfare	27.03.2019
	6A	Bhasin	Association, 1618, Main	
			Chandrawal Road	10.07.2019
			Delhi 110 007	
			Ashok.bhasin2015@gmail.com	
7.	7	Sh. S.B. Kuchhal	Legal Advisor,	29.03.2019
			Kothi No. 1, Road No. 32	
			East Punjabi Bagh,	
	-		New Delhi 110 026	
8.	8	Sh. Malay Saha	Delhi Metro Rail Corporation Ltd.	05.04.2019
	8A	General Manager	Metro Bhawan, Fire Brigade	
	8B		Lane, Barakhamba Road,	
	8C		New Delhi 110 001	
9.	9	Sh. Mukesh Kumar	Delhi Transco Limited	05.04.2019
	9A	Sharma	Shakti Sadan, Kotla Road,	
	9B 9C		New Delhi 110 002	
10.	9C 10	Sh. Sunil Gupta	Pension Fighters	05.04.2019
			11/12, Guru Ram Das Nagar,	



S. No.	R.	Name	Address	Date of
	No.			Receipt
			Main Market, Laxmi Nagar,	
			Delhi 110 092	
			pensionfighters@gmail.com	
11.	11	Sh. Rajan Gupta	Delhi Electricity Consultative	05.04.2019
		Former Member	Council,	
			H. No. 355, Udyan, Nerala	
			Delhi 110 040	
12.	12	Dr. Arun Kumar	Dignity Restoration & Grievance	08.04.2019
		Chairman	Settlement Association	
			B4/84/2, Safdarjung Enclave,	
			New Delhi 110 029	
			director@dignityindia.org.	
13.	13	Sh . H.M. Sharma	146FF, Vinodbapuri, Lajpat	06.05.2019
	13A		Nagar-2, New Delhi 110 024	
			hemantahemanta@rediffmail.co	12.07.2019
			<u>m</u>	
14.	14	Er. Sarabjit Roy	Sroy.mb@gmail.com	06.04.2019
		National Convenor		
15.	15	Sh. Saurabh Gandhi	United Residents of Delhi – URD	06.04.2019
	15A	Gen. Secretary	C-6/7, Rana Pratap Bagh, Delhi	
			110 007	11.07.2019
			urdrwas@gmail.com	
16.	16	Sh. Vipin Gupta	A-17, Antriksh Apartments	08.04.2019
	16A		New Town Co-Op. Group Housing	
			Society Ltd.	04.05.2019
			Sector 14-Extn. Rohini	
			Delhi 110 085	
	47		Vipin.bfi@gmail.com	
17.	17	Sh. Kailash Jain	198, Dr. Mukherjee Nagar,	06.04.2019
			Delhi 110 009	
10	10		kcjcqd@gmail.com	06.04.0040
18.	18	Ms. Neeta Gupta	Neetagupta.vg111@gmail.com	06.04.2019
19.	19	Sh. B.P. Agarwal	Bpagarwal57@gmail.com	05.04.2019
	19A	Advocate,		
	19B			
	19C			
20	19D	Ch. logdich Kkatama	iagdich naucerie Queha a calie	06.04.2010
20.	20	Sh. Jagdish Khetarpal	jagdishpowerip@yahoo.co.in	06.04.2019
21	20A		222 Dealert F. Mayura Viller Dhara	11.07.2019
21.	21	Sh. A.K. Datta	222, Pocket E, Mayur Vihar Phase	05.04.2019
			II, Delhi 110 091	



S. No.	R.	Name	Address	Date of	
	No.			Receipt	
			mmathur2001@yahoo.com		
22.	22	Sh. Kuldeep Kumar	Delhi State Electricity Workers	04.04.2019	
		General Secretary	Union, L-2, main Road, Brampuri,		
			Delhi 110 094		
23.	23	Sh. B.S. Vohra	East Delhi RWAs Joint Front,	04.04.2019	
		President	F-19/10, Krishna Nagar,		
			Delhi 110 051		
24.	24	Sh. C.P. Awasthi	Federation of All Resident	04.04.2019	
		Secretary	Welfare Association		
			81, Venus Apartment,		
			Rohtak Road, Paschim Vihar,		
			New Delhi 110 087		
			Awasthichandra1@gmail.com		
25.	25	Sh. Vikas Gotwani	Vgotwani 0409@yahoo.co.in	22.04.2019	
26.	26	Sh. Bharat Kumar	Tata Power Delhi Distribution	26.04.2019	
	26A	Bhadawat	Ltd.		
	26B	Head (Regulatory and	NDPL House, Hudson Lines		
		Legal)	Kingsway Camp, Delhi 110 009		
27.	27	Sh. S.B. Kuchhal	Kothi No. 1, Road No. 32, East	02.05.2019	
			Punjabi bagh,		
			New Delhi 110 026		
28.	28	Sh. Suresh Kumar	C-116, Yadav Nagar, Samaypur	06.05.2019	
			Badli,		
			Delhi		
29.	29	Sh. Rakesh	B-312, Saraswati Vihar,	06.05.2019	
			Pitam Pura,		
			Delhi 110 034,		
30.	30	Sh. Rajesh Kumar	B-312, Saraswati Vihar,	06.05.2019	
			Pitam Pura,		
			Delhi 110 034,		
31.	31	Sh. Sushil Kumar Jain	B-312, Saraswati Vihar,	06.05.2019	
			Pitam Pura,		
			Delhi 110 034,		
32.	32	Sh. Sunil Dutt	B-312, Saraswati Vihar,	06.05.2019	
			Pitam Pura,		
			Delhi 110 034		
33.	33	Sh. Bale Ram	B-312, Saraswati Vihar,	06.05.2019	
			Pitam Pura,		
			Delhi 110 034		
34.	34	Sh. Ardesh	B-312, Saraswati Vihar,	06.05.2019	



S. No.	R.	Name	Address	Date of
	No.			Receipt
			Pitam Pura,	
			Delhi 110 034	
35.	35	Sh. Narendra Kumar	B-312, Saraswati Vihar,	06.05.2019
			Pitam Pura,	
			Delhi 110 034	
36.	36	Sh. Uma Shankar	B-312, Saraswati Vihar,	06.05.2019
		Aggarwal	Pitam Pura,	
			Delhi 110 034	
37.	37	Sh. Pratap Singh	B-312, Saraswati Vihar,	06.05.2019
			Pitam Pura,	
			Delhi 110 034	
38.	38	Sh. Santosh Kumar	B-312, Saraswati Vihar,	06.05.2019
			Pitam Pura, Delhi 110 034	
39.	39	Sh. Vikas	B-312, Saraswati Vihar,	06.05.2019
			Pitam Pura, Delhi 110 034	
40.	40	Sh. Ram Nivas	B-312, Saraswati Vihar,	06.05.2019
			Pitam Pura, Delhi 110 034	
41.	41	Sh. Mintu	B-312, Saraswati Vihar,	06.05.2019
			Pitam Pura, Delhi 110 034	
42.	42	Sh. Rajender	B-312, Saraswati Vihar,	06.05.2019
			Pitam Pura, Delhi 110 034	
43.	43	Sh. Surender Singh	H. No. 525, Main Narela Road,	06.05.2019
			Near WaterTan, Aliput, Delhi	
44.	44	Sh. Udham Singh	H. No. 521, Main Narela Road,	06.05.2019
			Near WaterTan, Aliput, Delhi	
45.	45	Sh. Rajesh Kumar	H. No. 442, Main Narela Road,	06.05.2019
			Near WaterTan, Aliput, Delhi	
46.	46	Sh. Naresh Sharma	E-17, Yadav Nagar,	06.05.2019
			Samaypur Badli, Delhi 1100 42	
47.	47	Sh. Kuldip Singh	B-312, Saraswati Vihar, Pitam	06.05.2019
			Pura, Delhi 110 034	
48.	48	Sh. Hari Ram	DVB Pensioners Association	10.05.2019
	48A	Bhardwaj	Rajghat Power House,	16.04.2019
			New Delhi - 110 002	
49.	49	SH. Ravi Shandiliya	BSES Rajdhani Power Ltd.	08.05.2019
	49A	Sr. Manager	BSES Bhawan, Nehru Place,	
	49B		New Delhi 110 019	
50.	50	Sh. Shekhar Saklani	BSES Yamuna Power Ltd.	16.05.2019
		Power Management	Karkardooma, Delhi	
51.	51	Sh. Ishwar Dutt	B-1280, Vijay park,	16.05.2019



S. No.	R.	Name	Address	Date of
	No.			Receipt
			Maujpur, New Delhi 110053	
52.	52	Sh. S.R. Narasimhan	Ridge Castle Welfare Association	07.06.2019
		Treasurer	Ridge Castle Apartments	
			Dada bari Road, Ward 8,	
			Mehrauli, New Delhi 110 030	
53.	53	Sh. Nikhil Kumar	Employees' State Insurance	12.06.2019
		DD (Admn.)	Corporation Hospital, Okhla	
54.	54.	Sh. Amit Kansal	Indraprastha Power Generation	18.06.2019
		Dy. Manager	Company Limited	
		(Comml.)	Regd. Off: "Himadri", Rajghat	
		IPGCL	Power House Complex, New	
			Delhi 110002	20.06.2010
55.	55.	Sh. Amit Kansal	Indraprastha Power Generation	20.06.2019
		Dy. Manager	Company Limited	
		(Comml.) IPGCL	Regd. Off: "Himadri", Rajghat	
		IPGCL	Power House Complex, New Delhi 110002	
56.	56.	Sh. S.P Gupta	DVB Engineers (Pensioners)	21.06.2019
50.	50.	President	Forum, BN-142, (West) Shalimar	21.00.2019
		Flesidelit	Bagh, Delhi 110088	
57.	57.	Sh. Satish Joshi	Satish i@hotmail.com	28.06.2019
57.	57A	511. 54(1511 505111	<u>satisti le notinali.com</u>	12.07.2019
58.	58	Sh. K.N. Vasudeva	47A, DDA, MIG Flats	27.06.2019
			Pocket-C, Phase-III, Ashok Vihar	
			Delhi 110 052	
59.	59	Ms. Bhawna Luthra	Leadership for Environment and	02.07.2019
			Development (LEAD) India	
			M-8, 3 rd Floor, Greater Kailash	
			Part 1, New Delhi 110 048	
60.	60	Sh. Sanjay Gupta	C-4/15, Model Town, 3	03.07.2019
	60A		Delhi 110 009	12.07.2019
			sanjayrssons@gmail.com	
61.	61	Sh. Suhail Khan	Sofia Educational and Welfare	05.07.2019
		President	Society, 663, Street No. 6, Old	
			Mustafabad, Delhi 110 094	
62.	62	Sh. Prahlad Singh	H.No. 467, Bakhtawar Pur,	04.07.2019
_			Delhi 110 036	
63.	63	Sh. Brij Mohan Garg	Federation of Wazirpur Vidhan	08.07.2019
		President	Sabha Welfare Association	
			BA-5A, Ashok Vihar,	
			Phase -1, Delhi 110 052	



S. No.	R.	Name	Address	Date of
	No.			Receipt
64.	64	Sh. Kulwant Singh President	Dislshad Colony Resident Welfare Association (Regd.) F-167, Ground Floor, Dilshad Colony, Delhi 110 095	08.07.2019
65.	65 65A	Sh. S.M. Verma Director (Tech.)	Pragati Power Generation Co. Ltd., Regd. Off: "Himadri", Rajghat Power House Complex, New Delhi 110002	08.07.2019 08.07.2019
66.	66	Sh. Nanak Chand Jain President	Wazirpur Factories Association C-8-2, Wazirpur Industrial Area, Delhi 110 052	08.07.2019
67.	67	Sh. Balkishan Gupta	Sudhar Samiti Durga Puri, 1449/22, Gali No. 9, Durga Puri, Shahdra, Delhi 110 093	08.07.2019
68.	68	Sh. Umesh Anand President	Association of Entrepreneurs of DDA Sheds Okhla Phase I & II Mandi Complex, DDA Sheds, Okhla Industrial Area, Phase-I, New Delhi 110 020	08.07.2019
69.	69	Mr. Arvind Mehta President	542, Double Storey, New Rajinder Nagar, New Delhi 110 060	10.07.2019
70.	70	Mr. Tanay Gupta Gen. Secretary	Delhi Petrol Dealers Association (Regd.), 3/8, Asaf Ali Road, New Delhi 110 002	02.05.2019
71.	71	Mr. Saurabh Kumar Managing Director	Energy Efficiency Services Limited, 4 th Floor, Sewa Bhawan, R.K. Puram, New Delhi 110 066	02.05.2019
72.	72	Mr. Pankaj Chhabra	323, Dr. Mukherjee Nagar, Delhi 110 009 pankajchhabra <u>323@gmail.com</u>	18.03.2019
73.	73	Mr. Satish Nambardar	H.No. 890, Panna Mojan, Bawana, New Delhi 110 039	21.05.2019
74.	74	Superintending Engineer Electrical SDMC	South Delhi Municipal Corporation, Room No. 205, 02 nd Floor, E-Block, Dr. S.P. M. Civic Centre, Jawaharlal Nehru Marg, Minto Road, New Delhi 110 002	13.05.2019
75.	75	Mr. Padam Jain	Jain292@gmail.com	23.05.2019
76.	76	Mr. S.K. Gupta	Sector, 23, Rohini	07.06.2019



S. No.	R.	Name	Address	Date of
	No.			Receipt
			Delhi 110 086	
			Skgupta876@gmail.com	
77.	77	Mr. Kailash Jain	Dr. Mukherjee Nagar Niwasi	03.06.2019
			Manch	
			kcjqcd@gmail.com	
78.	78	Mr. Aman Singhal	Amansinghal220@gmail.com	11.06.2019
79.	79	Mr. Piyush Garg	Piyshgarg814@gmail.com	11.06.2019
80.	80	Mr. Rajesh Garg	Engineers Association Okhla,	08.07.2019
			Y-35, Okhla Industrial Area,	
			Phase-II, New Delhi 110 020	
81.	81	Mr. Sanjay Kumar	Sanjaykumarsisodiya1974@gmail	09.07.2019
			<u>.com</u>	
82.	82	Mr. Guvind Ram	A-114, Second Floor,	09.07.2019
		Luthra	Vivek Vihar-II, Delhi	
			Manishluthra04@gmail.com	
83.	83	Mr. Gurdip Singh	Krishna Market Pahar Ganj,	09.07.2019
		President	Residents & Shopkeepers	
			Welfare Society (Regd.)	
			5147, Pahar Ganj, Krishna	
			Market, New Delhi 110 055	
84.	84	Sh. Jaipal Singh	School Block Residents Welfare	09.07.2019
		Verma,	Association, S-305, School Block,	
		President	Shakarpur, Delhi 110 092	
85.	85	Mr. Parsu Ram Rawat	B-43, Gali No. 5 Brahmpuri,	06.07.2019
		Secretary	Delhi 110 053	
			Ryashpal1@gmail.com	
86.	86	Mr. Ompal Singh	E-186, Chattarpur Extension	11.07.2019
		Ahlawat	New Delhi 110 074	
		Former President		
87.	87	Mr. Amit Bhargwa	B-5-44 Azad Apartment	12.07.2019
			Sri Aurobindo Marg,	
			New Delhi 110 016	
88.	88	Mr. Sanjeev Jain	B-94, Gali No. 10, Shashi Garden	12.07.2019
	88A		Patparganj, Delhi 110 091	12.07.2019
	88B			11.07.2019
	88C			11.07.2019
	88D			11.07.2019
89.	89	Mr. T.P. Maniappan	Federation of Co-operative	12.07.2019
			Group Housing Societies Dwarka	
			Ltd.	
			B-9, Vidyut CGHS Ltd.,	



S. No.	R.	Name	Address	Date of
	No.			Receipt
			Plot No. 2, Sector-12	
			Dwarka	
			New Delhi 110 078	
90.	90	Lt. Col. Paramjit Singh	Paramjit 49@yahoo.com	12.07.2019
91.	91	Mr. Jasvinder Singh	D-2, Block, Janakpuri,	12.07.2019
		Dhir	New Delhi 110 058	
		Executive Member		
92.	92	Mr. K.K. Agnihotri	Anant Raj projects Limited	12.07.2019
		Authorised Signatory	H-65, Connaught Circus, New	
			Delhi 110 001	
93.	93	Mr. Shilaish Kumar	Sksastro1938@gmail.com	12.07.2019
94.	94	Mr. J.C. Gosain	918, Dr. Mukherjee Nagar,	12.07.2019
		Chairman	Delhi 110 009	
95.	95	Dr. Ruby Makhiya	Navjeevan RWA	12.07.2019
		Secretary	Navjeevan Vihar,	
			New Delhi 110 017	
96.	96	Sh. Krishan Kumar	Resident Welfare Association	12.07.2019
		President	Kakrola Housing Complex,	
			Dwarka, New Delhi 110 078	
97.	97	Mahipal Singh	Rattan Vihar, Kiradi	11.07.2019
		Member	Delhi 110 086	
98.	98	Ms. Sarla Devi	W/o Late Nagresh Kumar	11.07.2019
			A-145, G/F Lal Doora,	
			Village, Delhi 110 091	
99.	99	Mr. Rakesh Bhardwaj	145, Gaun Patparganj	11.07.2019
			Delhi 110 091	
100.	100	Real Cause	Real Cause, 174, Ist Floor,	11.07.2019
			Street No. 38, Zakir Nagar, Okhla	
			New Delhi 110 025	
101.	101	Mr. Leju Valsan	IL&FS Environmental	12.07.2019
			Infrastructure & Services Ltd.	
			SDMC Compost Plant,	
			Mathura Road,	
			Okhla, New Delhi	
			Leju.Valsan@ilfsindia.com	
102.	102	Mr. Sumeet Salhotra	Sumeet.Salhotra@ilfsindia.com	10.07.2019
	102			10.07.2019
	Α			
103.	103	Mr. Bijender Singh	<u>bs_kotla@yahoo.com</u>	12.07.2019
104.	104	Mr. Jatin Midha	Joint Forum of Residents	12.07.2019
		Gen. Secretary	355, 2nd Floor, Double Storey	



S. No.	R. No.	Name	Address	Date of Receipt
			New rajinder Nagar, New Delhi 110 060	



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 2017-18 AND ANNUAL TARIFF PETITION FOR FY 2019-2020

S. No.	Name	Address
1	SH. JAG MOHAN	DMRC
2	SH. YOGENDRA SATI	DMRC
3	SH. NITIN TYAGI	MLA, LAXMI NAGAR
4	SH. AVNEESH KUMAR TYAGI	LAXMI NAGAR
5	SH. SANDEEP MALHOTRA	IL&FS
6	SH. HEMANT PALIWAL	LAXMI NAGAR
7	SH. RITURAJ GOVIND	MLA, KIRARI
8	SH. DHARMENDRA KUMAR	RWA, KIRARI
9	MS. SARITA SINGH	MLA, ROHTASH NAGAR
10	SH. VIJAY KUMAR	NEW MODERN SHAHDARA
11	SH. MAHABIR SINGH	ROHTASH NAGAR
12	SH. GAUTAM KUMAR	PRATAP VIHAR
13	SH. JAVED	NAND NAGARI
14	SH. HARI CHAND	ROHTASH NAGAR
15	SH. SUNNY KUMAR	RAM NAGAR
16	SH. RAVINDRA KUMAR	KIRARI
17	SH. JASVEER	SULEMAN NAGAR
18	SH. PARVESH KUMAR	ASHOK NAGAR
19	SH. RAKESH KUMAR	PREM NAGAR
20	SH. ASHOK BHASIN	NDRWF
21	SH. B.L. VERMA	NDRWF
22	SH. DALIP KUMAR	KAROL BAGH
23	SH. PREET KUMAR	ROHTASH NAGAR
24	SH. MUREED RAJ	KIRARI
25	SH. GURDIP SINGH	RWA, PAHAR GANJ
26	SH. ASHOK KUMAR SHARMA	ROHTASH NAGAR
27	SH. LALITESH SHARMA	ROHTASH NAGAR
28	SH. CHANDRAKANT SHRIVAS	DMRC
29	SH. SUKHDEV RAJ ABROL	KALKAJI
30	SH. SHUBHAM KUMAR	DMRC
31	SH. RATAN KUMAR	DMRC
32	SH. DOKIPARTNI SIVAKAR	DMRC
33	SH. LEJUS VALSAN	IL&FS
34	SH. SAURABH BHARDWAJ	MLA, CHIRAG DELHI
35	SH. SANDEEP SINGH	KIRBI PLACE
36	SH. SURENDER SINGH	MLA, DELHI CANTT.
37	SH. PRADEEP	DELHI CANTT.
38	SH. SAWAN KUMAR	DELHI CANTT.
39	SH. ANKIT BHARDWAJ	MOTI BAGH
40	SH. SURENDER DHYAN	DELHI CANTT



S. No.	Name	Address
41	SH. SANDEEP PAWAR	DELHI CANTT
42	SH. DEELIP KUMAR	DELHI CANTT
43	SH. AKHTAR KHAN	R K PURAM
44	SH. MD. TARIQ,	DELHI CANTT
45	SH. SHIV RAM	TELIKHAND VILLAGE
46	SH. GURMEET	DELHI CANTT
47	SH. M K AGGARWAL	RWA, SHAHDARA
48	SH. LOK NATH ANAND	SHAKUR BAST, RANI BAGH
49	SH. V K TALWAR	RANI BAGH
50	SH. PRITAM SINGH	MADANPUR KHADAR
51	SH. JATIN	DELHI CANTT
52	SH. BAL KISHAN,	RWA, DURGA PURI
53	SH. RISHI PARKASH	ADARSH NAGAR
54	SH. PAWAN	DELHI CANTT
55	SH. VISHNU KUMAR RAWAT	MCD, SOAMI NAGAR
56	SH. BIJENDER SINGH	KISAN UNION
57	SH. PAWAN KUMAR SHARMA	MLA, ADARSH NAGAR
58	SH. VIPIN GUPTA	ADARSH NAGAR
59	SH. AJAY GUPTA	ADARSH NAGAR
60	SH. VIRENDER SINGH	SDMC
61	SH. DINESH KUMAR TANWAR	ADARSH NAGAR
62	SH. S. P. AHUJA	ASIAD VILLAGE
63	SH. ROHIT KUMAR	AZAD PUR
64	SH. SUBODH PANDEY	DMRC
65	SH. SANJEEV JHA	MLA, BURARI
66	SH. MUKESH KUMAR	BURARI
67	SH. AJAY KUMAR	NDMC
68	SH. RAKESH SHARMA	KADIPUR
69	MS.VANDANA KUMARI	MLA, SHALIMAR BAGH
70	SH. RATNAKAR PANDEY	BURARI
71	SH. SHARVAN KUMAR	BURARI
72	SH.SAJJAN KUMAR	BURARI
73	SH. NIRBHAY KUMAR SINGH	SANT NAGAR
74	SH. ROHIT KUMAR	JAHANGIR PURI
75	SH. MANIAPPAN THEKKUMAKALTILL	SECTOR -12,DWARKA
76	SH. SANJAY KUMAR MISHRA	SHALIMAR BAGH
77	SH. ANIL KUMAR KAUSHIK	BURARI
78	DR. KUNAL TANWAR	RWA, BASAI DHARAPUR
79	SH. PANKAJ JOSHI	SHALIMAR BAGH
80	SH. CHANDAR	SHALIMAR BAGH
81	SH. ARVIND KUMAR MEHTA	JOINT FORUM RESIDENTS, NEW
		RAJINDER NAGAR
82	SH. JATIN MIDHA	RAJENDER NAGAR
83	SH. JAGDISH KHETARPAL	JANAK PURI
84	SH. AKBAR KHAN	NIZAMUDDIN



S. No.	Name	Address
85	MS. RAKHI BIRLA	MLA, MANGOL PURI
86	SH. BHUPINDER SINGH BIRLA	MANGOL PURI
87	SH. VIPIN KUMAR	JANGPURA
88	SH. PRAVEEN KUMAR	MLA, JUNGPURA
89	SH. ANIL KUMAR BAJPAYEE	MLA, GANDHI NAGAR
90	SH. GODLY SHARMA	ROHINI
91	SH. RAVINDER KUMAR GAUTAM	JUNG PURA
92	SH. MOINUDDIN	JUNG PURA
93	SH. DEVINDER KUMAR SEHARAWAT	MLA, BRIJWASAN
94	SH. RAVINDRA KUMAR GAUTAM	JUNGPURA
95	SH. HEMANT KUMAR	JUNGPURA
96	SH. GAURAV BHANOT	KRISHNA NAGAR
97	SH. RAJESH KUMAR MALYAN	RWA, WAZIRPUR VILLAGE
98	SH. RAJIV KAKRIA	GREATER KAILASH
99	SH. MOHD. IDRIS UMAIR	DJB
100	SH. B.S. VOHRA	EAST DELHI FEDERATION
101	SH. VIJENDER GUPTA	MLA, ROHINI
102	SH. SURESH KUMAR SHARMA	KALKAJI EXTN.
103	SH. RAJAN GUPTA	INDERLOK
104	SH. JAGJIT SINGH	RWA, HAUDSAN LANE
105	SH. DHARMENDER MOGIA	RWA, PITAMPURA
106	SH. PUNEET GUPTA	ANAND NAGAR
107	SH. HARSH ARYA	DMRC
108	SH. MANUJ SINGHAL	DMRC
109	MS. SAVITA	RWA, MEHRAULI
110	SH. VIJAY KUMAR MANN	DMRC
111	SH. HOSHIYAR SINGH	RWA, MEHRAULI
112	SH. OMPAL SINGH	RWA, CHATTARPUR
113	SH. MASTER RAJ SINGH	JAUNTI VILLAGE
114	SH. JAGDISH PRADHAN	MLA, MUSTAFA BAGH
115	SH. OM PARKASH SAHRMA	MLA, VISHWAS NAGAR
116	SH. RAVINDER	KANJHAWALA
117	SH. VINOD KUMAR	PALAM
118	SH. BITTOO KHURANA	PALAM
119	MS. BHAVANA GAUR	MLA, PALAM
120	SH. RAJBIR SINGH	PALAM
121	SH. SANJEEV KUMAR	PALAM
122	SH. RAJENDER KUMAR	PALAM
123	SH. SANDEEP CHAUDHARY	PALAM
124	SH. SANJAY SISODIA	VASUNDHARA ZONE
125	SH. SANJAY GUPTA	MODEL TOWN
126	SH. SANJEEV KUMAR GOEL	PRITAMPURA
127	SH. PRAVEEN RANA	BURARI
128	SH. RAJAN GUPTA	NARELA
129	SH. RAHUL KALRA	EAST OF KAILASH



S. No.	Name	Address
130	SH. JARNAIL SINGH	MLA, TILAK NAGAR
131	SH. AJIT PAL SINGH	TILAK NAGAR
132	SH. SURINDER SINGH	TILAK NAGAR
133	SH. BHUPINDER SINGH	TILAK NAGAR
134	SH. B. S. VOHRA	RWA, EAST DELHI
135	SH. NEERAJ CHOPRA	RWA, MALVIYA NAGAR
136	SH. JAGDISH RAI BHATIA	RWA, MALVIYA NAGAR
137	SH. SURAJ KUMAR	MANGOL PURI
138	SH. KARAMVIR	MANGOL PURI
139	SH. SANTOSH KUMAR CHOUDHARY	MANGOL PURI
140	MS. PUSHPA	MANGOL PURI
141	SH. AJAY	MANGOL PURI
142	SH. JAIPAL SINGH VERMA	RWA, SHAKARPUR
143	SH. RAJ KUMAR	KRISHAN VIHAR
144	SH. MAHIPAL SINGH	RWA, KIRARI
145	SH. VIJENDER SINGH SHEKHAWAT	RWA, KRISHNA VIHAR
146	SH. BALBIR SINGH	INDIRA VIKAS COLONY
147	SH. KAILASH CHANDER JAIN	RWA, MUKHERJEE NAGAR
148	SH. JAGDISH CHANDER GOSAIN	RWA, MUKHERJEE NAGAR
149	SH. RAJESH GUPTA	MLA, WAZIRPUR
150	MS.BHAVISHYA	WAZIRPUR
151	SH. AAHAN	WAZIRPUR
152	SH. DOMNIC PETER	SANDHYA HYDRO POWER
153	SH. DEVENDER SINGH	SIDHARTH BASTI
154	SH. NARENDER PAL AGGARWAL	RWA, BAWANA
155	SH. CHIRANJI LAL	RWA, SHANTI NIKETAN PUBLIC SCHOOL
156	SH. SANJEEV JAIN	PATPAR GANJ
157	SH. RAKESH KUMAR BHARDWAJ	PATPAR GANJ
158	SH. VINAY PRAKASH SINGH	RWA, NARAYANA
159	SH. BUDHSEN SHARMA	NARAINA RING ROAD
160	SH. NEERAJ NIRWAL	DELHI CANTT
161	SH. SAURABH GANDHI	GENERAL SECRETARY, URD
162	SH. A. K. DUTTA	CHAIRMAN, URD
163	SH. BRIJESH MATHUR	COORDINATOR, RC
164	SH. HEMANTA SHARMA	LAJPAT NAGAR
165	SH. B.B. TIWARI	SECRETARY, URD
166	LT. COL. PARAMJIT SINGH	SHALIMAR BAGH
167	SH. JITENDRA KUMAR TYAGI,	PRESIDENT, URD
168	SH. DAYANAND MISRA	RWA, DWARKA
169	SH. RAM NARAYAN SINGH	SECTOR - 12, DWARKA
170	SH. ASHOK KUMAR TIWARI	SECTOR - 12, DWARKA
171	SH. SOMNATH BHARTI	MLA, MALVIYA NAGAR
172	SH. KRISHNA CHOPRA	MALVIYA NAGAR
173	SH. V.K. MALHOTRA,	SHEIKH SARAI
174	SH. SUDHIR SINGH	MALVIYA NAGAR



S. No.	Name	Address
175	MS. RUBY MAKHIJA	RWA, NAVJIWAN VIHAR
176	SH. KRISHNA KUMAR	RWA, DWARKA
177	SH. PRABHAKAR SINGH	MODEL TOWN
178	SH. B.S. SACHDEV	ELDERLY PEOPLE FORUM, KESHAV
		PURAM
179	SH. BRIJ MOHAN DUTT	FEDRATION OF WAZIRPUR, VIDHAN
		SABHA
180	DR. JAI KISHAN	ELDERLY PEOPLE FORUM, KESHAV
		PURAM
181	SH. AMIT BHATI	ROHINI
182	SH. SUNIL YADAV	ROHINI
183	SH. KRISHAN	ROHINI
184	SH. RAM KHILADI	ROHINI
185	SH. MADAN LAL	MLA , KASTURBA NAGAR
186	SH. ANKIT BAISOYA	KOTLA MUBARAK PUR
187	SH. SANDEEP BAISOYA	KASTURBA NAGAR
188	SH. SANJEEV BAISOYA	KOTLA
189	SH. MB. TABREZ ALAM	RWA, LODHI ROAD
190	SH. MB SHAMSHER ALAM	RWA, LODHI ROAD
191	SH. NANDU THAKUR	LODHI COLONY
192	SH. BANDHU YADAV	LODHI COLONY
193	SH. ANYUL HAQ	LODHI ROAD
194	SH. YASH PAL RAWAT	D- BLOCK, BRAMPURI
195	SH. SAGAR	RWA, LODHI ROAD
196	SH. SUBHASH CHAUDHARI	LAJPAT NAGAR
197	SH. PRADEEP	KOTLA
198	SH. B.L. SHARMA	GARHI
199	SH. RAJESH	LAJPAT NAGAR
200	SH. SURAJ KUMAR	
201	SH. PRINCE	LAJPAT NAGAR
202	SH. ANIL SHARMA	EX. MLA, R K PURAM
203	SH. AMAN KUMAR TOMAR	R K PURAM
204	SH. ARUN KUMAR	
205	SH. PRINCE	MAHARANI BAGH
206	SH. SHREY	JANGPURA
207	SH. KAILASH NATH	LODHI ROAD
208	SH. ARVIND KUMAR	LODHI ROAD
209	SH. VINOD KUMAR	LODHI ROAD
210	SH. RAJ KUMAR	LODHI ROAD
211	MS. KANCHAN GANDHI	ВЈР
212	SH. MAZHAN YAZEEN	DELHI MINORITIES COMMISSION
213	SH. AJAY SINGH	R. K. PURAM
214	SH. DEEPAK KUMAR KOHLI	
215	SH. RAMAN	
216	SH. MANISH KUMAR	R. K. PURAM
210		



S. No.	Name	Address
217	SH. DEVENDER KUMAR	
218	MS. SEEMA MALIK	NIGAM PARSHAD, KASTURBA NAGAR
219	SH. GURPAL SINGH	MAHINDER ENCLAVE
220	SH. MANMOHAN	SECTOR-7, ROHINI
201	SH. JAGDISH YADAV	SECTOR-7, ROHINI
222	SH. OM PARKASH MAMGAIN	
223	SH. RAJESH KUMAR GUPTA	
224	SH. RAKESH SHARMA	
225	SH. ASHWANI KUMAR	
226	SH. M. YAMIN KHAN	
227	SH. ASHUTOSH KUMAR	
228	MS.POONAM CHHETRAI	
229	SH. B. A. RANGANADHAN	ADVOCATE, SUPREME COURT
230	SH. TILAK BASU	ADVOCATE
231	SH. ISHAN ROY CHAUDHARY	ADVOCATE
232	SH. RAJESH BHATIA	
233	SH. ARUN KUMAR	
234	MS. PUSHPA UNIYAL	MAHILA MORCHA
235	MS. CHARANJIT KAUR	MAHILA MORCHA
236	SH. C.A. ASKHOK KUMAR	PANT MARG
237	SH. PRASHANT SHARMA	SECTOR-7, ROHINI
238	SH. KAMAL KISHOR YADAV	ROHINI
239	SH. SAMIR RANJAN	MAYUR VIHAR, PHASE-1
240	SH. TUSHAR MALHOTRA	,
241	SH. KULJIT SINGH,	
242	SH. S. K. SHARMA	SECTOR-12, ROHINI
243	SH. HARISH KUMAR	
244	SH. AZHAR ALI	LAXMI NAGAR
245	SH. AMIT BHARGAWA	SRI AUROBINDO MARG
246	MS. SANGEETA TYAGI	BRAHAM PURI
247	SH. SANJAY SINGH TYAGI	BRAHAM PURI
248	SH. ASHISH VERMA	
249	SH. ARYAMAN JAIN	CHANAKYA PURI
250	SH. MUKESH KIRAR	JUNGPURA
251	SH. KANHIYA LAL	
252	SH. MUKESH KUMAR MANJHI	
253	SH. DANISH ANSARI	
254	SH. ANAND SINGH	R K PURAM
255	SH. PRADEEP RAI	R K PURAM
256	SH. SUNEEL	-
257	SH. ANSAR	R K PURAM
258	SH. VISHAL KUMAR RAI	LODHI COLONY

