



## DELHI ELECTRICITY REGULATORY COMMISSION

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

F.11(1752)/DERC/2019-20/

### Petition No. 04/2020

In the matter of: **Petition for determination of tariff for FY 2020-21 and Truing Up of Aggregate Revenue Requirement (ARR) for FY 2018-19 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 Sh. Justice S S Chauhan, Chairperson  
Hon'ble Sh. A.K. Singhal, Member  
Hon'ble Dr. A. K. Ambast, Member

### **ORDER**

(Date of Order: 28.08.2020)

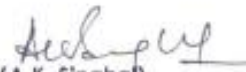
M/s. Indraprastha Power Generation Co. Ltd. (IPGCL) has filed the instant Petition for determination of tariff for FY 2020-21 and Truing Up of Aggregate Revenue Requirement (ARR) for FY 2018-19 for GTPS. The Petition was admitted by the Commission vide Order dated 24.01.2020. The Petition along with Executive summary was uploaded on the website of the Commission and publicised through advertisement in newspapers for seeking response of the stakeholders.

Considering the submissions made by the Petitioner as well as the comments and suggestions of the stakeholder, the Commission in exercise of power vested in it by the Electricity Act, 2003 and Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2017, hereby passes this Tariff Order signed, dated and issued on 28.08.2020.

The Petitioner shall take immediate steps to implement this Tariff Order, so as to make the revised tariffs applicable from 01.09.2020.

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 thereunder.

  
(A.K. Ambast)  
Member

  
(A.K. Singhal)  
Member

  
(Justice S S Chauhan)  
Chairperson

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## LIST OF ABBREVIATIONS

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
COVID	Corona Virus Disease
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
HEP	Hydro Electric Power
HPSEB	Himachal Pradesh State Electricity Board
HRA	House Rent Allowance
HT	High Tension
HVDS	High Voltage Distribution System
IDC	Interest During Construction
IGI Airport	Indira Gandhi International Airport
IPGCL	Indraprastha Power Generation Company Limited
JJ Cluster	Jhugghi Jhopadi Cluster
KSEB	Kerala State Electricity Board
LED	Light Emitting Diode
LIP	Large Industrial Power
LT	Low Tension
LVDS	Low Voltage Distribution System
MCD	Municipal Corporation of Delhi
MES	Military Engineering Service
MLHT	Mixed Load High Tension
MMC	Monthly Minimum Charge
MoP	Ministry of Power
MTNL	Mahanagar Telephone Nigam Limited
MU	Million Units
MYT	Multi Year Tariff
NABL	National Accreditation Board for Testing and Calibration of Laboratories
NAPS	Narora Atomic Power Station
NCT	National Capital Territory
NCTPS	National Capital Thermal Power Station

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
PPA	Power Purchase Agreement / Power Purchase Adjustment
PPCL	Pragati Power Corporation Limited
PTC	Power Trading Corporation
PWD	Public Works Department
R&M	Repair and Maintenance
RAPS	Rajasthan Atomic Power Station
REA	Regional Energy Account
RoCE	Return on Capital Employed
ROE	Return on Equity
RRB	Regulated Rate Base
RTI	Right to Information
RWA	Resident Welfare Associations
SBI	State Bank of India
SERC	State Electricity Regulatory Commission
SIP	Small Industrial Power
SJVNL	Satluj Jal Vidyut Nigam Limited
SLDC	State Load Despatch Centre
SPD	Single Point Delivery
SPUs	State Power Utilities
SVRS	Special Voluntary Retirement Scheme
THDC	Tehri Hydro Development Corporation
ToD	Time of Day
TOWMCL	Timarpur Okhla Waste Management Company (P) Limited
TPDDL	Tata Power Delhi Distribution Limited
TPS	Thermal Power Station



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 (IPGCL) (hereinafter referred to as 'IPGCL' or the 'Petitioner') for True-Up of Aggregate Revenue Requirement (ARR) for FY 2018-19 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 ARR & Tariff for FY 2020-21 in terms of Tariff Regulations, 2017 and Delhi Electricity Regulatory Commission (Business Plan) Regulations, 2019 (hereinafter referred to as 'Business Plan Regulations, 2019').

**INDRAPRASTHA POWER GENERATION COMPANY LIMITED (IPGCL)**

- 1.2 IPGCL is wholly owned by the Government of National Capital Territory of Delhi and operates the following Generating Stations:
- a) 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 National 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 formulation of Tariff Regulations and Tariff determination.

**THE COORDINATION FORUM MEETING**

- 1.5 Govt. of NCT of Delhi vide notification No. F.11/36/2005/Power/1789 dated 16/06/2005 constituted the Coordination Forum, comprising of Chairperson and Members of DERC, CMD of DTL, Managing Director of IPGCL/PPCL, CEOs of NDPL (now TPDDL), BYPL and BRPL with Secretary, DERC as the Member Secretary. Since the Committee constituted did not include NDMC and MES, who also distribute power in Delhi, the Commission had decided to invite them for all the meetings.
- 1.6 The 29th Co-ordination Forum Meeting was held on 04/03/2020 in the office of the Commission. Apart from the Chairperson, Members and other senior officers from the Commission, the 29th Co-ordination Forum Meeting witnessed participation from CEOs of BRPL and BYPL, representatives of DTL, SLDC, IPGCL, PPCL, TPDDL, NDMC.
- 1.7 The issues which were deliberated during the meeting are as listed below:

**Table 1.1: Issues Discussed in 29<sup>th</sup> Co-ordination Forum Meeting**

Sr. No.	Issues Discussed
a.	Confirmation of minutes dated 09/03/2015 and amendment dated 07/04/2015, action taken on decisions.
b.	Summer Preparedness
c.	Presentation by DTL on Islanding scheme in Delhi
d.	Proposal for disposal of DTs inherited from DVB which are beyond repair.
e.	Review Progress of replacement of oil filled transformers by dry type transformers
f.	Compliance of information to the consumers for scheduled power outages and un-scheduled power outages.
g.	Channels and manpower for registration of complaints related to outages during summer period.
h.	Status of implementation of Smart Meters
i.	Status of maintenance of toll free number for registration of electricity grievance.
j.	Surrender/ Re-allocation of Long Term Power, considering Demand-Supply scenario till FY 2024-25.
k.	Status of RPO Compliance and initiatives thereafter to meet the trajectory as stipulated in DERC (Business Plan Regulations), 2019.
l.	DSM initiatives and Actual Savings thereafter.

**MULTI YEAR TARIFF REGULATIONS**

- 1.8 The Commission issued Tariff Regulations, 2017 vide gazette notification dated 31/01/2017 specifying Terms and Conditions for Determination of Tariff for Generation of Electricity under the Multi Year Tariff (MYT) framework. Further the operational

norms for Generation utilities have also been approved by the Commission in Business Plan Regulations, 2017 under Tariff Regulations, 2017 for the period FY 2017-18 to FY 2019-20, and, in Business Plan Regulations, 2019 under Tariff Regulations, 2017 for the period FY 2020-21 to FY 2022-23.

## **FILING OF PETITION FOR TRUE-UP OF FY 2018-19 AND ARR FOR FY 2020-21**

### **FILING AND ACCEPTANCE OF PETITION**

- 1.9 IPGCL has filed its Petitions for the approval of Truing up of Expenses upto FY 2018-19 and ARR for FY 2020-21, before the Commission on 26/12/2019 and 03/02/2020 respectively.
- 1.10 The Commission admitted the Petitions for the approval of Truing up of Expenses upto FY 2018-19 and ARR for FY 2020-21 vide its Orders dated 24/01/2020 and 20/02/2020 respectively, subject to clarifications / additional information, if any, which would be sought from the Petitioner from time to time. Copies of the Admission Orders dated 24/01/2020 and 20/02/2020 are enclosed as Annexure I & I(a) to this Order.
- 1.11 Further, in view of the changed circumstances due to COVID-19, the Commission deemed it appropriate to give an opportunity to utilities to submit revised Tariff Petitions/ additional information w.r.t. ARR for FY 2020-21, by 30/05/2020.
- 1.12 On request of utilities to extend the time period for submission of revised Tariff Petitions for FY 2020-21, the final date for submission was extended upto 05/06/2020.
- 1.13 The complete copy of the Petition filed by the Petitioner along with additional information has been uploaded on website of the Commission ([www.derc.gov.in](http://www.derc.gov.in)) and the Petitioner.
- 1.14 The Executive Summary of Tariff Petitions, Executive Summary of Additional Information have also been uploaded on Commission's website at [www.derc.gov.in](http://www.derc.gov.in).

### **INTERACTION WITH THE PETITIONER AND PUBLIC HEARING**

- 1.15 The Order has referred at numerous places about 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.

- 1.16 The Commission relies upon the analysis conducted by the Tariff Division comprising of Executive Director (Tariff), Joint Director (Tariff-Engineering), Joint Director (Tariff-Finance), Deputy Director (Tariff-Engineering), Deputy Director (Tariff Accounts-Financial Analysis) and Deputy Director (Tariff-Economics) for preparation of the Orders.
- 1.17 A preliminary scrutiny/analysis of the Petition submitted by the Petitioner was carried out. Additional information/clarifications have been sought from the Petitioner as and when required. The Commission and the Petitioner have 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.
- 1.18 The Commission also conducted multiple validation sessions with the Petitioner during which discrepancies in the petition and additional information as required by the Commission were sought. Subsequently, the Petitioner submitted replies to the issues raised and provided details and documentary evidence to substantiate its claims regarding various submissions.
- 1.19 The Commission scheduled a Public Hearing on Tariff Petitions for True Up of FY 2018-19 and ARR for FY 2020-21 on 18/03/2020 to take a final view with respect to various issues concerning the principles and guidelines for tariff determination.
- 1.20 However, due to outbreak of Corona Virus Disease declared as a pandemic by WHO (GoNCTD's Notification No.F.51/DGHS/PH-IV/COVID19/2020/prsecyhfw/2393-2407 dated 13/03/2020), the Public Hearing scheduled on 18/03/2020 was cancelled and last date of submission of comments/suggestions on Tariff Petitions for True up of FY 2018-19 and ARR for FY 2020- 21 which was earlier kept till 20/03/2020 was thus extended till the next date of Public Hearing. The Public Notices, in this regard, were issued by the Commission.
- 1.21 In relation to COVID-19, as per Order no. 40-3/2020-DM-I(A) dated 30/05/2020 issued by Ministry of Home Affairs, Government of India, large gatherings/ congregations have

continued to remain prohibited. Giving due consideration to arisen scenario due to outbreak of Corona Virus Disease which refrains from holding Public Gatherings, the Commission finally decided not to conduct Public Hearing this year, for issuance of Tariff Order related to True up of FY 2018-19 and ARR of FY 2020-21 and communicated the same through public notice including on Commission's website. Alternatively, all stakeholders have been given additional time-period till 30/06/2020 for submitting comments/suggestions on tariff petitions/ additional information filed by the utilities.

- 1.22 A soft copy of the petition was also made available in CD form on payment of Rs. 25/- per CD or a copy of the petition was also made available for purchase from the respective Petitioner's head-office on working day till 30/06/2020 between 11 A.M. and 4 P.M. on payment of Rs.100/- either by cash or by demand draft/pay order .
- 1.23 In order to extend help to the stakeholders in understanding the ARR Petition and filing their comments, four officers of the Commission viz. Joint Director (Tariff-Engineering), Joint Director (Performance Standards & Engineering), Deputy Director (Tariff Accounts-Financial Analysis) and Deputy Director (Tariff-Engineering) were nominated for discussion on the ARR Petitions. This was duly mentioned in the Public Notices published by the Commission.
- 1.24 The Commission received written comments from the 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.
- 1.25 The issues and concerns raised by various stakeholders have been examined by the Commission. The major issues made by the stakeholders, the responses of the Petitioner thereon and the views of the Commission, have been summarized in Chapter A2.
- 1.26 The Commission has therefore considered the inputs/comments received from various stakeholders alongwith the due diligence conducted by the officers of the Commission in arriving at its final decision.

## PUBLIC NOTICE

- 1.27 The Commission has issued Public Notice in the following newspapers (on dates

mentioned alongside), indicating the venue, date and time of Public Hearing scheduled on 18/03/2020 and inviting comments from stakeholders on the Tariff Petition filed by the Petitioner latest by 20/03/2020:

(a)	Hindustan Times (English)	:	04/03/2020
(b)	The Hindu (English)	:	04/03/2020
(c)	The Times of India (English)	:	04/03/2020
(d)	Mail Today (English)	:	04/03/2020
(e)	Navbharat Times(Hindi)	:	04/03/2020
(f)	Punjab Kesri (Hindi)	:	04/03/2020
(g)	Dainik Jagran (Hindi)	:	04/03/2020
(h)	Jadid-In-Dinon (Urdu)	:	04/03/2020
(i)	Jan Ekta (Punjabi)	:	04/03/2020

Public Notice was also uploaded on Commission's website [www.derc.gov.in](http://www.derc.gov.in).

- 1.28 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 20/03/2020 in the following newspapers on the respective dates mentioned alongside:

(a)	Business Standard (English)	:	06/03/2020
(b)	The Indian Express (English)	:	06/03/2020
(c)	Dainik Jagran (Hindi)	:	06/03/2020
(d)	The Daily Educator New Delhi (Punjabi)	:	06/03/2020
(e)	Milap (Urdu)	:	06/03/2020

- 1.29 As stated in preceding paras that due to outbreak of Corona Virus Disease declared as a pandemic by WHO (GoNCTD's Notification No.F.51/DGHS/PH-IV/COVID19/2020/prsecyhw/2393-2407 dated 13/03/2020), the Public Hearing which was scheduled on 18/03/2020 was cancelled. The Commission issued a Public Notice in this regard in the following newspapers:

(a)	Hindustan Times (English)	:	14/03/2020
(b)	The Hindu (English)	:	14/03/2020
(c)	Times of India (English)	:	14/03/2020
(d)	Mail Today (English)	:	14/03/2020
(e)	Navbharat Times (Hindi)	:	14/03/2020
(f)	Dainik Jagran (Hindi)	:	14/03/2020

Public Notice was also uploaded on Commission's website [www.derc.gov.in](http://www.derc.gov.in).

- 1.30 Further, in view of the circumstances arisen due to outbreak of COVID-19 which refrains from holding Public Gatherings, the Commission decided not to conduct Public Hearing, for issuance of Tariff Order related to True up of FY 2018-19 and ARR of FY 2020-21, and all stakeholders have been given additional time-period till 30.06.2020 for submitting comments/suggestions on tariff petition/ additional information filed by the Petitioner. In this regard, the Commission issued Public Notice in the following newspapers inviting comments from stakeholders on the Revised Tariff Petitions and additional information filed by the Petitioner latest by 30/06/2020:

(a)	Hindustan Times (English)	:	13/06/2020
(b)	The Hindu (English)	:	13/06/2020
(c)	The Times of India (English)	:	13/06/2020
(d)	Mail Today (English)	:	13/06/2020
(e)	Navbharat Times(Hindi)	:	13/06/2020
(f)	Punjab Kesri (Hindi)	:	13/06/2020
(g)	Dainik Jagran (Hindi)	:	13/06/2020
(h)	Jadid-In-Dinon (Urdu)	:	13/06/2020
(i)	Jan Ekta (Punjabi)	:	13/06/2020

- 1.31 Copies of all the Public Notices are available on Commission's website [www.derc.gov.in](http://www.derc.gov.in)

## LAYOUT OF THE ORDER

- 1.32 This Order is organised into five Chapters:

- Chapter A1 provides details of the tariff setting process and the approach of the Order.
- Chapter A2 provides brief of the comments of various stakeholders, the Petitioner's response and views of the Commission thereon.
- Chapter A3 provides details/analysis of the True up of FY 2018-19 and impact of past period true up based on judgement of Hon'ble APTEL, if any, Review Order of the Commission, if any, and its directives on the matter.
- Chapter A4 provides determination of the Aggregate Revenue Requirement for FY 2020-21 of Gas Turbine Power Station.



e) Chapter A5 provides details of the Directives of the Commission.

- 1.33 The Order contains following Annexures, which are an integral part of the Tariff Order:
- a) Annexure I & I (a) - Admission Orders.
  - b) Annexure II - List of the stakeholders who submitted their comments on True-up of expense for FY 2018-19 and approval of Aggregate Revenue Requirement & Tariff for FY 2020-21.

## APPROACH OF THE ORDER

### APPROACH FOR TRUE UP OF FY 2018-19

- 1.34 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, FY2018-19 and FY 2019-20, unless reviewed earlier.”*

- 1.35 The Commission in its Tariff Regulations, 2017 has specified that Regulations shall be deemed to have come into effect from 1<sup>st</sup> 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 1<sup>st</sup> February, 2017 and shall remain in force till amended or repealed by the Commission. “*

- 1.36 Accordingly, ARR for FY 2018-19 has been trued up as per Tariff Regulations, 2017 and Business Plan Regulations, 2017.

### APPROACH FOR ARR AND TARIFF FOR FY 2020-21

- 1.37 The Commission vide its Notification dated 31<sup>st</sup> January, 2017 had issued Tariff Regulations, 2017. Further, the Commission has issued Business Plan Regulations, 2019.

- 1.38 The Commission has evaluated the revised ARR/ additional information submitted by

the Petitioner on the basis of the provisions in Tariff Regulations, 2017 read with Business Plan Regulations, 2019 and other factors considered appropriate by the Commission as discussed hereafter.

**A2: RESPONSE FROM THE STAKEHOLDERS**

- 2.1 Summary of Objections/ suggestions from stakeholders, the response of INDRAPRASTHA POWER GENERATION COMPANY LIMITED (IPGCL) and Commission's view.

**INTRODUCTION**

- 2.2 Section 64(3) of Electricity Act, 2003, stipulates that the Commission shall determine tariff under Section 62 of the Electricity Act, 2003 for the Generating Company, after consideration of all suggestions received from the public and the response of the Generating Company to the objections/suggestions of stakeholders, issue a tariff order accepting the application with such modifications or such conditions as may be specified in the order.
- 2.3 The Commission has examined the issues taking into consideration the comments/suggestions offered by the various stakeholders in their written statements and the response of the Petitioner thereon.
- 2.4 The Commission endeavours to issue Tariff Orders as per provisions of the Electricity Act, 2003.
- 2.5 The Commission vide its Public Notice dated 04/03/2020 scheduled a Public Hearing on Tariff Petitions for True-Up of FY 2018-19 and ARR for FY 2020-21 on 18 March 2020 to take a final view concerning various issues concerning the principles and guidelines for tariff determination.
- 2.6 However, due to outbreak of Corona Virus Disease declared as a pandemic by WHO (GoNCTD's Notification No.F.51/DGHS/PH-IV/COVID19/2020/prsecyhfw/2393-2407 dated 13/03/2020), the Public Hearing which was scheduled on 18/03/2020 was cancelled and the last date of submission of comments/suggestions on Tariff Petitions for True-up of FY 2018-19 and ARR for FY 2020- 21 which was earlier kept till 20/03/2020 was thus extended till the next date of Public Hearing. The Public Notices, in this regard, were issued by the Commission.
- 2.7 Concerning COVID-19, as per Order No. 40-3/2020-DM-I(A) dated 30/05/2020 issued by

Ministry of Home Affairs, Government of India, large gatherings/ congregations have continued to remain prohibited. Giving due consideration to arisen scenario due to outbreak of Corona Virus Disease which refrains from holding Public Gatherings, the Commission decided not to conduct Public Hearing this year with regard to Tariff Order related to True-up of FY 2018-19 and ARR of FY 2020-21 and communicated the same through public notice including on Commission's website. Alternatively, all stakeholders have been given additional time-period till 30/06/2020 for submitting comments/suggestions on tariff petitions/ additional information filed by the utilities.

- 2.8 The comments/suggestions of various stakeholders, the replies/response by the Petitioner and the views of the Commission thereon are summarized under various subheads below.

#### **ISSUE 1: STATION HEAT RATE**

##### **STAKEHOLDERS' VIEW**

- 2.9 GTPS submission seeks relaxation in Station Heat Rate with respect to the ceiling norms specified by DERC/CERC. As per DERC Tariff Regulation, 2017 and Business Plan Regulation, 2017, the approved Station Heat Rate in Combined Cycle is 2450 kcal/kWh and in Open Cycle is 3125 kcal/kWh. Hence, we request the Commission to consider the ceiling heat rate as per Regulation. Also, GTPS has not given any monthly adjustment as per Regulation 148 and 149 of DERC Tariff Regulation, 2017.
- 2.10 Further, the Petitioner has not given any monthly adjustment in line with Regulation 148 and 149 of Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2017. However, CERC Tariff Regulations stipulate sharing of gain on achieving the SHR by 50:50.

##### **PETITIONER'S SUBMISSION**

- 2.11 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 a full module without frequent starts/stops and backing down. However as submitted in the petition, the station can generate 1922.67 MU @ 81.29% Annual Plant availability factor out of

which the gross generation was only 599.569 MU for FY 2018-19. 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. The frequent start and stops were due to erratic scheduling of power by SLDC and DISCOMs.

2.12 Sharing of saving in normative parameters, it is to submit that the operative parameters of GTPS are more than the normative parameters hence there is no question of sharing/adjustment.

2.13 Further as per regulation 148 and 149 of DERC tariff regulation 2017, clause 149 reads as under:

*“the financial gain to a generating company or the transmission licensee on account of operational parameters shall be shared in the ratio as specified by the commission in the Business Plan Regulations.”*

2.14 Moreover, in Business Plan Regulation, 2017 of DERC, the concept of such sharing has been dropped by the commission.

### COMMISSION'S VIEW

2.15 The Commission has considered the Station Heat Rate of the Petitioner Plant in open and combined cycle mode as per the provisions of Tariff Regulations, 2017 along with Business Plan Regulations, 2017 & 2019 for the respective periods while determining tariff for True-up of FY 2018-19 and ARR of FY 2020-21. Further, DISCOMs are bound by the principle Merit Order Despatch, therefore, they have to schedule power considering the energy charge rate in ascending order of various power plants in their portfolio.

### ISSUE 2: PLANT LOAD FACTOR

#### STAKEHOLDERS' VIEW

2.16 Petitioner has achieved the PLF of 25.35% as compared to Norm of 85%.

2.17 Procurement of Spot R-LNG seems irrelevant owing to the fact that, During Peak Period i.e. April to Sep 31% & in Off Peak Period of month Oct to Jan is 10% 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. 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.

2.18 The Petitioner has further submitted as under:

*"From the above table it is reiterated that Normative PLF i.e. 85% could be achieved only when the scheduled generation of the plant is @ normative NAPAF i.e. 85% or in the cases of continuous running of full module without frequent starts/stops and backing down. It is therefore request state commission to direct State Load Dispatch Centre for full scheduling as per availability in the interest of state grid."*

2.19 In this regard, it is to submit that schedule of the plant is decreased due to high costs of power due to use of RLNG. If plant runs on RLNG source of power definitely the machine will have achieved its performance, but ultimately it will also increase the ECR rate by Rs. 5 to 6 per/unit and burden of end consumers will increased.

2.20 IPGCL shall not be allowed to bill "Take or pay charges" to the beneficiaries

#### PETITIONER'S SUBMISSION

2.21 IPGCL provides available generation from different gases and their rates to DISCOMs including BYPL on day-ahead basis. There is regular cut on the cheaper gas available for the plant by MoP & NG and the petitioner have no control over the allocation of domestic cheaper gas. However, Petitioner make full effort for availability of cheaper domestic gas with GAIL and the rest is taken from Imported gas i.e. RLNG & Spot RLNG.

2.22 The actual contracted quantity of all the gases has been given by the petitioner in Para no. 24 of the petition which reads as under:

*"GT Station of IPGCL runs on the Natural Gas being supplied by GAIL and Liquid Fuel supplied by IOCL. Earlier the total (APM+PMT+LNG) allocation for GTPS was 1.44 MMSCMD which was sufficient to run six gas turbines. This allocation was reduced to 1.32 MMSCMD during the FY 2006-07. Out of the total allocation of 1.32 MMSCMD, the contracted quantity of R-LNG is 0.60 MMSCMD and balance i.e. 0.72 MMSCMD comes from APM (0.59 MMSCMD) and PMT (0.13 MMSCMD) and these*

*quantities are further subject to daily cuts in the range of 25-30% depending on the availability.”*

However, contracted quantity of APM is 0.84 MMSCMD and it is restricted upto 0.59 MMSCMD by the GAIL.

- 2.23 Petitioner has utilized RLNG gas as per the schedule given by SLDC. Hence the question of availability to examine in a holistic manner is out of context as availability of the plant is declared on day-ahead basis to SLDC along with the available generation from different gases and their rates. Moreover details of Gas along with bills are being regularly shared to respondent as per direction of State Commission.

### COMMISSION'S VIEW

- 2.24 The Commission's directive on clause of 'Take or Pay' is for future Gas Supply Agreements. Further, the Petitioner must run the power plant on cheaper fuel before moving on to costlier fuel in order to cater to its scheduled generation.
- 2.25 The Commission has considered the Plant Availability Factor in line with the Business Plan Regulations, 2017 & 2019 for the respective periods.

### ISSUE 3: AUXILIARY POWER CONSUMPTION

#### STAKEHOLDERS' VIEW

- 2.26 Petitioner has sought true up of Auxiliary consumption @ 3.76% against the approved normative auxiliary consumption of 2.50%. Thus, it is requested to the Commission to restrict the auxiliary consumption at 2.50% in line with Regulation 3(b) of Business Plan Regulations, 2017.
- 2.27 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.
- 2.28 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.

- 2.29 Requesting to the Commission that to direct GT to install separate meters for Auxiliary consumption as per DERC order dated 29/09/15.
- 2.30 A petitioner should compute Fixed Auxiliary consumption expenses based on ECR calculated as per formula specified in –DERC tariff regulation 2017 as follows:
- “403. 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  $ECR = GHR \times LPPF \times 100 / \{CVPF \times (100 - AUX)\}$ ....”*
- 2.31 IPGCL should follow the DERC Tariff Regulation 2017 while computing the ECR adhering to normative operational Parameters and — Commission should allow ECR to an extent \_ formula given as per DERC Regulation 2017.

#### PETITIONER’S SUBMISSION

- 2.32 It is to submit that normative Auxiliary Power Consumption 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 a full module without frequent starts/stops and backing down. Further, as submitted in the petition, the station will consume 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 due to erratic scheduling, resulting in higher Auxiliary Power Consumption.
- 2.33 Required meters have already been installed by DTL in line with existing Regulation of CEA.
- 2.34 As submitted in the petition, the station will consume 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 due to erratic scheduling, resulting in higher



APC. As regards Installation of energy meter for APC, it is to submit that required meters have already been installed by DTL in line with existing regulation of CEA.

- 2.35 Further, in reference to double claim in part of Auxiliary consumption, it is to submit that as per DERC BPR 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 2018-19. 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. IPGCL has calculated only revised total amount of fixed part of auxiliary consumption. However additional amount recoverable will be difference of as submitted by IPGCL in present petition and already recovered during FY 2018-19. In any case while carrying out truing up, individual fixed cost components as per regulations, state commission necessarily deducts/adjusts already recovered amount as already allowed in previous tariff order. Therefore, there will be no double claim.
- 2.36 It is to submit that fixed APC is to be revised in line DERC order dated 17/10/2019 and 23/10/2019 in Review Petition No. 59 of 2017 and 41 of 2018.

#### COMMISSION'S VIEW

- 2.37 The Commission has considered the auxiliary power consumption as approved in the Business Plan Regulations, 2017 & 2019 for the respective periods.

#### ISSUE 4: ENERGY CHARGE RATE & FUEL COST

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

*"403. Energy charge rate (ECR) in Rupees per kWh on the 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  $ECR = GHR \times LPPF \times 100 / \{CVPF \times (100 - AUX)\}$  ...."*

- 2.39 The Petitioner should follow the DERC Tariff Regulation 2017 while computing the ECR adhering to normative operational Parameters and Commission should allow ECR to an extent formula given as per DERC Regulation 2017.

#### **PETITIONER'S SUBMISSION**

- 2.40 The submission of petitioner is same as of respondent. However, the Respondent allegation is false that the Petitioner will be using different formula other than specified in DERC tariff regulation 2017 for arriving ERC.

#### **COMMISSION'S VIEW**

- 2.41 Energy Charge Rate is determined in the Tariff Order based on the prices of fuel during the applicable period as per the provisions of Tariff Regulations, 2017 along with Business Plan Regulations, 2017 & 2019 and the same is subject to change with time. The Commission has appropriately considered the prices of the fuel to arrive ECR in the relevant section of this Order.

#### **ISSUE 5: O&M AND R&M EXPENSES**

##### **STAKEHOLDERS' VIEW**

- 2.42 For FY 17-18, the Commission has given Impact of Rs. 6.38 Cr towards 7<sup>th</sup> pay Commission based on auditor certificate. However, in FY 2018-19, an amount of Rs 12.03 Cr is being sought by IPGCL which is significantly higher in comparison to the amount claimed in FY 2017-18. Thus, the Commission is requested to do the prudence check before allowance of the same to IPGCL.
- 2.43 The Petitioner has sought Rs.96.59 Cr for FY 2018-19 towards O&M. This includes base O&M expensed of Rs 84.56 Cr and Rs. 12.03 towards Additional O&M. We request Commission to direct IPGCL to provide the cost breakup expense in each head for the amount of Rs 84.54 Cr with audited statement to reach the figure as submitted by Petitioner in its claimed as per Business Plan Regulation.

**PETITIONER'S SUBMISSION**

- 2.44 It is submitted that during the process of tariff determination for FY 2017-18 only an interim relief of Rs 500 per Employee was disbursed by the Petitioner. Accordingly, the claim was meagre, however at a later stage, based on recommendations of the committee IR was increased near the actual proposed pay, Though the pay revision has not been implemented till date, however, the release of IR to more realistic value has been allowed in line with recommended scale by pay revision committee, therefore, there is an increase in IR as compared to allowed vide tariff order for FY 2018-19. The Petitioner has submitted the relevant information to the State Commission. State Commission is requested to allow the same after verification of submitted records.
- 2.45 Petitioner has calculated O&M expenses as per DERC (terms and conditions for determination of tariff) Regulation, 2017 vide clause no. 87 which reads 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."*

**COMMISSION'S VIEW**

- 2.46 The Commission has considered the provisions of Tariff Regulations, 2017 alongwith Business Plan Regulations, 2017 & 2019 while considering the O&M and R&M Expenses for the Petitioner for the respective period.

**ISSUE 6: WEIGHTED AVERAGE COST OF CAPITAL (WACC) FOR COMPUTING ROCE****STAKEHOLDERS' VIEW**

2.47 The Petitioner has considered normative interest rate for FY 2018-19. The Commission is requested to verify the actual cost of working capital and if the same is found lower than the normative interest rate, the actual interest rate may be considered for truing up.

**PETITIONER'S SUBMISSION**

2.48 The comment of stakeholder is out of context and against existing provision of DERC Tariff Regulation clause 86.

**COMMISSION'S VIEW**

2.49 The Petitioner does not have any outstanding loan and as per various provisions of Business Plan Regulation 2019 and Tariff Regulations 2017, the Commission has provisionally considered the rate of interest on loan as MCLR of SBI as on 01/04/2020 i.e. 7.75% for FY 2020-21 against Petitioner submission of 9.44%.

**ISSUE 7: NON-TARIFF INCOME****STAKEHOLDERS' VIEW**

2.50 The Petition has offered Nil amount as Non-Tariff Income for FY 2018-19. Thus, for truing Up of FY 2018-19 ARR, Non-Tariff Income based on Audited Financial Statements for FY 2018-19 may be considered.

2.51 Further, Nil amount has been considered as Non-Tariff Income for FY 2020-21. Thus, to approve ARR for FY 2020-21, an amount equivalent to trued-up Non-Tariff Income for FY 2018-19 may be considered.

**PETITIONER'S SUBMISSION**

2.52 The head wise details of other income had already been provided to the State Commission. However, aggrieved by certain decisions of the State Commission contrary

to DERC tariff regulation, 2017 and Business plan Regulation, 2017 in the impugned order, Petitioner has filed an APPEAL no. 392 of 2019 before Appellate tribunal of Electricity. The expenditure related to Non-Tariff Income was one of them. There are similar issues for FY 18-19, therefore, Petitioner is filing present true-up petition without prejudice to its submission in the existing case on above matter.

### COMMISSION'S VIEW

- 2.53 The Commission has considered the NTI for the Petitioner in line with the provisions of Tariff Regulations, 2017 along with Business Plan Regulations, 2017 and 2019.

### ISSUE 8: WORKING CAPITAL

#### STAKEHOLDERS' VIEW

- 2.54 GTPS has asked for a fuel cost of Rs 1443.67 Crs for FY 2020-21 considering ~39% Spot RLNG Gas of Higher LPPF of about 29.868 Rs/SCM. However as per Actual Wt. Average LPPF of Oct 19 to Dec-19 comes out to be 13.958 Rs/SCM. Also, ECR should be considered based on LPPF of APM Gas at normative availability. Also, there is a further drop of 26% in Domestic Natural Gas pricing as per for H1 of FY 2020-21 which has further reduced the Fuel cost. Accordingly, we request the Commission to consider ECR based on APM gas.
- 2.55 The Petitioner has claimed Fuel cost of Rs. 664.15 Cr. for FY 2018-19 on actual basis. 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."*

Accordingly, it is requested to the Commission to True-up the actual Primary fuel cost.

- 2.56 The Petitioner has sought Rs 251.25 Cr towards revised working capital Expenditure for FY 2018-19 on account of receivable equivalent to 2 months of capacity charge and energy charge.

We request Commission to observe following inputs as under while allowing the revised working capital:

- a) Petitioner has utilized merely 40% of APM gas during FY 2018-19.
  - b) Remaining of the gas used through RLNG source of power.
  - c) The PLF has mentioned by petitioner is 25.36% i.e 578 MU has been generated out of 1900 MU @ normative 85% availability.
  - d) Petitioner has considered the normative availability factor rather than actual availability, during calculation of fuel cost in the table 5.5 clause "F" page no-21 of the petition, hence, resulting the increased working capital cost.
- 2.57 We request Commission to direct the petitioner to re-calculate the working capital on actual basis. The same will reduce the margin of working capital in the interest of Delhi Consumers.

#### PETITIONER'S SUBMISSION

- 2.58 The Petitioner has calculated the fuel cost as per actual for working capital at 85% PLF. However, based on the history of scheduling, the PLF of plant GTPS never went beyond 30%. Hence, generation was met only through cheaper available Gas. However, in case operation up to normative PLF is scheduled, there will be a need for additional Gas, only available as RLNG, hence working capital requirement will increase. Therefore, Petitioner has calculated working capital on normative generation with actual gas mix required to achieve normative Generation.
- 2.59 The petitioner has taken fuel cost for working capital for FY 2018-19 based on the weighted average of preceding three months of the relevant financial year i.e. taken for the month of Jan-18, Feb-18 and Mar-18 for FY 2018-19 as per DERC tariff Regulation 2017 as provided in clause no. 107. The same is produced 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”.*

Further, contrary to claim of respondent, the calculation of fuel cost for the working capital is to be done on normative availability rather than actual generation. Therefore, Petitioner has calculated as per DERC (terms and conditions for determination of tariff) Regulation, 2017 vide clause no. 86 which reads as under:

*“86. Interest on working capital shall be payable on normative basis not withstanding that the utility has availed any loan for the working capital.”*

### COMMISSION’S VIEW

2.60 The Commission has determined the working capital for the Petitioner in line with the provisions of Tariff Regulations, 2017 along with Business Plan Regulations, 2017 and 2019.

### ISSUE 9: REQUIREMENT OF LOAN AND EQUITY

#### STAKEHOLDERS’ VIEW

2.61 As per regulation 63 of DERC tariff regulation, 2017 the debt-equity ratio should be 70:30 relevant extract is:

*“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 deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff.*

*(vi) Where equity deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as a 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 debt: equity ratio.”*

Hence, Commission should consider 70:30 debt-equity ratio as per applicable regulation and the same should be applied for return on capital employed.

- 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:*

- a) Where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff;*
  - b) Where equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as notional loan;*
  - c) The equity invested in foreign currency shall be designated in Indian rupees on the date of each investment;*
  - d) 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 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. However, aggrieved by certain decisions of the State Commission contrary to DERC tariff regulation, 2017 and Business plan Regulation, 2017 in the impugned order, Petitioner has filed an APPEAL no. 392 of 2019 before Appellate tribunal of Electricity. There are similar issues for FY 18-19, therefore, Petitioner is filing present true-up petition without prejudice to its submission in an existing case on above matter.

### COMMISSION'S VIEW

2.65 The Commission has considered the requirement of loan and equity as per the provisions of Tariff Regulations, 2017 along with Business Plan Regulations, 2017 & 2019.

### ISSUE 10: MARGIN FOR RATE OF INTEREST ON LOAN

#### STAKEHOLDERS' VIEW

2.66 IPGCL in its petition has incorrectly quoted the Regulation 5 of Business Plan Regulations, 2017 as under:

*"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"*

2.67 However correct provision of the Business Plan Regulations, 2017 as under:

*"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 1, e., 14.00%."*

- 2.68 We request Commission to consider the MARGIN FOR RATE OF INTEREST ON LOAN as per the Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2017 and Delhi Electricity Regulatory Commission (Business Plan) Regulations, 2017.

#### PETITIONER'S SUBMISSION

- 2.69 Petitioner has considered the margin for rate of interest on loan for FY 2018-19 on similar lines as quoted by the commission in its tariff order dt 31.08.2017 in Para 4.74 which reads as under:

*"4.74 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: "*

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

- 2.70 Further, petitioner has taken the same as given by the State commission in its subsequent tariff order dated 31.08.2017.

#### COMMISSION'S VIEW

- 2.71 The Commission has considered the interest rate for the Petitioner in line with the provisions of Tariff Regulations, 2017 along with Business Plan Regulations, 2017 and 2019.

#### ISSUE 11: INCOME TAX AND AUDITED FINANCIAL STATEMENT

**STAKEHOLDERS' VIEW**

- 2.72 Amount of actual Income Tax paid is not mentioned anywhere in the true-up Petition. The Commission is requested to check the amount of actual Income tax paid corresponding to the amount claimed for truing up.
- 2.73 Share the copy of Audited Financial Statement for FY 2018-19, as the same is not found as a part of Tariff Petition.
- 2.74 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.

**PETITIONER'S SUBMISSION**

- 2.75 Petitioner has not claimed any Income tax as the same was not paid during the year. However, if the same becomes due at a later stage, has pleaded to allow the same.
- 2.76 The copy of Audited Financial Statement for FY 2018-19 has already shared with the Commission

**COMMISSION'S VIEW**

- 2.77 The Commission has considered the Income Tax for the Petitioner in line with the provisions of Tariff Regulations, 2017 along with Business Plan Regulations, 2017 and 2019.

**ISSUE 12: CAPITAL EXPENDITURE (CAPEX)****STAKEHOLDERS' VIEW**

- 2.78 As per Regulation 43 of Tariff Regulation 2017,  
"The capital expenditure, in respect of existing project/scheme incurred or projected to be incurred after the cut-off date, may be admitted by the Commission, subject to prudence check considering:  
"(1) .....  
(7) Any additional capital expenditure which has become necessary for efficient operation. The claim shall be substantial with the technical justification and cost-

benefit analysis duly supported by the documentary evidence like test results...."

However, the claim of IPGCL does not fall in any of the criteria and is not supported by any justification. The claims are already covered under normative O&M as per DERC Business Plan Regulation, 2017.

- 2.79 The Petitioner has sought Rs. 4.69 Cr towards Capital Expenditure for FY 18-19. 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 Contrary to the submission of Stakeholder, the proposed additional capital for the plant, fall under the category of deterioration of assets and obsolescence.

#### **COMMISSION'S VIEW**

- 2.81 The Commission has considered the provisions of Tariff Regulations, 2017 and Business Plan Regulations, 2017 while considering the CAPEX for the Petitioner for applicable period.

### **ISSUE 13: RENOVATION & MODERNISATION**

#### **STAKEHOLDERS' VIEW**

- 2.82 The existing power purchase agreement for power supply from the plant to Delhi Distribution Company will be expiring by March 2021. Since GTPS plant has several features like Reliable Supply to VVIP areas, work as starting station for Grid revival in case of Blackouts or total grid failure, capable to operate in Synchronous Condenser Mode with a minimum retrofit.
- 2.83 IPGCL plant will expire in March'2021. BYPL vide its letter dated 05.12.2019 has cleared its stand to not to accept the proposal of R&M of GT and intimated the same to IPGCL, as BYPL has already sufficient arrangement from conventional & renewable sources (550MW) to meet future demand.

#### **PETITIONER'S SUBMISSION**

- 2.84 IPGCL welcomes the proposal of Stakeholder for life extension of GTPS beyond March

2021 and applauds Stakeholder approach for the larger interest of state grid. State SLDC has also strongly recommended. Further, operation of GTPS beyond March 2021 for safety and reliability of state grid. IPGCL will take necessary action on the matter once the scope of retrofit and extent of the operation is finalized by Commission on disposal of present Tariff Petition. Accordingly, IPGCL, once again request Commission to look into the matter and finale the same along with Tariff Order for FY 2020-21 in the large interest of state grid.

- 2.85 As regards further operation of GTPS beyond March 2021 and BYPL letter dated 05/12/2019, it is to submit that while submitting its earlier response BYPL had ignored the fact that GTPS has different features and Technology and it cannot be compared exactly with other power plant of similar / different technology, size and capacity situated outside the load centre ignoring 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. Further, contrary to its earlier view on operation of BYPL beyond March 2021, BYPL in a meeting held on 04/07/2020 agreed to proposal.

#### COMMISSION'S VIEW

- 2.86 Power Department, GoNCTD has held meetings in this regard with stakeholders. The proposal of Generating Company (Applicant) for the extension of expiring PPA of GTPS beyond March 2021 shall be dealt by Commission based on the various considerations as brought out by Applicant and its scrutiny/ analysis by the Commission including cost benefit analysis.

**A3: TRUE UP OF FY 2018-19****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 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.”*

3.3 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:*

*Force Majeure;*

*Change in Law;*

*Re-financing of Loan; and*

*Primary Fuel Cost.”*

3.4 Therefore, in accordance with Tariff Regulations, 2017 and Business Plan Regulations, 2017, the Commission has trued up the expenses for the Petitioner for FY 2018-19.

## **NORMS OF OPERATION**

### **AVAILABILITY**

#### **PETITIONER’S SUBMISSION**

3.5 The Petitioner has submitted that Commission has fixed the norm of 85% availability for the period FY 2018-19 for recovery of full fixed cost.

3.6 Since Gas turbines of GTPS are more than 30 years old and could not achieve 85% availability factor during the previous period, hence, the availability achieved for GTPS during FY 2018-19 may be considered for recovery of full fixed cost as follows:

**Table 3. 1: Petitioner’s Submission: Plant Availability for FY 2018-19**

Sr. No.	Particulars	UoM	FY 2018-19
1	Plant Availability	%	81.29%

**COMMISSION ANALYSIS**

- 3.7 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%”*

- 3.8 The Petitioner vide its submission dated 26/02/2020 has provided the SLDC certificate for Plant Availability Factor and the Commission has considered the same for the purpose of true up of FY 2018-19 which is as follows:

**Table 3. 2: Commission Approved: Plant Availability for FY 2018-19**

Sr. No.	Station	UoM	FY 2018-19		
			Norm	Actual as submitted by Petitioner	Approved for True-up
1	GTPS	%	85%	81.68%	81.68%

- 3.9 However, the Commission has not relaxed the Normative Annual Plant Availability Factor(NAPAF) of 85% for FY 2018-19 as stipulated in the Business Plan Regulations, 2017 for recovery of Capacity charges under Regulation 100 of Tariff Regulations, 2017.

**STATION HEAT RATE (SHR)****PETITIONER’S SUBMISSION**

- 3.10 The Petitioner has submitted that the Commission has approved the station heat rate of 2450 kCal/kWh in combined cycle mode and 3125 kCal/kWh in open cycle mode of operation in DERC Business Plan Regulation, 2017. However, the actual heat rate achieved by the station is on higher side due to frequent start/stops and partial operation of the units.
- 3.11 Further, the Central Electricity Regulatory Commission in its latest tariff regulations for the period from FY 2019 to FY 2024 has fixed a heat rate of 2600 kCal/kWh in combined cycle mode and 3578 kCal/kWh in open cycle mode for similar Assam gas station of



NEEPCO. Hence, GTPS request the Commission to relax the norms of SHR and allowed as shown in table below.

- 3.12 The actual heat rate achieved by achieved by the Petitioner for IGTPS for FY 2018-19 is as follows:

**Table 3. 3: Petitioner's Submission: Station Heat Rate (kCal/kWh)**

Particulars	UoM	FY 2018-19
Station Heat Rate (CC)	(kCal/kWh)	2549
Station Heat Rate (OC)	(kCal/kWh)	3429

### COMMISSION ANALYSIS

- 3.13 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 4: Gross Station Heat Rate (GHR)**

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

*....."*

- 3.14 The contention of the Petitioner regarding relaxation of heat rate on the grounds of Heat Rates allowed by CERC for Assam GPS may not be accepted as the operating norms of Gas Turbine Stations depends upon its design, margins, manufacturer, make, the vintage of the plant, atmospheric conditions, operating environment, geographical locations, maintenance of the stations, etc. It is noted that Assam GPS is placed at a different geographical location as compared with the location of GTPS and is operating under different atmospheric/environment conditions, different make, frame size and different design etc. Thus, comparing the two plants not hold good.

- 3.15 It is further to be noted that, Rajasthan Electricity Regulatory Commission in its Terms

and Conditions of Tariff Regulations, 2019 has considered lower Gross Station Heat Rate of Ramgarh Gas based plant which is having similar configuration as of GTPS. Comparison between the two is as follows:

Table 3. 4: Comparison of Station Heat rate

Sr. No.	Station Name	Configuration	Commission	Station Heat Rate
1	<b>Gas Turbine Power Station (GTPS)</b>	270 MW (6 GT of 30 MW each + 3 ST of 30 MW each)	DERC Business Plan Regulations, 2019	
	Combined Cycle (kCal/kWh)			2450
	Open Cycle (kCal/kWh)			3125
2	<b>Ramgarh Gas Turbine Power Station (RGTPS-1 to 3)</b>	110 MW (1 GT of 35.5 MW + 1 GT of 37.5 MW + 1 ST of 37.5 MW)	RERC Tariff Regulations, 2019	
	Combined Cycle (kCal/kWh)			1950
	Open Cycle (kCal/kWh)			2830

- 3.16 In view of the above, the Commission approves the normative Gross Station Heat Rate for GTPS Station for true up of FY 2018-19 as per the approved norms in Business Plan Regulations, 2017 as follows:

Table 3. 5: Commission Approved: Station Heat rate

Sr. No	Station	Mode of Operation	UoM	FY 2018-19		
				Business Plan Regulations, 2017	Actual as submitted by Petitioner	Approved for True Up
1	GTPS	Combined Cycle	kcal/kWh	2450	2549	2450
2		Open Cycle	kcal/kWh	3125	3429	3125

## AUXILIARY POWER CONSUMPTION (APC)

### PETITIONER'S SUBMISSION

- 3.17 The Petitioner has submitted actual APC has increased during FY 2018-19 due to unproductive auxiliary consumption on part load operation & frequent back down. Thus, the Petitioner requested the Commission to allow APC achieved as per actual for FY 2018-19.
- 3.18 Actual Auxiliary Power Consumption (APC) achieved for GTPS during FY 2018-19 as submitted by the Petitioner is as under:

**Table 3. 6: Petitioner's Submission: Auxiliary Power Consumption**

Sr. No.	Particulars	UoM	FY 2018-19
1	Auxiliary Consumption	%	3.76%

**COMMISSION ANALYSIS**

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

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

*...*

*...*

*(3) AUXILIARY ENERGY CONSUMPTION*

*Auxiliary Energy Consumption shall be computed in two parts:*

- a) Fixed: 0.5% of the generation at normative PLF of the plant capacity which shall form part of other expenses under Fixed Cost, at energy charge rate approved by the Commission in respective Tariff Order.*
- b) Variable: 2.0% of the actual generation which shall form part of computation of energy charge rate of the respective month."*

- 3.20 While framing the norms of operation in Business Plan Regulations, 2017, the Commission has determined the norms of operation based on the past performance which also includes the actual operation below the technical limit as and when required, vintage of equipment etc. In view of the above, the Commission approves the Auxiliary Power Consumption for GTPS Station for true up of FY 2018-19 as per the approved norms in Business Plan Regulations, 2017 as follows:

**Table 3. 7: Commission Approved: Fixed Auxiliary Power Consumption**

Sr. No	Station	UoM	FY 2018-19		
			Business Plan Regulations, 2017	Actual as submitted by Petitioner	Approved for True Up
1	GTPS	%	0.50%*	-	0.50%*

*\* @ 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.*

**Table 3. 8: Commission Approved: Auxiliary Power Consumption**

Sr. No	Station	Mode of Operation	UoM	FY 2018-19		
				Business Plan Regulations, 2017	Actual as submitted by Petitioner	Approved for True Up
1	GTPS	Combined Cycle	%	2.00%	3.76%	2.00%
2		Open Cycle	%	0.50%		0.50%

**PLANT LOAD FACTOR (PLF)****PETITIONER'S SUBMISSION**

- 3.21 The Petitioner has submitted that the GTPS has low PLF as compared to availability in FY 2018-19. This lower PLF has resulted into high Station Heat Rate and Auxiliary Power Consumption of the station. Further, the Petitioner has submitted that the Normative PLF i.e 85% could be achieved only when the scheduled generation of the plant is @ normative NAPAF i.e. 85% or in the cases of continuous running of full module without frequent starts/stops and backing down. It is therefore request to Commission to direct State Load Dispatch Centre for full scheduling as per availability in the interest of state grid.
- 3.22 The Petitioner has further submitted the Gross and Net Generation of GTPS for FY 2018-19 on the basis of PLF and APC as under:

**Table 3. 9: Petitioner's Submission: Gross and Net Generation**

Sr. No.	Description	UoM	FY 2018-19	Remarks
A	Plant Capacity	MW	270	As per Petition
B	PLF	%	25.35	As per SLDC Certificate
C	Gross Generation	MU	599.569	$= A * B * 365 * 24 / 100000$
D	Aux. Generation	%	3.76	As per Petition
E	Aux. Generation	MU	22.564	$E = C * D$
F	Net Generation	MU	577.005	$F = C - E$

- 3.23 Accordingly, the Petitioner has submitted the comparison of availability and PLF of the Station as under:

**Table 3. 10: Petitioner's Submission: Plant Load Factor for FY 2018-19**

Year	UoM	Availability	PLF
2018-19	%	81.29%	25.35%

**COMMISSION ANALYSIS**

- 3.24 Based on the SLDC certificate submitted by the Petitioner vide its submission dated 26/02/2020, the Commission has considered the Availability and Plant Load Factor as for FY 2018-19 as follows:

**Table 3. 11: Commissions Approval: Plant Load Factor for FY 2018-19**

Year	UoM	Norm	PLF
2018-19	%	85%	25.35%

- 3.25 The Commission has not considered any relaxation in the norms for Station Heat Rate and Auxiliary Power Consumption based on the actual PLF of the station as the norms of operation were determined based on the past performance. The Commission can-not direct the State Load Despatch Centre, Delhi for giving full scheduling to the plant as the scheduling of the stations is considered by SLDC, Delhi based on grid security, merit order despatch and other grid operational factors etc.

**VARIABLE COST FOR GTPS****FUEL CONSUMPTION****PETITIONER'S SUBMISSION**

- 3.26 The Petitioner has submitted that GT Station of IPGCL runs on the Natural Gas being supplied by GAIL and Liquid Fuel supplied by IOCL. Earlier the total (APM+PMT+LNG) allocation for GTPS was 1.44 MMSCMD which was sufficient to run six gas turbines. This allocation was reduced to 1.32 MMSCMD during the FY 2006-07. Out of the total allocation of 1.32 MMSCMD, the contracted quantity of R-LNG is 0.60 MMSCMD and balance i.e. 0.72 MMSCMD comes from APM (0.59 MMSCMD) and PMT (0.13 MMSCMD) and these quantities are further subject to daily cuts in the range of 25-30% depending on the availability. In view of non availability of sufficient gas, Commission has approved the conversion of two Gas Turbines on dual fuel system in FY 2008-09. MoP&NG has further allocated 0.23 MMSCMD non-APM ONGC gases whose supply has been commenced from mid October, 2011. The Petitioner has 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 if there is no off take of supply. Petitioner is also using spot R-LNG, subject to amount of power schedule and requirement of RLNG to meet the shortage of gas. Hence, GTPS has sufficient gas to run the GT's on base load.

- 3.27 Based upon the allocation, the consumption of APM, PMT, R-LNG and NAPM gas for FY 2018-19 is shown as under:

**Table 3. 12: Petitioner's Submission: Total Gas Consumption**

Particulars	Unit	FY 2018-19
APM Gas	MMSCM	65.9482
PMT Gas	MMSCM	4.9208
NAPM Gas	MMSCM	42.3402
R-LNG Gas	MMSCM	49.4506
SPOT Gas	MMSCM	0.0393
<b>Total Gas</b>	<b>MMSCM</b>	<b>162.6991</b>

- 3.28 The Petitioner has further submitted the details of total gas consumption, rate per SCM and total cost of the gas for FY 2018-19 as per actual and fuel cost as follows:

**Table 3. 13: Petitioner's Submission: Energy Charge Rate and Fuel Cost**

Particulars	Unit	FY 2018-19
Total Gas Consumption	MMSCM	162.699
Average Gas Price	Rs./SCM	18.366
Weighted Average GCV	kCal/SCM	9392.203
Total Gas Cost	Rs. Crore	298.81
Net Generation	MU	577.005
<b>Variable Cost-CC</b>	<b>Rs./kWh</b>	<b>5.179</b>

## COMMISSION ANALYSIS

- 3.29 The Commission in its 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 as per Business Plan Regulations, 2017 determines fuel cost and energy charge rate.
- 3.30 Further, the Commission vide its e-mail dated 08/06/2020 sought the verification of energy charge rate billed by GTPS to the beneficiary DISCOMs. In response, the beneficiary DISCOMs (BRPL vide Letter dated 15/06/2020, BYPL and TPDDL vide Email dated 11/06/2020) submitted that the computation of energy charge rate billed by GTPS

during FY 2018-19 is as per the provisions of Tariff Regulations, 2017 and Business Plan Regulations, 2017. Accordingly, the Commission has considered the fuel cost for true-up of FY 2018-19.

## 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 in Business Plan Regulation, 2017, which is as below for GTPS for the control period from FY 2017-18 to FY 2019-20:

**Table 3. 14: Petitioner's Submission: O&M Expenses(Rs.Lakh/MW)**

Year	2017-18	2018-19	2019-20
GTPS	29.66	31.32	33.08

- 3.32 Petitioner further submitted that pay and perks of employees of the Petitioner Company is determined in line with Central Pay Commission Recommendations. In case of Petitioner Company the same has been partially implemented on recommendation of wage revision committee. Accordingly, Petitioner has paid Interim relief to the employees of IPGCL for the years starting from FY 17-18 to till date. The Expenditure for FY 18-19 is Rs 12.03 Cr. Further, the final payment along with the arrears will be paid to the employees after the order of implementation of wage revision committee report. Accordingly State Commission is requested to consider Rs 12.03 Cr as additional expenditure on account of Employees cost to be allowed additionally
- 3.33 Accordingly, the O & M expenses for FY 2018-19 is shown below:-

**Table 3. 15: Petitioner's Submission: O & M Expenses**

Sr. No.	Particulars	UoM	FY 18-19 (Allowed)	FY 18-19 (Actual/ Normative)
A	Base O&M expenses	Rs Cr.	84.56	84.56
B	Impact of Adhoc payment as IR due to Pay Revision	Rs Cr.	-	12.03
C	Total O&M Expenses	Rs Cr.	84.56	96.59

## COMMISSION ANALYSIS

- 3.34 The Commission has specified the normative Operation and Maintenance Expenses for existing generating stations in Business Plan Regulations, 2017 as follows:

*“6. OPERATION AND MAINTENANCE EXPENSES*

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

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

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

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

....

*(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.”*

- 3.35 The normative O&M expenses for FY 2018-19 as per Business Plan regulations, 2017 works out to be Rs. 84.56 Crore by multiplying the Rs.31.32 Lakh/MW with installed capacity of 270 MW of the plant as per norms.
- 3.36 During, the prudence check, an auditor certificate was sought for Interim Relief paid on account of Seventh pay Commission. The Petitioner has submitted the certificate stating that Rs.14.79 Crore has been paid as Interim Relief on account of Seventh pay Commission. Accordingly, Rs. 14.79 Crore has been considered as Interim relief.
- 3.37 The Commission has been receiving the request from DTL that they have incurred additional O&M expenditure of Rs.10.26 crore on account of IPGCL staff. The Commission has earlier decided the matter in previous Tariff Order dated 28.03.2018 of DTL. The relevant extract is produced below:

*“3.20 The Petitioner has claimed Rs.8.52 Cr. in respect of IPGCL staff diverted to them. It is observed from the true up of IPGCL that normative O&M expenses allowed to IPGCL is higher in comparison to the actual O&M expenses incurred by IPGCL partly due to reduced employee expenses burden to IPGCL. Therefore, the*



*Commission has not considered additional claim of the Petitioner on account of Salary of IPGCL staff deployed with Petitioner as the same was part of employee expenses of IPGCL of the base year.”*

- 3.38 The Commission observed that from FY 2016-17, DTL has been incurring the expenditure in respect of IPGCL staff diverted to them. The norms for O&M expenses during FY 2017-18 to FY 2019-20 in Business Plan Regulations, 2017 have been made based on the data in the previous year upto FY 2015-16. Since this expenditure was not part of O&M expenses considered for determination of norms for O&M expenses for the DTL, but in fact was part of O&M expenses of IPGCL, therefore, the Commission in order to give a fair treatment in accordance with para 3.37, allows actual expenses incurred by DTL on salary of diverted IPGCL staff, by deducting the same from IPGCL O&M expenses and including the same in the O&M expenses of DTL, making it revenue neutral. Therefore, additional O&M expenses of Rs. 10.26 Crore incurred by DTL on account of IPGCL Staff salary (including interim relief for 7<sup>th</sup> pay commission) for 2018-19 have been adjusted.
- 3.39 Accordingly, the Commission approves the O&M Expenses for GTPS for FY 2018-19 as follows:

**Table 3. 16: Commission Approved: O&M Expenses**

Sr. No.	Particulars	UoM	Amount	Ref
A	Base O&M Expenses	Rs Cr	84.56	As per Business Plan Regulation 2017
B	Impact of Adhoc payment as IR due to Pay Revision	Rs Cr	14.79	As per Certificate dated 04/03/2020
C	Less: Expenses of diverted staff of IPGCL to DTL	Rs Cr	10.26	As per DTL Petition for true-up of FY 2018-19
D	Total O&M Expenses	Rs Cr	89.09	<b>D = (A+B-C)</b>

## CAPITAL EXPENDITURE

### PETITIONER'S SUBMISSION

- 3.40 The Petitioner has submitted that it has made certain capital additions in FY 2018-19 for an amount of Rs 4.69 Cr. These are the capital spares purchased for the maintenance of plant and are included in the fixed assets in the books of the company as per IND-AS requirement.

- 3.41 The Petitioner has requested the Commission to allow the expenditure of Rs. 4.69 Crore towards Capital Expenditure incurred for GTPS in FY 2018-19. Accordingly, the capitalization submitted by the Petitioner for FY 2018-19 is calculated as below:

**Table 3. 17: Petitioner's Submission: Capital Expenditure**

Sr. No.	Particulars	Unit	FY 2018-19
A	Opening GFA	Rs. In Cr	425.14
B	Addition	Rs. In Cr	4.69
C	Deletion	Rs. In Cr	3.77
D	Closing GFA	Rs. In Cr	426.06
E	Average GFA	Rs. In Cr	425.60

**COMMISSION ANALYSIS**

- 3.42 The Commission has not considered the additional capitalization for FY 2018-19 as the same are in nature of capital spares which is covered under the O&M expenses of the Petitioner.
- 3.43 Accordingly, the GFA approved by the Commission for FY 2018-19 is as follows:

**Table 3. 18: Commission Approved: Capital Expenditure**

Sr. No.	Particulars	UoM	FY 2018-19	
			Petitioner Submission	Commission Approved
A	Opening GFA	Rs Cr	425.14	425.14
B	Addition	Rs Cr	4.69	0.00
C	Deletion	Rs Cr	3.77	3.77
D	Closing GFA	Rs Cr	426.06	421.37

**DEPRECIATION****PETITIONER'S SUBMISSION**

- 3.44 The Petitioner has submitted that since the cumulative depreciation has reached 70% of the total depreciation, the Petitioner has spread the remaining depreciable value over the remaining life of the asset, in accordance with the DERC Tariff Regulations, 2017. The total accumulated depreciation allowed by the Commission till FY is Rs. 349.78 Cr.
- 3.45 Accordingly, depreciation calculated for FY 2018-19 is calculated as below:

**Table 3. 19: Petitioner's Submission: Depreciation**

Sr. No.	Particulars	Unit	FY 2018-19
A	Average GFA	Rs. in Cr	425.60
B	Opening Accumulated Depreciation	Rs. in Cr	349.78

Sr. No.	Particulars	Unit	FY 2018-19
C	Balance Depreciation	Rs. in Cr	33.26
D	Balance Useful Life	Years	3
E	Current Year Depreciation	Rs. in Cr	11.09
F	Closing Accumulated Depreciation	Rs. in Cr	360.87
G	Average Accumulated Depreciation	Rs. in Cr	355.32
H	Average Net Fixed Asset	Rs. in Cr	70.28

### COMMISSION'S ANALYSIS

3.46 The Commission approved the accumulated depreciation at the closing of FY 2017-18 in the relevant tariff order as Rs 349.78 Cr. The same has been considered as the opening accumulated depreciation for FY 2018-19. 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 computed depreciation for FY 2018-19.

3.47 The Depreciation approved by the Commission for true up for FY 2018-19 is as follows:

**Table 3. 20: Commission Approved: Depreciation**

Sr. No.	Particulars	Unit	FY 2018-19
A	Average GFA	Rs. in Cr	423.26
B	Opening Accumulated Depreciation	Rs. in Cr	349.78
C	Adjustment of De-capitalization	Rs. in Cr	0.66
D	Balance Depreciation [90% of A- (B+C)]	Rs. in Cr	30.49
E	Balance Useful Life	Years	3
F	Current Year Depreciation	Rs. in Cr	10.16
G	Closing Accumulated Depreciation	Rs. in Cr	359.94
H	Average Accumulated Depreciation	Rs. in Cr	354.86
I	Average Net Fixed Asset	Rs. in Cr	68.39

### WORKING CAPITAL

#### PETITIONER'S SUBMISSION

3.48 Petitioner has calculated the Interest on Working Capital as per DERC 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 NAPAF duly taking into account mode of operation of the generating station on gas fuel and liquid fuel;*

- (b) Liquid fuel stock for 15 days
- (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 Petitioner has submitted that Commission in Tariff order dated 28/03/2018 has taken fuel cost for the month of Nov-17, Dec-17 and Jan-18 in arriving working capital for FY 18-19. However, as per DERC tariff regulation 2017, the same should be taken for the month of Jan-18, Feb-18 and Mar-18. Accordingly, Petitioner has taken fuel cost for working capital by taking average of three months from Jan-18 to March-18 as per DERC tariff Regulation 2017 for FY 2018-19 which reads as under:

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

3.50 Further, the weighted average landed price of gas for the period is 12.576 Rs/SCM and weighted average GCV is 9326.751 kCal/SCM. The detailed calculation is attached and placed as Annexure 'B'. Thus, Fuel Cost arrived @ Normative parameters is Rs 664.15 Cr. Accordingly, working capital for FY 18-19 is consider as under:

**Table 3. 21: Petitioner's Submission: Requirement of Working Capital**

Sr. No.	Particulars	Unit	FY 18-19
A	Fuel expenses for 1 month	Rs Cr	55.35
B	Liquid Fuel for 1/2 month	Rs Cr	30.52
C	Maintenance spares @ 30% of O&M	Rs Cr	25.37
D	O&M expenses for 1 month	Rs Cr	7.05
E	Annual Fixed Cost for the year	Rs Cr	133.43
F	Fuel Cost for the year	Rs Cr	664.15
G	Receivables equivalent to 2 months of capacity and energy charge	Rs Cr	132.93

Sr. No.	Particulars	Unit	FY 18-19
H	Total Working Capital	Rs Cr	251.21

- 3.51 Petitioner has revised requirement of working capital on normative basis for FY 18-19 and requested Commission to true up the working capital for FY 18-19 as per above details.

#### COMMISSION ANALYSIS:

- 3.52 The Commission in Tariff Order for FY 2018-19 determined the working capital of GTPS based on the provisions of DERC Tariff Regulations, 2017.
- 3.53 Accordingly, the Commission has considered the working capital for FY 2018-19 as approved by the Commission vide its Order dated 28/03/2018 which is as follows:

**Table 3. 22: Commission Approved: Requirement of Working Capital**

Sr. No.	Particulars	Unit	FY 2018-19	Reference
A	Fuel expenses for 1 month	Rs Cr	52.46	As per Tariff Order dated 28/03/2018
B	Liquid Fuel for 1/2 month	Rs Cr	30.52	
C	Maintenance spares @ 30% of O&M	Rs Cr	25.37	
D	O&M expenses for 1 month	Rs Cr	7.05	
E	Annual Fixed Cost for the year	Rs Cr	132.34	
F	Fuel Cost for the year	Rs Cr	629.46	
G	Receivables equivalent to 2 months of capacity and energy charge	Rs Cr	126.97	
H	Total Working Capital	Rs Cr	242.36	

#### REQUIREMENT OF LOAN AND EQUITY

##### PETITIONER'S SUBMISSION

- 3.54 The Petitioner has submitted that since accumulated depreciation is greater than the 70% of Gross Fixed asset during FY 2018-19, the remaining value is treated as 100% equity. Accordingly, the Petitioner has determined the requirement of Loan and Equity as follows:

**Table 3. 23: Petitioner's Submission: Requirement of Loan & Equity**

Sr. No.	Particulars	Unit	FY 2018-19
A	Average Net Fixed Asset	Rs in Cr.	70.28
B	Average Equity	Rs in Cr.	70.28
C	Average CAPEX Loan	Rs in Cr.	0.00
D	Working Capital Loan	Rs in Cr.	251.21

E	Total Loan Requirement	Rs in Cr.	251.21
F	Average RRB	Rs in Cr.	321.49

- 3.55 Petitioner has filed an appeal no. 392 of 2019 in APTEL against not treating the balance GFA as equity, in absence of any outstanding loan (all Capital Loans are already paid), rather dividing it in the ratio of 30:70 of equity and loan.

#### COMMISSION ANALYSIS

- 3.56 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.”*

- 3.57 The Commission has determined the requirement of Loan & Equity in terms of above stated Regulation pending the order of the APTEL judgment in appeal filed by the Petitioner, which is as follows:

**Table 3. 24: Commission Approved: Requirement of Loan & Equity**

Sr. No.	Particulars	Unit	FY 2018-19
A	Average Net Fixed Asset	Rs in Cr.	68.39
B	Average Equity	Rs in Cr.	20.52
C	Average CAPEX Loan	Rs in Cr.	47.88
D	Working Capital Loan	Rs in Cr.	242.36
E	Total Loan Requirement	Rs in Cr.	290.24
F	Average RRB	Rs in Cr.	310.75

**RETURN ON CAPITAL EMPLOYED****PETITIONER'S SUBMISSION**

3.58 The Petitioner has submitted that 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."*

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

$$RoCE = WACCI * RRB_i$$

*Where, WACCI*

*is the Weighted Average Cost of Capital for each year of the Control Period;*

*RRB<sub>i</sub> – Average Regulated Rate Base for the i<sup>th</sup> 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:*

$$WACC = [D/(D+E)] * r_d + [E/(D+E)] * r_e$$

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

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

3.59 The Petitioner has 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%

- 3.60 Petitioner 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 for FY 18-19 has been calculated at 10.26% on the basis of SBI MCLR of 8.15% as on 1st April, 2018 plus margin of 2.11% for FY 2018-19.
- 3.61 Further, the Petitioner has considered the base rate of return on equity at 14%. Since petitioner has not paid any income tax in FY 18-19, the grossed up rate of return on equity has been taken at 14.00% for FY 2018-19. However, Commission is requested to allow recovery of actual tax to be paid arising out of true up of expenditure for FY 18-19.
- 3.62 Accordingly, the Petitioner has computed Weighted Average Cost of Capital (WACC) and Return on Capital Employed (RoCE) as follows:

**Table 3. 25: Petitioner’s Submission: WACC and RoCE**

Sr. No.	Particulars	Unit	FY 18-19
A	Average RRB	Rs in Cr	321.49
B	Average Capex loan	Rs in Cr	0.00
C	Loan for Working Capital Requirement	Rs in Cr	251.21
D	Total Loan	Rs in Cr	251.21
E	Average Equity	Rs in Cr	70.28
F	Cost of Debt, Rd	%	10.26
G	Return on Equity, Re	%	14.00
H	WACC	%	11.08
I	RoCE	Rs in Cr	35.61



**COMMISSION ANALYSIS**

- 3.63 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=  $14/[(100-\text{Tax Rate})/100]$*

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

- 3.64 It was observed during the prudence check session with the Petitioner, that the Petitioner has not paid income tax for FY 2018-19. Accordingly, the Commission has considered the rate on return on equity as 14.00% for FY 2018-19.

- 3.65 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 1<sup>st</sup> 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.”*

- 3.66 Further, for Margin for Interest on Loan, Business Plan Regulations, 2017 is to be followed. Relevant extract of Business Plan Regulations, 2017 is as follows:

*“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%.”*

- 3.67 During the prudence check, it was submitted by the Petitioner that GTPS doesn't have any actual loan remaining, thus SBI MCLR rate as on 01/04/2018 i.e. 8.15% has been considered by the Commission in terms of Tariff Regulations, 2017 and Business Plan Regulations, 2017 for the period FY 2018-19.

- 3.68 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."*

3.69 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  $i$ th year of the Control Period shall be computed in the following manner:*

$$RRBi = RRB_{i-1} + \Delta ABi / 2 + \Delta WCi;$$

*Where,*

*" $i$ " is the  $i$ th year of the Control Period;*

*RRBi: Average Regulated Rate Base for the  $i$ th year of the Control Period;*

*$\Delta WCi$ : Change in working capital requirement in the  $i$ th year of the Control Period from  $(i-1)$ th year;*

*$\Delta ABi$ : Change in the Capital Investment in the  $i$ th year of the Control Period;*

*This component shall be arrived as follows:*

$$\Delta ABi = Invi - Di - CCI - Reti;$$

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  $\Delta ABi$  and capital grants/subsidies received during *ith* year of the Control Period for construction of service lines or creation of fixed assets;

*Reti*: 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:

$$RoCE = WACC_i * RRB_i$$

Where,

*WACC<sub>i</sub>* is the Weighted Average Cost of Capital for each year of the Control Period;

$RRBi$  – Average Regulated Rate Base for the  $i$ th 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;

$r_d$  is the Cost of Debt;

$r_e$  is the Return on Equity.”

- 3.70 Accordingly, the Commission has trued up the Return on Capital Employed for FY 2018-19 as follows:

**Table 3. 26: Commission Approved: WACC and RoCE**

Sr. No.	Particulars	Unit	FY 2018-19
A	Average RRB	Rs in Cr	310.75
B	Average Capex loan	Rs in Cr	47.88
C	Loan for Working Capital Requirement	Rs in Cr	242.36
D	Total Loan	Rs in Cr	290.24
E	Average Equity	Rs in Cr	20.52
F	Cost of Debt, $R_d$	%	8.15
G	Return on Equity, $R_e$	%	14.00
H	WACC	%	8.54
I	<b>RoCE</b>	<b>Rs in Cr</b>	<b>26.53</b>

**FIXED AUXILIARY CONSUMPTION EXPENSES****PETITIONER'S SUBMISSION**

3.71 The Petitioner has submitted that the Commission has allowed Fixed Auxiliary Consumption expenses (0.5%) @ Normative PLF. Accordingly, Petitioner has calculated Fixed Auxiliary Consumption Expenses for FY 2018-19 as under:

**Table 3. 27: Petitioner's Submission: Fixed Auxiliary Consumption Expenses**

Sr. No.	Particulars	Unit	FY 2018-19
A	Plant Capacity	MW	270
B	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	5.179
G	<b>Fixed Auxiliary Consumption</b>	<b>Rs Cr</b>	<b>5.21</b>

3.72 Further, as regards to estimation of sent out energy on normative APC, Petitioner had filed review petition no. 59 of 2017 and 41 of 2018 to resolve the issue of arriving sent out energy. Accordingly the State commission vide its order dated 23.10.2019 and 17.10.2019 has ordered to calculate ex-bus sent out energy on normative APC of 2.5% rather than 2% (excluding 0.5% of fixed APC). However, petitioner has arrived ECR on actual auxiliary consumption basis.

**COMMISSION ANALYSIS**

3.73 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.”*

3.74 Accordingly, the Commission has considered the same Fixed Auxiliary Consumption as allowed by Order dated 28/03/2018 which is as follows:

**Table 3. 28: Commission Approved: Fixed Auxiliary Consumption Expenses**

Sr. No.	Particulars	UoM	FY 2018-19
A	Plant Capacity	MW	270
B	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 (approved)	Rs/kWh	3.195
G	Fixed Auxiliary Consumption	Rs Cr	3.21

## NON-TARIFF INCOME

### COMMISSION ANALYSIS

3.75 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.”

- 3.76 Accordingly, the Commission based on the Cost Audit Report submitted by the Petitioner (Proforma-H\_ Surcharge on Sale of Energy (GTPS), has considered the LPSC and subsequently the impact of the same on NTI for FY 2018-19 is as under:

**Table 3. 29: Commission Approved: LPSC Considered as NTI**

Sr. No.	LPSC Details for FY 2018-19	Amount (Rs Cr)
A	LPSC Amount Collected	26.23
B	Principal Amount	145.74
C	LPSC Amount allowed for retention @10.26% (Rate of Interest on Working Capital)	14.95
D	LPSC amount considered as NTI	11.28

**Table 3. 30: Commission Approved: Computation of NTI**

Sr. No.	Component of NTI for FY 2018-19	Amount (Rs Cr)
A	Rental from staff quarter	0.39
B	NTI on account of LPSC	11.28
C	Net Income from sale of scrap	0.13
D	Total NTI	11.81

## SUMMARY OF FIXED COST

### PETITIONER'S SUBMISSION

- 3.77 The Annual Fixed Cost for FY 2018-19 submitted by the Petitioner is as under:

**Table 3. 31: Petitioner's Submission: Annual Fixed Cost**

Sr. No.	Particulars	Unit	FY 2018-19
A	Return on Capital Employed	Rs Cr	35.61
B	Depreciation	Rs Cr	11.09
C	Operation and Maintenance Expenses	Rs Cr	96.59
D	Fixed Auxiliary Consumption	Rs Cr	5.21
E	Annual Fixed Cost	Rs Cr	148.49
F	Net Generation	MU	577.005
G	Fixed Cost Per Unit	Rs/ kWh	2.573

### COMMISSION ANALYSIS:

- 3.78 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.”*

Regulation 8 of Business Plan Regulations, 2017 provides as under:

*“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.*

3.79 Accordingly, the Commission has trued up the AFC for FY 2018-19 as follows:

**Table 3. 32: Commission Approved: Annual Fixed Cost**

Sr. No.	Particulars	UoM	FY 2018-19			Ref.
			As per Order dated 28/03/2018	Petitioner's Submission	Approved	
A	Return on Capital Employed	Rs Cr	33.62	35.61	26.53	Table 3.26
B	Depreciation	Rs Cr	10.95	11.09	10.16	Table 3.20
C	Operation and Maintenance Expenses	Rs Cr	84.56	96.59	89.09	Table 3.16
D	Fixed Auxiliary Consumption	Rs Cr	3.21	5.21	3.21	Table 3.28
E	Annual Fixed Cost	Rs Cr	132.34	148.49	128.99	(A+B+C+D)
F	Less: Non-Tariff Income (NTI)	Rs Cr	-	-	11.81	Table 3.30
G	Annual Fixed Cost (Net of NTI)	Rs Cr	132.34	148.49	117.19	(E-F)

Sr. No.	Particulars	UoM	FY 2018-19			Ref.
			As per Order dated 28/03/2018	Petitioner's Submission	Approved	
H	Net Generation	MU	1970.21	577.01	577.01	Table 3.9
I	Fixed Cost per unit	Rs./kWh	0.672	2.573	2.031	$I=(G/H)*10$

**TARIFF ORDER DATED 31/07/2019**

3.80 The Commission vide its Tariff Order dated 31/07/2019 has determined true-up for FY 2017-18. Commission has considered margin for interest on loan as 2.34%, and accordingly considered rate of interest on loan as 10.34% (i.e. 8% SBI MCLR rate on 01/04/2017 + 2.34% margin for interest on loan). However, it has been noticed based on the submissions of the Petitioner that GTPS doesn't have any actual loan remaining. As there is no actual loan remaining for the Petitioner, the inadvertent error of considering rate of interest on loan as 10.34% is to be revised as 8% (i.e. SBI MCLR rate as on 01/04/2018) in line with the Tariff Regulations, 2017 and BPR 2017 quoted as follows:

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 1<sup>st</sup> 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.”*

Relevant extract of Business Plan Regulations, 2017 is as follows:

**“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%.”*

- 3.81 Accordingly, Commission has revised the Return on Capital Employed for FY 2017-18 which is as follows:

**Table 3. 33: Commission Approved: WACC and RoCE**

Sr. No.	Particulars	UoM	Approved in TO dated 31/07/2019	Revised
A	Average RRB Average Equity	Rs Cr	299.34	299.34
B	Average loan requirement for Capital investment	Rs Cr	56.59	56.59
C	Cost of loan for capital investment	%	10.34	8.00
D	Loan for working capital requirement	Rs Cr	218.51	218.51
E	Cost of loan for working capital	%	10.34	8.00
F	Average Equity	Rs Cr	24.25	24.25
G	Return on Equity, Re	%	14.00	14.00
H	WACC	%	10.64	8.49
I	RoCE	Rs Cr	31.84	25.40

- 3.82 Accordingly, Commission has revised the AFC for FY 2017-18 as follows:

**Table 3. 34: Commission Approved: Annual Fixed Cost for FY 2017-18**

Sr. No.	Particulars	UoM	Approved in TO dated 31/07/2019	Revised
A	Return on Capital Employed (RoCE)	Rs Cr	31.84	25.40
B	Depreciation	Rs Cr	10.95	10.95
C	Operation and Maintenance Expenses	Rs Cr	86.46	86.46

Sr. No.	Particulars	UoM	Approved in TO dated 31/07/2019	Revised
D	Fixed Auxiliary Consumption	Rs Cr	3.31	3.31
E	Annual Fixed Cost	Rs Cr	132.56	126.12
F	NTI	Rs Cr	15.69	15.69
G	Annual Fixed Cost net of NTI	Rs Cr	116.87	110.43

3.83 The Petitioner is directed to refund the difference of AFC i.e. Rs. 6.44 Cr. (**Ref. Table 3.34: Rs. Cr. 116.87 - 110.43**) for FY 2017-18 and Rs. 15.15 Cr. (**Ref. Table 3.32: Rs. Cr. 132.24 - 117.19**) for FY 2018-19, based on the revised AFC and true up of AFC as indicated in the above table as per Regulation 151 of Tariff Regulations, 2017. Relevant extract of Regulation 151 of Tariff Regulations, 2017 is as follows:

*“151. The financial gains and losses by a generating company or the transmission licensee, as the case may be, on account of uncontrollable parameters other than capitalisation shall be passed on to beneficiaries of the generating company or to the long term transmission customers of transmission system, as the case may be.*

*Provided that the amount under-recovered or over-recovered, along with simple interest at the rate equal to the bank rate as on 1st April of the respective year, shall be recovered or refunded by the generating company or the transmission licensee, as the case may be, in six equal monthly instalments starting within three months from the date of the tariff order issued by the Commission.”*

**A4: ANALYSIS OF AGGREGATE REVENUE REQUIREMENT (ARR) FOR FY 2020-21****NORMS OF OPERATION**

- 4.1 The Commission has specified the norms of operation, for the purpose of determination of tariff in Business Plan Regulations, 2019. The submissions made by the Petitioner in this regard and the Commission's views on the same have been discussed in the following sections.

**PLANT AVAILABILITY AND PLANT LOAD FACTOR****PETITIONER'S SUBMISSION**

- 4.2 The Petitioner has submitted that the operational parameters considered by the Petitioner for FY 2020-21 is as per DERC Business Plan Regulations, 2019.
- 4.3 The Petitioner has proposed plant availability for FY 2020-21 as follows:

**Table 4. 1: Petitioner Submission: Plant Availability**

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

**COMMISSION'S ANALYSIS**

- 4.4 The Commission has specified the Normative Annual Plant Availability Factor (NAPAF) and Normative Annual Plant Load Factor (NAPLF) in Business Plan Regulations, 2019 and relevant extract is as follows:

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

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

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

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

- 4.5 In view of the above, the Commission has considered Plant Availability and Plant Load Factor as approved in Business Plan Regulations, 2019.

**STATION HEAT RATE****PETITIONER'S SUBMISSION**

- 4.6 The Petitioner has submitted that the operational parameters considered by the Petitioner for FY 2020-21 is as per DERC Business Plan Regulations, 2019.
- 4.7 The Petitioner has further requested to consider the impact on performance of thermal generating stations operated in part load operation as recommended by Central Electricity Authority vide letter no. CEA/TETD-TT/2018/N-15/1451 dated 10.12.2018. The impact of part load operation on performance of thermal generating stations is reproduced as under:-

*"F. Impact of part load operation on performance of thermal generating stations:*

.....

**2. Gas/Liquid fuel based Thermal generating Stations:**

**i) Impact on Station Heat Rate:**

*The degradation of module/plant heat rate for gas /liquid fuel based thermal generating stations in CCGT mode of operation are proposed to be considered as below:*

<b>Sl.No.</b>	<b>Module/Plant loading as % of Installed capacity</b>	<b>Increase in module/plant heat rate (%)</b>
1.	90 to 100	Nil
2.	80 to 89.99	2.5
3.	70 to 79.99	5
4.	60 to 69.99	8
5.	50 to 59.99	12

...."

- 4.8 The Petitioner has considered Station Heat Rate for FY 2020-21 as follows:

**Table 4. 2: Petitioner Submission: Proposed SHR**

<b>Sr. No.</b>	<b>Particulars</b>	<b>UoM</b>	<b>FY 2020-21</b>
1	Station Heat Rate (Combined Cycle)	kCal/ kWh	2450
2	Station Heat Rate (Open Cycle)	kCal/ kWh	3125

**COMMISSION ANALYSIS**

- 4.9 The Commission has specified the Station Heat Rate (SHR) for existing generating stations of Delhi in Business Plan Regulations, 2019 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 Cycle
		(kCal/ kWh)	
1	Gas Turbine Power Station (GTPS)	2450	3125
2	Pragati Power Station I (PPS-I)	2000	2900

”

- 4.10 While framing the norms of operation in Business plan Regulations, 2019, the Commission has determined the norms of operation based on the past performance, vintage of equipment etc. Accordingly, the Commission has considered Station Heat Rate as approved in Business Plan Regulations, 2019.

**AUXILIARY POWER CONSUMPTION****PETITIONER'S SUBMISSION**

- 4.11 The Petitioner has submitted that the operational parameters considered by the Petitioner for FY 2020-21 is as per DERC Business Plan Regulation, 2019.
- 4.12 The Petitioner has further requested to consider the impact on performance of thermal generating stations operated in part load operation as recommended by Central Electricity Authority vide letter no. CEA/TETD-TT/2018/N-15/1451 dated 10.12.2018. The impact of part load operation on performance of thermal generating stations is reproduced as under:

*“F. Impact of part load operation on performance of thermal generating stations:*

.....

**3. Gas/Liquid fuel based Thermal generating Stations:**

**ii) Impact on Auxiliary Energy Consumption:**

*The additional auxiliary energy consumption admissible at part loading of gas/liquid fuel based thermal generating station is proposed to be considered as below:*

<i>Sl.No.</i>	<i>Plant/ Module loading as % of Installed capacity</i>	<i>Admissible % additional auxiliary energy consumption (% point)</i>
1.	90 to 100	Nil
2.	80 to 89.99	2.5
3.	70 to 79.99	5
4.	60 to 69.99	8
5.	50 to 59.99	12

.....”

- 4.13 Since the PLF of GTPS for the last 3 years had been quite low due to less scheduling of the plant by SLDC and DISCOMs. In view of the low scheduling the loading of the plant remains very low as compared to the installed capacity. Therefore, Petitioner has requested to kindly consider the recommendations of CEA and provide suitable compensation to the petitioner in heat rate and Auxiliary power consumption.
- 4.14 The Petitioner has considered Auxiliary Power Consumption for FY 2020-21 as follows:

**Table 4. 3: Petitioner Submission: Auxiliary Power Consumption**

<b>Sr. No.</b>	<b>Particulars</b>	<b>UoM</b>	<b>FY 2020-21</b>
1	Auxiliary power consumption in CC mode	%	2.75%
2	Auxiliary power consumption in OC mode	%	1.00%

## COMMISSION'S ANALYSIS

- 4.15 The Commission has specified the Auxiliary Energy Consumption for existing generating stations of Delhi in Business Plan Regulations, 2019 as follows:

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

...

...

**(3) AUXILIARY ENERGY CONSUMPTION**

*Auxiliary Energy Consumption for existing Gas based Generating Stations of Delhi shall be as follows:*

<b>S.No.</b>	<b>Mode of Operation</b>	<b>Percentage</b>
1	Combined Cycle	2.75%
2	Open Cycle	1.00%

- 4.16 While framing the norms of operation in Business Plan Regulations, 2019 , the Commission has determined the norms of operation based on the past performance



which also includes the actual operation below the technical limit as and when required, vintage of equipment etc. Accordingly, the Commission has considered Auxiliary Power Consumption as approved in Business Plan Regulations, 2019.

## GROSS AND NET GENERATION

### PETITIONER'S SUBMISSION

4.17 The Petitioner has submitted Gross and Net Generation for GTPS for FY 2020-21 as follows:

**Table 4. 4: Petitioner Submission: Gross and Net Generation**

Sr. No.	Particulars	UoM	FY 2020-21
1	Gross Generation	MU	2010.42
2	Auxiliary Consumption	%	2.75%
3	Net Generation	MU	1955.13

### COMMISSION'S ANALYSIS

4.18 Gross and Net Generation for FY 2020-21 as approved by the Commission based on the norms of operation specified in Business Plan Regulations, 2019 is as follows:

**Table 4. 5: Commission Approved Gross and Net Generation (MU)**

Sr. No.	GTPS	UOM	FY 2020-21	Ref.
A	Capacity	MW	270	
B	NAPLF	%	85	
C	Gross Generation	MU	2010.42	(AxBx365x24)/1000
D	Auxiliary Consumption	%	2.75%	Para 4.15
E	Auxiliary Consumption	MU	55.29	CxD
F	Net Generation	MU	1955.13	C-E

## ENERGY CHARGE RATE AND VARIABLE COST

### PETITIONER'S SUBMISSION

4.19 The Petitioner has submitted that GTPS of IPGCL runs on the Natural Gas supplied by GAIL and Liquid Fuel supplied by IOCL. The total contracted quantity of Gas (APM+NAPM+RLNG) for GTPS is 1.67 MMSCMD. MoP&NG had allocated 0.23 MMSCMD non-APM ONGC gas and the supply of the same commenced from mid October, 2011. Out of the total allocation, the contracted quantity of R-LNG is 0.60 MMSCMD and

balance comes from APM and Non-APM. However, the quantities of domestic gases are further subject to daily cuts in the range of 25-30% depending on the availability. The reduced allocation of domestic gas is compensated through SPOT RLNG by making monthly Gas Sale Purchase Notice (GSPN) with Gail India Limited.

- 4.20 The Petitioner further submitted that it has 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. 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 also.
- 4.21 The estimated fuel cost and its consumption for FY 20-21 has been calculated based on the weighted average GCV of three months from October 2019 to December 2019 in line with DERC regulation, 2017. The weighted average landed price of the gas comes to Rs 13.957 per SCM and weighted average GCV is 9226.907 kCal/SCM. However, the gas consumption during these months i.e from October 2019 to December 2019 was limited only to domestic gas and very small quantity of imported gas due to fewer schedules given by SLDC. However, this is not the case throughout the year. Hence to run the plant at normative PLF, the total gas required would be 533.822 MMSCM.
- 4.22 The Petitioner has further submitted that the total fuel cost considering the Gross Generation of the plant, SHR of the station, Gross Calorific Value and the Fuel Prices as follows:

**Table 4. 6: Petitioner Submission: Fuel Cost for PPS-I**

Sr. No.	Particulars	UoM	FY 2020-21
1	Total Gas Consumption	MMSCM	533.822
2	Average Gas price	Rs./SCM	27.04
3	Total Gas Cost	Rs. Cr	1443.67
4	Net Generation	MU	1955.13
5	Variable Cost per unit	Rs./kWh	7.384

**COMMISSION'S ANALYSIS**

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

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

*(a) For coal based stations:*

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

*(b) For gas and liquid fuel based stations*

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

*Where,*

*AUX = Normative auxiliary energy consumption in percentage*

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

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

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

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

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

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

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

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

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

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

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

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

-----

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

- 4.24 The Petitioner has considered the Fuel Cost after considering the total Gas consumption required to run the Plant throughout the year and considering average gas price of Rs. 27.04/SCM which appears to be on higher side. However, landed Price of Primary fuel and Gross Calorific Value has been computed as per the information available in Form 15 of March, April and May 2020 as available on the website of the Petitioner which is as follows:

**Table 4. 7: Fuel Parameters considered for determination of ECR**

Sr. No.	Particulars	UoM	Mar-20	Apr-20	May-20
1	Quantum	000'SCM	8024.104	7583.427	10888.05
2	Cost	Rs Cr	10.835	7.634	12.295
3	GCV	kCal/ SCM	9196.35	9230.85	9221.58
4	LPPF	Rs/ SCM	13.502	10.067	11.292
5	Average LPPF	Rs/ SCM	11.62		
6	Weighted Average GCV	kCal/ SCM	9216.592		

- 4.25 Accordingly, the Commission approves the Energy Charge Rate (ECR) and Fuel Cost for FY 2020-21 as follows:

**Table 4. 8: ECR and Fuel Cost approved by the Commission**

Sr. No.	Particulars	UoM	Petitioner's Submission	Approved Value	Ref.
A	Net Generation	MU	1955.13	1955.13	Table 4.5
B	ECR	Rs/ kWh	7.384	3.176	
C	Fuel Cost	Rs Cr	1423.38	621.01	(AxB)/10

## FIXED COST

## OPERATION AND MAINTENANCE EXPENSES

### PETITIONER'S SUBMISSION

- 4.26 The Petitioner has considered the Normative Operation and Maintenance expenses as per DERC Business Plan Regulations, 2019.
- 4.27 The Petitioner has further submitted that pay and perks of employees of the petitioner Company is determined in line with Central Pay Commission Recommendations. In case

of Petitioner the same has been partially implemented on recommendation of wage revision committee. Accordingly, Petitioner has paid Interim relief to the employees of IPGCL for the years starting from FY 17-18 to till date. Further, the final payment along with the arrears will be paid to the employees after the order of implementation of wage revision committee report and is likely to be implemented in FY 20-21. 27.

Accordingly, State Commission is requested to allow the impact on account of implementation of seventh pay commission additionally in FY 20-21 on actual basis to the petitioner.

4.28 The O&M Expenses submitted by the Petitioner for GTPS is as follows:

**Table 4. 9: Petitioner Submission: O&M Expenses**

Sr. No.	Particulars (Rs.Cr.)	UoM	2020-21
A	O&M expenses as per DERC Business Regulation, 2019	Rs Cr	79.52
B	Impact of 7 <sup>th</sup> Pay commission	Rs Cr	-
C	Total O&M Expenses	Rs Cr	79.52

## COMMISSION'S ANALYSIS

4.29 The Commission has specified the normative Operation and Maintenance Expenses for existing generating stations in Business Plan Regulations, 2019 as follows:

*"6. OPERATION AND MAINTENANCE EXPENSES*

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

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

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

Station	2020-21	2021-22	2022-23
GTPS	29.45	30.58	31.75
PPS-I	23.02	23.90	24.82

....."

*(2) Additional Repair & Maintenance expenses on account of Dry Low NOx (DLN) burners and Sewage Treatment Plant (STP), if any, shall be allowed on actual basis during the*

*Control Period after prudence check at the time of True Up on submission of documentary evidence*

*(3) The impact of difference of amount on account of actual implementation of Seventh Pay Revision and Interim Relief already considered for determination of norms for O&M Expenses, if any, shall be allowed separately in line with the methodology adopted for computation of norms for O&M Expenses, at the time of True up of ARR for relevant Financial year subject to prudence check.”*

- 4.30 Accordingly, the Commission approves the O&M Expenses for GTPS for FY 2020-21 as follows:

**Table 4. 10: Commission Approved O&M Expenses**

Sr. No.	Particulars	UoM	Amount	Ref
A	Base O&M Expenses	Rs Cr	79.52	Para 4.29
B	Impact of 7 <sup>th</sup> Pay Commission	Rs Cr	-	
C	Total O&M Expenses	Rs Cr	79.52	A+B

- 4.31 Impact of any statutory Pay revision on employee's cost as may be applicable on case to case basis shall be considered separately, based on actual payment made by the Petitioner and prudence check at the time of true up as specified in the Business plan Regulations, 2019.

## CAPITAL EXPENDITURE

### PETITIONER'S SUBMISSION

- 4.32 The capitalization plan submitted by the Petitioner during FY 2020-21 is as follows:

**Table 4. 11: Petitioner Submission: Capital Expenditure**

Sr. No.	Particulars	UoM	FY 2020-21
1	Opening GFA	Rs Cr	425.14
2	Addition	Rs Cr	17.33
3	Deletion	Rs Cr	0.00
4	Closing GFA	Rs Cr	442.47
5	Average GFA	Rs Cr	433.81

**COMMISSION'S ANALYSIS**

- 4.33 The Petitioner has projected the capital expenditure for FY 2020-21 of Rs. 17.33 Crore as per Regulation 7(1) of the Business Plan Regulations, 2019. The same has been considered provisionally subject to true-up.
- 4.34 Accordingly, the GFA approved by the Commission for FY 2020-21 is as follows:

**Table 4. 12: Commission Approved: Capital Expenditure**

Sr. No.	Particulars	UoM	FY 2020-21		Ref.
			Petitioner Submission	Approved	
A	Opening GFA	Rs Cr	425.14	421.37	Table 3.18
B	Addition	Rs Cr	17.33	17.33	Business Plan Regulations, 2019
C	Deletion	Rs Cr	0.00	0.00	-
D	Closing GFA	Rs Cr	442.47	438.70	A+B-C
E	Average GFA	Rs Cr	433.81	430.04	(A+D)/2

**DEPRECIATION****PETITIONER'S SUBMISSION**

- 4.35 The Petitioner has submitted that 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, in accordance with the DERC Tariff Regulation, 2017. The total accumulated depreciation allowed by the Commission till FY 2019-20 is Rs 371.68 Cr.
- 4.36 Accordingly, the Petitioner has requested to approve the depreciation for FY 2020-21 as follows:

**Table 4. 13: Petitioner Submission: Depreciation**

Sr. No.	Particulars (Rs Crores)	UoM	FY 2020-21
1	Depreciation	Rs Cr	18.74

**COMMISSION'S ANALYSIS**

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

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

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

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

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

*81. Land other than the land held under lease shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.*

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

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

4.38 It is observed that the cumulative depreciation has reached 70% of the total depreciation, therefore the Commission has spread the remaining depreciable value over the remaining life of the asset.

4.39 Further, it is observed that GTPS Station got commissioned in 1996 and shall complete its useful life by 2021. For determination of remaining depreciable value during the useful life of the plant, the Commission has considered the capital additions of Rs.17.33 Crore proposed during FY 2020-21.



4.40 useful life of the plant, the Commission has considered the capital additions of Rs. 17.33 Crore proposed during FY 2020-21.

4.41 Accordingly, the Commission has approved the depreciation for FY 2020-21 as follows:

**Table 4. 14: Commission Approved Depreciation**

Sr. No.	Particulars	UoM	Petitioner's Submission	Approved	Ref.
A	Average GFA	Rs Cr	433.81	430.04	Table 4.12
B	Opening Accumulated Depreciation	Rs Cr	371.68	371.68	
C	Balance Depreciation	Rs Cr	18.74	15.35	(90%xA)-B
D	Balance Useful life	Years	1	1	
E	Depreciation	Rs Cr	18.74	15.35	C/D

## MEANS OF FINANCING

### PETITIONER'S SUBMISSION

4.42 The Petitioner has submitted that since accumulated depreciation has reached over and above 70% of Gross Fixed Asset, the remaining value is treated as 100% equity.

4.43 The Petitioner has submitted that the requirement of loan and equity as follows:

**Table 4. 15: Petitioner Submission: Requirement of Loan & Equity**

Sr. No.	Particulars	UoM	FY 2020-21
A	Average Net Fixed Asset	Rs Cr	52.75
B	Average Equity	Rs Cr	52.75
C	Average CAPEX Loan	Rs Cr	0.00
D	Working Capital Loan	Rs Cr	446.89
E	Total Loan Requirement	Rs Cr	446.89
F	Average RRB	Rs Cr	499.65

### COMMISSION'S ANALYSIS

4.44 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."

4.45 Accordingly, the Commission has computed the quantum of Loan and Equity required for funding of Net Fixed Assets for FY 2020-21 as follows:

**Table 4. 16: Requirement of Loan and Equity computed by the Commission**

Sr. No.	Particulars	UoM	FY 2020-21		Ref.
			Petitioner Submission	Approved	
A	Average GFA	Rs Cr	433.81	430.04	Table 4.14
B	Opening Accumulated Depreciation	Rs Cr	371.68	371.68	Table 4.14
C	Depreciation for the year	Rs Cr	18.74	15.35	Table 4.14
D	Closing Accumulated Depreciation	Rs Cr	390.42	387.03	B+C
E	Average Accumulated Depreciation	Rs Cr	381.05	379.36	(B+D)/2
F	Average Net Fixed Assets	Rs Cr	52.75	50.68	A-E
G	Average Equity	Rs Cr	52.75	15.20	30% of F
H	Average Loan	Rs Cr	0.00	35.48	70% of F

## WORKING CAPITAL

### PETITIONER'S SUBMISSION

4.46 The Petitioner has submitted that it has calculated the Interest on Working Capital as per DERC Tariff Regulations, 2017.

4.47 Accordingly, the Petitioner has submitted the requirement of Working Capital as follows:

**Table 4. 17: Petitioner Submission: Requirement of Working Capital**

Sr. No.	Particulars	UoM	FY 2020-21
A	Fuel expenses for 1 month	Rs Cr	120.31
B	Maintenance spares @ 30% of O&M	Rs Cr	23.85
C	Liquid fuel stock for ½ month	Rs Cr	30.52
D	O&M expenses for 1 month	Rs Cr	6.63

Sr. No.	Particulars	UoM	FY 2020-21
E	Annual Fixed Cost for the year	Rs Cr	149.86
F	Fuel cost for the year	Rs Cr	1443.67
G	Receivables equivalent to 2 months of capacity and energy charges	Rs Cr	265.59
H	Total Working Capital	Rs Cr	446.89

### COMMISSION ANALYSIS

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

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

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

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

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

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

*Receivables equivalent to two months of capacity charge and energy charge for sale of electricity calculated on normative plant availability factor, duly taking into account mode of operation of the generating station on gas fuel and liquid fuel; and*

*Operation and maintenance expenses for one month."*

4.49 Accordingly, Working Capital requirement for FY 2020-21 has been computed as follows:

**Table 4. 18: Commission Approved: Working Capital Requirement**

Sr. No.	Particulars	UoM	FY 2020-21		Ref.
			Petitioner Submission	Approved	
A	Fuel expenses for 1 month	Rs Cr	120.31	51.75	Tariff Regulations, 2017 & Business Plan
B	Liquid fuel stock for ½ month	Rs Cr	30.52	30.52	
C	Maintenance spares @ 30% of O&M	Rs Cr	23.85	23.85	
D	O&M expenses for 1 month	Rs Cr	6.63	6.63	
E	Annual Fixed Cost for the year	Rs Cr	149.86	118.62	

Sr. No.	Particulars	UoM	FY 2020-21		Ref.
			Petitioner Submission	Approved	
F	Fuel Cost for the year	Rs Cr	1443.67	621.01	Regulations, 2019
G	Receivables equivalent to 2 months of capacity and energy charge	Rs Cr	265.59	123.27	(E+F)/6
H	Total Working Capital	Rs Cr	446.89	236.02	A+B+C+F+G

## WEIGHTED AVERAGE COST OF CAPITAL (WACC) AND RETURN ON CAPITAL EMPLOYED (ROCE)

### PETITIONER'S SUBMISSION

- 4.50 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 ROE is 17.84%.
- 4.51 The Petitioner has further submitted that there is no outstanding capital loan as on date, therefore in order to calculate the return on capital employed petitioner has taken weighted average interest rate on outstanding working capital loan, which is 9.44%. This rate of interest is within prescribed limit of this regulation i.e. inclusive of SBI MCLR of 7.90% as on 10.12.2019 notified by State Bank of India plus margin of 1.54% taken as the difference of the weighted average rate of interest on working capital loan portfolio and SBI MCLR as on 10.12.2019 for FY 20-21.
- 4.52 Accordingly, Petitioner has computed Weighted Average Cost of Capital (WACC) and Return on Capital Employed (RoCE) as follows:

**Table 4. 19:: Petitioner Submission: WACC and RoCE**

Sr. No.	Particulars	UoM	FY 2020-21
A	Average RRB	Rs Cr	499.65
B	Total Loan	Rs Cr	446.89
C	Average Equity	Rs Cr	52.75
D	Cost of Debt, Rd	%	9.44%
E	Return on Equity, Re	%	17.84%
F	WACC	%	10.33%
G	RoCE	%	51.60

### COMMISSION'S ANALYSIS

- 4.53 Regulation 3 and 4 of Business Plan Regulations, 2019 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:*

$$\text{Rate of Return on Equity} = 14 / [(100 - \text{Tax Rate}) / 100]$$

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

- 4.54 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 2020-21.

- 4.55 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.”*

- 4.56 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.”*

- 4.57 The Commission has specified Margin for Rate of Interest on loan in Business Plan Regulations, 2019 as follows:

***“5. MARGIN FOR RATE OF INTEREST ON LOAN***

*The rate of interest on loan for a financial year shall be Marginal Cost of Fund based Lending Rate (MCLR) of SBI as on 1<sup>st</sup> April of that financial year plus the Margin. The Margin, in terms of Regulation 4(2) of the DERC (Terms and Conditions for Determination of Tariff) Regulations, 2017 for the Generating Entity, is allowed as the difference between the weighted average rate of interest on actual loan portfolio and the MCLR as on 1<sup>st</sup> April of that financial year:*

*Provided that the Margin shall not exceed 5.00%, 4.25% and 3.50% for the first, second and third year of the control period, respectively:*

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

- 4.58 In view of the above, as the Petitioner does not have any outstanding loan, the Commission has provisionally considered the rate of interest on loan by considering the Bank Rate as Marginal Cost of Fund based Lending Rate (MCLR) of SBI as on 01/04/2020 i.e. 7.75% for FY 2020-21 subject to true-up.
- 4.59 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  $i$ th year of the Control Period shall be computed in the following manner:*

$$RRBi = RRB_{i-1} + \Delta ABi / 2 + \Delta WCi;$$

*Where,*

*“ $i$ ” is the  $i$ th year of the Control Period;*

*RRBi: Average Regulated Rate Base for the  $i$ th year of the Control Period;*

*$\Delta WCi$ : Change in working capital requirement in the  $i$ th year of the Control Period from  $(i-1)$ th year;*

*$\Delta ABi$ : Change in the Capital Investment in the  $i$ th year of the Control Period;*

*This component shall be arrived as follows:*

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

Where,

*Invi*: Investments projected to be capitalised during the  $i^{th}$  year of the Control Period and approved;

*Di*: Amount set aside or written off on account of Depreciation of fixed assets for the  $i^{th}$  year of the Control Period;

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

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

*RRB i-1*: Closing Regulated Rate Base for the Financial Year preceeding the  $i^{th}$  year of the Control period. For the first year of the Control Period, Closing RRB i-1 shall be the Opening Regulated Rate Base for the Base Year i.e. RRBO;

$$RRBO = OCFAO - ADO - CCO + WCO;$$

Where;

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

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

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



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

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

$$RoCE = WACC_i * RRBi$$

*Where,*

*WACC<sub>i</sub> is the Weighted Average Cost of Capital for each year of the Control Period;*

*RRBi – Average Regulated Rate Base for the i<sup>th</sup> 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;*

*r<sub>d</sub> is the Cost of Debt;*

*r<sub>e</sub> is the Return on Equity.”*

- 4.60 In view of the above, the Commission has computed Return on Capital Employed (RoCE) as follows:

Table 4. 20: Commission Approved: WACC and RoCE

Sr. No.	Particulars	UoM	Petitioner's Submission	FY 2020-21
A	Average Net Fixed Asset	Rs Cr	52.75	50.68
B	Average Equity	Rs Cr	52.75	15.20
C	Average CAPEX Loan	Rs Cr	-	35.48
D	Working Capital Loan	Rs Cr	446.89	236.02
E	Average Loan Requirement	Rs Cr	446.89	271.50
F	Average RRB	Rs Cr	499.65	286.70
G	Grossed up Rate of Return on Equity	%	17.84	17.84
H	Rate of Interest on Loan	%	9.44	7.75
I	Weighted Average Cost of Capital (WACC)	%	10.33	8.29
J	RoCE	Rs Cr	51.60	23.75

## SUMMARY OF FIXED COST

### PETITIONER'S SUBMISSION

- 4.61 Annual Fixed Cost for FY 2020-21 as submitted by the Petitioner is as follows:

Table 4. 21: Petitioner Submission: Total Fixed Cost

Sr. No.	Particulars	UoM	FY 2020-21
1	Return on Capital Employed	Rs Cr	51.60
2	Depreciation	Rs Cr	18.74
3	Operation and Maintenance Expenses	Rs Cr	79.52
4	Annual Fixed Cost	Rs Cr	149.86
5	Net Generation	MU	1955.13
6	Fixed Cost Per Unit	Rs/ kWh	0.766

## COMMISSION ANALYSIS

- 4.62 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.”*

- 4.63 Accordingly, the Commission approves the Annual Fixed Cost for FY 2020-21 by considering the various components as follows:

**Table 4. 22: Commission Approved: Annual Fixed Cost**

Sr. No.	Particulars	UoM	FY 2020-21		Ref.
			Petitioner's Submission	Commission Approved	
A	Return on Capital Employed	Rs Cr	51.60	23.75	Table 4.20
B	Depreciation	Rs Cr	18.74	15.35	Table 4.14
C	Operation and Maintenance Expenses	Rs Cr	79.52	79.52	Table 4.10
<b>D</b>	<b>Annual Fixed Cost</b>	<b>Rs Cr</b>	<b>149.86</b>	<b>118.62</b>	<b>A+B+C</b>
E	Net Generation	MU	1955.13	1955.13	Table 4.5
F	Fixed Cost per unit	Rs./kWh	0.766	0.607	$F=(D/E)*10$

**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 The Commission directs the Petitioner to reconcile the payment to be made to Delhi Transco Limited (DTL) as part of employee expenses with regard to IPGCL staff diverted in DTL as per directions of Ministry of Power, till date.
- 5.6 The Petitioner vide its letter dated 25/11/2019 requested the Commission for extension/continuation of GTPS as PPA is expiring on March, 2021. However, the Commission directs the Petitioner to file a Petition for such extension/continuation of GTPS with detailed cost-benefit analysis.
- 5.7 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 and file a compliance report to the Commission within a period of 3 months.

## Annexure- I

**DELHI ELECTRICITY REGULATORY COMMISSION**

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

F.11(1752)/DERC/2019-20/

**Petition No. 04/2020**In the matter of: **Petition for Truing Up of ARR for FY 2018-19.**

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  
Hon'ble Sh. A.K. Singhal, Member  
Hon'ble Dr. A. K. Ambasht, Member

**Appearance:**

1. Sh. R. K. Yadav, IPGCL

**INTERIM ORDER**

(Date of Hearing: 23.01.2020)

(Date of Order: 24.01.2020)

1. The instant Petition has been filed by M/s. Indraprastha Power Generation Co. Ltd. (IPGCL) for Truing-up of its ARR for FY 2018-19.
2. The Petition has been scrutinised and found generally in order as per the DERC Comprehensive (Conduct of Business) Regulations, 2001.
3. The Petition is admitted. The Petitioner shall furnish clarifications/ additional information, if and when required by the Commission.

  
(A.K. Ambasht)  
Member

  
(A.K. Singhal)  
Member

  
(Justice S S Chauhan)  
Chairperson

## Annexure- I(a)

**DELHI ELECTRICITY REGULATORY COMMISSION**

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

F.11(1752)/DERC/2019-20/

Petition No. 04/2020

In the matter of: Tariff Petition for determination of tariff for FY 2020-21 and True Up of ARR for FY 2018-19.

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  
Hon'ble Sh. A.K. Singhal, Member  
Hon'ble Dr. A. K.Ambasht, Member

**Appearance:**

1. Sh. R. K. Yadav, IPGCL

**INTERIM ORDER**

(Date of Hearing: 19.02.2020)

(Date of Order: 20.02.2020)

- The representatives of the Petitioner M/s. Indraprastha Power Generation Co. Ltd. (IPGCL) states that the instant Petition filed for determination of tariff for FY 2020-21 may be taken as additional submission of already admitted Petition for True-up of its ARR for FY 2018-19.
- The request of the Petitioner is allowed and accordingly, the petition for tariff for FY 2020-21 is taken on record as an additional submission in True Up Petition for FY 2018-19. The Petitioner shall furnish clarifications/ additional information, if and when required by the Commission.

  
(A.K. Ambasht)  
Member

  
(A.K. Singhal)  
Member

  
(Justice S S Chauhan)  
Chairperson

## Annexure– II

**LIST OF RESPONSES RECEIVED FROM STAKEHOLDERS ON TRUE UP OF FY 2018-19**  
**AND ARR FOR FY 2020-21**

Sr. No.	R. No.	Name	Address	Category	Company/ Licensee	Date of Receipt
1.	1	Sh. Rajesh Aggarwal Gen. Secretary	Shahdara Residents Welfare Association 348, fresh Bazar, Shahdara, Delhi 110 032	RWA	DISCOMs	11.03.2020
2.	2	Dayaram Devedi Vice President	262, Katra Pyare Lal Chandni Chowk, Delhi 110 006	Association	DISCOMs	11.03.2020
3.	3	Sh. V.K. Malhotra General Secretary	DVB Engineers' Association D-3, Vikas Puri, New Delhi 110 018	Association	DISCOMs	12.03.2020
	3A	Sh. V.K. Malhotra General Secretary	DVB Engineers' Association D-3, Vikas Puri, New Delhi 110 018	Association	PPCL	16.03.2020
4.	4	Sh. Harbans Sharma	287, Kucha Ghasi Ram Fatehpuri Chandni Chowk Delhi 110 006	Association	DISCOMs	12.03.2020
5.	5	Sh. Shiv Sharma	D-8/155 Brij Puri, Delhi 110 094	RWA	DISCOMs	13.03.2020
6.	6	Sh. Balkishan Gupta President	1449/22, Gali No. 9, Durgapuri, Shahdara, Delhi 110 093	RWA	DISCOMs	12.03.2020
7.	7	Sh. Ranjeet Singh Luheera President	527 B, School Block, Shakarpur, Delhi 110 092	NGO	DISCOMs	12.03.2020
8.	8	Sh. Jai Pal Singh Verma President	S-305, School Block, Shakarpur, Delhi 110 092	RWA	DISCOMS	12.03.2020
9.	9	Sh. D.K. Bhandari President	Awasiya Kalyan Samiti (Regd.) Pocket J & K , Dilshad Garden, Delhi 110 095	NGO	DISCOMs	12.03.2020
10.	10	Sh. Rajbir Singh	Glat No. 8, 2 <sup>nd</sup> Floor, Rama Apartment, C-54, Panchsheel Vihar, Malviya Nagar, New Delhi 110 017	Domestic	DISCOMs	13.03.2020

Sr. No.	R. No.	Name	Address	Category	Company/ Licensee	Date of Receipt
			<a href="mailto:Rsjayanth01@gmail.com">Rsjayanth01@gmail.com</a>			
11.	11	Sh. S.B. Kuchhal Legal Advisor	Kothi No. 1, Road No. 33 East Punjabi Bagh New Delhi 110 026	Commercial	DISCOMs	16.03.2020
12.	12	Ms. Renu Pal President	Resident Welfare Association (Regd.) Pocket B-3, Mayur Vihar Phase-III, Delhi 110 096	RWA	DISCOMs	16.03.2020
13.	13	Sh. S.R. Abrol	L-2, 91B, DDA, LIG, Kalkaji New Delhi	Domestic	DISCOMs	16.03.2020
14.	14	Sh. Bhopal Singh President	Resident Welfare Association, H-16/830, Bapa Nagar, Payare Lal Marg, Karol Bagh, New Delhi 110 005 <a href="mailto:jatavbhopalsingh@gmail.com">jatavbhopalsingh@gmail.com</a>	RWA	DISCOMs	16.03.2020
15.	15	Sh. Rohit Arora President	Gyan Park Welfare Society 17A, Gyan Park, Chander Nagar, Kishna Nagar, Delhi 110 051	RWA	DISCOMs	16.03.2020
16.	16	Sh. Deepak Tuli	Prasad nagar, Karol Bagh, New Delhi 110 005	RWA	DISCOMs	16.03.2020
17.	17	Sh. Kuldeep Kumar General Secretary	Delhi State Electricity Workers Union(DSEWU) 7/6, Yamuna Vihar, Delhi 110 053 <a href="mailto:kuldeepsewunion@gmail.com">kuldeepsewunion@gmail.com</a>	Association	DISCOMs	17.03.2020
	17A	Sh. Kuldeep Kumar General Secretary	Delhi State Electricity Workers Union(DSEWU) 7/6, Yamuna Vihar, Delhi 110 053 <a href="mailto:kuldeepsewunion@gmail.com">kuldeepsewunion@gmail.com</a>	Association	PPCL	19.03.2020
18.	18	Sh. S.K. Sharma General Manager (C&RA)	Delhi Transco Limited Shakti Sadan, Kotla Road, New Delhi 110 002	Govt.	BRPL	18.03.2020
	18A	Sh. S.K. Sharma General Manager (C&RA)	Delhi Transco Limited Shakti Sadan, Kotla Road, New Delhi 110 002	Govt.	BYPL	18.03.2020
	18B	Sh. S.K. Sharma General Manager	Delhi Transco Limited Shakti Sadan,	Govt.	TPDDL	18.03.2020



Sr. No.	R. No.	Name	Address	Category	Company/ Licensee	Date of Receipt
		(C&RA)	Kotla Road, New Delhi 110 002			
	18C	Sh. S.K. Sharma General Manager (C&RA)	Delhi Transco Limited Shakti Sadan, Kotla Road, New Delhi 110 002	Govt.	NDMC	18.03.2020
	18D	Sh. S.K. Sharma General Manager (C&RA)	Delhi Transco Limited Shakti Sadan, Kotla Road, New Delhi 110 002	Govt.	BRPL	29.06.2020
	18E	Sh. S.K. Sharma General Manager (C&RA)	Delhi Transco Limited Shakti Sadan, Kotla Road, New Delhi 110 002	Govt.	BYPL	29.06.2020
	18F	Sh. S.K. Sharma General Manager (C&RA)	Delhi Transco Limited Shakti Sadan, Kotla Road, New Delhi 110 002	Govt.	TPDDL	29.06.2020
	18G	Sh. S.K. Sharma General Manager (C&RA)	Delhi Transco Limited Shakti Sadan, Kotla Road, New Delhi 110 002	Govt.	NDMC	29.06.2020
19.	19	Sh. A.K. Rampal	F-26/114, Sector, 7, Rohini, Delhi 110 005	Domestic	IPGCL and PPCL	17.03.2020
	19A		<a href="mailto:anuprampal@gmail.com">anuprampal@gmail.com</a>		DISCOMs	19.06.2020
20	20	Sh. Mohinder Pal	<a href="mailto:pal458395@gmail.com">pal458395@gmail.com</a>	Domestic	DISCOMs	18.03.2020
21	21	Sh. Saurabh Gandhi Gen. Secretary	United Residents of Delhi C-6/7 Rana Pratap Bagh, Delhi 110 007	RWA	DISCOMs	16.03.2020
22	22	Sh. Kuwar Pratap Singh Secretary	Bhajanpura Jan Sahiyog, (regd.) D-408, Street No. 9, D, Bhajanpura, Delhi 110 053	Domestic	DISCOMs	11.03.2020
23	23	Sh. B.S. Sachdev President	Elderly Peoples Forum Varishth Nagrik Manoranjan Kendra, Ist Floor, C-4 Block, Keshav Puram, Delhi 110 035	RWA	DISCOMs	20.03.2020
		Sh. B.S. Sachdev				

Sr. No.	R. No.	Name	Address	Category	Company/ Licensee	Date of Receipt
	23A	President				20.03.2020
24	24	Sh. Ishwar Dutt	B-120, Vijay Park, Maujpur, New Delhi 110 053	Domestic	DISCOMs	20.03.2020
25.	25	Sh. Satish Das	H.No. 90, Panna Mojan, Bawana, New Delhi 110 039	Domestic	TPDDL	20.03.2020
26	26	Er. CV Vishwanathan	99, Arjun Apartments Sector 13, Dwarka Delhi 110 075	Domestic	DISCOMs	20.03.2020
27	27	Sh. Virat Gandhi	Rang Rasayan Apartments 13, Rajapur, Pocket 7, Sector, 13, Rohini, Delhi 110 05	Domestic	TPDDL	20.03.2020
28	28	Sh. Vipin Gupta	A-17, Antriksh Apartments, New Town Co-op. Group Housing Society Ltd. Sector, 14-Ext. Rohini, Delhi 110085  <a href="mailto:Vipin.bfi@gmail.com">Vipin.bfi@gmail.com</a>	Domestic	DISCOMs	
29	29	Sh. A.K. Datta	222, Pocket E, Mayur Vihar, Phase-II Delhi 110 091	Domestic	BYPL	
30.	30	Sh. Saurabh Gandhi General Secretary	United Resident of Delhi  <a href="mailto:urdrwas@gmail.com">urdrwas@gmail.com</a>	RWA	BYPL	22.06.2020
31	31	Sh. B.B. Tewari Social Intraprenuer	<a href="mailto:urdrwas@gmail.com">urdrwas@gmail.com</a>	RWA	BYPL	22.06.2020
32	32	Sh. Ram Lal Tiwari	House No. 581, Main Narela Road, Alipur, Delhi 110 036	Domestic	DISCOMs	20.03.2020
33	33	Sh. Rakesh Chauhan	<a href="mailto:Chauhan.rakesh70111@gmail.com">Chauhan.rakesh70111@gmail.com</a>	Domestic	TPDDL	24.06.2020
34	34	Sh. Saurabh Srivastava Regulatory affairs	Indian Energy Exchange Limited Unit. 3,4,5 & 6 Fourth Floor, TDI Centre, Plot No. 7 Jasola District Centre, New Delhi 110 025  <a href="mailto:Saurabh.Srivastava@iexindia.com">Saurabh.Srivastava@iexindia.com</a>	Industrial/ Commercial	DISCOMs	26.05.2020
35.	35	Sh. Lalita Kumar	<a href="mailto:Lalitikumar69@dtu.ac.in">Lalitikumar69@dtu.ac.in</a>	Domestic	DISCOMs	24.06.2020
36.	36	PK Enterprises	<a href="mailto:Pk.enterprises76@gmail.com">Pk.enterprises76@gmail.com</a>	-	TPDDL	24.06.2020
37	37	Sh. Arvind Duhoon	<a href="mailto:Arvind.duhoon@gmail.com">Arvind.duhoon@gmail.com</a>	Domestic	TPDDL	24.06.2020
38	38	Ms. Preeti Sarna	<a href="mailto:sarnapreety@gmail.com">sarnapreety@gmail.com</a>	Domestic	DISCOMs	25.06.2020

Sr. No.	R. No.	Name	Address	Category	Company/ Licensee	Date of Receipt
39.	39	Sh. Rajesh Sood, President Vijay Niketan, RWA	Resident of Welfare Association H-89, DDA LIG Flats, Naraina Vihar, New Delhi 110 028	RWA	DISCOMs	25.06.2020
40.	40.	Sh. Arvind K. Jain	SHRI SAI BABA CO-OPERATIVE GROUP HOUSING SOCIETY LTD. PLOT No. 4, SECTOR-9, ROHINI, DELHI- 110085	RWA	DISCOMs	25.06.2020
41.	41.	Sh. Sukh preet	<a href="mailto:sukhpreetsir@gmail.com">sukhpreetsir@gmail.com</a>	Domestic	DISCOMs	25.06.2020
42.	42.	Ms. Maneela bhugra	<a href="mailto:Maneela.bhugra@gmail.com">Maneela.bhugra@gmail.com</a>	Domestic	TPDDL	25.06.2020
43.	43.	Sh. Naresh Kumar	<a href="mailto:Maresh.mkuan@gmail.com">Maresh.mkuan@gmail.com</a>	Domestic	DISCOMs	25.06.2020
44.	44.	Ms. Vandana Thakur	<a href="mailto:Vandana.thakur34@gmail.com">Vandana.thakur34@gmail.com</a>	Domestic	DISCOMs DTL	25.06.2020
45.	45.	Sh. Rajan Gupta	<a href="mailto:Rajang2442@gmail.com">Rajang2442@gmail.com</a>	Domestic	TPDDL	25.06.2020
46.	46.	Ms. Shivangi	<a href="mailto:Shivangi.sh86@gmail.com">Shivangi.sh86@gmail.com</a>	Domestic	TPDDL	26.06.2020
47.	47.	Sh. Rajeev	<a href="mailto:Bh.rajeev2012@gmail.com">Bh.rajeev2012@gmail.com</a>	Domestic	TPDDL	26.06.2020
48.	48.	Sh. Prabhat Pal	<a href="mailto:Prabhatpal187@gmail.com">Prabhatpal187@gmail.com</a>	Domestic	DISCOMs DTL	26.06.2020
49.	49.	Sh. Anil Kumar Gupta, Secretary	NEW TOWN CO-OPERATIVE GROUP HOUSING SOCIETY LTD. Plot No. D-3, Sector: 14-Extn., ROHINI, Delhi 110085 <a href="mailto:newtowncghs@gmail.com">newtowncghs@gmail.com</a>	Domestic	DISCOMs	26.06.2020
50.	50.	Sh. Anurag	<a href="mailto:anuragbhel@gmail.com">anuragbhel@gmail.com</a>	Domestic	TPDDL	26.06.2020
51.	51.	Sh. Ankit Singh	<a href="mailto:Ankitsingh1092@gmail.com">Ankitsingh1092@gmail.com</a>	Domestic	DISCOMs	26.06.2020
52.	52.	Sh. Rajender Bansal	<a href="mailto:Rajenderbansal47@gmail.com">Rajenderbansal47@gmail.com</a>	Domestic	DISCOMs	26.06.2020
53.	53.	<a href="mailto:Dikansh94@gmail.com">Dikansh94@gmail.com</a>	<a href="mailto:dikansh94@gmail.com">dikansh94@gmail.com</a>	Domestic	DISCOMs	27.06.2020
54.	54	Sh. Suresh Kumar Gupta Director	The Midland fruit and Vegetable products (India) Pvt. Ltd. Jumbo House, Dr. Jha Marg, O.I.A PH-3, New Delhi 110 020	Agricultural	DISCOMs	25.06.2020
55.	55	Sh. Narendra Prakash Bhargava Proprietor	Jumbo International Jumbo House, Dr. Jha Marg, O.I.A PH-3, New Delhi 110 020	Agricultural	DISCOMs	25.06.2020
56.	56	Ms. Neeta Gupta	A-17, Antriksh Apartments, New Town, CGHS Ltd. Sector 14-Extension, Rohini Delhi 110 085  <a href="mailto:Neetagupta.vg111@gmail.com">Neetagupta.vg111@gmail.com</a>	Domestic	DISCOMs	28.06.2020

Sr. No.	R. No.	Name	Address	Category	Company/ Licensee	Date of Receipt
57	57	Sh. Sandeep Sharma	<a href="mailto:Sandeep.sharmaji80@gmail.com">Sandeep.sharmaji80@gmail.com</a>	Domestic	TPDDL	29.06.2020
58	58	Sh. B.P. Agarwal Advocate	<a href="mailto:Bpagarwal57@gmail.com">Bpagarwal57@gmail.com</a>	Industrial/ Commercial	TPDDL	29.06.2020
59	59	Sh. A K Rampal	<a href="mailto:anuprampal@gmail.com">anuprampal@gmail.com</a>	Domestic	IPGCL & PPCL	30.06.2020
60	60	Sh. Arindam.K. Das, Regulatory Affairs BRPL	BSES Rajdhani Power Limited Corp. Office- Nehru Place, Delhi-19	DISCOM	IPGCL & PPCL	30.06.2020
61.	61	Sh. OP Singh, Addnl. G.M-HOD Regulatory TPDDL	Tata Power Delhi Distribution Limited Hudson Lines Kingsway Camp Delhi 110009	DISCOM	IPGCL	30.06.2020
62.	62	Sh. OP Singh, Addnl. G.M-HOD Regulatory TPDDL	Tata Power Delhi Distribution Limited Hudson Lines Kingsway Camp Delhi 110009	DISCOM	PPCL	30.06.2020
63.	63	Sh. OP Singh, Addnl. G.M-HOD Regulatory TPDDL	Tata Power Delhi Distribution Limited Hudson Lines Kingsway Camp Delhi 110009	DISCOM	DTL	30.06.2020
64.	64	Sh. Ashok Bhasin	North Delhi Residents Welfare Federation  <a href="mailto:Ashok.bhasin2015@gmail.com">Ashok.bhasin2015@gmail.com</a>	RWA	DISCOMS	30.06.2020
65.	65.	Ms. Monica Rathamani	Sterlite Power Transmission Ltd. F-1 Mira Corporate Suites, Ishwar Nagar, New Delhi – 110065  <a href="mailto:Monica.rathamani@sterlite.com">Monica.rathamani@sterlite.com</a>	commercial	DTL	01.07.2020
66.	66	Ms. Somya Tripathi Asstt. Manager	Delhi Metro Rail Corporation Ltd. Metro Bhawan, Fire Brigade Lane, Barakhamba Road, New Delhi 110 001	Govt.	DISCOMs	01.07.2020
67	67	Sh. Ashok Kumar Gupta	H.No. D-8/13 KH. No. 37/14, Ground Floor, Rama Vihar Delhi	Domestic	DISCOMs	26.06.2020
68	68	Sh. Chander Singh	House No. 78-B Block K, Sharma Colony, Budh Vihar, Delhi 110 086	Domestic	DISCOMs	26.06.2020
69	69	Sh. Srikant Kumar	House No. 3245, Sarop Nagar, Tri Nagar, Delhi 110 035	Domestic	TPDDL	26.06.2020

Sr. No.	R. No.	Name	Address	Category	Company/ Licensee	Date of Receipt
70	70	Sh. Gopal Singh Badal	House No. A-2373, Gali No. 5 Rani Bagh, Delhi 110 034	Domestic	TPDDL	26.06.2020
71	71	Sh. Dharam Pal	<a href="mailto:Pal458395@gmail.com">Pal458395@gmail.com</a>	Domestic	DISCOMs	23.06.2020
72	72	Sh. Dharam Pal	House No. 159, Ground Floor Block Naraina, Delhi 110 028	Domestic	TPDDL	26.06.2020
73	73	Sh. Raju Aggarwal (Head Regulatory	BSES Yamuna Power Limited Shakti Kiran Building, Karkardooma, Delhi 110 032	Licensee	IPGCL	03.07.2020
	73A				PPCL	03.07.2020
	73B				DTL	03.07.2020
74	74	Sh. M.K.Poddar Ececutive Engineer (Comml.)	New Delhi Municipal Council Room No. 103, First Floor, S.B.S. Place, Gole Market, New Delhi 110001	Licensee	DISCOMs	19.08.2019
75	75	Dr. Ashok Kumar	1064, Gandhi Ashram, Narela, Delhi 110040	Association	DISCOMs	04.03.2020
76	76	Dr. Anil Kumar Sharma	National Council for Teacher Education	GOVT.	DISCOMs	22.10.2019
77	77	Sh. Sanjay Vig (General Secretary)	D.S.I.D.C. S F S Entrepreneur Association (Regd.)	Association	DISCOMs	18.10.2019
78	78	Sh. Surender Gupta (General Secretary)	Mangolpuri Industrial Area (Phase-I&II) C.E.T.P. Society (Regd.)	Association	DISCOMs	18.10.2019