Jharkhand State Electricity Regulatory Commission

Order on

True-up for FY 2018-19,

Annual Performance Review for FY 2019-20 and

ARR & Tariff for FY 2020-21

for

Jharkhand Bijli Vitran Nigam Limited (JBVNL)

Ranchi

October 01, 2020

CONTENTS

List of Abbreviations

Abbreviation	Description
A&G	Administrative and General
ACS/ACoS	Average Cost of Supply
AMG/MMG	Annual Minimum Guarantee
APNRL	Adhunik Power and Natural Resources Limited
APR	Annual Performance Review
APTEL	Appellate Tribunal for Electricity
ARR	Aggregate Revenue Requirement
AT&C	Aggregate Technical & Commercial
BSEB	Bihar State Electricity Board
CAG	Comptroller and Auditor General
CAGR	Compound Average Growth Rate
CCG	Consumer Contribution and Grants
CGRF	Consumer Grievance Redressal Forum
COD	Commercial Operation Date
CSD	Consumer Security Deposit
CWIP	Capital Works in Progress
DDUGJY	Deen Dayal Upadhyaya Gram Jyoti Yojana
DPS	Delayed Payment Surcharge
DT	Distribution Transformer
DVC	Damodar Valley Corporation
EA	Electricity Act, 2003
FPA	Fuel Purchase Adjustment
FY	Financial Year
GFA	Gross Fixed Assets
GoJ	Government of Jharkhand
HP	Horse Power
HTS	High Tension Services (Industrial)
HTSS	High Tension Special Services (Industrial)
IAS	Irrigation and Agriculture Services
IEX	Indian Energy Exchange
IoWC	Interest on Working Capital
IPDS	Integrated Power Development Scheme
IPP	Independent Power Producer
JBVNL	Jharkhand Bijli Vitran Nigam Limited
JREDA	Jharkhand Renewable Energy Development Agency
JSBAY	Jharkhand Sampurna Bijli Achchadan Yojna
JSEB	Jharkhand State Electricity Board
JSERC	Jharkhand State Electricity Regulatory Commission
JUSNL	Jharkhand Urja Sancharan Nigam Limited
JUUNL	Jharkhand Urja Utpadan Nigam Limited
JUVNL	Jharkhand Urja Vikas Nigam Limited
kW(h)	kilo Watt (hour)

kVA(h)	kilo Volt-Ampere (hour)
LTIS	Low Tension Industrial Services
MD	Maximum Demand
MDI	Maximum Demand Indicator
MES	Military and Engineering Services
MOD	Merit Order Despatch
MoP	Ministry of Power
MoU	Memorandum of Understanding
MU	Million Units
MW	Megawatt
MYT	Multi Year Tariff
NFA	Net Fixed Assets
NTI	Non-Tariff Income
O&M	Operations and Maintenance
PAF	Plant Availability Factor
PPA	Power Purchase Agreement
PSS	Power Sub-Station
PTPS	Patratu Thermal Power Station
R&M	Repair and Maintenance
RAPDRP	Restructured Accelerated Power Development and Reforms Programme
RGF	Resource Gap Funding
RGGVY	Rajiv Gandhi Grameen Vidyutikaran Yojana
RE	Renewable Energy
REC	Renewable Energy Certificates
RoE	Return on Equity
RPO	Renewable Purchase Obligation
RTS	Railway Traction Services
SAC	State Advisory Committee
SBD	Standard Bid Documents
SBI	State Bank of India
SECI	Solar Energy Corporation of India
SERC	State Electricity Regulatory Commission
SHPS	Sikidri Hydo Power Station
SS	Streetlight Services
T&D	Transmission & Distribution
TVNL	Tenughat Vidyut Nigam Limited
TVS	Technical Validation Session
UDAY	Ujwal Discom Assurance Yojana
USO	Universal Supply Obligation
WBSEB	West Bengal State Electricity Board

List of Tables

BEFORE

Jharkhand State Electricity Regulatory Commission, Ranchi

Case (Tariff) No.: 13 of 2019

In the matter of:

Petition for

True-up for FY 2018-19,

Annual Performance Review for FY 2019-20

And

ARR and Tariff for FY 2020-21

In the matter:

Jharkhand Bijli Vitran Nigam Limited (JBVNL),
Dhurwa, HEC, Ranchi ……………………………………………… **Petitioner**

PRESENT

Hon'ble Mr. Rabindra Narayan Singh	Member (Engg.)
Hon'ble Mr. Pravas Kumar Singh	Member (Legal)

Order dated October 01, 2020

Jharkhand Bijli Vitran Nigam Limited (hereinafter referred to as 'JBVNL' or the 'Petitioner') has filed the Petition dated December 30, 2019 for approval of True up for FY 2018-19, Annual Performance Review for FY 2019-20 and ARR & Tariff for FY 2020-21.

A 1 INTRODUCTION

Jharkhand State Electricity Regulatory Commission

1.1 The Jharkhand State Electricity Regulatory Commission (hereinafter referred to as the "JSERC" or "the Commission") was established by the Government of Jharkhand under Section 17 of the Electricity Regulatory Commission Act, 1998 on August 22, 2002. The Commission became operational with effect from April 24, 2003.

1.2 The Government of Jharkhand vide its notification dated August 22, 2002 had defined the functions of JSERC as per Section 22 of the Electricity Regulatory Commission Act, 1998 to be the following, namely:

(a) to determine the tariff for electricity, wholesale, bulk, grid or retail, as the case may be, in the manner provided in Section 29;
(b) to determine the tariff payable for the use of the transmission facilities in the manner provided in Section 29;
(c) to regulate power purchase and procurement process of the transmission utilities and distribution utilities including the price at which the power shall be procured from the generating companies, generating stations or from other sources for transmission, sale, distribution and supply in the State;
(d) to promote competition, efficiency and economy in the activities of the electricity industry to achieve the objects and purposes of this Act.

1.3 After the Electricity Act, 2003 (hereinafter referred to as the 'Act' or 'EA 2003') came into force, the earlier Electricity Regulatory Commissions Act, 1998 stands repealed and the functions of SERCs are now defined under Section 86 of the Act.

1.4 In accordance with Section 86 (1) of the Act, the JSERC discharges the following functions:

(a) determine the tariff for generation, supply, transmission and wheeling of electricity, wholesale, bulk or retail, as the case may be, within the State:
Provided that where open access has been permitted to a category of consumers under Section 42, the State Commission shall determine only the wheeling charges and surcharge thereon, if any, for the said category of consumers;
(b) regulate electricity purchase and procurement process of distribution licensees including the price at which electricity shall be procured from the generating

companies or licensees or from other sources through agreements for purchase of power for distribution and supply within the State;

(c) facilitate intra-State transmission and wheeling of electricity;

(d) issue licences to persons seeking to act as transmission licensees, distribution licensees and electricity traders with respect to their operations within the State;

(e) promote cogeneration and generation of electricity from renewable sources of energy by providing suitable measures for connectivity with the grid and sale of electricity to any person, and also specify, for purchase of electricity from such sources, a percentage of the total consumption of electricity in the area of a distribution licensee;

(f) adjudicate upon the disputes between the licensees and generating companies; and to refer any dispute for arbitration;

(g) levy fee for the purposes of this Act;

(h) specify State Grid Code consistent with the Grid Code specified under Clause (h) of sub-section (1) of Section 79;

(i) specify or enforce standards with respect to quality, continuity and reliability of service by licensees;

(j) fix the trading margin in the intra-state trading of electricity, if considered, necessary;

(k) discharge such other functions as may be assigned to it under this Act.

1.5 The Commission has to also advise the State Government as per sub section 2 of Section 86 of the Act, on all or any of the following matters, namely:

(a) promotion of competition, efficiency and economy in activities of the electricity industry;

(b) promotion of investment in electricity industry;

(c) reorganisation and restructuring of electricity industry in the State;

(d) matters concerning generation, transmission, distribution and trading of electricity or any other matter referred to the State Commission by that Government.

1.6 The State Commission ensures transparency while exercising its powers and discharging its functions.

1.7 In discharge of its functions, the State Commission is also guided by the Tariff Policy as notified by the Government of India under Section 3 of the Act. The objectives of the Tariff Policy are to:

(a) ensure availability of electricity to consumers at reasonable and competitive rates;

(b) ensure financial viability of the sector and attract investments;

(c) promote transparency, consistency and predictability in regulatory approaches across jurisdictions and minimize perceptions of regulatory risks;

(d) promote competition, efficiency in operations and improvement in quality of supply.

The Petitioner - Jharkhand Bijli Vitran Nigam Limited

1.8 The erstwhile Jharkhand State Electricity Board (JSEB) was constituted on March 10, 2001 under the Electricity (Supply) Act, 1948 as a result of the bifurcation of the erstwhile State of Bihar. Before that, the Bihar State Electricity Board (BSEB) was the predominant entity entrusted with the task of generating, transmitting and supplying power in the State.

1.9 The Energy Department, Government of Jharkhand, vide its Letter No. 1/Board-01-Urja-26/13-1745 dated June 28, 2013 unbundled the erstwhile JSEB into following companies:

a) Jharkhand Urja Vikas Nigam Ltd. (JUVNL) being the holding company;
b) Jharkhand Urja Utpadan Nigam Ltd. (JUUNL) undertaking the generation function of the erstwhile JSEB;
c) Jharkhand Bijli Vitran Nigam Ltd. (JBVNL) undertaking the distribution function of the erstwhile JSEB;
d) Jharkhand Urja Sancharan Nigam Ltd. (JUSNL) undertaking the transmission function of the erstwhile JSEB.

1.10 Jharkhand Bijli Vitran Nigam Ltd. (herein after to be referred to as "JBVNL" or "the Petitioner") has been incorporated under Indian Companies Act, 1956 pursuant to decision of Government of Jharkhand to reorganize erstwhile JSEB.

1.11 Reorganization of the JSEB has been done by Government of Jharkhand pursuant to "Part XIII – Reorganization of Board" read with Section 131 of The Electricity Act 2003. The Petitioner is a Company constituted under the provisions of Government of Jharkhand, General Resolution as notified by transfer scheme vide notification no. 8, dated January 6, 2014, and is duly registered with the Registrar of Companies, Ranchi.

1.12 Jharkhand Bijli Vitran Nigam Ltd was incorporated on October 23, 2013 with the Registrar of Companies, Jharkhand, Ranchi and obtained Certificate of Commencement of Business on November 28, 2013.

1.13 The Petitioner is a Distribution Licensee under the provisions of the Electricity Act, 2003 (EA, 2003) having license to supply electricity in the State of Jharkhand.

1.14 The Petitioner is functioning in accordance with the provisions envisaged in the Electricity Act, 2003 and is engaged in the business of Distribution of Electricity to its consumers situated over the entire State of Jharkhand.

The Petitioner's Prayers

1.15 The Petitioner in this Petition has prayed before the Commission:

1. ***"To admit the True-up Petition of JBVNL for FY 2018-19 in accordance with Regulation 9.3 of the JSERC (Terms and Conditions for Determination of Distribution Tariff) Regulations, 2015***
2. ***To admit the APR Petition of JBVNL for FY 2019-20 in accordance with Regulation 9.2 of the JSERC (Terms and Conditions for Determination of Distribution Tariff) Regulations, 2015***
3. ***To admit the ARR Petition of JBVNL for FY 2020-21 in accordance with Regulation 6 of the JSERC (Terms and Conditions for Determination of Distribution Tariff) Regulations, 2015***
4. ***To convert the accumulated revenue gap of JBVNL till FY 2020-21 after suitable revision in tariff, into regulatory asset and allow the realization of the same over the period of next 5 years starting from FY 2021-22.***
5. ***To approve single ACoS for all distribution Utilities in Jharkhand, as prayed in Chapter-6 and approve suitable tariff for all categories of consumers (or) To approve the proposed tariff to meet the revenue gap and to minimise the gap between ARR and ACS***
6. ***To provide clarification regarding applicability of tariff for Commercial Services in rural areas and tariff for commercial consumers having contracted capacity above 5 kW***
7. ***To approve tariff for unmetered consumers as approved in T.O dated 27th April, 2018 regarding Tariff Order for FY 2017-18 and FY 2018-19***
8. ***To approve revised schedule of charges.***
9. ***To approve the terms and conditions of tariff as proposed by the Petitioner***
10. ***To allow the Petitioner to submit supplementary/additional submissions, if any.***
11. ***To pass any other order as the Hon'ble Commission may deem fit and appropriate under the circumstances of the case and in the interest of justice.***
12. ***To condone any error/omission and to give opportunity to rectify the same."***

Scope of the Present Order

1.16 The Commission in this Order has approved the True-up for FY 2018-19, Annual Performance Review for FY 2019-20 and ARR & Tariff for FY 2020-21.

1.17 While approving this Order, the Commission has taken into consideration:

a) Material placed on record by the Petitioner
b) Provisions of the Electricity Act, 2003;
c) Principles laid down in the National Electricity Policy;
d) Principles laid down in the Tariff Policy;
e) Provisions of the JSERC (Terms and Conditions for Determination of Distribution Tariff) Regulations, 2015 (hereinafter referred to as the 'Tariff Regulations, 2015');

1.18 Accordingly, the Commission has scrutinized the Petition in detail and hereby issues the Order on Truing-up for FY 2018-19, Annual Performance Review for FY 2019-20 and ARR & Tariff for FY 2020-21 for JBVNL.

A 2 PROCEDURAL HISTORY

Background

2.1 The Commission has performed True-up of JBVNL till FY 2015-16 through various Orders.

2.2 The Commission has last issued the Tariff Order for JBVNL on February 28, 2019 on True-up for FY 2016-17 & FY 2017-18, Annual Performance Review for FY 2018-19 and ARR & Tariff for FY 2019-20.

2.3 The Petitioner filed a Review Petition on the above Order seeking review of the said order on the following issues.

a. Disallowance of Delayed Payment Surcharge of Rs 352.85 Crore of DVC in the Power Purchase Cost of FY 2017-18
b. Calculation of Depreciation for FY 2016-17, FY 2017-18, FY 2018-19 and FY 2019-20
c. Revenue Gap for FY 2016-17 and FY 2017-18
d. Adjustment of Outstanding Gap with the Grant under UDAY

2.4 The Commission disposed of the above vide its Review Order dated September 30, 2020 and admitted the Review on the following two issues for reasons recorded in detail in its Review Order.

a. Disallowance of Delayed Payment Surcharge of Rs 352.85 Crore of DVC in the Power Purchase Cost of FY 2017-18
b. Calculation of Depreciation for FY 2016-17 and FY 2017-18

2.5 The Commission has considered the impact of the above in this Order.

2.6 The Petitioner in the current Petition filed on December 30, 2019 has sought for Truing-up of FY 2018-19, Annual Performance Review for FY 2019-20 and ARR & Tariff for FY 2020-21.

Information Gaps in the Petition

2.7 As part of the Tariff determination exercise, several deficiencies/information gaps were observed in the Petition submitted by the Petitioner that were communicated to the Petitioner vide Letter No. JSERC/Case (Tariff) No. 13 of 2019/420 dated February 10, 2020.

2.8 The Petitioner submitted its response to the aforesaid letter and furnished additional data/ information to the Commission vide letter no. 236/ C.E(C&R) dated February 27, 2020 and letter no. 379/ C.E(C&R) dated March 12, 2020.

2.9 The Commission has scrutinized the additional data/ information and has considered the same while passing this Order. The Commission has examined the replies and supporting documents as supplied by the Petitioner on the discrepancies pointed out to it.

2.10 In order to provide adequate opportunities to all stakeholders and general public, as mandated under Section 64 (3) of the Electricity Act 2003 and in relevant provisions of Regulations framed by the Commission and in order to ensure transparency in the process of tariff determination, the Commission decided to hold Virtual Public Hearing through video conferencing on August 20, 21 and 24, 2020, due to the prevailing pandemic situation affecting the State.

Inviting Public Comments/Suggestions

2.11 The Commission directed the Petitioner to make available copies of the Petitions to the members of general public on request, and also issue a public notice inviting comments/ suggestions on the Petition for approval of True-up for FY 2018-19, Annual Performance Review for FY 2019-20 and ARR & Tariff Determination for FY 2020-21.

2.12 The aforesaid public notice was issued by the Petitioner in various newspapers and a period of twenty one (21) days was given to the members of the general public for submitting their comments/suggestions.

Table 1: List of newspapers and dates of publication of public notice by JBVNL

Newspaper	Date of Publication
Dainik Bhaskar	20.03.2020, 21.08.2020 & 25.08.2020
Dainik Jagran	20.03.2020, 21.08.2020 & 25.08.2020
Hindustan Times	20.03.2020, 21.08.2020 & 25.08.2020
Hindustan	20.03.2020, 21.08.2020 & 25.08.2020
Prabhat Khabar	20.03.2020, 21.03.2020 & 25.03.2020

2.13 Further, taking a considerate view of the pandemic situation due to COVID-19, the Commission issued a Notice on its website www.jserc.org and various newspapers giving additional time of 10 days till August 14, 2020 to various Stakeholders to submit their comments/suggestions. Further, the Commission also organized a Public Hearing through video conference on August 20, 21 and 24, 2020, where an additional opportunity was provided to all the Stakeholders to submit their comments/suggestions on the above said

Petition. The details of the newspapers wherein the Notice was published by the Commission are as under:

Table 2: List of newspapers and dates of publication of public notice by the Commission

Newspaper	Date of Publication
Prabhat Khabar	07.08.2020, 29.07.2020 & 12.08.2020
Hindustan	07.08.2020 & 12.08.2020
The Morning India	07.08.2020 & 29.07.2020
Hindustan Times	07.08.2020 & 29.07.2020
Dainik Bhaskar	29.07.2020

Meeting of the State Advisory Committee

2.14 The Commission convened a meeting of the State Advisory Committee (SAC) on September 08, 2020 and prominently kept an agenda for discussion on the Petitions filed by the Petitioner. The minutes of the SAC meeting is attached as **Annexure 2** to this Order.

2.15 The points discussed during the meeting and the suggestions made by the members of the SAC have been duly considered by the Commission.

Submission of Comments/Suggestions and Conduct of Public Hearing

2.16 Numerous comments/ suggestions on the Petitions were received from various Stakeholders. The comments/ suggestions of the Public, Petitioner's responses and Commission's views thereon are detailed in **Section A 4** of this Order.

A 3 BRIEF FACTS OF THE PETITION

A. True-up for FY 2018-19

Energy Sales

3.1 The following table summarises the energy sales approved by the Commission in its Order dated February 28, 2019 wherein the Commission carried out APR of FY 2018-19 vis-à-vis actual energy sales as submitted by the Petitioner.

Table 3: Sales as submitted by the Petitioner for FY 2018-19 (MU)

Particulars	FY 2018-19	
	APR	Petition
Domestic	6,206.61	5,442.39
Commercial/Non Domestic	846.88	713.28
Public Lighting / SS	78.51	20.81
Irrigation / IAS	209.44	211.29
Industrial LT / LTIS	218.72	221.88
Industrial HT / HTS / S/ EHT	2,623.22	2,481.08
RTS/MES	102.09	96.56
Total	**10,285.46**	**9,187.28**

Energy Balance

3.2 The energy balance details as submitted by the Petitioner for FY 2018-19 vis-a-vis as approved earlier by the Commission in its Order dated February 28, 2019 is provided in the table below:

Table 4: Energy Balance as submitted by the Petitioner for FY 2018-19 (MU)

Particulars	FY 2018-19	
	APR	Petition
Power Purchase from Outside JBVNL Boundary (MU)	8,664.45	6,958.87
Loss in External System (%)	3.00%	3.00%
Loss in External System (MU)	259.93	208.77
Net Outside Power Available (MU)	8,404.52	6,750.11
Energy Input Directly to State Transmission System (MU)	510.29	419.74
State-owned Generation (MU)	1,205.50	641.33
Energy Available for Onward Transmission (MU)	10,120.31	7,811.17
Transmission Loss (%)	2.23%	8.29%
Transmission Loss (MU)	225.68	647.44
Net Energy Sent to Distribution System (MU)	9,894.63	7,163.73
Direct Input of Energy to Distribution System (MU)	913.93	4,750.15
Total Energy Available for Sales (MU)	**10,808.56**	**11,913.88**

Aggregate Revenue Requirement

3.3 The Aggregate Revenue Requirement for the FY 2018-19 as submitted by the Petitioner vis-a-vis is as approved earlier by the Commission in its Order dated February 28, 2019 is tabulated below:

Table 5: ARR as submitted by the Petitioner for FY 2018-19 (Rs. Crore)

Particulars	FY 2018-19	
	Approved	Petition
Power Purchase Cost	5,020.25	5,216.71
Inter-State Transmission Charges	144.73	140.34
Intra-State Transmission Charges	253.01	203.35
Additional REC Purchase to meet RPO	108.16	
O&M Expenses	443.14	450.92
Employee Expenses	*224.44*	*294.14*
A&G Expenses	*79.19*	*100.73*
R&M Expenses	*139.51*	*56.05*
Depreciation	160.64	258.20
Interest on Long Term Loan	155.81	201.66
Interest on Working Capital Loan	14.92	16.92
Interest on Consumer Security Deposit	49.72	51.99
Return on Equity	170.51	214.25
Total Expenses	**6,520.88**	**6,754.34**
Less: Non-Tariff Income	140.84	217.48
ARR	**6,380.05**	**6,536.86**
Less: Disallowance due to excess Distribution Loss		345.06
Net ARR	**6,380.05**	**6,191.81**
Less Penalties	127.60	127.60
ARR Recoverable	**6,252.44**	**6,064.21**

3.4 Based on the ARR and revenue as per the Audited Accounts, the Petitioner has estimated the revenue gap for the FY 2018-19 after taking into consideration the impact of RGF as summarized below:

Table 6: Gap/Surplus as submitted by the Petitioner for FY 2018-19 (Rs. Crore)

Particulars	FY 2018-19	
	Approved	Petition
ARR Recoverable	**6,252.44**	**6,064.21**
Revenue from Sales	**4,953.25**	**4,053.77**
RGF by State Govt.		591.59
Gap After Subsidy	**1,299.20**	**1,418.85**

B. Annual Performance Review for FY 2019-20

Sales:

3.5 The following table summarises the energy sales approved by the Commission in its Order dated February 28, 2019 vis-à-vis as submitted by the Petitioner for FY 2019-20.

Table 7: Sales submitted for FY 2019-20 (MU)

Particulars	FY 2019-20	
	Approved	Petition
Domestic	6,703.14	6,329.81
Commercial/Non Domestic	948.50	752.71
Public Lighting / SS	78.51	25.64
Irrigation / IAS	230.38	206.19
Industrial LT / LTIS	229.65	219.43
Industrial HT / HTS / S/ EHT	2,708.40	2,283.84
RTS/MES	112.30	121.41
Total	**11,010.88**	**9,939.02**

Energy Balance:

3.6 The energy balance details as submitted by the Petitioner for FY 2019-20 vis-a-vis that approved in the ARR Order for FY 2019-20 dated February 28, 2019 is provided in the table below:

Table 8: Energy Balance as submitted by the Petitioner for FY 2019-20 (MU)

Particulars	FY 2019-20	
	Approved	Petition
Power Purchase from Outside JBVNL Boundary (MU)	10,062.56	7,247.14
Loss in External System (%)	3.00%	3.00%
Loss in External System (MU)	301.88	217.41
Net Outside Power Available (MU)	9,760.68	7,029.73
Energy Input Directly to State Transmission System (MU)	409.77	770.15
State-owned Generation (MU)	1,131.58	730.32
Energy Available for Onward Transmission (MU)	11,302.04	8,634.78
Transmission Loss (%)	2.23%	5.00%
Transmission Loss (MU)	252.04	431.74
Net Energy Sent to Distribution System (MU)	11,050.00	8,203.05
Direct Input of Energy to Distribution System (MU)	25.59	4,971.96
Total Energy Available for Sales (MU)	**11,075.59**	**13,175.00**

Aggregate Revenue Requirement

3.7 The Aggregate Revenue Requirement for the FY 2019-20 as submitted by the Petitioner vis-a-vis that approved in the ARR Order for FY 2019-20 dated February 28, 2019 is tabulated below:

Table 9: ARR as submitted by the Petitioner for FY 2019-20 (Rs. Crore)

Particulars	FY 2019-20	
	ARR Order	Petition
Power Purchase Cost	5,396.25	5,506.58
Inter-State Transmission Charges	151.96	147.36
Intra-State Transmission Charges	326.73	202.26
Additional REC Purchase to meet RPO	128.65	
O&M Expenses	526.31	660.31
Employee Expenses	*233.29*	*307.86*
A&G Expenses	*82.65*	*105.42*
R&M Expenses	*210.37*	*247.03*
Depreciation	254.12	442.98
Interest on Long Term Loan	229.05	398.38
Interest on Working Capital Loan	19.44	42.81
Interest on Consumer Security Deposit	57.61	55.67
Return on Equity	219.54	346.78
Total Expenses	**7,309.68**	**7,803.13**
Less: Non-Tariff Income	145.46	171.15
Add: Provision for Doubtful Debt		274.30
ARR Recoverable	**7,164.22**	**7,906.28**

3.8 Based on the ARR and revenue projected as per the existing Tariff, the Petitioner has estimated the revenue gap for the FY 2019-20 after taking into consideration the impact of RGF as summarized below:

Table 10: Gap/Surplus as submitted by the Petitioner for FY 2019-20 (Rs. Crore)

Particulars	FY 2019-20	
	Approved	Petition
ARR Recoverable	**7,164.22**	**7,906.28**
Revenue from Sales	**6,963.56**	**5,486.03**
RGF by State Govt.	NIL	NIL
Gap/(Surplus) After Subsidy	**200.66**	**2,420.25**

C. ARR and Tariff for FY 2020-21

Energy Sales:

3.9 The following table summarised the energy sales as approved by the Commission in its MYT Order dated June 21, 2017 vis-a-vis that estimated now by the Petitioner for FY 2020-21 is provided in the table below:

Table 11: Sales submitted for FY 2020-21 (MU)

Particulars	MYT Order	Petition
Domestic	10,612.60	6,624.37
Commercial/Non Domestic	620.07	837.90
Public Lighting / SS	159.93	26.36
Irrigation / IAS	641.39	334.91
Industrial LT / LTIS	196.68	220.33
Industrial HT / HTS / S/ EHT	2,491.78	2,294.80
RTS/MES	238.31	121.41
Total	**14,960.76**	**10,460.08**

Energy Balance:

3.10 The energy balance as approved by the Commission in its MYT Order dated June 21, 2017 vis-a-vis that estimated now by the Petitioner for FY 2020-21 is provided in the table below:

Table 12: Energy Balance as submitted by the Petitioner for FY 2020-21 (MU)

Particulars	MYT Order	Petition
Power Purchase from Outside JBVNL Boundary (MU)	8,853.13	7,016.78
Loss in External System (%)	3.00%	3.00%
Loss in External System (MU)	265.59	210.50
Net Outside Power Available (MU)	8,587.53	6,806.27
Energy Input Directly to State Transmission System (MU)	1,428.05	483.49
State-owned Generation (MU)	3,544.50	95.72
Energy Available for Onward Transmission (MU)	15,059.15	7,385.49
Transmission Loss (%)	4.00%	2.23%
Transmission Loss (MU)	602.37	164.70
Net Energy Sent to Distribution System (MU)	14,456.78	7,220.79
Direct Input of Energy to Distribution System (MU)	4,499.69	4151.37
Total Energy Available for Sales (MU)	**18,956.47**	**11,372.16**

Aggregate Revenue Requirement

3.11 The Aggregate Revenue Requirement for the FY 2020-21 as approved by the Commission in its MYT Order dated June 21, 2017 vis-a-vis that estimated now by the Petitioner is tabulated below:

Table 13: ARR as submitted by the Petitioner for FY 2020-21 (Rs. Crore)

Particulars	FY 2020-21	
	MYT Order	Petition
Power Purchase Cost	6,548.22	5,573.91
Inter-State Transmission Charges		154.73
Intra-State Transmission Charges	282.25	244.98
O&M Expenses	535.87	816.54
Employee Expenses	*243.61*	*322.21*
A&G Expenses	*57.37*	*110.34*
R&M Expenses	*234.89*	*384.00*
Depreciation	212.52	570.54
Interest on Long Term Loan	202.15	524.48
Interest on Working Capital Loan	0.00	52.20
Interest on Consumer Security Deposit	110.09	54.58
Return on Equity	175.16	446.63
Total Expenses	**8,066.27**	**8,438.59**
Less: Non-Tariff Income	155.47	187.02
Add: Provision for Doubtful Debt		133.21
ARR Recoverable	**7,910.80**	**8,384.78**

3.12 Based on the ARR and revenue projected as per the existing Tariff, the Petitioner has estimated the revenue gap for the FY 2020-21 after taking into consideration the impact of RGF as summarized below:

Table 14: Gap/Surplus as submitted by the Petitioner for FY 2020-21 (Rs. Crore)

Particulars	FY 2020-21
ARR Recoverable	**8,384.78**
Revenue from Sales	**6,660.72**
RGF by State Govt.	NIL
Gap After Subsidy	**1,724.07**

3.13 Based on the above and earlier submissions of revenue gap, the Petitioner has estimated the cumulative revenue gap till FY 2019-20 as summarized below:

Table 15: Cumulative Revenue Gap till FY 2019-20 as submitted by the Petitioner (Rs. Crore)

Particulars	FY 2018-19	FY 2019-20
Opening Revenue Gap	-	1,591.94
Revenue Gap / (Surplus) created during the Year	1,418.85	2,420.25
UDAY Grants		

Particulars	FY 2018-19	FY 2019-20
Resultant Gap/Surplus during the Year		
Closing Gap at end of the Year	1,418.85	4,012.19
Rate of Interest	12.20%	12.20%
Carrying Cost on Opening Balance	-	199.79
Carrying cost on Additional Gap Created during the Year	173.10	303.74
Total Gap including carrying cost	1,591.94	4,515.72

3.14 The Petitioner has submitted that given the significant amount of revenue gap, the whole impact may be not be possible to be passed on to consumers, by way of revision in retail tariffs, as it may lead to an inexorable tariff shock. Therefore, the Petitioner has proposed creation of Regulatory asset of Rs 4515.72 Crore with a 5 year amortisation period, with passage to consumers in equal tranches. The Petitioner further requested the Commission to provide return on such regulatory asset to the tune of weighted average cost of capital i.e. 12.45%.

3.15 In order to cover the projected revenue gap for the Control Period, the Petitioner has proposed revision in retail tariff for FY 2020-21 for various categories. The tariff schedule proposed by the Petitioner is summarised below:

Table 16: Tariff Schedule for FY 2020-21 as proposed by the Petitioner (Rs.)

Sub-Category	Existing Component of Tariff (FY 2019-20)		Proposed Component of Tariff (FY 2020-21)	
	Energy Charges	Fixed Charges	Energy Charges	Fixed Charges
Domestic Rural	5.75 / kWh	20 / Conn./ Mon	7.00 / kWh	75 / Conn./ Mon
Domestic Urban	6.25 / kWh	75 / Conn./ Mon	7.50 / kWh	150 / Conn./ Mon
Domestic HT	6.00 / kVAh	100 / kVA / Mon	5.00 / kVAh	300 / kVA / Mon
Commercial upto 5 kW (Rural)	6.00 / kWh	40 / Conn./ Mon	7.00 / kWh	75 / Conn./ Mon
Commercial upto 5 kW (Urban)			7.50 / kWh	150 / Conn./ Mon
Commercial Urban (>5 kW)	6.25 / kWh	150 / Conn./ Mon	7.50 / kWh	300 / kW/ Mon
Irrigation and Agriculture	5.00 / kWh	20 / HP/ Mon	6.50 / kWh	20 / HP / Mon
Low Tension Industrial Supply	5.75 / kVAh	100 / kVA / Mon	6.50 / kVAh	300 / kVA / Mon
High Tension Industrial Supply	5.50 / kVAh	350 / kVA / Mon	5.00 / kVAh	500 / kVA / Mon
High Tension Special Service	5.50 / kVAh	350 / kVA / Mon	4.25 / kVAh	500 / kVA / Mon
Streetlight Service	6.25 / kWh	100 / kW/ Mon	7.00/ kWh	100 / kW / Mon
Railway Traction Services	5.50 / kVAh	350 / kVA / Mon	4.25 / kVAh	500 / kVA / Mon
Military Engineering Services	5.50 / kVAh	350 / kVA / Mon	4.25 / kVAh	500 / kVA / Mon
Other Distribution Licensees	5.50 / kVAh	350 / kVA / Mon	5.00 / kVAh	500 / kVA / Mon

3.16 The Petitioner has submitted that the proposed tariff schedule would yield revenue of Rs. 8129.21 Crore as against Rs. 6660.72 Crore at the existing tariff and has proposed that the unrecovered gap to be considered as Regulatory Asset.

A 4 PUBLIC CONSULTATION PROCESS

4.1 The Petition filed by the Petitioner evoked response from several stakeholders. The Public Hearings were held at various locations across the State of Jharkhand to ensure the maximum public participation and transparency wherein stakeholders put forth their comments and suggestions before the Commission in the presence of the Petitioner. The list of the attendees is attached as **Annexure-1** to this Order.

4.2 In course of public hearings, the Commission also allowed persons/representatives of entities who had not submitted prior written representations but attended the public hearings to express their views, in person, regarding the Petition filed by the Petitioner and also about ways and means to improve the services rendered by the Petitioner.

4.3 The comments and suggestion of the members of the public along with the response thereon of the Petitioner and the views of the Commission are detailed hereunder:

Audit Report of FY 2018-19

Public Comments/Suggestions

4.4 The Stakeholder has submitted that the Auditors of the Petitioner have raised their concern over the audited accounts of FY 2018-19. The Stakeholder reproduced the key concerns/issues raised by the Auditors as shown below:

- Books of accounts not maintained properly and are not fully on accrual basis;
- Accounting Policies inconsistent with IND AS;
- Scheme Wise bifurcation and status of ongoing turnkey schemes not provided to auditors for CWIP of Rs. 1176.38 Crore;
- Information pertaining to Consumer Wise Security Deposit and interest thereof is unavailable;
- The auditors have expressed reservation on certain administration expenses of Rs. 17.28 Crore;
- The auditors have given adverse opinion on financial statements maintained by the Petitioner and they do not reflect true picture as required under the Act;

4.5 The Stakeholder submitted that in such a scenario, the claim of true-up for FY 2018-19 based on the audited account is questionable when the auditors themselves are unsatisfied.

Petitioner's Response

4.6 The Petitioner in its reply submitted the point wise reply to the objection raised by the Stakeholder as follows:

Books of accounts not maintained properly:

Historically, the Petitioner had been preparing accounts manually and therefore maintaining certain records like Fixed Asset Register etc. were difficult. The Petitioner further submitted that in the last few years, it has improved significantly in terms of records keeping and availability of data enabling auditors to comment on specific matters and the Petitioner expects further improvement. In order to ensure that the Petitioner complies with the requirements of maintenance of books and records the company has already worked towards implementation of SAP ERP, which will fill the remaining gaps and allow them to maintain records electronically and also ensure compliances. The Petitioner is presently at the transition phase of implementation and it is expecting the ERP to be fully operational from the FY 2020-21.

Accounting Policies inconsistent with IND AS:

The Petitioner submitted that they have not been able to impair fixed assets in the absence of fixed asset register and once the same is available, the Petitioner will be able to do so. Such impairment will result in possible losses which will increase our ARR and hence is beneficial for us to get it done at the earliest. On account of situation like this, our policies are not aligned with IND AS.

Further, with respect to capitalization of work under Deposit and ADP head, the Petitioner submitted that the corresponding expenditures are audited. However, as a policy considering the nature, expenses under such heads are capitalized as and when incurred. Accordingly, completion certificates were not issued for such completions for which auditors made a recommendation to do so like the Petitioner did for other turnkey projects of Rs. 4200 Crore approximately which were verified by auditors. This is because the work under Deposit and ADP heads are usually completed in very short period of times because of the specific nature. The Petitioner further added that in case of Deposit heads, for the depreciation expense on the asset, equal amount of amortized income is booked having therefore, no impact on the profit or loss.

The Petitioner submitted that upon 100% checking by auditors of the capitalization made in the FY 2018-19, the Petitioner provided them the completion certificates and the necessary documents for approximately ~99% of the amount which signifies the correctness of the figure. The Petitioner accepted the recommendation of auditors and will classify the intangible assets separately in the Financial Statements in FY 2019-20.

Scheme Wise bifurcation of CWIP:

The Petitioner submitted that as against the previous year observation of auditors wherein no information were provided w.r.t CWIP figures, the Petitioner made a significant progress and provided the details of close to 80% of CWIP figures. Further, the Petitioner added that because of the manual work environment, it took time to complete the details of some of the old items which the Petitioner expects to comply fully in the F.Y 2019-20.

Information on Consumer Wise Security Deposit:

The Petitioner stated that they have started working on preparing the list and adjusting the interest in consumer security deposit, as already confirmed in the auditor's report that the interest for HT consumers have been adjusted. The Petitioner further added that as of March, 31, 2019, the Petitioner has already adjusted the interest of approximately ~3.4 lakh consumers other than HT consumers. Further, the Petitioner stated that the interest expenses are booked on accrual basis against which adjustment needs to be done in the following year. Accordingly, the payment/adjustment of interest of consumers for the liability of 2018-19 will be done in 2019-20.

Reservation on Expenses Booked Based on Holding Company Debit Note:

The Petitioner submitted that they have booked an expense of Rs 17.28 Crore based on the Debit Note received from their Holding Company for their share of expenses. The Petitioner has also booked an income of approx. Rs. 0.9 Crore towards income from the same debit note. The Petitioner added that this is usual transaction that happens with the Holding company every year. The Petitioner stated that the financial statements of our holding company is also audited and there has been no adverse comments on such debit notes by their auditor. Further section 143 (1) of Companies Act, 2013 empowers the auditor of the Holding company to call for documents of subsidiary companies but there is no provision for the vice-versa. In this context, the auditor of the subsidiary company needs to rely on the documents provided by the Holding company.

Adverse Opinion Issue:

The Petitioner clarifies that over the last few years, with huge amount of work on infrastructure and development of various payment methods, the AT & C loss have been gradually improving. The Petitioner understands that there is further scope of reduction and the Petitioner's actively working on the same. The Petitioner further added that there is an advanced progress on the preparation of fixed asset register and SAP ERP is also in transition phase, there will be enough control mechanism developed to ensure that financial controls are put in place and is confident of having all these in place in the FY 2020-21.

Views of the Commission

4.7 The Commission has gone through the submissions of the Stakeholder and the Petitioner. The Commission is of the view that as per the observations of the auditor the audited accounts of the Petitioner are in non-compliance to the accounting standards. The Commission observes that even though the Petitioner has made efforts towards resolving some of the issues but all exceptions raised by the Auditor have been not addressed in an appropriate manner which has also been acknowledged by the Petitioner. The Auditor has repeatedly expressed concerns on various issues in the past accounts. Even though the Petitioner has claimed that such observations are taken care of in the subsequent accounts, however, objections of the Auditor still persist for FY 2018-19. The Petitioner has stated that most of the anomalies will get rectified in FY 2019-20 and once the SAP ERP gets implemented by FY 2020-21 all the issues will be addressed.

4.8 Accordingly, the Commission again directs the Petitioner to address the objections raised by the Auditor in an appropriate manner so that precise data is available as failure on this account may lead to rejection of true up Petition in future.

4.9 The Commission points out that as per Definition 2.1 of JSERC Distribution Tariff Regulation, 2015, Accounting Statement needs to be duly certified by statutory auditor(s) for carrying out truing up which the Petitioner has submitted and further since the Petitioner was able to furnish details of almost entire capitalisation to the Auditor's satisfaction hence the truing up is being carried out in this Order.

Energy Sales

Public Comments/Suggestions

4.10 The Stakeholder submitted that the Petitioner has claimed the actual energy sales for FY 2018-19 less than the actual for FY 2017-18. The Stakeholder requested the Commission to carry out due diligence before approving the sales for FY 2018-19.

Petitioner's Response

4.11 The Petitioner submitted that it agrees with the submission of the Stakeholder that the actual sales of the Petitioner have been at a lower level than actual for FY 2017-18 and also less than approved in APR for FY 2018-19 vide JSERC Order dated February 28, 2019. The Petitioner submitted the detailed point wise reply to issues raised by the Stakeholder as stated below:

Public Lighting:
The Petitioner submitted that the prime reason for fall in sales to consumers under 'Public Lighting' category for FY 2018-19 is due to use of energy efficient LED lamp provided by EESL.

Domestic Consumers:
Prior to FY 2017-18, billing of the Domestic consumers was done at Area Board/Circle Level. However, various challenges and issues were faced in billing of such consumers. Therefore, in order to induce effectiveness and accuracy in the billing process, new billing system was introduced in FY 2017-18. After introduction of centralized billing, several billing issues were resolved and credit was given to eligible consumers due to which unaccounted energy consumed in previous years were also accounted in FY 2017-18. This led to spike in energy billed for FY 2017-18. However, since billing system stabilized in FY 2018-19, no previous such issues were faced in FY 2018-19. Hence in comparison to FY 2017-18, there was a decrease in energy sales recorded in FY 2018-19.

Further, the Petitioner added that the lighting load form bulk of demand from domestic category. However due to efforts of Energy Efficiency Services Limited (EESL) and Discom, there was enhanced usage of energy efficient LED lamps and tubes by domestic consumers. This led to reduction in energy consumption by domestic consumers.

The Petitioner also submitted that the apprehension of the Stakeholder that the Petitioner is doing under billing, is leading to passing of burden of the Petitioner inefficiency to consumer is completely unfounded as the Commission during True-up disallows additional power purchase cost due to higher T&D Loss which may result from such under billing.

Unmetered Domestic Sales:
The Petitioner submitted that despite its best effort, it hasn't been able to complete metering of all unmetered consumers due to their large numbers as well as geographical spread to remote locations. Currently also due to Covid-19 induced lockdown the process of metering unmetered consumers have been impacted.

Energy Saving Due to Energy Efficiency Measures:
The Petitioner submits that it has undertaken measures like replacement of CFL bulbs by LED and other energy efficiency equipment. However as per UJALA dashboard, Jharkhand has installed 1.36 crore LED bulbs saving annual energy of 1,771 MUs resulting in total saving of Rs. 709 Crore.

Views of the Commission

4.12 The Commission has gone through the submissions of the Stakeholder and the Petitioner. The Commission has carried out due prudence check before allowing sales and cost of power purchase as per JSERC Distribution Tariff Regulations, 2015. With regards to unmetered consumers the Commission disagrees with the submissions made by the Petitioner. The Petitioner during the previous tariff proceedings on several occasions including during Public Hearing as well as during SAC meeting committed to meter every consumer by March 2019 and therefore pretext put forward by the Petitioner do not hold any merit. The Commission, however, considering the pandemic situation prevailing since March 2020, provides last opportunity to the Petitioner to get all its unmetered consumers metered by December 31, 2020. The Petitioner shall not be allowed to bill any unmetered consumers from January 01, 2021.

Energy Balance

Public Comments/Suggestions

4.13 The Stakeholder submitted that the Petitioner has claimed Intra-state Transmission loss absurdly high as 8.29% against the approved value of 2.23% in Order dated February 28, 2019. Similarly, the Petitioner has considered the Inter-State Transmission loss as 3.00% as approved in previous Order dated February 28, 2020 and not on actual basis and requested the Commission to allow loss on actual basis based on POSOCO data. Further, the Stakeholder suggested that the excess quantum should be disapproved for the sources having highest variable cost under MOD irrespective of State/Central/IPP source.

Petitioner's Response

4.14 The Petitioner has submitted the Intra State Transmission Loss as per Annual Audited Accounts of FY 2018-19. The detailed calculation of Intra-State Transmission Loss is explained below:

In FY 2018-19, the Petitioner purchased 6,958.87 MU power from Inter-state generating stations (including UI and short-term power). Applying 3% losses there-on, inter-state transmission losses have been calculated at 208.77 MU. Total transmission losses as per Audited Accounts is 856.21 MU. Thereafter, intra-state transmission losses has been calculated as difference of total transmission losses and inter-state transmission losses at 647.44 MU. Accordingly, Intra State Transmission losses works out as 8.29% (647.44 MU/7,811.17 MU) for FY 2018-19.

The Petitioner further added that the Inter-State Transmission Loss is considered as approved by the Commission in MYT Order dated June, 21, 2017.

The Petitioner submitted that it has calculated Energy Balance and disallowed Power Purchase Cost as per methodology already approved by the Commission in its MYT Order dated June, 21, 2017 as well as subsequent Tariff Orders for the Petitioner. The Petitioner submitted that the Stakeholder has not submitted detailed calculation formulae as how it has arrived at excess quantum to be disallowed, hence it would not be able to comment on the given Objection. The Petitioner further submitted that the contention of the Stakeholder to disallow power purchase from highest variable cost sources should also be denied because even if it reduces loss and don't draw extra power from power plants as per Merit Order Despatch (MOD) principle, even then the Petitioner would have to pay fixed charge of the source and would only save upon the variable cost of the plant.

Views of the Commission

4.15 The Commission has gone through the submissions of the Stakeholder and the Petitioner. The Commission has detailed its approach for approval of transmission losses and power purchase cost in the subsequent sections of this Order.

Power Purchase Cost

Public Comments/Suggestions

4.16 The Stakeholder requested the Commission to seek power purchase cost break-up of various charges (Fixed Charges, Energy Charges, FPPCA, Short Term Power Purchase, Supplementary bill, UI, etc.) from the Petitioner for all financial year to run MOD rather than disallowing based on average cost of power purchase. The Stakeholder listed its issues as follows:

- Break up of Power Purchase Cost for each Financial Year;
- Procurement of power under MOD;
- Detail regarding Short Term Power Purchase;
- Detail/reason for UI Purchase;
- Detail/reason of Supplementary Bills;
- Claim of Power Purchase from Kanti Bijli, as the same is not approved by the Commission;
- Detail regarding UI Sale;
- Approval of Ceiling rate for Short term Power Purchase;
- Detail of DPS in Power Purchase Cost;

4.17 The Stakeholder requested the Commission to review the above points, while approving the power procurement cost for FY 2019-20 and FY 2020-21.

Petitioner's Response

4.18 The Petitioner submitted that the Commission has already raised the query for data deficiency in Petition filed by the Petitioner vide letter no. JSERC/Case (Tariff) No. 13 of 2019/420 dated February, 10, 2020 and the Petitioner in its compliance submitted the replies vide its letter no. 236/CE (C&R) dated February, 27, 2020.

4.19 The Petitioner further added that it follows MOD while scheduling power from various power plants and backs down excess capacity above its requirement. However as per Regulation 6.3(b) of CERC Grid Code, unit or units of a Central Generating Station of inter-State Generating Station need to be run above technical minimum which is 55% of MCR loading or installed capacity. Further if due to backing down by any Beneficiary, CGS or ISGS operates below normative availability but at or above technical minimum it is compensated due to degradation in Station Heat Rate, Auxiliary consumption and oil consumption by such Beneficiary. Hence any backing down on basis of MOD is done keeping in view Technical minimum as well as compensation to be paid if such backing down is done.

Short-Term Power Purchase:

The Petitioner submitted that there has been no agreement with any generator or trader for purchase of short term power. The purchase of power from IEX through PTC (as a client member) is the Spot Power procured on day-ahead basis or term-ahead basis to meet the immediate requirement arising out of demand and supply imbalances such as shut down of any generating unit due to technical fault or spike/fall in demand due to weather conditions. Since it is not possible to predict such scenarios (shutdown of any power plant, spike/fall in power demand etc.) in advance, the Petitioner submitted that it is not possible to submit rolling forecast of short term power to be purchased. In view of same, the Petitioner submits quarterly power purchase from short term sources after completion of the given quarter.

UI Purchase:

The Petitioner submitted that there is always a difference between energy scheduled and actual drawl from interstate network by any Beneficiary/Generator which results in UI Purchase/sales. The Petitioner further added that as per fourth amendments in Clause (10) of Regulation 7 of CERC (Deviation Settlement Mechanism and related matters)

Regulations, 2014, which was enforced in FY 2018-19, all the market participants are required to change sign of deviation from schedule change if the deviations are sustained in one direction for six time blocks or more. Violation of above requirement under this clause leads to an additional charge of 20% on the daily base DSM payable / receivable. Further such additional charge for violation of sign change condition is levied for each such violation during a day. In view of this condition the Petitioner is forced to declare its schedule in such a way that it both overdraws and under-draws from its schedule so as to escape the additional charge. This leads to both UI purchase as well as UI sales during the year. In FY 2018-19, the Petitioner had deviated 250 MU while overdrawing and 90 MU while under-drawing. The resultant deviation of 160 MU is approximately 1.2% of its overall purchase which can be said to be minimal. Further, the Petitioner submitted that it always endeavors to keep UI drawl at minimum specially when grid frequency is low and UI charges are high.

Supplementary Bills:

The Petitioner submitted that the supplementary bills are charged on basis of previous period Tariff by Power Generators and hence are uncontrollable in nature and therefore are completely pass through in Tariff. It further added that these bills are raised on account of Judgment in review order/appeal by SERC/CERC/APTEL/Supreme Court etc. or True-up of previous years.

Kanti Bijlee:

The Petitioner submitted that the contention of the Stakeholder that Kanti Bijlee is unapproved source is completely unsubstantiated, as the Commission in its MYT Order dated 21st June, 2017 has approved both power purchase quantum and cost for KBUNL power plant for the Petitioner for MYT Period FY 2016-17 to FY 2020-21.

UI Sale:

The Petitioner submits its schedule on t-1 day after estimating its energy demand in particular time block. However, due to various uncontrollable factors such as change in weather or outage of any load due to grid failure etc., actual demand of the state goes below scheduled drawl which results in negative deviation (earlier called as UI sale). Further, added that the contention of the Stakeholder that UI sale (~90 MU) has been done without any receipt from UI pool is misleading as the Petitioner has got corresponding deviation charge as per Regulation 5 of CERC (Deviation Settlement Mechanism and related matters) Regulations, 2014 as amended from time to time.

Approval of Ceiling Rate for Short Term Power Purchase:

The Petitioner submitted that it has to purchase power from short term sources in case of emergency situations. For purchasing power from such sources, it places buy order considering its purchasing power at optimum rate, depending upon situation.

Delayed Payment Surcharge:

The Petitioner submits that it has not submitted DPS, paid in FY 2018-19 as part of power purchase in True-up Petition for FY 2018-19.

Suggestions for optimization of power purchase cost:

The Petitioner submitted that they have noted the points suggested by the Stakeholder in positive spirit, subject to its replies furnished above. The Petitioner submitted that it endeavors to optimize power purchase cost in overall interest of its consumers.

Views of the Commission

4.20 The Commission has gone through the submissions of the Stakeholder and the Petitioner. The Commission has discussed the methodology of approving power purchase in the relevant sections of this Order while determining the power purchase quantum and cost.

4.21 The Commission however disagrees with the Petitioner’s submission on the PPA status of Kanti Bijli Utpadan Nigam Ltd. The Commission would like to clarify that any new PPA that the Petitioner is about to enter needs to be pre-approved by the Commission and mere consideration of such source in tariff orders do not grant deemed approval of such agreement. The Commission would like to caution the Petitioner that in order to avoid any financial impact in future on account of un approved PPA will be to the account of the Petitioner and therefore it is in the interest of the Petitioner to get such PPA approved by the Commission beforehand.

Operation and Maintenance Expenses for FY 2018-19

Public Comments/Suggestions

4.22 The Stakeholder submitted that O&M Expenses are controllable parameter; however, the Petitioner has claimed the O&M Expenses on actuals which are in violation of JSERC Regulations.

Petitioner’s Response

4.23 The Petitioner submitted that as per Note-2 of Regulation 6.6 of JSERC MYT Distribution Regulations, the Commission needs to consider any variation due to changes recommended by pay commission in addition to the prescribed formulae. Additionally, Terminal Expenses is required to be approved as per actual as the same is uncontrollable factor for Licensee. Hence the actual Employee Expenses as submitted by the Petitioner should be approved.

Views of the Commission

4.24 The Commission has gone through the submissions of the Stakeholder and the Petitioner. The Commission has discussed its approach for approving O&M expenses for FY 2018-19 to FY 2020-21 in the relevant sections of this Order.

Operation and Maintenance Expenses for FY 2019-20 and FY 2020-21

Public Comments/Suggestions

4.25 The Stakeholder submitted that Employee Expenses and A&G Expenses for FY 2019-20 should be approved based in the actual expenses incurred so far in FY 2019-20. Similarly, the expenses for FY 2020-21 should be approved as per trend of last 2-3 years based on inflation factor. Further, the Stakeholder objected to the allowance of R&M Expenses based on the approved MYT value of 2.34% and requested the Commission either to allow R&M Expenses based on past trend of actual expenses or in the interim allow provisionally as 1.00% for FY 2019-20 & FY 2020-21, subject to truing up based on audited accounts.

Petitioner's Response

4.26 The Petitioner submitted that it has calculated Employee Expenses and A&G Expenses as per formulae prescribed in Regulation 6.6 (b) of JSERC MYT Distribution Regulations read with Note 1 appended with the clause by considering the actual figure of FY 2018-19. The contention of the Stakeholder to determine actual figure of first half of FY 2019-20 to approve employee expenditure of FY 2019-20 is devoid of any ground in the relevant Regulations of the -Commission. Further the half yearly figure of FY 2019-20 would also not include terminal liability as the determined as per actuarial valuation at end of the year.

4.27 With regard to R&M Expenses, the Petitioner claimed the R&M Expenses using 'k' Factor as per formulae prescribed in JSERC MYT Distribution Regulations, 2015. The contention of the Stakeholder to change the given 'k' factor in between MYT Control Period is without any basis or legal ground. Further, added that the Petitioner is planning to increase its R&M Expenses in order to supply reliable power to its consumers. In view of the same reducing 'k' factor arbitrarily to 1% as proposed by the Stakeholder, would lead to creating obstacle in the Petitioner endeavors.

Views of the Commission

4.28 The Commission has gone through the submissions of the Stakeholder and the Petitioner. The Commission has discussed its approach for approving Employee and R&M expenses for FY 2019-20 and FY 2020-21 in the relevant sections of this Order.

Capital Expenditure/GFA

Public Comments/Suggestion

4.29 The Stakeholder submitted that the Petitioner has deviated from the approved capex scheme without prior approval of the Commission, due to which the very purpose of having Capital Investment Plan is lost when there is such a huge deviation which further impacts Depreciation, Interest on Loan, Return on Equity etc. The Stakeholder further requested the Commission to direct the Petitioner to provide the scheme wise detail of Grants & Consumer Contribution before approving the capex.

Petitioner's Response

4.30 The Petitioner submitted that variation in annual figures is due to delay in execution of project vis-à-vis originally planned. Due to such delays, the ratio of actual capex and capitalization with corresponding approved value is less than 'one' for certain years when there is overall delay in project execution/completion and for subsequent year when the delayed portion of capex work actually gets executed/capitalized the ratio is greater than one.

4.31 Further, the Petitioner added that the Stakeholder has wrongfully compared total capitalization and capex approved in MYT Control Period without factoring in new schemes like JSBAY and SAUBHAGYA which were launched by respective State and Central Government after MYT Order-. Additionally, the Petitioner has also incurred capital expenditure under funding from RE State Plan. The Petitioner submitted that actual and estimated capex under JSBAY, RE State Plan and SAUBHAGYA in Control Period (FY 2016-17 to FY 2020-21) is Rs. 4966 Crore, Rs. 131 Crore and Rs 290 Crore. The additional capex under these new schemes broadly explains variability in capex as approved in MYT Order and current value submitted by the Petitioner on basis of actual/estimated expenditure.

4.32 The Petitioner submitted that these schemes are primarily for expanding energy access in the State. Further these schemes are primarily funded by grants from State and Central Government. -It further submitted that the Commission has already approved additional capital expenditure under JSBAY and RE State Plan in its Order dated 28th February, 2019 noting that these works have been entirely financed through grants. Additionally, the Petitioner has also got 90% funding for SAUBHAGYA as a grant through central government and the scheme has been highly helpful in achieving aim of 100% electrification in the State.

4.33 The Petitioner submitted that they have already submitted required data to the Commission regarding funding of various schemes and detailed calculation regarding opening and closing Consumer Contribution and Grants (CCG) in both CWIP and GFA vide its letter no. 236/CE (C&R) dated 27th February, 2020 and the same may be referred by the Stakeholder from the website of the Commission.

Views of the Commission

4.34 The Commission has gone through the submissions of the Stakeholder and the Petitioner. The Commission has discussed its approach for approving Capital Expenditure and Capitalisation for FY 2018-19 to FY 2020-21 in the relevant sections of this Order.

Reassessment of Capitalization and Depreciation

Public Comments/Suggestion

4.35 The Stakeholder requested the Commission to consider the capitalization based on past trends, regulatory provision and take a practical view and approve 20% of projected Capex and Capitalization claimed by the Petitioner for FY 2019-20 & FY 2020-21, subject to truing up.

Petitioner's Response

4.36 The Petitioner submitted that it accepts point of view of the Stakeholder that in view of stressed financial condition of Discom and State Government in wake of lockdown induced by COVID-19 only necessary capital expenditure should be incurred. However, The Petitioner would like to add for schemes where most of the capex has already been incurred or the funding is entirely through grant it would be prudent enough to execute/complete such schemes. However, the reassessment of addition in GFA by the Stakeholder by considering only 20% of the capex incurred is without any base and the Petitioner feels no merit in commenting on the proposed methodology.

Views of the Commission

4.37 The Commission has gone through the submissions of the Stakeholder and the Petitioner. The Commission has discussed its approach for approving Capital Expenditure and Capitalisation for FY 2019-20 to FY 2020-21 in the relevant sections of this Order.

Interest on Normative Loan

Public Comments/Suggestion

4.38 The Stakeholder stated that the actual loan portfolio details are provided in Note 14 (a) and Note 14(b) of the financial statements of the Petitioner for FY 2018-19. The loans are taken from PFC and REC @ 9.5% each and from Government of Jharkhand @ 13%. The Stakeholder further added that the Petitioner is not making any interest payments to Government of Jharkhand (GoJ) and therefore requested the Commission to consider the interest rate as 9.5% for computation. Further, the Stakeholder requested the Commission to seek response from GoJ through Petitioner about the interest payable and loan repayments and if there is likely probability of the amount to be converted into grant.

Petitioner's Response

4.39 The Petitioner submitted that the interest rate on the normative debt is claimed at base rate of SBI plus 200 basis points as applicable on 1st April of relevant financial year in accordance with fourth proviso of Regulation 6.24 of JSERC MYT Distribution Regulations, 2015. However, the Commission may also consider interest rate as weighted average rate of interest on actual loan portfolio at the beginning of each year as per Regulation 6.24 of JSERC MYT Distribution Regulations, 2015; if it interprets the regulation in such a manner.

4.40 The Petitioner further added that it disagrees with the contention of the Stakeholder that interest rate on loan taken from GoJ shouldn't be factored for calculation of interest rate as the Petitioner is unable to pay interest on the given loan. The interest and repayment of the loan are being accrued if not paid and as per accounting principle, balance sheet is prepared on accrual basis and not on basis of cash flow. The Petitioner submitted that it would have to pay the amount afterwards when its financial situation would comparably improve. Hence, the Petitioner submitted that if the Commission decides to calculate weighted average on loan, it should also factor-in rate of interest pertaining to loan taken from GoJ.

Views of the Commission

4.41 The Commission has gone through the submissions of the Stakeholder and the Petitioner. The Commission has discussed its approach for approving Interest on Loan for FY 2018-19 to FY 2020-21 in the relevant sections of this Order.

Return on Equity (RoE)

Public Comments/Suggestion

4.42 The Stakeholder requested the Commission to reduce the rate of Return on Equity (say 8%) which will help to lower the tariffs as well and as a result retain industrial consumers.

Petitioner's Response

4.43 The Petitioner submitted that any underperformance on its part leads to regulatory disapproval by the Commission which further results in disallowance of expense and loss of revenue and hence effectively reduces its Return on Equity. Hence there is no rationale behind the Stakeholder plea to reduce rate of RoE to 8% owing to underperformance by the Petitioner.

4.44 The Petitioner further submitted that owing to various disallowances by the Commission, delay in Tariff Orders and regulatory assets it has been suffering losses for many previous years as is reflected in its audited balance sheet. The lockdown imposed due to COVID-19 has also impacted revenue of the Petitioner and it is also finding it difficult to pay its liabilities to power generators and contractors. Hence restricting RoE at such a time would also impact performance of the Petitioner and its ability to supply power to its consumers.

Views of the Commission

4.45 The Commission has gone through the submissions of the Stakeholder and the Petitioner. The Commission does not find any merit in reducing the RoE and has approved the same as per Regulations.

Interest on Security Deposit

Public Comments/Suggestion

4.46 The Stakeholder submitted that all the regulatory Commission across the Country have the provision to allow the Interest on Security Deposit during the true up period based on actual payments made and not on provision basis. The Petitioner financial statements for FY 2018-19 clearly mentions that provision has been made on Security Deposit amount at 6.5% Bank Rate and interest is payable. Further, the Stakeholder suggested the Commission to withheld approval of Interest on Security Deposit for FY 2019-20 & FY 2020-21 till pending interests are paid to the Consumers and in absence of details no such claim should be allowed as pass through in ARR.

Petitioner's Response

4.47 The Petitioner submitted that Interest on Security Deposit for FY 2018-19 is being accrued even if not paid. Hence the same amount has also been reflected in audited Balance sheet on basis of which the Commission preforms True-up. The Petitioner further added that Interest on Security Deposit for all the relevant years since deposits will be made, once they are mapped with concerned consumers. Further, in relation to Interest on Security Deposit for FY 2019-20 & FY 2020-21, the Petitioner has considered nominal 5% increase from actual figure of FY 2018-19 to factor in additional security deposit from existing/new consumers.

Views of the Commission

4.48 The Commission has gone through the submissions of the Stakeholder and the Petitioner. The Commission has discussed its approach for approving Interest on Security Deposit for FY 2018-19 to FY 2020-21 in the relevant sections of this Order.

Provision for Bad/Doubtful Debt

Public Comments/Suggestion

4.49 The Stakeholder submitted that as per Regulations, the Collection Efficiency target is 100%. Hence, the claim of the Petitioner for provision of bad and doubtful debts need not be allowed.

Petitioner's Response

4.50 The Petitioner submitted that it receives RGF from State Government in order to account for Regulatory disallowance for various performances related parameters including Collection Efficiency. Hence provision for bad & doubtful debts should be adjusted from RGF received from State Government.

Views of the Commission

4.51 The Commission has gone through the submissions of the Stakeholder and the Petitioner. The Commission agrees with the views of the stakeholder and is of the view that the same cannot be allowed as there is no provision under the tariff regulations to consider the same.

Utilisation of Resource Gap Funding (RGF)

Public Comments/Suggestion

4.52 The Stakeholder requested the Commission to presume that the Petitioner will receive RGF of Rs. 1200 Crore in FY 2019-20 and FY 2020-21 as received in FY 2018-19 and adjust the disallowed amount from RGF and utilize the balance amount for reduction of revenue gap for FY 2018-19, FY 2019-20 and FY 2020-21.

Petitioner's Response

4.53 The Petitioner submitted that in previous years, the disallowance on account of higher T&D losses was adjusted with the RGF provided by the State Government. However, in FY 2018-19, the Government of Jharkhand has not sanctioned or disbursed any amount under Resource Gap Funding. The amount of Rs. 1250 Crore received in FY 2018-19 out of which Rs. 750 Crore was given for payment to DVC and only Rs. 500 Crore was provided on account Regulatory disallowance support i.e. for disallowance in power purchases and other cost elements.

4.54 The Petitioner further added that the current Petition is prepared in line with the letter sent by Energy Dept., Govt of Jharkhand vide letter no. 4020 dated 20.10.17, which specifies that RGF shall not be provided to the Petitioner for future years. As such, there is no RGF support from the State Government and the same has been considered while calculating the Net Annual Revenue Requirement.

Views of the Commission

4.55 The Commission has gone through the submissions of the Stakeholder and the Petitioner. The Commission has dealt with the issue while carrying out APR for FY 2019-20 and ARR for FY 2020-21 in the subsequent sections of this Order.

Penalty for Non-Compliance of Directive

Public Comments/Suggestion

4.56 The Stakeholder submitted that the Commission in its previous Tariff Order had levied 2% penalty of ARR for non-compliance of the Commission's directive. The Stakeholder submitted that penalty of 2% seems insufficient and requested the Commission to increase the penalty from 2% to 5%.

Petitioner's Response

4.57 The Petitioner submitted that as per Section 142 (Punishment for non-compliance of directions by Appropriate Commission) of Electricity Act 2003 provides for penalty to be levied by the -Commission. The relevant extract of the Electricity Act'03 has been reproduced below for the ready reference:-

> *"In case any complaint is filed before the Appropriate Commission by any person or if that Commission is satisfied that any person has contravened any of the provisions of this Act or the rules or regulations made thereunder, or any direction issued by the Commission, the Appropriate Commission may after giving such person an opportunity of being heard in the matter, by order in writing, direct that, without prejudice to any other penalty to which he may be liable under this Act, such person shall pay, by way of penalty, which shall not exceed* ***one lakh rupees for each contravention*** *and in case of a continuing failure with an additional penalty which may extend to* ***six thousand rupees for every day*** *during which the failure continues after contravention of the first such direction".*

4.58 Similarly, Sub-Regulation 32.1 (Non-Compliance of Orders and Directions) of JSERC's Conduct of Business Regulations, 2016 provides as under:-

> *"Where any complaint is filed before the Commission by any person or where the Commission is satisfied that any person has contravened any provisions of the Act or rules or regulations made thereunder or any direction issued by the Commission, the Commission may after giving such person an opportunity of*

being heard in the matter, by order in writing, direct that, without prejudice to any other penalty to which he may be liable under the Act, such person shall pay, by way of penalty, which shall not exceed one lakh rupees for each contravention and in case of a continuing failure with an additional penalty which may extend to six thousand rupees for every day during which the failure continues after contravention of the first such direction."

4.59 The Petitioner submitted that bare perusal of the above paragraphs makes it clear that the penalty of 2% of Annual Revenue Requirement, levied by the -Commission is not congruent to the provision of Electricity Act'03 and therefore illegitimate.

4.60 The Petitioner submitted that the decision of the Commission to impose a penalty of 2% of the ARR of the Appellant for FY 2018-19 which translates to Rs. 122 Crore is not in accordance with the Electricity Act, 2003 and JSERC's Conduct of Business Regulations 2016. The Petitioner submitted that it has also filed an appeal before the - APTEL regarding various points related to Tariff Order dated 28.04.2018 and is sub-Judice. The Petitioner submitted that it has been providing the Commission the updated status of compliance of Directives of - Commission on timely basis. The Petitioner further submitted that in its Tariff Petition filed on 30.12.2019 for True-up of FY 2018-19, Annual Performance review of FY 2019-20 and Determination of Annual Revenue Requirement of FY 2020-21 it has submitted the status of compliance of Directives issued by the Commission.

4.61 The Petitioner further added that it is making all endeavours for making compliance of directives and most of the directives have already been complied with.

Views of the Commission

4.62 The Commission has gone through the submissions of the Stakeholder and the Petitioner. The Commission observes that the issue of consistent non-compliance by the Petitioner was raised by several Stakeholders during the Public Hearing and was also vociferously put forward by Members of the State Advisory Committee Meeting in the meeting held on September 08, 2020. The Commission also expressed its dissatisfaction over non-compliance of its direction during the above events and listed out several non-compliance on behalf of the Petitioner especially related to safety of personnel and directions related to improving poor quality of supply.

4.63 The Commission has considered the persistent non-compliance of the Petitioner gravely as many lives have been lost and deaths/injury to personnel continues due to non-compliance of safety protocols. The Commission is of the view that it has provided enough opportunity in the past to the Petitioner but in vain. The Commission has therefore withheld the liquidation of gap amount determined in this Order till the time the Petitioner complies with all the directions of the Commission. The Commission would further like to clarify that no carrying cost for this withheld period will be allowed to the Petitioner and therefore it is in the interest of the Petitioner to expedite the compliance of pending directions. Further, the Commission has observed that the Petitioner has neither complied to the provisions of JSERC (Compensation to Victims of Electrical Accidents) Regulations, 2018, nor has provided compensation as per the Regulations.

Proposal: One State-One Tariff

Public Comments/Suggestion

4.64 The Stakeholder submitted that the proposal of One State One Tariff is a move to hide inefficiency and earn more revenue without improving the performance.

Petitioner's Response

4.65 The Petitioner submitted that the comments of the Stakeholder are completely subjective in nature and no new facts have been presented before the Commission. The Petitioner further added that the Petitioner has submitted the proposal of One State One Tariff based upon the suggestion of the Commission and it is the Commission to decide upon the same. Further, the contention of the Stakeholder that, One State One Tariff, is at odds with promoting competition in power sector and against the spirit of the Electricity Act 03 is devoid of any merit because DVC, JUSCO, TSL and the Petitioner are having different sales mix. The Petitioner submitted that in absence of level playing field to all the competing licensees, Tariff based on actual Cost of Supply will be derogatory for the financial health of Discoms. In view of the arguments made above, the contention of the Stakeholder may be out-rightly rejected.

Views of the Commission

4.66 The Commission has gone through the submissions of the Petitioner and Respondent. The Commission observes that the Petitioner apart from floating the idea has done very little detailing on how the same can be implemented in the State considering the stark differences in the sales mix and power procurement cost. The Commission is of the view that the Petitioner should have submitted a detailed proposal on the same if it was serious about the implementation of the concept. The Commission is therefore constrained to overlook the same at this juncture.

Segregation into Wheeling and Retail Business

Public Comments/Suggestion

4.67 The Stakeholder submitted that the methodology adopted on allocation basis rather than Power Regulatory Accounting Regulations 2015 basis is temporary solution which the Petitioner has been conveniently using for the last few years and requested the Commission to take strict action against petitioner to ensure compliance.

Petitioner's Response

4.68 The Petitioner submitted that Regulation 42.4 provides for the allocation ratios for apportioning different cost and revenue elements of ARR of a licensee. As such, in absence of the segregated Wheeling and Retail Supply business accounts, the Petitioner has sought to use the methodology provided in the JSERC (Power Regulatory Accounting) Regulations, 2016. The relevant extract of the aforementioned regulation have been reproduced below for the ready reference:-

> *"42.2 In case the Commission has specified the basis of allocation of expenses between Wires Business and Retail Supply Business in the JSERC (Terms and Conditions for Determination of Distribution Tariff) Regulations, 2010 and as amended from time to time, the same shall be considered for allocation of the expenses of the Distribution Licensee.*
> *42.3 In case the above-mentioned regulations do not specify any basis for allocation of expenses between Wires Business and Retail Supply Business, the Distribution Licensees shall follow a consistent basis of allocation ratios for apportionment of different components of Distribution ARR into Wires Business and Supply Business, after approval of the same by the Commission."*

4.69 The Petitioner submitted that in light of the fact that JSERC (Terms and Conditions for Determination of Distribution Tariff) Regulations, 2010 have been repealed and replaced with JSERC (Terms and Conditions for Determination of Distribution Tariff) Regulations, 2015 which does not provide for apportionment of ARR of Licensee. The licensee may use Allocation provided in regulation 42.4 of JSERC (Power Regulatory Accounting) Regulations, 2016. Therefore, there is no merit in the contention of the Stakeholder.

Views of the Commission

4.70 The Commission has gone through the submissions of the Petitioner and Respondent. The Commission has dealt with the issue of allocation of ARR in relevant section of the ARR.

Comments on Voltage-wise Cost of Supply Report

Public Comments/Suggestion

4.71 The Stakeholder submitted that the voltage wise cost of supply report is questionable. The Stakeholder further submitted that the feeder data is manually maintained and is unavailable for all the feeders. Further, the sample selection itself is incorrect as the data for the selected feeders is unavailable for complete 12 months, hence data analysis is also incomplete and incorrect. The feeder selection is taken for predominately 33kV consumers and Third Party Agency/Petitioner has ignored 33kV and above consumers.

Petitioner's Response

4.72 The Petitioner submitted that the report submitted by the consultant has been finalized after due discussions with officials of the Petitioner. Further, when the study for the said report began, information pertaining to FY 2018-19 was not available as the FY was not completed. In view of the above, FY 2017-18 data was taken into consideration. The Petitioner further added that capacity of substations, network connections, consumer profile, power sources and power flows generally do not change much from one year to the next and therefore do not alter conclusions of the study substantially.

4.73 The Petitioner submitted that although the feeder data for full 12 months is not available for some feeders, the extent and degree of feeder data that is available permits the study to be carried out with minimal error by making suitable interpolations based on reasonable assumptions. Further the consultant for the study has clubbed consumers above 33 kV with consumers at 33 kV under the category "33 kV and above consumers"

4.74 The Petitioner further submitted that the Voltage-wise Cost of Supply study was done on the basis of data for FY 2017-18 and the result of the data is to be utilized for calculating retail and wheeling tariff for FY 2020-21. Hence in order to achieve the same, the Petitioner has apportioned voltage wise cost of supply for FY 2017-18 in FY 2020-21 utilizing ratio of average cost of supply of both years.

Views of the Commission

4.75 The Commission has gone through the submissions of the Petitioner and Respondent. The Commission has not considered the Report submitted as the Sample Feeder Selection is unclear and the Consultant itself, in its declaration on assumptions has submitted that details for most of the feeders were unavailable.

Cross Subsidy

Public Comments/Suggestion

4.76 The Petitioner submitted the HTS consumers are currently cross subsiding to the tune of 119% of the Voltage Cost of Supply. Any further increase in the tariff of the HTS would jeopardise the interests of industries in the State of Jharkhand. The Stakeholder further submitted that the proposal of the Petitioner to increase the tariff of industries is irrational, hackneyed and allegedly appears to possess an ill intent that may toll a death knell for a number of industries in the State. The Stakeholder requested the Commission to reject the same for the greater interest of the industries and the State.

Petitioner's Response

4.77 The Petitioner submitted that it completely agrees with the contention of the Stakeholder that the Tariff should be linked to Average Cost of Supply rather than Voltage wise cost of supply. The Commission in its Tariff Order has also directed the Petitioner to conduct Voltage Wise Cost of Supply and submit a report. The Petitioner in its compliance to the directive of the Commission has conducted the voltage-wise cost of Supply study and submitted the report along with the Tariff petition for determination of Tariff for FY 2020-21. Further, in its Tariff Petition, the Petitioner has adopted the methodology as used by the Commission and has linked the Category wise Tariff with Voltage wise cost of supply rather than the average cost of Supply.

Views of the Commission

4.78 The Commission has gone through the submissions of the Petitioner and Respondent. The Commission has discussed the issue in the **Section A 10** of this Order.

Load Factor Rebate

Public Comments/Suggestion

4.79 The Stakeholder submitted the Petitioner has proposed to remove the Load Factor Rebate for all consumer categories without providing any supporting data/information. The Stakeholder submitted that it is clear proposition for not desirous to provide incentives to consumers. The Stakeholder requested the Commission to retain Load Factor Rebate mechanism as it will also help to revive the waning Industrial sector in the Petitioner license area.

Petitioner's Response

4.80 The Petitioner submitted that provision of Load Factor results in double counting of benefits of higher consumption to the consumer, whereas, the lower Load Factor on the other hand is not being penalized. Hence, requested the Commission to remove the Load Factor Rebate for all consumer categories as it increases billing disputes while adversely impacting the financial position of the Petitioner.

Views of the Commission

4.81 The Commission has gone through the submissions of the Petitioner and Respondent. The Commission agrees with the views of the Stakeholder that higher load factor consumption should be suitably rewarded especially during the current pandemic situation. There Commission is of the view that there is an urgent need to induce growth and revive the industries and therefore the Commission has increased the load factor rebate that can be availed by HT consumers consuming at higher load factors and has suitably modified the load factor rebate mechanism.

Tariff of HTIS/HTSS (HT Industrial & HT Special Service) Category

Public Comments/Suggestion

4.82 The Stakeholder requested the Commission to disapprove the proposal to hike Tariff of HTS & HTSS Category, instead lower the Tariff of the respective categories to make its competitive on the National Market.

Petitioner's Response

4.83 The Petitioner submitted that the Stakeholder is trying to mislead the Commission by making a statement that there has been an increase in Tariff to HTS/HTSS consumers. The impact of the revised Tariff on the HTS/HTSS consumers has been shown in the table below.

Particulars	**HTS**	**HTSS**
Load	100	300
Load Factor	0.72	0.72
Billed Demand Considering 85% of CD	85	255
Existing Fixed Charge	350	350
Fixed Charges in Rs (A)	29,750	89,250
Proposed Fixed Charge	500	500
Fixed Charges in Rs (B)	42,500	1,27,500
No of Units Consumed at unity PF	44,064	1,32,192
Existing Energy Charges	5.50	5.50
Monthly Energy Charge in Rs (C)	2,42,352	7,27,056
Proposed Energy Charges	5.00	4.25
Revised Monthly Energy Charge (D)	2,20,320	5,61,816
Bill at Existing Energy Charge (A+C)	2,72,102	8,16,306
Bill at proposed Energy Charge (B+D)	2,62,820	6,89,316
Reduction in Bill	**9,282**	**1,26,990**

4.84 The Petitioner submitted that for a HTS consumers having a load of 100 KVA and HTSS consumer having a load of 300 KVA, the monthly saving would be Rs. 9,282 and Rs. 1,26,990 respectively.

Views of the Commission

4.85 The Commission has gone through the submissions of the Petitioner and Respondent. The Commission has discussed the tariff structure in the Rate Schedule section of this Order.

Interpretation of Load Factor by different Discom

Public Comments/Suggestion

4.86 The Stakeholder submitted that in the State of Jharkhand, two Discoms interpret the Load Factor Rebate in the different manner. The Stakeholder further added the Petitioner went on calculating Load Factor as per their own interpretation, hence, requested the Commission to remove the confusion and the disparity in interpreting the Load Factor Rebate.

Petitioner's Response

4.87 The Petitioner submitted that the Stakeholder has pointed towards different interpretation of provision regarding Load Factor Rebate as applicable for the Petitioner and DVC. The Petitioner further added that the Stakeholder has thereafter concluded on its own that interpretation of DVC regarding Load factor rebate is the correct one. In this regard, the Petitioner added that as per Regulation 12.5 of JSERC (Terms and Conditions for Determination of Distribution Tariff) Regulations, 2015 decision of the JSERC in questions relating to interpretation of any provisions of the regulations would be final.

4.88 The Petitioner in its Order dated July 28, 2020 in Case No. 16 of 2019 regarding correct methodology of Load Factor Rebate has reiterated its communication dated August 25, 2006 that the Load Factor Rebate will be calculated on the consumption in excess of the defined percentage/slabs as mentioned under Load Factor Rebate Table of the respective Tariff Orders. The Load Factor Rebate to the eligible consumers shall be given only on the energy charges corresponding to the units consumed above the respective slab. The Petitioner further submitted that in the same Order the Commission also reiterated its earlier directions as given in Tariff Order of FY 2003-04. In the said Order - JSERC elaborated calculation of load factor rebate in following manner:

> *"for load factor between 40-60%, 5% rebate is admissible on the energy charge in excess of 40% of the load factor up to 60 %. If the load factor is between 60 to 70%, the load factor rebate is 5% for consumption between 40% to 60% and 7.5% beyond 60%upto 70% and 10% for consumption beyond load factor of 70%."*

4.89 The Petitioner has therefore submitted that the Commission has already given its decision regarding interpretation of Load Factor rebate and therefore there is no relevance of raising the same issue again.

Views of the Commission

4.90 The Commission has gone through the submissions of the Petitioner and Respondent. The Commission would like to clarify that there was no ambiguity in the interpretation of load factor rebate mechanism as has also been replied by the Petitioner. The Commission has also re-iterated its clarification on the issue time and again. The Commission would like to state that as mentioned earlier in this section the Commission has decided to do away with the earlier mechanism and has proposed a simpler load factor mechanism to promote industrial growth and hence the issue raised is taken care of.

Books of Accounts

Public Comments/Suggestions

4.91 The stakeholder submitted that the books of accounts maintained by company is not adequate and satisfactory to give a true and fair view of the state of the affairs of the company and such books so maintained is not fully on accrual basis as required under Section 128 of the Companies Act 2013.

Petitioner's Response

4.92 The Petitioner replied that historically, it has been preparing accounts in the manual environment. On account of the same maintenance of certain records like Fixed Asset Register etc. were difficult. The Petitioner further submitted that it has improved significantly in the last few years in terms of records keeping and availability of data enabling auditors to comment on specific matters where the Petitioner expects further improvement. The Petitioner further replied that the fact that it has been able to get audit completed on time in the last couple of years and provide audited accounts instead of provisional one while filing true up itself suggests the improvements and the focus of the management. In order to ensure that JBVNL complies with the requirements of maintenance of books and records the Petitioner submitted that the company has already worked towards implementation of SAP ERP which will fill the remaining gaps and allow us to maintain records electronically and also ensure compliances. The Petitioner further submitted that it is now at the transition phase of implementation and expect the ERP to be fully operational from FY 2020-21.

4.93 The Petitioner further submitted that it has already taken the matter seriously with respect to preparation of fixed asset register and there is a significant development on the same. The process of appointment of agency for physical verification and preparation of fixed asset register in association with World Bank is at advanced stage and it expects it to be completed by August 2020 so that work can start from end October which will resolve this concern.

Views of the Commission

4.94 The Commission has gone through the submissions of the Stakeholder and the Petitioner. The Commission again directs the Petitioner to maintain its account in an appropriate manner so that precise data is available as failure on this account may lead to rejection of true up Petition in future. The Commission points out that as per Definition 2.1 of JSERC Distribution Tariff Regulation, 2015, Accounting Statement needs to be duly certified by statutory auditor(s) for carrying out truing up which the Petitioner has submitted and further since the Petitioner was able to furnish details of almost entire capitalisation to the Auditor’s satisfaction hence the truing up is being carried out in this Order.

AT&C Loss

Public Comments/Suggestions

4.95 The stakeholder has submitted that JBVNL has claimed loss in external system at 3.00%, transmission loss at 8.29% and distribution loss at 22.89% for 2018-19. For 2019-20, JBVNL has claimed loss in external system at 3.00%, transmission loss at 5.00% and distribution loss at 18%. The Stakeholder submitted that there is no reason to permit AT & C Loss beyond the approved parameter by the - Commission as also these figures cannot be relied.

4.96 The Stakeholder further submitted that the loss in external system and transmission loss are not related with the distribution operation and therefore should not be allowed and the distribution loss should be allowed only to the extent of permissible limit as laid down by the Commission in its earlier tariff order.

Petitioner’s Response

4.97 The Petitioner submitted that in order to cater to the energy requirement of the Consumers in the JBVNL’s license area, power is purchased from Interstate and Intrastate Generating stations. The power thus purchased is wheeled through the Inter and Intra State Transmission system wherein the unit wheeled are subjected to certain losses called as Transmission losses, which after the due diligence are approved by the Commission. The Petitioner further submitted that as the Discoms are the cash counted for whole value chain of the Power Sector, these losses are considered in the energy balance of Distribution Licensee. It further added that the Commission in its Tariff Order 28.02.2019, has also considered the approved Transmission losses in the Energy Balance and the Licensee has adopted the same methodology for preparation of energy balance. The Petitioner also submitted that the effect of higher T&D losses is not passed on to the consumers in the licensee area of JBVNL as the Commission while approving energy balance of JBVNL does not allow additional power purchase cost corresponding to loss levels above approved T&D loss. As such, the cost of power purchase due to higher T&D losses does not forms part of Tariff applicable.

Views of the Commission

4.98 The Commission has gone through the submissions of the Stakeholder and the Petitioner. The Commission notes with concern that the actual level of Distribution losses submitted by the Petitioner are higher as compared to the targets set by the Commission. The Commission is of the view that such high loss levels due to Petitioner's inefficiency should not be passed on to the consumers. The Commission has done detailed discussion in this regard in the subsequent sections of this Order.

Reliability of AT&C loss Figure

Public Comments/Suggestions

4.99 The Stakeholder submitted that JBVNL admitted in its submission that metering of feeders, Distribution transformers does not exist and are not being presently monitored. Further, unmetered connections also exist and JBVNL has failed to get these connections metered. The Stakeholder further added that there is no authentic and scientific method and is beyond imagination how JBVNL can calculate the T & D loss when they supply to unmetered consumers and there is metering at DT level. The stakeholder thus submitted that the statements related to T & D Loss seems fictious and major reason for the depleting financial health of the Petitioner.

Petitioner's Response

4.100 The Petitioner submitted that AT&C loss is calculated by two separate components: Billing Efficiency and Collection Efficiency. The formulae used for calculating the AT&C losses has been given below:

AT&C Losses: 1-CE X BE

4.101 The Petitioner submitted the methodology for calculation of these components as explained below:

a. Billing Efficiency: Billing efficiency is calculated as ratio of Energy consumed to Input Energy. Where Energy consumed is sum of energy billed to all the consumers of JBVNL in a particular financial year. In case of unmetered Consumers, the consumption is calculated based on the LDHF formula as specified by the Commission, where the load factor is considered as "0.15". The figure is also maintained in billing system of JBVNL. The Input Energy is calculated as energy received from GSS by JBVNL in the same financial year. This figure is recorded by meters installed at outgoing feeders of respective GSS.

4.102 The Petitioner also submitted that T&D losses are function of billing efficiency only and once the Billing efficiency is determined, the T&D losses can be calculated. The Petitioner further submitted that JBVNL has been endeavoring to ensure 100% DT Metering, however, due to outbreak of COVID-19, the rate of progress has been affected.

b. Collection Efficiency: The Petitioner submitted that the Collection Efficiency is ratio of amount collected and amount billed. Amount collected is reflected in receipt generated as well as amount collected by JBVNL. Amount Billed is amount corresponding to the sum of energy billed to all the consumers of JBVNL in a particular FY. The figure is also maintained in billing system of JBVNL.

4.103 The Petitioner also submitted that both components of AT&C loss is maintained and recorded and are also audited annually by statutory auditor.

Views of the Commission

4.104 The Commission has gone through the submissions of the Stakeholder and the Petitioner. The Commission has approved normative losses as per Regulations which has been discussed in the subsequent sections of this Order.

Energy Sales

Public Comments/Suggestions

4.105 The Stakeholder submitted that the projection of increase in domestic, commercial and irrigation & agriculture category seems unrealistic and impractical and requested the Commission to revisit the same.

Petitioner's Response

4.106 The Petitioner submitted that the objector hasn't raised specific queries regarding objections over trend in number of consumers, connected load and Energy Sales of different consumer categories. The Petitioner explaining a few trends which are above or below normal values.

a. Increase in Domestic Consumers: SAUBHAGYA. The Petitioner submitted that in order to start the billing of these new consumer, proper verification has to be done by JBVNL. As High increase in number of domestic consumers is mainly due to electrification drive for releasing connection under such, the pace of consumers getting added in the billing database of JBVNL is a bit slower than the pace for release of connection. The Petitioner submitted that the unavoidable lag in providing connection and bringing the consumer in the billing database has led to increase in number of domestic consumers from around 40 lakhs to 43.5 lakh in FY 2020-21.

b. Increase in IAS Consumers: The Petitioner submitted that it is expected that JBVNL will complete its target of cumulative 1,00,000 agriculture connection by FY 2020-21 under Tilka Manjhi and DDUGJY schemes and it has considered 1,00,000 consumers in IAS category.

c. Increase in NDS Consumers: The Number of Non-Domestic Consumers in first half of FY 2019-20 has been prorated for the complete FY 2019-20. i.e. the Increase in Number of Consumer in the first 5 months has been prorated to arrive at the number of Consumers for the FY 2019-20. For the FY 2020-21 past trend has been considered for projecting number of NDS consumers.

d. Load of NDS Consumers: The Petitioner submitted that 90% of the total NDS consumers are NDS-II consumers and it is seen in past, that the NDS-II consumers tends to understate the connected load. The Petitioner in the current petition has prayed before the Commission to allow it to recover the fixed charges based on connected load. In light of above, JBVNL has planned to regularize the Load of NDS consumers through a mass drive. The Petitioner submitted that the Connected Load per NDS-II consumer is assumed to increase from 2 to 2.3 KW.

e. Reduction in Sales to HT Consumers: The Petitioner submitted that the reduction in Sales to HT Consumers has been due to shifting of HTSS consumers from JBVNL to DVC due to difference in the applicable Tariff.

Views of the Commission

4.107 The Commission has gone through the submissions of the Stakeholder and the Petitioner. The Commission has done detailed discussion while approving sales in sections A6 and A7 of this Order.

Interest on Consumer Security Deposit

Public Comments/Suggestions

4.108 The Stakeholder submitted that JBVNL has not paid the interest amount to the consumers for very long period. Directions have been given repeatedly in all the tariff order but it has not been adhered by the licensee. The Stakeholder submitted that the Licensee should be penalized for non-compliance for the directions of the - Commission and the penal provision introduced in the Tariff Order for FY 2017-18 for non-payment of Interest on consumer security should be reintroduced. The Stakeholder further submitted that the extra gain earned by JBVNL in way of interest due to non-payment of Interest on Consumer Security Deposit should be deducted in ARR.

Petitioner's Response

4.109 The Petitioner submitted that it is committed to pay interest on security deposit to all consumers whose details are available with JBVNL in its database. Further, JBVNL has provided a window for consumers to kindly provide their consumer security deposit details to it, whether through the web-based tool especially created for such purpose or through hard copy submission to any of JBVNL's office.

4.110 The Petitioner further submitted that interest on security deposit is being accrued even if not paid, as per the accounting principles. Hence, the same amount has also been reflected in audited Balance sheet on basis of which the Commission preforms True-up. The Petitioner submitted that it is committed to pay interest on security deposit for all consumers, once the details of security deposit of all consumers is obtained. It further submitted that the amount of Security Deposit is deducted from working capital requirement, which leads to reduction in Interest on Working Capital as a part of ARR.

Hence, the Petitioner requested the Commission to approve Interest on Consumer Deposit for FY 2018-19 as submitted by it in its Petition.

Views of the Commission

4.111 The Commission has gone through the submissions of the Stakeholder and the Petitioner. The Commission has discussed this issue under compliance to directions section of this Order.

Billing & collection efficiency

Public Comments/Suggestions

4.112 The Stakeholder has submitted that billing and collection efficiency is a matter of grave concern and such inefficiency cannot be allowed at the cost of consumers. A shocking admission by JBVNL- Percent of receipt generated to such domestic consumers as number of bills issued is less than 10% which admittedly speaks about lack of commitment. The Stakeholder submitted that it cannot be permitted to bypass all such decisions and continue with high T&D loss and collection inefficiency resulting in higher tariff for consumers. The Stakeholder further submitted that these figures are provisional and as per the past practices, there is every possibility of the losses being on the higher side than reported in the tariff petition and therefore Consumers cannot be burdened for the inefficient cost of the licensee.

Petitioner's Response

4.113 The petitioner submitted that the tariff burden on consumers due to excess loss, JBVNL submits that no effect of AT&C loss over and above the level approved by - Commission is passed on to consumer tariff.

Views of the Commission

4.114 The Commission has gone through the submissions of the Stakeholder and the Petitioner. The Commission has approved normative losses as per regulations and therefore any inefficiency of the Petitioner is not loaded on consumers.

Capital Expenditure

Public Comments/Suggestions

4.115 The Stakeholder has submitted that JBVNL has claimed the capital expenditure plan and operational expenses. The Stakeholder stated that it is stated in para 5.9 of the said

Regulation, "The Licensees shall file for the Commission's approval a Capital Investment Plan for the entire Control Period with the business plan. The investment plan shall be prepared scheme-wise and each scheme shall be included in: -

a. Purpose of investment (e.g. replacement of existing assets, meeting load growth, technical and distribution loss reduction, non-technical loss reduction, meeting reactive energy requirements, customer service improvement, improvement in quality and reliability of supply etc);
b. Capital structure;
c. Capitalization Schedule;
d. Implementation schedule including timelines;
e. Financing Plan;
f. Cost-benefit analysis;
g. Improvement in operational efficiency envisaged in the control period;
h. Ongoing projects that will spill over in to year under review along with justification
i. New projects that will commence during the control period but may be completed within or beyond control period

4.116 The Stakeholder further submitted that no reference has been given to show that approval of the Commission was obtained as per Regulation otherwise the interest burden of that cannot be passed to the consumers. Regarding capital expenditure on R&M expenses the Stakeholder submitted that the interest burden of that cannot be passed to the consumers unless the benefit from that are passed on.

4.117 The Stakeholder further submitted that the Licensee has claimed a higher Depreciation although corresponding Capital Expenditure schedule reflects a reduction in the GFA and CAPEX. The Stakeholder further added that since the depreciation is linked to GFA and CAPEX and increase in depreciation without increase in GFA and CAPEX is not maintainable.

Petitioner's Response

4.118 The petitioner submitted that it has submitted Petition for approval of Capital Investment Plan which was approved by the Commission in Order dated 21st June, 2017. Further schemes such as SAUBHAGYA and JSBAY which were sanctioned after Order on

Business Plan, with considerable government grant was approved by the Commission in subsequent Orders.

Views of the Commission

4.119 The Commission has gone through the submissions of the Stakeholder and the Petitioner. The Commission has done detailed discussion in this regard in the subsequent sections A5, A6 and A7 of this Order.

Receipt from State Government

Public Comments/Suggestions

4.120 The stakeholder submitted that during FY 2018-19 Rs 1250 Crore out of which Rs. 658.41 Crore has been deducted on account of AT &C Loss. This adjustment related to inefficiency cost not be allowed to be adjusted and entire receipt should be adjustment in revenue gap.

Petitioner's Response

4.121 The Petitioner submitted that the submission of the Objector is not tenable in view of communication from the Energy department, Government of Jharkhand vide letter dated 14 July 2014 stating that "Amount released towards resource gap may be utilized to meet the slashes/disallowances worked out by the Commission while fixing the tariff". Hence the amount received from government of Jharkhand can't be used to offset revenue gap as stated by the Stakeholder.

Views of the Commission

4.122 The Commission has gone through the submissions of the Stakeholder and the Petitioner. The Commission has done detailed discussion in this regard in the subsequent Section A8 of this Order.

Correctness of the Submission

Public Comments/Suggestions

4.123 The Stakeholder submitted that many of the Figure in the proposed APR and ARR related to previous years have been found to be same. The Stakeholder submitted that approved figures and actuals achievements related to different cost and purchases have been mentioned as same to the decimal points which creates doubt about the genuinely and correctness of the figures/submission. The Stakeholder requested the Commission to get these figures verified suitably for its correctness and removing the doubts.

Petitioner's Response

4.124 The Petitioner submitted that it has taken best effort to ensure that all the figures submitted in the Petition are correct. The Petitioner further submitted that the Stakeholder hasn't specified which expense it is pointing towards in its Objection, hence it finds itself unable to answer to the comment of the Objector.

Views of the Commission

4.125 The Commission has gone through the submissions of the Stakeholder and the Petitioner. The Commission has carried out due prudence check of each cost parameters before approving the same which addresses the Stakeholder's concern.

100% Collection Efficiency target

Public Comments/Suggestions

4.126 The Stakeholder submitted that JBVNL has proposed for 92.97% collection efficiency for FY 2018-19 and 95% for FY 2019-20 against 100% approved by the Commission. The Stakeholder submitted that the matter has been repeatedly dealt in earlier tariff orders and therefore no relaxation should be allowed for the reason already spelt and recorded in the earlier orders. The Stakeholder submitted that there has been repeated decrease in collection efficiency over years which is a matter of concern and no relaxation should be allowed as stated in earlier Tariff orders.

Petitioner's Response

4.127 The Petitioner submitted that in order to increase collection efficiency it has introduced several avenues for payment of bills by the consumers, to enhance the collections which includes:

a. Payment by credit/ debit card through Mobile App (ezy-bzly),
b. Online web-based payment facility on JBVNL's website
c. Payment through Bharat Bill Payment System (BBPS)
d. POS machine and E-wallet facility through Urja Mitras Tie-ups with ~4,500 Pragya Kendras
e. Collection through ~440 Post Offices

f. Collection through ~ 190 Any Time Payment (ATP) machines

4.128 The Petitioner submitted that the target of 100% of collection efficiency is very high and even the most efficient utilities in the Country are not able to achieve the 100% collection efficiency. The Petitioner further submitted that one of the key reasons behind the lower collection efficiency of JBVNL than the targeted collection efficiency is the addition of large number of rural consumers during FY 2018-19 under SAUBHAGYA and DDUGJY 12th Plan Scheme. It further added that the newly added consumers are from remote parts of the State and have limited paying capacity and therefore in order to complete mandate of universal electrification, the Petitioner is supplying electricity to them. It further added that the percentage of receipt generated to such rural domestic consumers as number of bills issued is less than 10% and therefore in such a scenario, it is impossible to achieve collection efficiency of 100% as mandated by the Commission.

Views of the Commission

4.129 The Commission has gone through the submissions of the Stakeholder and the Petitioner. The Commission has considered 100% collection efficiency as provided under the Tariff Regulations, 2015.

Energy Audit

Public Comments/Suggestions

4.130 The Stakeholder submitted that in spite of repeated directives by the Commission since Tariff Order 2003-04, and repeated assurance by licensee no reliable data could be made available for a single division. The Stakeholder submitted that after 18 years, JBVNL has submitted a sample report which shows a lack of commitment to undertake energy audit and bring transparency. The Stakeholder further submitted that it’s a serious matter and requested the Commission to penalize suitable directive on this matter for non-compliance. It further added that energy audit will bring in transparency, expose the inefficiency in the system.

4.131 The Stakeholder also submitted that the claim of JBVNL of about 100% feeder metering is misleading and the reports provided during the previous Advisory committee meeting on 26.02.2020 had discrepancy and therefore such statement of JBVNL cannot be relied upon. The Stakeholder requested the Commission that it should appoint an external agency to check and audit the correctness of claim of JBVNL about 100% metering of feeders.

Petitioner's Response

4.132 The Petitioner submitted that it has already completed 100% Feeder Metering and is in process of 100% metering of DTs and Consumers to enable energy auditing.

Views of the Commission

4.133 The Commission has gone through the submissions of the Stakeholder and the Petitioner. The Commission has dealt with the issue in the compliance to direction section of this Order.

Smart Meters

Public Comments/Suggestions

4.134 The Stakeholder submitted that the Petitioner proposes to install smart meters in town areas targeting consumers other than DS Rural since meters can run as pre-paid meters. The Stakeholder submitted that the Petitioner has admitted that the billing and collection efficiency in the rural areas are very poor but prepaid meters are being proposed for the urban areas where billing and collection efficiency is better which shows its business vision.

Petitioner's Response

4.135 JBVNL has noted the suggestion given by the Objector and would like to submit that JBVNL is installing Pre-paid meters in urban areas on pilot basis and based on the future outcomes of the project, JBVNL would explore the option of installing the Smart Meters in Rural Areas also.

Views of the Commission

4.136 The Commission has gone through the submissions of the Stakeholder and the Petitioner. The Commission directs the Petitioner to move towards prepaid meters to improve the collection efficiency and has specified the priority for implementation of pre-paid meters in the tariff rationalization section of this Order.

Tariff Proposal

Public Comments/Suggestions

4.137 The Stakeholder submitted that JBVNL has proposed steep hike in fixed/ demand charges for all category of consumers which seems impractical and unrealistic. In absence of proper competition JBVNL is taking advantage of its monopoly. The Stakeholder submitted that the proposed increase without supply commitment will force the State to negative growth causing socio-economic crisis as there seems no justification for proposal of steep hike in the fixed / demand charges from 50% to 300% across all category of consumers. The Stakeholder submitted that the Petitioner has attempted to increase revenue without service commitment.

Petitioner's Response

4.138 The Petitioner replied that it has submitted its Tariff proposal in order to recover its justifiable ARR and in line with voltage-wise Cost of Supply. In order to prevent tariff shock to consumers the Petitioner submitted that it has also left considerable revenue gap (~Rs. 4700 crore) unrecovered which can be recovered at a later time.

4.139 The Stakeholder submitted that effect of any inefficiency on part of JBVNL is curtailed by the Commission while approving energy balance of JBVNL and is not passed in retail tariff by way of disallowing additional power purchase cost corresponding to loss level above approved T&D loss and requested the Commission may take a suitable decision on the matter.

Views of the Commission

4.140 The Commission has gone through the submissions of the Stakeholder and the Petitioner. The Commission has done detailed discussion in this regard in the **Section A 10**, of this Order.

Fixed charge on KW basis

Public Comments/Suggestions

4.141 The Petitioner submitted that reintroduction of fixed charge on kw basis from connection basis will lead to inspection and harassment leading to unfair practices and exploitation of consumers and proposed mix of Connection and Demand Based Fixed Charge for Commercial Consumers.

Petitioner's Response

4.142 The Petitioner replied that fixed charge on 'kW' basis has been introduced for NDS –II (urban) category as there are great variations in range of connected load of consumers. Hence levy of fixed charge on per connection basis leads to both large consumers and small consumers paying same amount.

Views of the Commission

4.143 The Commission has gone through the submissions of the Stakeholder and the Petitioner. The Commission has done detailed discussion in this regard in the **Section A 10**, of this Order.

High cost of supply for LTIS consumers

Public Comments/Suggestions

4.144 The Stakeholder submitted that JBVNL has proposed three times increase in fixed/ demand charge and approx. 12% increase in the energy charge for LTIS category. Further, the proposal to increase three times in the fixed charge is not supported by reliable data. The Stakeholder therefore requested that the increase in fixed/ demand charge and energy charge should not be allowed.

Petitioner's Response

4.145 The Petitioner submitted that LT Consumers are provided supply at LT level where the losses are higher and also there are higher O&M expense and depreciation cost due to extensive LT network as compared to 11 kV level resulting into high Cost of Supply for LTIS consumers as compared to HT consumers.

4.146 Regarding, increase in fixed charges of LTIS Consumers, the Petitioner submitted that Fixed Charges are recovered from consumers to compensate the Distribution Licensee for its fixed cost. However, the Tariff has been designed in such a fashion that only partial fixed cost is recovered through fixed charges. The remaining fixed cost of the Licensee is recovered through the applicable energy charges. As LTIS Consumers have average load factor of 10%-15% only, it leads to under recovery of Energy charges. The Under recovery of Energy Charges is though compensated by the lower Power Purchase, the part fixed cost remains under recovered. As such, in order to enable JBVNL to fully recover its fixed cost it becomes an imperative to increase Fixed Charges to the extent that fixed cost is fully recovered.

4.147 Regarding Shifting of LTIS Consumer to HT Category in case of higher load, the Stakeholder submitted that for the purpose of verification, Recorded Demand will be considered and therefore, there will not be any requirement of physical verification of load.

4.148 The Petitioner further submitted that the objector has misconstrued the proposal of the Petitioner. The Petitioner submitted that in its Tariff Petition for FY 2020-21 it has projected the Average Cost of Supply for HT Consumers at 11 kV level to be Rs. 6.09 per unit and the per unit billing rate of Rs 6.15 per unit considering 60% load factor.

4.149 Similarly, in case of HTSS consumer, the petitioner has projected the average cost of Supply of Rs. 5.91 per unit at 33 kV level for HTSS Consumers and the per unit billing rate of Rs 5.98 per unit considering 40% Load Factor.

Views of the Commission

4.150 The Commission has gone through the submissions of the Stakeholder and the Petitioner. The Commission has done detailed discussion on Tariff Structure in **Section A 10**, of this Order.

kVAh Billing

Public Comments/Suggestions

4.151 The Stakeholder submitted that KVAH billing was introduced for LTIS and HT consumers. It has resulted in undue revenue for JBVNL. Many LTIS consumers are not being billed as per the Tariff. Suitable meters have also not been installed at all the consumer premises to record KVAH readings. The Stakeholder submitted that repeated mistakes have been observed during billing and there is lack of interest in the field officers about correction of these bills. The Stakeholder requested that the KVAH billing should be made optional and consumers opting for KVAH billing should be given a rebate of 3% reduction in the energy tariff rates on the billed amount similar to the tariff of other licensee in the State.

Petitioner's Response

4.152 The Petitioner replied that KVAh metering was a concept mooted to replace the conventional kWh metering. In Previous Tariff Orders, the Tariff was fixed for the Active Energy (KWH). The Petitioner submitted that the Discom had to absorb the loss in the supply system due to the additional amount of current drawn due to the lower Power Factor. This resulted in increase in Line losses and reduced capacity of the network to cater the Active Load. To counter this Regulatory measure needs to be initiated upon the consumers who do not maintain the power factor at specified value. The Petitioner further submitted that if KVAh Metering is employed, automatically it becomes the responsibility of the consumer to maintain the Power Factor. Else, the Consumers who do not maintain the Power Factor have to automatically pay themselves for the additional burden due to poor power factor of the load maintained by them. The Petitioner listed some of the Benefits of KVAh Billing are mentioned: -

a. It will incentivize the consumers to improve the power factor by installation of capacitors at the load point itself, which would be the right practice.
b. With the better power factor, the line loading shall be lower for the same KW requirement leading to lower transmission as well as distribution losses.
c. KVAH system of billing will avoid manipulations, whatsoever.

Views of the Commission

4.153 The Commission has gone through the submissions of the Stakeholder and the Petitioner. The Commission has done detailed discussion in this regard in the **Section A 10**, of this Order.

Clause 13 of HT Agreement

Public Comments/Suggestions

4.154 The Stakeholder submitted that vide Tariff order for FY 2019-20 the Commission has fixed 20 hours supply for calculation of reduction in demand charge similar to provision of Clause 13 of HT agreement. The Stakeholder further submitted that the consideration of 20 hours for recovery of entire demand charge is not justified. There have been repeated orders of the Commission that Clause 13 of HT agreement is in the interest of consumer and compels the licensee to minimize power supply interruptions.

4.155 The Stakeholder further submitted that, the calculation of SAIDI is being manipulated and wrongly presented which should be independently audited by third party. The Licensee aims for Zero Power Cut, if it is achieved, there would be no claim under Clause 13 and therefore even if the clause continues, it will not have any adverse impact on the Licensee. The Petitioner requested the Commission to increase the cap of 20 hours to 23 hours and extend the rebate to all category of consumers as introduced in the earlier tariff order.

Petitioner's Response

4.156 The Petitioner submitted that the Commission is entrusted with two-sided responsibility to safeguard the interest of Consumers and as well as Discoms. Therefore, keeping its present financial condition and infrastructure in view, limit of 20 hours supply for recovery of full fixed charge is justified. The Petitioner submitted that it also submits that SAIDI is calculated based on the SCADA meters installed in 11 kV feeders and there is no manual intervention while the same is prepared. Therefore, the contention of the Objection doesn't have any merit.

Views of the Commission

4.157 The Commission has gone through the submissions of the Stakeholder and the Petitioner. The Commission is of the view that the Distribution Licensees should be held accountable for round the clock availability of power to the Consumers. The Licensees should compensate the Consumers for unavailability of power in terms of reduced Fixed/Demand Charges as per the mechanism approved in **Section A 14** of this Order.

Load Factor Rebate

Public Comments/Suggestions

4.158 The Stakeholder submitted that claim of Licensee that Load Factor rebate was introduced to curb the theft of Electricity is misleading and incorrect. The Stakeholder further submitted that the Tariff Order for FY 2003-04 and FY 2010-11 states that Load Factor rebate was introduced for improving consumption and efficiency and with the aim to encourage HT consumers to maintain high load factor. The Stakeholder submitted that High Load factor is beneficial for the Licensee therefore, it does not find any reason for removal of Load factor rebate.

4.159 The tariff proposal submitted by JBVNL related to HT/ HTSS/ EHT consumer stands as under:

Connected Load (kW):	787,471
Projected Energy Sales (MU):	2294.80
Load Factor :	29.14 %

4.160 The Stakeholder submitted that the above calculation shows that there is a strong case to incentivize consumers having high load factor as the same will benefit the Licensee with better utilization of its infrastructure. The Stakeholder submitted that the load factor rebate should be extended to consumers having load factor above 50%. The Stakeholder further submitted that Load factor for LTIS category is being projected at 7.5%. The Stakeholder requested that LTIS consumers having load factor above 20% should be extended load factor rebate.

Petitioner's Response

4.161 The Petitioner submitted that provision of load factor results in double accounting of benefits of higher consumption to the Consumer as the fixed cost is already being spread over higher number of units, whereas the lower load factor on the other hand is not being penalized.

4.162 The Petitioner submitted the comparison of the base load factor rebate for other utilities as below:

Sr. No.	State/Discom	Load Factor Rebate
1	Chhattisgarh	1% rebate with LF above 65% and 1% incremental rebate from every percent increase thereby.
2	DVC	5% LF rebate above LF of 65% and 10% above 80%
3	JUSCO	7.5% LF rebate above LF of 60% and 10% above 70%

4.163 The Petitioner submitted that it can be seen from the Comparison given above that the Load Factor rebate is provided above 60% LF. The rationale behind the same is to promote consumers to better utilise their Contract demand while helping the Discom to flatten the load curve. The Petitioner submitted that the cost of the rebate given is also passed on in the ARR of the Licensee and therefore, by reducing the threshold for availing the benefit would only put additional burden on the other consumers in the State of Jharkhand.

4.164 The Petitioner submitted that detailed submission on Load Factor rebate has already been submitted by the Petitioner in its Tariff Petition. The Petitioner requested the Commission to remove the load factor rebate for all consumer categories as it increases billing disputes while adversely impacting the financial position of the Petitioner.

Views of the Commission

4.165 The Commission has gone through the submissions of the Stakeholder and the Petitioner. The Commission is of the view that load factor rebate should continue and should be increased further to promote economic activities and has therefore increased the rebate and further simplified the load factor rebate mechanism in this Order.

Tariff Schedule Terms and conditions of Supply

Public Comments/Suggestions

4.166 The Stakeholder submitted that there should be a standard and uniform Tariff Schedule/ Terms and conditions of supply for all DISCOM in the State. This would bring transparency in the business and curtail the scope of back door revenue and benefit to any licensee. The Stakeholder made following suggestions.

a. The proposed change in penalty for exceeding billing/ contract demand should not be permitted. Similar attempt by JBVNL to get revision earlier has been turned down by - JSERC.
b. Rebate for prompt online payment is not being extended to many LTIS demand-based consumers. JBVNL has not been able to provide the online payment facility to LTIS demand- based consumers in many divisions. Such consumers should be allowed rebate for offline payment also. This will pressurize JBVNL to provide the online payment facility to all consumers.
c. The proposed increase in Tariff in Fixed Charges and Energy charges should not be allowed as the rates of Energy and its availability across the country has seen a downward trend. The Petitioner submitted that many states have reduced the energy tariff for Industries. Also, in the proposed tariff comparison with other states have been mentioned but it should also be comparable with under DISCOMs in the state and not with other State. Disparity in the tariff will bring in unhealthy business environment.
d. LTIS Demand Based proposed increase in the minimum billing from 50% to 75% is not justified and not backed with any evidence to justify the same. Most LTIS run for 8 hours only and therefore further burdening will impact its financial health.
e. HT Consumers pay the highest tariff and give the best revenue to the Licensee. The proposed tariff is aimed to burden the HT consumers directly and indirectly through different proposal which would have indirect cost to HT consumers. The

Licensee should prefer to encourage the HT consumers by reduction in tariff and other incentives instead of discouraging them.

f. HT Demand Billing proposed increase in the minimum billing from 75% to 85% is not justified and not backed with any evidence to justify the same.

g. High Load Factor should be encouraged and Load Factor rebate should be allowed in true spirit in accordance with Tariff guideline.

h. The proposed change in penalty for exceeding contract demand from three continuous month to three occasions in a calendar year is not justified. Technically, if the consumers consume energy even if there is supply lower than the rated voltage supply, his demand is bound to increase abnormally and in the present situation such instance are frequent.

i. Penalty for exceeding contract demand above 110% of contract demand should be levied at normal tariff upto 110% and 1.5 times above 110%.

j. Steep hike has been proposed in the schedule of charges and Transformer rent, which is not justified and holds no merit. There has been an increase of hardly 2% in the minimum wage across one year in Jharkhand which can easily be set off with improvement in services, consumer density and collection efficiency.

k. Removal of Unmetered consumer category. There has been repeated direction of the Commission for metering the unmetered connections. JBVNL has been repeatedly assuring that the same will be complied. The Petitioner submitted detailed statement of direction given by the Commission and reply submitted by the licensee since Tariff order 2003-04. The Stakeholder submitted that it clearly shows the seriousness of JBVNL to remove the unmetered category and the Commission should not give any relief in this matter and should not allow tariff for unmetered category. The Stakeholder submitted that the Petitioner has taken a step forward and continues to bill the unmetered consumers without tariff for which JBVNL should be penalized.

l. LTIS consumers are being asked to provide distribution transformers when applying for new connection. In absence of any clear guideline, JBVNL insists that LTIS consumer provide transformer. This has resulted in additional burden on small MSME’s who have very limited financial strength. Field officers harasses the small consumers and ultimately leads to unfair dealings. The Stakeholder requested the Commission to take note of the same and specify in the order that DT will be provided by JBVNL for all LTIS connections.

m. Access to current reading of Meter: It's the right of the consumer to have access to the current meter reading. JBVNL does not allow access to the current meter reading for HT/ HTSS consumers. This is against natural justice and consumer right as it leads to depriving the consumer to even verify the correctness of the bills. All other licensee in the state provides access to the current meter reading.

n. Online process for new connections Provision has been introduced for online application for applying for new connections. The Stakeholder submitted that impractical and complicated procedures, compels the applicant to approach middleman and pay hefty cost for availing new connections. Conditions for unwanted documents and procedures have in fact made the online process difficult in the name of simplification.

Petitioner's Response

4.167 The Petitioner submitted that

a. Penalty in case of Recorded Demand exceeding the Contract demand, the Petitioner submitted that in order to bring commercial discipline, JBVNL has proposed penalty in case Recorded demand exceeds Contract demand. Further, submitted that the Discoms also have to schedule their demand on daily basis and in case of over drawl are liable to pay the DSM Charges. If the consumers don't draw as per the contract demand and don't have to pay for excess demand, the UI charges incurred by the licensee would be spread over all the other consumer, which would be against the law of natural justice.

4.168 The Petitioner further submitted that in absence of any penalty for exceeding contract demand, consumers may declare any contract load and later-on would exceed that. This would create a situation where the Discom won't be able to do a balance distribution network planning leading to loss in future.

a. Rebate on prompt online payment is available for all consumer categories

b. JBVNL has proposed increase in Tariff schedule in order to recover its justifiable ARR and in line with voltage-wise Cost of Supply. It can be seen from the table given below that the tariff applicable in JBVNL is lower in comparison to neighbouring states. The Comparison of Tariff with the neighbouring states has been enumerated below:

Particulars	Jharkhand (JBVNL)	Bihar (All DISCOM)	Chhattisgarh (CSPDCL)	Madhya Pradesh (All DISCOM)	Uttar Pradesh (DVVNL)
	FY 19-20 Actual	FY 20-21	FY 20-21	FY 19-20	FY 19-20
Domestic	4.27	6.73	3.92	6.41	5.95
Commercial/Non domestic	6.07	7.53	8.55	9.40	10.46
Irrigation & Agriculture/	2.02	6.09	4.83	5.59	2.50
Industrial Services, LTIS	9.72	10.19	6.59	8.78	9.31
HTS/HTSS/EHT	7.25	8.08	8.42	7.86-8.15	7.40-10.51
IS-I: Public Lighting/SS	6.34	9.99	6.38	6.49	10.14
IS-II: RTS, MES	7.18	9.99	4.46	4.89	12.12
Average total of all categories	5.29	7.35	5.39	6.59	6.71

c. It is also worthwhile to mention that Tariff of JBVNL is not comparable with other Discoms in the state of Jharkhand due to the fact that these Discoms have different Consumer mix. The tariff of DVC is lower than the JBVNL because DVC serves to the consumers who are at 33KV and above only. As such, there are 3- 4% Losses only. However, in case of JBVNL more than 99.9% are at LT level. As such, cost of supply of JBVNL is higher as compared to DVC.

d. JBVNL needs to incur many fixed cost such as O&M expense, capex cost for network (Depreciation, Interest on loan etc) and also needs to pay capacity charges to power plants. These costs have to be incurred despite irrespective of power consumption by consumers of JBVNL and are contracted on basis of connected load of consumers after applying load and diversity factors. Hence to ensure minimum recovery of such charges, JBVNL has proposed minimum billing of LTIS consumers on 75% of consumer load

e. The replies to the comments of the objector have already been given above. Therefore, the same has not been repeated for the sake of brevity.

f. Schedule of Charges and Transformer Rent are proposed in line with similar charges in other states and cost incurred by JBVNL for undertaking relevant activities.

g. JBVNL is trying to install meter for all unmetered consumers by March 2021 and till then JBVNL will do the billing of unmetered consumers as per interim Order of - Commission in Case no. 19 of 2019

h. JBVNL would like to submit that whenever LTIS consumer can be accommodated using existing DT, no new DT is installed and Connection is released after taking supply from same DT. However, at time, where there is requirement of new DT by JBVNL, sometimes LTIS consumer on its own procure new DT to expedite new connection, which JBVNL accepts and installs as part of Deposit Works. Any specific complaints of consumer regarding such practice may kindly be brought to the notice of respective officer/ Management of JBVNL and same shall be dealt strictly.

i. Access to current reading of Meter: JBVNL has noted point of the Objector and would take steps in the given direction so that consumers may access their meter reading without leaving any scope for meter tampering

j. Online Process for new connections: JBVNL has noted the suggestion and comment of the Objector and would take steps to simplify processes required for new connection.

Views of the Commission

4.169 The Commission has gone through the submissions of the Stakeholder and the Petitioner. The Commission has done detailed discussion with regard to issues related to tariff in this regard in the **Sections A 10, A 13 and A 14** of this Order. With regards to issues pertaining to Supply Code the Commission shall take up the same while carrying out amendment to supply code.

High LTIS Tariff

Public Comments/Suggestions

4.170 The Stakeholder submitted that keeping in view the present Covid-19 impacts the upward revision of tariff up to 275% to 13.4% is not at all advisable. The tariff proposed by Petitioner is very high compared to JUSCO.

Petitioner's Response

4.171 The Petitioner submitted that it has proposed tariff for different consumer categories in consonance with the voltage wise cost of supply with an intent to meet its Aggregate Revenue Requirement, while ensuring minimal tariff shock to consumers. JBVNL understands the impact of unforeseen pandemic conditions in the recent past and is committed to improve the quality of supply for all consumers, which necessitates the additional capital expenditure and power purchase. Accordingly, JBVNL has proposed nominal increase in tariff for LTIS category as well.

4.172 Consumer and sales mix of JUSCO is different from JBVNL and its network is also in a limited geographical area, whereas JBVNL supplies power in entire State with more than 30 Lac rural households. Hence the comparison of tariff may not be appropriate.

Views of the Commission

4.173 The Commission has gone through the submissions of the Stakeholder and the Petitioner. The Commission has rationalised the Fixed Charges of different Consumer Categories in such a way that it is more or less uniform with the Fixed Charges of the Other Licensees in the State. The Commission has also kept in mind that there is no/marginal increase/decrease in Average Billing Rate (ABR) for each category of consumers, while re-allocating recovery from Fixed and Energy Charges. The Commission has done detailed discussion in this regard in the Sections A 11 and A 13 of this Order.

Renewable Energy

Public Comments/Suggestions

4.174 The Stakeholder submitted that, how does the tariff support renewable energy, it is not considered

a. Supply side and demand side element of tariff that support renewable energy

b. Transparency about cost impact of renewable energy supportive demands are suggested to be considered

Petitioner's Response

4.175 The Petitioner submitted that Purchase of renewable power shall not only be required for meeting the RPO obligation but will also be cost effective. In the instant Petition, JBVNL has proposed procurement of renewable power to fulfil its RPO obligation, which includes 700 MW solar power and 500 MW wind power from SECI. The average rate of such power shall be lower than Rs. 3.00 Per unit, thus reducing the overall power purchase cost of JBVNL.

Views of the Commission

4.176 The Commission has gone through the submissions of the Stakeholder and the Petitioner. The Commission has discussed the purchase from RE Sources in Detail in **Sections A 5, A 6 and A 7** of this Order

Subsidy to HTSS Consumer

Public Comments/Suggestions

4.177 The Stakeholder submitted that subsidy of Rs 42 Crore was announced for HTSS consumers which was supposed to be disbursed from Dec 2019 to Mar 2020 has not yet been made available to the consumers.

Petitioner's Response

4.178 The Petitioner has submitted that JBVNL would like to submit that, wherever applicable, it has already passed on the benefit of subsidy declared to all respective bills of HTSS consumers, through their bills.

Views of the Commission

4.179 The Commission has gone through the submissions of the Stakeholder and the Petitioner. The Commission is of the view that the disbursement of subsidy is under the purview of the State Government and therefore merits no response.

Waiver of Fixed Charges

Public Comments/Suggestions

4.180 The Stakeholder submitted that to waive off the fixed charges for the lock down period, due to recent pandemic Covid-19.

Petitioner's Response

4.181 The Petitioner submitted that as per direction of Government of Jharkhand u/s 108 of EA, 2003; - Commission has already initiated suo moto petition to defer fixed charges of consumers for duration of lockdown, which is presently under adjudication.

Views of the Commission

4.182 The Commission has gone through the submissions of the Stakeholder and the Petitioner. The Commission issued Order on suo moto Case no. 15 of 2020 dated September 21, 2020, ruling as below:-

> *"7. .... The Commission will consider the additional expenses that are likely to be incurred by the Distribution Licensees on all these accounts after prudence check while evaluating the APR of FY 2020-21 for further processing."*.

Force Majeure Clause

Public Comments/Suggestions

4.183 The Stakeholder submitted that the Petitioner has not proposed any Force Majeure Clause in its Petition, however it is a natural part of all the Agreement. In the last Tariff Order for FY 2018-19, the Commission has given a formula for remission in Fixed Charge, which is single sided and shall not provide desired results. The Stakeholder propose Force Majeure Clause should be for both the Licensee as well as Consumers.

Petitioner's Response

4.184 The Petitioner submitted that there is no such requirement of submitting Force Majeure clause as per the Regulations. The Commission has already provided relief to consumers vide its Order dated September, 21, 2020 (Case No. 15 of 2020) regarding deferment of Fixed Charges and may decide on the issue.

Views of the Commission

4.185 The Commission has discussed the issue in the subsequent section of this Order.

Increase in Minimum Limit of Billing Demand for HT Consumers

Public Comments/Suggestions

4.186 The Stakeholder submitted that the Petitioner has proposed to increase the minimum limit of Demand Charge from 75% to 85%. The Stakeholder strongly oppose such increase without any basis and in the current pandemic situation.

Petitioner's Response

4.187 The Petitioner submitted that it has revised lower bar of demand charge to 85% of Contract Demand (from 75% in previous Tariff Order) in Tariff proposal for FY 2020-21 to encourage industries to declare their correct Contract Load. The Petitioner further added that it was observed that generally HTIS/HTS industries declare higher Contract Load than its requirement which leads to higher capacity addition by the Petitioner and thereby increases its Fixed Cost. Upward revision of lower limit of Demand Charge would encourage such consumers to declare their correct Contract Load. The Petitioner requested the Commission that any further decrease in tariff for HTIS/HTSS consumers would either lead to shortfall in recovery of ARR of the Petitioner or it would lead to increase in tariff for other category of consumers whose tariff have already been proposed to increase.

Views of the Commission

4.188 The Commission has gone through the submissions of the Stakeholder and the Petitioner. The Commission has discussed this issue in detail in **Section A 13** of this Order.

Impact of UDAY Scheme

Public Comments/Suggestions

4.189 The Stakeholder requested the Commission to review the impact on adoption of UDAY before considering the proposal of the Petitioner.

Petitioner's Response

4.190 The Petitioner submitted that the Commission has already considered grant/loan under UDAY while determining Tariff for FY 2019-20 vide Order dated February 28, 2019, which has been challenged by the Petitioner at Appellate Tribunal for Electricity (APTEL). Moreover, UDAY scheme's progress is being monitored by Ministry of Power at central level, for which the Petitioner has been providing all required information.

Views of the Commission

4.191 The Commission has gone through the submissions of the Stakeholder and the Petitioner. The Commission is of the view that the issue is subjudice and shall be considered based on the final Judgment by Hon'ble APTEL.

Impact of ADITYA Scheme

Public Comments/Suggestions

4.192 The Stakeholder requested the Commission to review the impact of Atal Distribution System Improvement Yozana (ADITYA) after the success of UDAY before considering the proposal of the Petitioner.

Petitioner's Response

4.193 The Petitioner submitted that it has not been apprised of any such scheme. Further it is submitted that if any such scheme is introduced, the Petitioner shall evaluate and participate accordingly.

Views of the Commission

4.194 The Commission is of the view that the proposed Scheme is yet to be approved and therefore has not considered the same in this Order.

Change in the behavior pattern of Consumer to Energy Efficient Equipment

Public Comments/Suggestions

4.195 The Stakeholder requested the Commission to device the tariff structure in a way so that the Consumers turn to energy efficient equipment's.

Petitioner's Response

4.196 The Petitioner submitted that the present tariff structure supports your contention as energy billed is levied on per unit basis and hence consumer is incentivized for saving or reducing its energy consumption. Further, the Petitioner has proposed tariff of categories as per Voltage-wise Cost of Supply, thereby encouraging consumers to use energy optimally.

4.197 The Petitioner further added that it has disbursed 1.37 Crore LED bulbs amongst consumers in Jharkhand till now to encourage energy savings.

Views of the Commission

4.198 The Commission has considered the submission of the Stakeholder and the Petitioner and has discussed the same in **Section A 13** of this Order.

Encourage/Incentives the Pre-paid Metering

Public Comments/Suggestions

4.199 The Stakeholder requested the Commission to incentive the Consumers opting for prepaid meters.

Petitioner's Response

4.200 The Petitioner submitted that it has already working in that direction and in process of installing Smart meters for Urban areas of Ranchi and Jamshedpur in the initial phase, while other areas shall be covered in subsequent phases, post which it shall be easier to bring the functionality of prepaid billing.

Views of the Commission

4.201 The Commission has introduced rebates for Pre-paid meters in this Order. The same is detailed in **Sections A 14** of this Order.

A 5 TRUE-UP FOR FY 2018-19

5.1 The Petitioner submitted that the True-up for FY 2018-19 has been prepared based on the Accounts audited by the Statutory Auditor taking into consideration the provisions of the Tariff Regulations, 2015 and the methodology adopted by the Commission in its earlier Orders.

5.2 The Commission based on the provision of the Tariff Regulations, 2015 has now carried out True-up for the FY 2018-19 considering

a) Audited (Statutory) accounts for the FY 2018-19.
b) Tariff Regulations, 2015.
c) Methodology adopted by the Commission in its earlier Orders.

5.3 Further, the Commission has taken due cognisance of the judgement of Hon'ble APTEL in Appeal no.48 of 2016 and Appeal no. 316 of 2016 & IA no. 656 of 2016 dated May 31, 2017, while passing this Order.

Energy Sales

Petitioner's Submission

5.4 The Energy Sales as submitted by the Petitioner for FY 2018-19 vis-a-vis approved in its Order dated February 28, 2019 is summarised below:

Table 17: Sales submitted by the Petitioner (MU)

Particulars	FY 2018-19	
	APR Order	Petition
Domestic	6,206.61	5,442.39
Commercial/Non Domestic	846.88	713.28
Public Lighting / SS	78.51	20.81
Irrigation / IAS	209.44	211.29
Industrial LT / LTIS	218.72	221.88
Industrial HT / HTS / S/ EHT	2,623.22	2,481.08
RTS/MES	102.09	96.56
Total	**10,285.46**	**9,187.28**

Commission's Analysis

5.5 As per the Clause 5.30 of the Tariff Regulations, 2015, Sales is considered to be an uncontrollable parameter and hence actual sales needs to be considered for truing up subject to prudence check.

5.6 The Commission has approved the actual sales as submitted by the Petitioner for FY 2018-19 as summarised below:

Table 18: Sales approved by the Commission (MU)

Particulars	FY 2018-19		
	APR Order	Petition	Approved
Domestic	6,206.61	5,442.39	5,442.39
Commercial/Non Domestic	846.88	713.28	713.28
Public Lighting / SS	78.51	20.81	20.81
Irrigation / IAS	209.44	211.29	211.29
Industrial LT / LTIS	218.72	221.88	221.88
Industrial HT / HTS / S/EHT	2,623.22	2,481.08	2,481.08
RTS/MES	102.09	96.56	96.56
Total	**10,285.46**	**9,187.28**	**9,187.28**

Power Purchase Quantum and Cost

Petitioner's Submission

5.7 The Petitioner submitted that it has firm allocations of power from central allocations like NTPC, NHPC and other sources such as DVC, TVNL, WBSEB, etc. In addition to these, JBVNL has also purchased power from private stations like APNRL, Inland Power and some quantum from renewable sources during FY 2018-19.

5.8 The following table provides the station wise actual power purchase for FY 2018-19 based on the Audited Accounts vis-a-vis that approved by the Commission in its Order dated February 28, 2019.

Table 19: Power Purchase Quantum and Cost submitted by the Petitioner

Particulars	Power Purchase Quantum in (MU)		Power Purchase Cost in (Rs. Crore)	
	APR Order	Petition	APR Order	Petition
NTPC				
Farrakka	917.19	889.66	314.56	286.82
Farrakka III	594.69	540.96	231.96	216.04
Khalagaon I	187.42	206.21	67.6	67.05
Talcher	627.26	491.62	213.39	135.40
Khalagaon II	316.43	184.86	104.37	54.74
Barh	561.43	605.66	303.16	252.34
Korba	350.89	382.55	92.73	102.22
Total	**3,555.31**	**3,301.52**	**1,327.77**	**1,114.61**
NHPC				
Rangit	45.15	44.58	17.92	17.52
Teesta	316.95	319.88	79.9	79.25
Total	**362.1**	**364.46**	**97.82**	**96.77**

Particulars	Power Purchase Quantum in (MU)		Power Purchase Cost in (Rs. Crore)	
	APR Order	Petition	APR Order	Petition
PTC				
Chukha	175.44	158.28	44.24	38.01
Tala	311.3	291.12	70.6	62.88
Total	**486.74**	**449.4**	**114.84**	**100.89**
Total Central Sector	**4,404.15**	**4,115.38**	**1,540.43**	**1,311.88**
DVC				
DVC (Koderma)	1058.26	4730.78	454.15	2073.34
DVC (Consumer)	2186.62		1,148.03	
DVC	**3244.88**	**4730.78**	**1602.18**	**2073.34**
State Sector				
SHPS	158.32	96.59	46.43	24.30
TVNL	2,830.22	1,472.25	1011.42	596.08
Total State Sector	**2988.54**	**1568.84**	**1057.85**	**620.38**
Private				
Inland Power	409.77	356.74	171.8	160.11
APNRL	914.74	884.31	386.88	443.51
APNRL Add	447.21	475.08	165.64	168.48
Total Private Sector	**1,771.72**	**1,716.13**	**724.32**	**772.10**
Other RE				
Solar IPPs-State	19.29	19.37	34.64	34.79
SECI	24.37	20.41	13.67	12.16
Wind	32.68	115.26	11.54	40.69
Total Other RE	**76.34**	**155.04**	**59.85**	**87.65**
Posoco (ERLDC)				1.25
UI Payable		250.23		124.29
Deviation Charges of SER		-14.56		-4.86
Railway				-0.1
Kanti Power		89.09		44.69
Rungta Mines	26.81	41.53	8.83	13.34
ABCIL	73.72	21.47	26.78	6.67
ERLDC(APNRL)				39.21
PTC (IEX) Purchase		312.66		131.26
PTC (IEX) Sale		-124.86		-49.67
Banking of Power (Unit Banked)		25.18		0.38
Banking of Power (Unit Received)		-26.54		0.13
Supplementary Bills				88.15
GBI Claim				-23.54
Rebate				-20.17
Additional REC purchase			108.16	
Grand Total	**12,586.16**	**12,860.36**	**5,273.13**	**5216.71**

5.9 The Petitioner submitted that the Power Purchase Quantum and Cost for FY 2018-19 is in line with Commission Order dated February 28, 2019 in its chapter regarding APR for FY 2018-19. The Petitioner further requested the Commission to approve the power purchase cost as per the Annual Accounts of FY 2018-19 as summarized in the table above and approve the power purchase cost accordingly.

Commission's Analysis

5.10 The Commission has considered the submissions made by the Petitioner towards Power Purchase Cost for FY 2018-19. The Commission has also gone through the Audited Accounts of the Petitioner for FY 2018-19 and has approved the Power Purchase Cost of Rs. 5216.71 Crore as per the Audited Accounts as submitted by the Petitioner.

5.11 The Commission has also noted that the Petitioner has not submitted the rolling quarterly forecast of the quantum of short term power to be purchased by the Petitioner for the Commission's Approval on a quarterly basis as per the directions of the Commission vide its Order dated February 28, 2019. Hence, **the Commission directs the Petitioner to submit the rolling quarterly forecast of the quantum of short term power to be purchased as per Clause 5.20 of the Tariff Regulations, 2015.**

Energy Requirement and Energy Availability

Petitioner's Submission

5.12 The Petitioner submitted that energy availability for FY 2018-19 has been computed based on the actual Power Purchase and Sales as per the Audited Accounts for FY 2018-19.

5.13 The Petitioner further submitted the Power Purchase from various sources are segregated into different heads, while calculating the energy balance for FY 2018-19.

- Power Purchase from Outside JBVNL Boundary- NTPC, NHPC, PTC, APNRL, part of TVNL, NVVNL, SECI
- Energy Input Directly to State Transmission System- Input of power from TVNL directly to State Transmission System
- State-owned Generation- PTPS, SHPS, Rungta Mines, ABCIL, Inland Power
- Direct Input of Energy to Distribution System- DVC and Solar IPPs.

5.14 The Petitioner has computed the energy requirement based on the below mentioned formula:

Energy requirement = sales/(1- Distribution loss)

5.15 Based on the information provided above, Energy Balance of JBVNL for FY 2018-19 as submitted by the Petitioner is summarised below:

Table 20: Energy Balance submitted by the Petitioner (MU)

Particulars	FY 2018-19	
	APR Order	Petition
Power Purchase from Outside JBVNL Boundary (MU)	8,664.45	6,958.87
Loss in External System (%)	3.00%	3.00%
Loss in External System (MU)	259.93	208.77
Net Outside Power Available (MU)	8,404.52	6,750.11
Energy Input Directly to State Transmission System (MU)	510.29	419.74
State-owned Generation (MU)	1,205.50	641.33
Energy Available for Onward Transmission (MU)	10,120.31	7,811.17
Transmission Loss (%)	2.23%	8.29%
Transmission Loss (MU)	225.68	647.44
Net Energy Sent to Distribution System (MU)	9,894.63	7,163.73
Direct Input of Energy to Distribution System (MU)	913.93	4,750.15
Total Energy Available for Sales (MU)	**10,808.56**	**11,913.88**

Commission's Analysis

5.16 The Commission in its MYT Order dated June 21, 2017 had set the distribution loss targets for JBVNL for the Second Control Period from FY 2016-17 to FY 2020-21. The Commission has considered the same distribution loss level for the FY 2018-19 for the computation of energy balance.

5.17 The energy requirement as approved by the Commission for the FY 2018-19 based on approved energy sales and distribution losses is summarized below:

Table 21: Energy Requirement approved by the Commission

Particulars	FY 2018-19
Energy Sales	9,187.28
Distribution Loss (%)	15.00%
Distribution Loss (MU)	1,621.28
Energy Required for Distribution (MU)	**10,808.56**

5.18 It is observed that the Intra-State Transmission Losses of 8.29% for FY 2018-19 has been considered by the Petitioner as against the approved Intra-State Transmission Loss of 2.23%. The Petitioner responded that the Intra-State Transmission Loss was calculated by subtracting the normative 3% Inter-State Transmission Loss from the Inter-State Power Purchased from the overall Transmission Loss as per the Audited Accounts for the respective years for arriving at the Intra-State Transmission Losses.

5.19 The Commission has worked out energy availability for the FY 2018-19 on the basis of actual generation from tied up power from Central, State-owned and other Generating Stations. Further, the loss in external system has been considered at the same level as approved by the Commission in its earlier Order, while the Intra-State Transmission Loss has been considered at 2.23% as per the Tariff Order for JUSNL dated February 24, 2018. The energy availability from various sources has been summarized below:

Table 22: Energy Balance approved by the Commission

Particulars	FY 2018-19		
	APR Order	Petition	Approved
Power Purchase from Outside JBVNL Boundary (MU)	8,664.45	6,958.87	6,958.87
Loss in External System (%)	3.00%	3.00%	3.00%
Loss in External System (MU)	259.93	208.77	208.77
Net Outside Power Available (MU)	8,404.52	6,750.11	6,750.11
Energy Input Directly to State Transmission System (MU)	510.29	419.74	419.74
State-owned Generation (MU)	1,205.50	641.33	641.33
Energy Available for Onward Transmission (MU)	10,120.31	7,811.17	7,811.17
Transmission Loss (%)	2.23%	8.29%	2.23%
Transmission Loss (MU)	225.68	647.44	174.19
Net Energy Sent to Distribution System (MU)	9,894.63	7,163.73	7,636.98
Direct Input of Energy to Distribution System (MU)	913.93	4,750.15	4750.15
Total Energy Available for Sales (MU)	**10,808.56**	**11,913.88**	**12,387.14**

Transmission Charges

Petitioner's Submission

5.20 The Petitioner with regard to Inter-State Transmission charges submitted that the amount claimed is as per the Audited Accounts.

5.21 With regard to Intra-State Transmission Charges, the Petitioner submitted that the energy wheeled through Intra-State transmission network as per the Energy Balance has been considered for calculating the Intra-State transmission charges payable to JUSNL and no transmission charges are applied on direct input of energy to distribution system. Transmission charges payable to JUSNL been computed based on the approved rate in Tariff Order of JUSNL dated February 24, 2018.

5.22 The actual Intra-State transmission charges payable to JUSNL for FY 2018-19 as submitted by the Petitioner is provided in the table below:

Table 23: Transmission Charges submitted by the Petitioner (Rs. Crore)

Particulars	FY 2018-19	
	APR Order	Petition
Inter-State Transmission Charges	144.73	140.34
Intra-State Transmission Charges	253.01	203.35

Commission's Analysis

5.23 The Commission has observed that the Intra-State Transmission Charges claimed by the Petitioner is not as per the Tariff approved by the Commission vide its Tariff Orders for JUSNL. In addition, it was also observed that the Transmission Losses claimed by the Petitioner are very high as compared to the approved value of 2.23%. The Petitioner was asked to justify the Intra-State Transmission Charges claimed. The Petitioner responded that it has been paying the Transmission Charges in accordance to the invoices raised by JUSNL, which is as per the Tariff approved by the Commission. However, the Commission has observed that JUSNL has raised bills for 8484.14 MU against the value of 7811.17 MU as proposed by the Petitioner.

5.24 Hence, the Commission has calculated the Intra-State Transmission Charges based on the Tariffs approved for FY 2018-19 and the actual units transmitted as per the Energy Balance approved.

5.25 The Inter-State Transmission Charges are approved as claimed by the Petitioner.

Table 24: Transmission Charges approved by the Commission (Rs. Crore)

Particulars	FY 2018-19		
	APR Order	Petition	Approved
Inter-State Transmission Charges	144.73	140.34	140.34
Intra-State Transmission Charges	253.01	203.35	195.28

Capital Expenditure and Capitalisation

Petitioner's Submission

5.26 The Petitioner submitted the scheme-wise actual capital expenditure (capex) schedule for FY 2018-19 as per the Audited Accounts as below:

Table 25: Capital Expenditure submitted by the Petitioner (Rs. Crore)

Scheme Name	FY 2018-19	
	APR Order	Petition
DDUGJY	965.60	3,199.04
IPDS	279.10	628.74
RAPDRP - A	-	82.25

Scheme Name	FY 2018-19	
	APR Order	Petition
RAPDRP - B	-	1,244.56
DDUGJY 12th Plan	-	1,348.36
ADP + Misc.	315.55	366.49
Tilka Manjhi & AGJY	33.60	46.01
RE State Plan	-	20.40
JSBAY - RE	900.00	22.86
RGGVY (10th & 11th Plan)	-	2.89
Deposit & others	-	99.74
JSBAY - Urban Electrification	-	-
JSBAY - IT, SCADA & TRW	-	-
SAUBHAGYA	-	199.69
IT Schemes (WB Supported)	-	-
Total	**2,493.85**	**7,261.00**

5.27 The Petitioner submitted that capex of Rs. 7261.00 Crore has been done against the Approved Capex of Rs. 2493.85 Crore in FY 2018-19. The Petitioner submitted that this is testimony towards its success in implementing Central and State Government's scheme on the ground and also substantiates its claim in previous year's Petition that the revision in capital expenditure is majorly due to timings of payments which are linked to completion of works under various schemes. The Petitioner further submitted that since implementation of large schemes such as Jharkhand Sampurna Bijli Achyadan Yojna (JSBAY) was started in 2018 itself, a significant amount still remains as CWIP, despite transfer of Rs. 4595 Crore to GFA, as against Rs. 3027 Crore approved by the Commission.

5.28 The Petitioner further submitted the corresponding Capitalisation for FY 2018-19 as per the Audited Accounts as below:

Table 26: Capitalisation submitted by the Petitioner (Rs. Crore)

Particulars	FY 2018-19	
	APR Order	Petition
Opening GFA	5,962.09	5,962.09
GFA Additions	3,027.94	4,594.64
Deletions	0.00	0.00
Closing GFA	8,990.03	10,556.73

Commission's Analysis

5.29 The Commission asked the Petitioner to justify the Capital Expenditure of Rs. 7261.00 Crore incurred against the approved value of Rs. 2493.85 Crore for FY 2018-19. The Petitioner replied that it has incurred the said capex in schemes already approved by the

Commission. Further, in all those schemes, budget have already been allocated by Central or State Government and there have been only minor variations between approved budget and awarded cost, the difference of which is funded entirely by State Government. The Petitioner also submitted that projected capital expenditure of Rs. 5953.37 Crore in its Petition on APR for FY 2018-19 in Case (Tariff) No.: 08 of 2018, against which the Commission in its Order dated February 28, 2019 had approved capex of Rs. 2493.85 Crore for FY 2018-19 as the proposal submitted by JBVNL was very high in comparison to previous years and considered capital expenditure as approved in Order dated April 27, 2018. However, JBVNL was able to incur even higher capex in FY 2018-19 than submitted in its Petition mainly due to spill over works from previous financial years.

5.30 The Commission has analysed the capital expenses incurred by the Petitioner for FY 2018-19 as per the Audited Accounts and has observed in the break-up of the Scheme-wise capital expenditure, the actual expenditure under schemes viz., DDUGJY, IPDS, RAPDRP, ADP+Misc., etc., have been much higher than the Capex approved by the Commission in the Business Plan vide its MYT Order. In addition, the Commission has observed that the Petitioner has claimed Capital Expenses under heads viz., JSBAY RE, RE State Plan, SAUBHAGHYA and IT Schemes. The Commission however, observes that all these works except IT Schemes have been entirely financed through Grants and therefore the Capex as proposed by the Petitioner has been approved for FY 2018-19.

Table 27: Capital Expenditure approved by the Commission (Rs. Crore)

Scheme Name	FY 2018-19		
	APR Order	Petition	Approved
DDUGJY	279.10	628.74	628.74
IPDS	-	82.25	82.25
RAPDRP - A	-	1,244.56	1,244.56
RAPDRP - B	-	1,348.36	1,348.36
DDUGJY 12th Plan	315.55	366.49	366.49
ADP + Misc.	33.60	46.01	46.01
Tilka Manjhi & AGJY	-	20.40	20.40
RE State Plan	900.00	22.86	22.86
JSBAY - RE	-	2.89	2.89
RGGVY (10th & 11th Plan)	-	99.74	99.74
Deposit & others	279.10	628.74	628.74
SAUBHAGYA	-	199.69	199.69
Total	**2,493.85**	**7,261.00**	**7,261.00**

5.31 The Commission had raised queries to the Petitioner to provide the actual Scheme-wise capitalisation for FY 2018-19 vis-à-vis the approved capitalisation. The Petitioner submitted the same. The Commission, on scrutiny of the submission made by the Petitioner has approved the total Capitalisation as per the Audited Accounts and as submitted by the Petitioner for FY 2018-19 as below:

Table 28: Capitalisation approved by the Commission (Rs. Crore)

Particulars	FY 2018-19		
	APR Order	Petition	Approved
Opening GFA	5,962.09	5,962.09	5,962.09
GFA Additions	3,027.94	4,594.64	4,594.64
Deletions	0.00	0.00	0.00
Closing GFA	8,990.03	10,556.73	10,556.73

Consumer Contribution, Grants and Subsidies

Petitioner's Submission

5.32 The Petitioner submitted that the Consumer contribution and Grant (CCG), based on the Audited Accounts vis-à-vis as approved by the Commission is provided in the table below:

Table 29: Consumer Contribution and Grants (CCG) submitted by the Petitioner (Rs. Crore)

Particulars	FY 2018-19	
	APR Order	Petition
Opening CCG	5,107.57	5,107.57
Addition CCG	1,893.36	1,774.94
Closing CCG	7,000.93	6,882.51

Commission's Analysis

5.33 The Commission has considered the values of Consumer Contribution and Grants as per the Audited Accounts for FY 2018-19.

Table 30: Consumer Contribution and Grants (CCG) approved by the Commission (Rs. Crore)

Particulars	FY 2018-19		
	APR Order	Petition	Approved
Opening CCG	5,107.57	5,107.57	5,107.57
Addition in Consumer Cont.	1,893.36	1,774.94	1,665.04
Addition in Grants			109.90
Closing CCG	7,000.93	6,882.51	6,882.51

5.34 The Commission has adopted its previous approach for calculation of Normative Loan and Equity. For estimating the sources of finance required to fund the closing GFA, the

Commission had reduced the Gross GFA by the consumer contribution, grants and subsidies available with the Petitioner.

5.35 The Commission has considered CCG on the basis of the Audited Accounts as submitted by the Petitioner. The normative net loans are estimated after deducting accumulated depreciation from the value of gross loans.

5.36 For funding of above mentioned GFA, the Commission has considered the normative debt-equity ratio of 70:30 as provided in Tariff Regulations, 2015. Moreover, consumer contribution grants and subsidies for capital assets are first netted off from gross fixed assets and the normative debt-equity ratio is applied on the remaining gross fixed assets only.

Table 31: Source of Funding of GFA approved by the Commission (Rs. Crore)

Particulars	FY 2018-19
Opening CCG	5,107.57
Addition in CCG	1,774.94
Closing CCG	6,882.51
CCG towards CWIP	1,739.36
CCG towards Opening GFA	3,368.21
Opening GFA (less CCG)	2,593.88
GFA Addition (less CCG)	3,505.91
Closing GFA (less CCG)	6,099.79
Accumulated Depreciation	2,683.51
Acc. Dep. towards GFA	1,550.56
Normative Loan (Closing)	**2,719.29**
Normative Equity (Closing)	**1,829.94**

Operation & Maintenance Expenses

Petitioner's Submission

5.37 The Petitioner submitted that the employee expenses comprise of salaries, dearness allowance, bonus, terminal benefits in the form of pension & gratuity, leave encashment and staff welfare expenses.

5.38 The employee expenses for FY 2018-19 based on the Audited Accounts as provided by the Petitioner is in the table below:

Table 32: Employee Expenses submitted by the Petitioner (Rs. Crore)

Particulars	FY 2018-19	
	APR Order	Petition
Total Emp. Expenses	224.44	294.14
Emp. Expenses	*202.35*	*275.39*

Particulars	FY 2018-19	
	APR Order	Petition
Terminal benefits	*22.10*	*18.75*

5.39 The Petitioner submitted that the Administrative & General (A&G) expenses for FY 2018-19 is as per the Audited Account as provided in the table below.

Table 33: A&G Expenses submitted by the Petitioner (Rs. Crore)

Particulars	FY 2018-19	
	APR Order	Petition
A&G Expenses	79.19	100.73

5.40 The Petitioner also submitted that the increase in the A&G expenses for FY 2018-19 is majorly due to addition in computer billing cost due to addition of large number of consumers.

5.41 The Petitioner submitted that the Repair & Maintenance (R&M) expenses for FY 2018-19 is as per the Audited Accounts as provided in the table below.

Table 34: R&M Expenses submitted by the Petitioner (Rs. Crore)

Particulars	FY 2018-19	
	APR Order	Petition
R&M Expenses	139.51	56.05

Commission's Analysis

5.42 The Commission observed that for FY 2018-19, the actual R&M Expenses are lower than the expenses approved while the A&G and Employee Expenses are higher than the approved values. As the overall actual O&M expenses for FY 2018-19 are marginally higher than the values approved by the Commission vide its Order dated February 28, 2019, the Commission has approved the O&M Expenses as per the Audited Accounts for FY 2018-19. The O&M Expenses approved are summarised below:

Table 35: O&M Expenses approved (Rs. Crore)

Particulars	FY 2018-19		
	APR Order	Petition	Approved
Total Emp. Expenses	224.44	294.14	294.14
A&G Expenses	79.19	100.73	100.73
R&M	139.51	56.05	56.05
O&M Expenses	**443.14**	**450.92**	**450.92**

Depreciation

Petitioner's Submission

5.43 The Petitioner submitted that since the segregation of the depreciation pertaining to GFA created out of grant and consumer contribution is not provided in the accounts of JBVNL, the Petitioner has followed the similar approach adopted by the Commission in its Tariff Orders dated April 27, 2018 and February 28, 2019.

5.44 The Petitioner also submitted that the Commission in its Order dated February 28, 2019, has considered the average GFA for calculation of Depreciation. Further, the Commission in the same Order has calculated the GFA created out of loan and equity by reducing the closing balance of GFA created out of Grant and Consumer (CCG) from the Average GFA. Principally, it would be incorrect to consider Average GFA and Closing balance of CCG and the Commission ought to have considered only the Average balance of CCG.

5.45 The Petitioner submitted that it has first arrived at the GFA created out of debt and equity by deducting the consumer contribution and grants portion deployed towards GFA. Based on this GFA created out of debt and equity, the Petitioner has applied the depreciation rate as approved by the Commission to arrive at the total depreciation.

Table 36: Depreciation submitted by the Petitioner (Rs. Crore)

Particulars	FY 2018-19	
	APR Order	Petition
GFA Considered for Depreciation – (Exc. CC and Grants)	2704.44	4,346.84
Depreciation Rate	5.94%	5.94%
Depreciation	**160.64**	**258.20**

Commission's Analysis

5.46 According to provision of Clause 6.32 of Tariff Regulations, 2015, depreciation shall not be allowed on assets funded by consumer contribution and capital subsidies/grants. Excluding the consumer contribution deployed towards GFA approved in this Order, the Commission has determined the depreciation on the GFA created out of debt and equity for FY 2018-19. The rate of depreciation has been considered at 5.94% as approved in the earlier Order dated June 21, 2017. The Commission has calculated the Depreciation on Average GFA (net of Average CCG) as per the Tariff Regulations, 2015, also considering the submissions made by the Petitioner while calculating the Depreciation for FY 2018-19.

5.47 Accordingly, the Commission approves the depreciation for the FY 2018-19 as summarised in the following table:

Table 37: Depreciation approved by the Commission (Rs. Crore)

Particulars	FY 2018-19		
	APR Order	Petition	Approved
GFA (Exc. CC and Grants)	2704.44	4,346.84	4,346.84
Depreciation Rate	5.94%	5.94%	5.94%
Depreciation	**160.64**	**258.20**	**258.20**

Interest on Loan

Petitioner's Submission

5.48 The Petitioner submitted that it has adopted similar approach as followed by Commission in its previous Order in estimating the normative closing loan for JBVNL by deducting the normative equity, consumer contribution and grants pertaining to GFA from the Net Fixed Assets (NFA).

5.49 In line with the Tariff Regulations, 2015 and the Commission's approach in previous Tariff Order dated February 28, 2019, the repayment of debt has been considered to be equal to the depreciation applicable to GFA created out of debt and equity.

5.50 Further, the rate of interest on long-term loan has been considered at the Base rate of SBI as applicable on April 1, of FY 2018-19 plus 200 basis points as per Clause 6.24 of the Tariff Regulations, 2015. The Interest & Finance Charges claimed by the Petitioner for FY 2018-19 is as below:

Table 38: Interest on Loan submitted by the Petitioner (Rs. Crore)

Particulars	FY 2018-19	
	APR Order	Petition
Opening Loan	1,050.10	1,050.10
Deemed Loan Addition	972.78	1,927.40
Deemed Loan Repayment	160.64	258.20
Closing Loan	1,862.24	2,719.29
Average Loan	1,456.17	1,884.70
Interest Rate	10.70%	10.70%
Interest on Loan	**155.81**	**201.66**

Commission's Analysis

5.51 The Commission has calculated loans considering the debt-equity ratio in line with Clause 6.15 and Clause 6.16 of the Tariff Regulations, 2015. The loan arrived in this manner is considered as gross normative loan for calculation of interest on loan.

5.52 The Commission has excluded interest on loan amount, normative or otherwise, to the extent of capital cost funded by Consumer Contribution, Grants or Deposit Works carried out by Distribution Licensee in line with Clause 6.26 of the Tariff Regulations, 2015.

5.53 The repayment for the year of the debt has been considered as deemed to be equal to the depreciation allowed for that year. The opening value for FY 2018-19 has been considered as per the closing value of FY 2017-18 as approved in the previous Order dated February 28, 2019. Further, the rate of interest has been considered at the Base rate of SBI as applicable on April 1 of FY 2018-19 plus 200 basis points as per the Tariff Regulations, 2015. The interest on loan as approved by the Commission for FY 2018-19 is summarised in the following table:

Table 39: Interest on Loan approved by the Commission (Rs. Crore)

Particulars	FY 2018-19		
	APR Order	**Petition**	**Approved**
Opening Loan	1,050.10	1,050.10	1,050.10
Loan Addition	972.78	1,927.40	1,927.39
Loan Repayment	160.64	258.20	258.20
Closing Loan	1,862.24	2,719.29	2,719.29
Average Loan	1,456.17	1,884.70	1,884.70
Interest Rate	10.70%	10.70%	10.70%
Interest on Loan	**155.81**	**201.66**	**201.66**

Interest on Consumer Security Deposit

Petitioner's Submission

5.54 The Petitioner submitted that the Interest on consumer security deposit for FY 2018-19 has been computed based on the actual interest on consumer deposit as per Audited Accounts.

Table 40: Interest on CSD submitted by the Petitioner (Rs. Crore)

Particulars	FY 2017-18	
	APR Order	**Petition**
Closing CSD	501.61	585.86
Interest Rate	8.70%	8.70%
Int. on CSD	**43.64**	**51.99**

Commission's Analysis

5.55 The Commission has approved the interest on consumer security deposits, based on the Consumer Security Deposit as per the Audited Accounts as submitted by the Petitioner for FY 2018-19. The Interest on Consumer Security Deposits as approved by the Commission for the FY 2018-19 is tabulated below:

Table 41: Interest on CSD approved by the Commission (Rs. Crore)

Particulars	FY 2018-19		
	APR Order	Petition	Approved
Closing CSD	501.61	585.86	585.86
Interest Rate	8.70%	8.70%	8.70%
Int. on CSD	**43.64**	**51.99**	**51.99**

Interest on Working Capital (IoWC)

Petitioner's Submission

5.56 The Petitioner submitted that it has estimated the Interest on Working Capital (IoWC) requirement in line with the Clauses 6.29 and 6.30 of the Tariff Regulations, 2015, as provided in the Table below.

Table 42: IoWC submitted by the Petitioner (Rs. Crore)

Particulars	FY 2018-19	
	APR Order	Petition
1 month O&M Expenses	36.93	37.58
Maintenance Spares (@1% GFA)	11.90	61.00
2 months' Receivables	1,063.34	1,031.97
Less: 1 month Power Purchase Cost	418.35	405.97
Less: Consumer Security Deposit	571.50	585.86
Total Working Capital requirement	122.32	138.71
Interest rate on WC	12.20%	12.20%
Interest on Working Capital	**14.92**	**16.92**

Commission's Analysis

5.57 The Commission has considered IoWC as per the norms specified in the Tariff Regulations, 2015. The Commission has approved the Maintenance Spares at 1% of the Opening GFA as specified in the Regulations as against the Petitioner's approach on computing the same on closing GFA. The Petitioner has claimed 2 months' receivables including the disallowances for excessive T&D Losses and Collection Efficiency while the Commission has excluded the same from the calculation of Receivables.

5.58 Rate of IoWC has been considered to be equal to the Base Rate of SBI as applicable on the 1st April of FY 2018-19 plus 350 Basis Points as per Clause 6.31 of the Tariff Regulations, 2015.

5.59 The Interest on Working Capital as computed by the Commission for FY 2018-19 is summarized in the following table:

Table 43: IoWC approved by the Commission (Rs. Crore)

Particulars	FY 2018-19		
	APR Order	Petition	Approved
1 month O&M Expenses	36.93	37.58	37.58
Maintenance Spares (@1% GFA)	11.90	61.00	25.94
2 months' Receivables	1,063.34	1,031.97	975.44
Less: 1 month Power Purchase Cost	418.35	405.97	407.29
Less: Consumer Security Deposit	571.50	585.86	585.86
Total Working Capital requirement	122.32	138.71	45.80
Interest rate on WC	12.20%	12.20%	12.20%
Interest on Working Capital	**14.92**	**16.92**	**5.59**

Return on Equity

Petitioner's Submission

5.60 The Petitioner submitted that it has considered the opening balance of normative equity for FY 2018-19 as per the closing balance for the FY 2017-18, as approved by the Commission in its Order dated February 28, 2019. Closing equity for FY 2018-19 has been calculated using normative debt equity ratio (70:30), as per the provisions of Clause 6.16 of Tariff Regulations, 2015. Further, the rate of Return on Equity (RoE) has been considered to be 15.50% as per the provisions of Clause 6.17 of Tariff Regulations, 2015. The Petitioner has claimed RoE for FY 2018-19 as summarised below:

Table 44: RoE submitted by the Petitioner (Rs. Crore)

Particulars	FY 2018-19	
	APR Order	Petition
Opening Equity	934.55	934.55
Equity Addition	330.98	895.39
Deletions	0.00	0.00
Closing Equity	1,265.52	1,829.94
Rate of RoE	15.50%	15.50%
RoE	**170.51**	**214.25**

Commission's Analysis

5.61 The Commission has approved the Return on Equity on the approved equity employed for FY 2018-19 as per the provisions of Clauses 6.16 and 6.17 of the Tariff Regulations, 2015.

5.62 The Commission has considered the opening balance of normative equity as per the closing balance for the FY 2017-18 as approved in the previous Order dated February 28, 2019. Further, the rate of RoE has been considered to be 15.50%. Accordingly, the Commission computed normative RoE as follows:

Table 45: RoE approved by the Commission (Rs. Crore)

Particulars	FY 2018-19		
	APR Order	**Petition**	**Approved**
Opening Equity	934.55	934.55	934.55
Equity Addition	330.98	895.39	895.39
Deletions	0.00	0.00	0.00
Closing Equity	1,265.52	1,829.94	1,829.94
Rate of RoE	15.50%	15.50%	15.50%
RoE	**170.51**	**214.25**	**214.25**

Non-Tariff Income (NTI)

Petitioner's Submission

5.63 The Petitioner submitted that the Non-Tariff Income (Other Income) of JBVNL has been claimed for FY 2018-19, based on the Audited Accounts.

5.64 The Petitioner submitted that while computing the actual Non-Tariff Income (Other Income) of JBVNL for FY 2018-19, the financing cost for corresponding receivables has to be reduced as accrued DPS is considered as NTI. The Petitioner has already incurred power purchase costs on such outstanding receivables and DPS is levied as financing cost of such receivables, however, the Petitioner is allowed only 2 months of receivables in allowance of working capital. For the receivables beyond the period DPS is applicable and as DPS is considered to be additional income for the Petitioner financing cost of such receivables are allowed in line with the Judgment of Hon'ble APTEL dated July 12, 2011 in case No. 142 & 147 of 2009.

5.65 The Petitioner submitted that the Commission in its MYT Tariff Order for FY 2016-17 to FY 2020-21 and Tariff Order for FY 2019-20 dated February 28, 2019, has also considered the above approach in line with the Judgment of Hon'ble APTEL in Appeal no. 48 of 2016 and Appeal no. 316 of 2016 & IA no.656 of 2016 dated May 31, 2017, while approving the Non-Tariff Income of JBVNL. The Non-Tariff Income submitted by the Petitioner is summarised below:

Table 46: NTI submitted by the Petitioner (Rs. Crore)

Particulars	FY 2018-19	
	APR Order	Petition
Interest Income from Investment in Fixed Deposits	1.41	10.27
D.P.S from Consumer	300.00	442.80
Interest on advance to Supplier/Contractor	0.00	0.00
Interest from Bank (Other than FD)	6.35	11.97
Income from Staff Welfare activities	0.00	0.00
Supervision Charges	1.82	2.15
Miscellaneous Receipt	6.69	9.57
Meter Rent	12.87	21.03
Wheeling Charges / Fuel surcharge	0.03	0.00
Receipt from Consumers for capital works	0.00	18.06
Miscellaneous Charges from Consumers	15.00	1.74
Total	**344.17**	**517.60**
Interest rate for Receivables financing	12.20%	12.20%
Corresponding Receivables against DPS	1,666.67	2,460.01
Interest on Receivables against DPS	203.33	300.12
Net NTI to be considered	**140.84**	**217.48**

Commission's Analysis

5.66 The Commission has considered the Non-Tariff income for FY 2018-19 based on the Audited Accounts as submitted by the Petitioner.

5.67 Further, the Commission has adopted a similar approach as adopted in the Tariff Order dated June 21, 2017 for approving the Non-Tariff Income wherein, the Non-Tariff Income has been calculated after considering financing cost for corresponding receivables, as accrued DPS is considered to be form of NTI. The Commission has taken due cognizance of the Judgment of Hon'ble APTEL in Appeal no.48 of 2016 and Appeal no. 316 of 2016 & IA no. 656 of 2016 dated May 31, 2017, while approving the Non-Tariff Income.

5.68 Thus, Non-Tariff income as approved by the Commission for FY 2018-19 is summarized in the following table:

Table 47: NTI approved by the Commission (Rs. Crore)

Particulars	FY 2018-19		
	APR Order	Petition	Approved
Interest Income from Investment in Fixed Deposits	1.41	10.27	10.27

Particulars	FY 2018-19		
	APR Order	**Petition**	**Approved**
D.P.S from Consumer	300.00	442.80	442.80
Interest on advance to Supplier/Contractor	0.00	0.00	0.00
Interest from Bank (Other than FD)	6.35	11.97	11.97
Income from Staff Welfare activities	0.00	0.00	0.00
Supervision Charges	1.82	2.15	2.15
Miscellaneous Receipt	6.69	9.57	9.57
Meter Rent	12.87	21.03	21.03
Wheeling Charges / Fuel surcharge	0.03	0.00	0.00
Receipt from Consumers for capital works	0.00	18.06	18.06
Miscellaneous Charges from Consumers	15.00	1.74	1.74
Total	**344.17**	**517.60**	**517.60**
Interest rate for Receivables financing	12.20%	12.20%	12.20%
Corresponding Receivables against DPS	1,666.67	2,460.01	2,460.01
Interest on Receivables against DPS	203.33	300.12	300.12
Net NTI	**140.84**	**217.48**	**217.48**

Disallowances on account of Excessive AT&C Losses

Petitioner's Submission

5.69 The Petitioner submitted that it has undertaken several administrative measures to curb the AT&C Losses along with the technical measures such as metering of un-metered consumers, focusing on billing efficiency and collection efficiency improvement through appointment of dedicated agencies. However, due to challenging circumstances in Jharkhand including law & order aspects, it has not been able to achieve performance level specified by the Commission.

5.70 The Petitioner also submitted that the target of 100% of collection efficiency set by the Commission is highly impracticable and even the most efficient utilities in the Country are not able to achieve the 100% collection efficiency.

5.71 The Petitioner submitted that it has introduced several avenues for payment of bills by the consumers, to enhance the collections which includes:

- Payment by credit/ debit card through Mobile App (ezy-bzly),
- Online web-based payment facility on JBVNL's website
- Payment through Bharat Bill Payment System (BBPS)
- POS machine and E-wallet facility through Urja Mitras
- Tie-ups with ~4,500 Pragya Kendras
- Collection through ~440 Post Offices

- Collection through ~ 190 Any Time Payment (ATP) machines

5.72 The Petitioner submitted that one of the key reasons behind the lower collection efficiency of JBVNL than the targeted collection efficiency is the addition of large number of rural consumers during FY 2018-19 under SAUBHAGYA and DDUGJY 12th Plan Scheme. The newly added consumers are from remote parts of State and have poor paying capacity due to limited income. In order to complete mandate of universal electrification, JBVNL is supplying electricity to them. The Petitioner further submitted that the percent of receipt generated from such rural domestic consumers as number of bills issued is less than 10%. In such a scenario, the Petitioner submitted that it is impossible to achieve collection efficiency of 100% as mandated by the Commission.

5.73 The Petitioner requested the Commission that the amount of revenue which JBVNL has not been able to collect, may be allowed to be considered against the RGF received during FY 2018-19. The Petitioner further submitted that the calculation for disallowance is done by considering the difference between the Commission's approved collection efficiency i.e. 100% and the actual collection efficiency of 92.27% in FY 2018-19. The details of the same have been provided in the table below. The Petitioner submitted that the disallowance on account of Lower Collection efficiency shall be considered while adjusting RGF from ARR.

Table 48: Disallowance due to Collection Efficiency submitted by the Petitioner (Rs. Crore)

Particulars	FY 2018-19	
	APR Order	Petition
Revenue from sale of power	4,953.24	4,053.77
Collection efficiency	100%	92.27%
Uncollected revenue – to be adjusted against RGF	**0.00**	**313.36**

5.74 Further, the Petitioner submitted that the Commission has approved Distribution loss target of 15% for FY 2018-19. However, actual T&D loss for FY 2018-19 is working out to be 22.89%. Non-achievement of the loss target despite best efforts by the Petitioner is again due to addition of high number of rural domestic consumers. The Petitioner requested the Commissioner to relax T&D loss from 15% to 17% for FY 2018-19. The Petitioner submitted that it has estimated the disincentive for non-achievement of loss targets and has subtracted the same from power purchase expenditure for FY 2018-19, considering the methodology adopted by the Commission previously. The excess cost to be disallowed is the 'Disincentive for non-achievement of T&D loss targets', which needs to be appropriately adjusted against the Resource Gap Funding (RGF) as provided in the Table below:

Table 49: Disallowance due to Distribution Loss submitted by the Petitioner

Particulars	FY 2018-19 Petition
Energy Sales to Intrastate consumers (MU)	9,187.28
T&D loss (%) for intra-state consumers	22.89%
Energy req. for intra- state consumers (MU)	11,913.88
Energy Available for Distribution (MU)	11,069.01
Disallowed Units due to Excess Loss (MU)	844.87
Average Power Purchase Cost (Rs./ Unit)	4.08
Disallowed Cost due to Excess Loss (Rs. Crore)	345.06

Commission's Analysis

5.75 The Commission asked the Petitioner to provide justification for the reduction in collection efficiency. The Petitioner replied that the decline in collection efficiency is due to increase in consumers in rural areas due to significant rural electrification that has led to increase in energy sales and assessment from the rural areas but couldn't be converted into collection. The Petitioner attributed lower collection efficiency to significant metering programmes that has led to inclusion of consumers who have been out of the billing net for past period, who have large accumulation of electricity dues, against which collection could not be realized and migration of major HT consumers with good collection efficiency to other Discoms.

5.76 The Commission, however is of the view that it had already set the targets for the Collection efficiency in Section "Targets for Distribution Losses and Collection Efficiency" of the Tariff Regulations, 2015 and as such the submission of the Petitioner regarding sudden change seems to be out of order. The Commission thus directs the Petitioner to abide by the targets set by the Commission and any provisions for the lower collection efficiency cannot be allowed.

5.77 Further, with respect to the Distribution Loss Targets, the Commission in its earlier Order dated June 21, 2017 had already set targets for the second control period based on the GoI, UDAY scheme.

5.78 The Commission notes with concern that the actual level of Distribution losses submitted by the Petitioner is at 22.89%, while the Commission has calculated the distribution losses at 25.83% which is even more higher as compared to the targets set by the Commission. The Commission is of the view that such high loss levels due to Petitioner's inefficiency should not be passed on to the consumers.

5.79 Accordingly, the additional power purchase cost incurred due to higher Distribution losses, beyond the targeted level, has been disallowed and is treated as 'Disincentive for non-achievement of Distribution loss targets' for FY 2018-19. The Commission has adopted similar approach as adopted by it in the previous Order dated February 28, 2019, in the computation of non-achievement of T&D loss reduction targets. The non-achievement of Distribution loss reduction targets for the FY 2018-19 as approved by the Commission is summarized below:

Table 50: Disallowance due to Distribution Loss approved by the Commission

Particulars	FY 2018-19
Total Energy Available for Sales at Distribution Periphery (MU)	12,387.14
Energy Sold at Distribution Periphery (Grossed up by Normative Loss of 15%)	10,808.56
Power Purchase Disallowed at Distribution Periphery (MU)	1,578.57
Average Power Purchase Cost at Distribution Periphery (Rs./ kWh)	4.21
Total Disallowance due to high Distribution Loss (Rs. Crore)	**664.80**

Resource Gap Funding (RGF)

Petitioner's Submission

5.80 The Petitioner submitted that Resource Gap Funding (RGF) is being provided by Government of Jharkhand to meet the disallowances and slashes made by the Commission during tariff determination process for various parameters such as higher T&D Loss, normative interest computation, normative generation cost etc.

5.81 A communication from the Energy department, Government of Jharkhand (GoJ) was also submitted (annexed for reference) vide letter dated July 14, 2014 stating that:

> *"Amount released towards resource gap may be utilized to meet the slashes/disallowances worked out by the Hon'ble commission while fixing the tariff".*

5.82 In line with the above communication by the GoJ, the Petitioner requested the Commission to consider adjusting the complete RGF towards disallowance/slashes and remaining amount of RGF may be considered to meet the revenue gap. The resource gap funding available to meet revenue gap is provided below:

Table 51: RGF submitted by the Petitioner (Rs. Crore)

Particulars	FY 2018-19	
	APR Order	Petition
Resource Gap Funding Received	-	1,250.00
Disallowances – on account of AT&C losses and	-	658.42

Particulars	FY 2018-19	
	APR Order	Petition
Addition in Gap due to Efficiency Gains		
Net Resource Gap Funding available to meet revenue gap	-	591.58

Commission's Analysis

5.83 The Commission has approved RGF for FY 2018-19 based on the Audited Accounts as provided by the Petitioner.

5.84 Further, considering the methodology adopted by this Commission in its previous Order dated February 28, 2019, the Commission has partially adjusted the RGF towards the disallowance of the power purchase cost (owing to higher Distribution losses) and remaining resource gap funding available to the Petitioner after accounting for the aforesaid disallowance has considered for meeting the approved revenue gap.

5.85 Thus, the resource gap funding as approved by the Commission for FY 2018-19 is tabulated below:

Table 52: RGF approved for by the Commission (Rs. Crore)

Particulars	FY 2018-19	
	Petition	Approved
Resource Gap Funding Received	1,250.00	1,250.00
Disallowances on account of increased Distribution Losses	345.06	664.80
Disallowances on account of reduced collection efficiency	313.36	-
Net Resource Gap Funding available to meet revenue gap	**591.58**	**585.20**

Penalty for Non-Compliance of Directives

5.86 The Petitioner has filed an appeal before Hon'ble APTEL on this case on a previous Order dated April 27, 2018. The Appeal is pending before Hon'ble APTEL and the case is sub-judice. Hence, the Commission is continuing with its approach for levying Penalty for Non-Compliance of Directives of the Commission as discussed in detail in its previous Tariff Order dated April 27, 2018 at 2% of the Aggregate Revenue Requirement (ARR) of the Petitioner for FY 2018-19. The Penalty levied is summarised below:

Table 53: Penalty imposed for Non-Compliance of Directives by the Commission (Rs. Crore)

Particulars	FY 2018-19
ARR Approved	**5,852.66**
Penalty Imposed	2%
Total Penalty	117.05

Summary of ARR for FY 2018-19

Petitioner's Submission

5.87 Based on the components of the ARR discussed in the above Sections, the final ARR submitted by the Petitioner for FY 2018-19 is as below:

Table 54: ARR submitted by the Petitioner (Rs. Crore)

Particulars	FY 2018-19	
	ARR Order	Petition
Power Purchase Cost	5,020.25	5,216.71
Inter-State Transmission Charges	144.73	140.34
Intra-State Transmission Charges	253.01	203.35
Additional REC Purchase to meet RPO	108.16	
O&M Expenses	443.14	450.92
Employee Expenses	*224.44*	*294.14*
A&G Expenses	*79.19*	*100.73*
R&M Expenses	*139.51*	*56.05*
Depreciation	160.64	258.20
Interest on Long Term Loan	155.81	201.66
Interest on Working Capital Loan	14.92	16.92
Interest on Consumer Security Deposit	49.72	51.99
Return on Equity	170.51	214.25
Total Expenses	**6,520.88**	**6,754.34**
Less: Non-Tariff Income	140.84	217.48
ARR	**6,380.05**	**6,536.86**
Less: Disallowance due to excess Distribution Loss		345.06
Less: Disallowance due to low collection efficiency		313.36
Net ARR	**6,380.05**	**6,191.80**
Less Penalties	127.60	127.60
ARR Recoverable	**6,252.44**	**6,064.20**

Commission's Analysis

5.88 The ARR approved by the Commission based on the discussions made in the Section above for FY 2018-19 is summarised below.

Table 55: ARR approved by the Commission (Rs. Crore)

Particulars	FY 2018-19		
	APR Order	Petition	Approved
Power Purchase Cost	5,020.25	5,216.71	5,216.71
Inter-State Transmission Charges	144.73	140.34	140.34
Intra-State Transmission Charges	253.01	203.35	195.28
Additional REC Purchase to meet RPO	108.16		
O&M Expenses	443.14	450.92	450.92
Employee Expenses	*224.44*	*294.14*	*294.14*

Particulars	**FY 2018-19**		
	APR Order	**Petition**	**Approved**
A&G Expenses	*79.19*	*100.73*	*100.73*
R&M Expenses	*139.51*	*56.05*	*56.05*
Depreciation	160.64	258.20	258.20
Interest on Long Term Loan	155.81	201.66	201.66
Interest on Working Capital Loan	14.92	16.92	5.59
Interest on Consumer Security Deposit	49.72	51.99	51.99
Return on Equity	170.51	214.25	214.25
Total Expenses	**6,520.88**	**6,754.34**	**6,734.94**
Less: Non-Tariff Income	140.84	217.48	217.48
ARR	**6,380.05**	**6,536.86**	**6,517.46**
Less: Disallowance due to excess Distribution Loss		345.06	664.80
Less: Disallowance due to low collection efficiency		313.36	
Net ARR	**6,380.05**	**6,191.80**	**5,852.66**
Less Penalties	127.60	127.60	117.05
ARR Recoverable	**6,252.44**	**6,064.20**	**5,735.61**

Summary of Standalone Gap/(Surplus)

5.89 The summary of Standalone Gap/(Surplus) proposed by the Petitioner vis-à-vis approved by the Commission for FY 2018-19 is summarised below. The Commission has considered the rebate provided by the Petitioner on the Sale of Power (Rs. 35.70 Crore) and has reduced the same from the Revenue proposed by the Petitioner.

Table 56: Summary of Gap/(Surplus) (Rs. Crore)

Particulars	**FY 2018-19**		
	APR Order	**Petition**	**Approved**
ARR Recoverable	**6,252.44**	**6,064.20**	**5,735.61**
Revenue from Sales	**4,953.25**	**4,053.77**	**4,018.06**
RGF provided by the State Govt.	**-**	**1,250.00**	**1,250.00**
Less: Losses Disallowed	-	658.42	664.80
RGF to be adjusted in Gap	-	591.58	585.20
Gap After Subsidy	**1,299.20**	**1,418.85**	**1,132.34**

A 6 ANNUAL PEFORMANCE REVIEW FOR FY 2019-20

6.1 As per Clause 9.2 of the Tariff Regulations, 2015

> *"9.2 The Licensee shall submit the Annual Performance Review report as part of annual review on actual performance as per the timelines specified in the Section 11 of these Regulations to assess the performance vis-à-vis the targets approved by the Commission at the beginning of the Control Period. This shall include annual statements of its performance and accounts including audited/authenticated accounts and the tariff worked out in accordance with these Regulations;"*

6.2 The Petitioner submitted that special cognizance has been taken of the approved figures in Tariff Order dated February 28, 2019 and principles adopted by the Commission in previous Tariff Orders, to arrive at the most realistic projections for APR for FY 2019-20.

6.3 The Commission has approved the APR for FY 2019-20 taking into consideration:

a) Tariff Regulations, 2015.
b) Methodology adopted by the Commission in its previous Orders.

6.4 Further, the Commission has taken due cognisance of the Judgement of Hon'ble APTEL in Appeal No. 48 of 2016 and Appeal No. 316 of 2016 & IA No. 656 of 2016 dated May 31, 2017, while passing this Order.

Energy Sales

Petitioner's Submission

6.5 The Petitioner submitted that it has estimated the sales for FY 2019-20 based on the actual sales in first six months, expected growth in the number of consumers, changes in pattern of consumption and demand of electricity in previous years. In FY 2018-19, there was a transient fall in recording of energy sales due to challenges with new billing system. The Petitioner however submitted that the issue would be resolved from FY 2019-20 onwards.

6.6 The Petitioner submitted that it has estimated the total consumer addition in FY 2019-20 by adopting a practical approach, to arrive at the total sales of JBVNL. The projection of domestic consumers has been done taking into view the large scale electrification being done under various ongoing schemes of Central and State Government. The Petitioner further submitted that the pace of consumers getting added in the billing database of

JBVNL is a bit slower than the pace for release of connection. The Petitioner stated that the reason behind the same is that as per the Govt. Mandate, connections must be released to the consumers with minimum requirement of essential documents. However, in order to start the billing of these new consumer, proper verification has to be done by JBVNL. The Petitioner submitted that the unavoidable lag in providing connection and bringing the consumer in the billing database is the basic reason for increase in domestic consumers to the tune of 40 Lakh in FY 2019-20 from 34 Lakh in FY 2018-19.

6.7 The Petitioner submitted that due to increase in HTSS tariff, many high paying consumers have either shifted to DVC and other distribution licensees or have shut down their operations. This has led to overall decrease in HT sales. GoJ has also stepped in to control the situation and has granted subsidy of Rs.1.25/kVAh in tariff to HTSS consumers. However, due to ongoing economic slowdown and availability of lower tariff as approved by the Commission itself for other distribution licensees, the Petitioner submitted that the migration has continued and stated that if proper steps are not taken, this trend may continue next year also.

6.8 Further, the Petitioner had also planned to electrify 1,00,000 agriculture consumers every year over the next 3 years period (till FY 2020-21) under the "Tilka Manji" scheme and DDUGJY, the impact of which has been considered in the present APR. For remaining categories, the Petitioner submitted that the consumers would grow as per trend of previous years.

6.9 The category wise estimation of consumer of all categories for FY 2019-20 are detailed below.

Table 57: Category-wise consumers submitted by the Petitioner (No.)

Particulars	FY 2019-20
Domestic	39,78,168
Commercial	2,32,769
Irrigation & Agricultural / IAS	63,482
Industrial LT/LTIS	16,432
Industrial HTS/HTSS/EHT	1,736
IS-I: Public Lighting / SS	410
IS-II: RTS, MES	10
Total	**42,93,007**

6.10 Based on consumer-category wise historic average connected load, the Petitioner has estimated category-wise connected load for FY 2019-20 as detailed in the table below.

Table 58: Category-wise Connected Load submitted by the Petitioner (kW)

Particulars	FY 2019-20
Domestic	56,23,665
Commercial	4,19,038
Irrigation & Agricultural / IAS	45,104
Industrial LT/LTIS	2,95,776
Industrial HTS/HTSS/EHT	7,76,622
IS-I: Public Lighting / SS	9,840
IS-II: RTS, MES	47,330
Total	**72,17,364**

6.11 Based on the above, the Petitioner has projected the energy sales, keeping in view the average energy consumption per consumer in past, especially for domestic and irrigation consumer categories. Whereas, a natural increase in energy sales for others has been considered for other consumer categories. The category-wise sales for FY 2019-20 as projected by the Petitioner has been summarized in the table below.

Table 59: Category-wise Sales submitted by the Petitioner (MU)

Particulars	FY 2019-20	
	ARR Order	Petition
Domestic	6,703.14	6,329.81
Commercial	948.50	752.71
Irrigation & Agricultural / IAS	230.38	206.19
Industrial LT/LTIS	229.65	219.43
Industrial HTS/HTSS/EHT	2,708.40	2,283.84
IS-I: Public Lighting / SS	78.51	25.64
IS-II: RTS, MES	112.30	121.41
Total	**11,010.88**	**9,939.02**

Commission's Analysis

6.12 The Commission has calculated the 1 year, 2 year, 3 year, 4 year and 5 year CAGR of the actual sales till FY 2018-19 and has considered appropriate CAGR over the past few years for estimation of Sales for FY 2019-20. The Commission has considered the growth rate of 4%, 12%, 3%, 10%, 6%, 0% and 4% for escalation of Sales over the actual sales for FY 2018-19 for Domestic, Commercial, Streetlight, Irrigation, LT Industrial, HT Industrial and RTS/MES respectively for FY 2019-20 as summarised below:

Table 60: Category-wise Sales approved by the Commission (MU)

Particulars	FY 2019-20		
	ARR	Petition	Approved
Domestic	6,703.14	6,329.81	5,660.08
Commercial/Non Domestic	948.50	752.71	798.87
Public Lighting / SS	78.51	25.64	21.43
Irrigation / IAS	230.38	206.19	232.42
Industrial LT / LTIS	229.65	219.43	235.19
Industrial HT / HTS / S/ EHT	2,708.40	2,283.84	2,481.08
RTS/MES	112.30	121.41	100.42
Total	**11,010.88**	**9,939.02**	**9,529.50**

Power Purchase Quantum and Cost

Petitioner's Submission

6.13 The Petitioner submitted that it has projected the power purchase for FY 2019-20 based on the following facts and assumptions:

- Generation during first six months of current financial year: Power Purchase quantum has been considered as per bills raised by respective generating companies.
- Generation Trend in Previous Financial Year: Generation during remaining six months in current Financial Year have been estimated as per generation ratio of first half and second half of previous Financial Year FY 2018-19. However proper adjustments have been made considering merit order dispatch (MOD) and requisite PLF of various power plants.
- Power Requirement in FY 2019-20: Based on estimated Sales and Energy balance for FY 2019-20 (as detailed in Section below), excess power available for sale in open market has been calculated.
- Purchase through short-term sources: No new power purchase from IEX (PTC) or UI mechanism has been estimated in remaining six months due to excess supply. However, the same may be purchased in case of emergency.
- Current status of upcoming Power Stations: As per CEA Thermal Power Plant Status report for month of August 2019, JBVNL has considered NTPC Darlipalli Unit-1 to be scheduled for Commercial Operation (COD) on January 01, 2020.

- Furthermore, PLF of new plants have been considered in range of 50%, as they would be under stabilization mode, just after commissioning and auxiliary losses has been considered at 6%.

6.14 The Petitioner has submitted that it has estimated the power purchase Cost for FY 2019-20 based on following facts and assumptions:

- Power Purchase Cost during first six months of current financial year: Average Power Purchase cost for first six months as per bills raised by respective generating companies, have been considered for full year
- Transmission and Scheduling Charges: Actual Transmission and scheduling Charges for FY 2018-19 have been escalated by 5% to arrive at corresponding figure for FY 2019-20
- Power Purchase Cost for new Plants: Power Purchase cost of new NTPC plants have been considered at Rs 4.00 kWh (Energy Charge- Rs 1.75/kWh and Capacity Charge-Rs 2.25/kWh).
- Sale of Excess Power: Sale of Excess power has been considered at Average Power Purchase Cost (except transmission and scheduling charges) at Rs. 4.32/kWh as per methodology adopted by the Commission in its MYT Order dated June 21, 2017.

6.15 Based on above facts and assumptions, source-wise estimated Power Purchase quantum and cost for FY 2019-20 as submitted by the Petitioner is tabulated below:

Table 61: Power Purchase Cost submitted by the Petitioner

Particulars	Power Purchase Quantum		Power Purchase Cost	
	ARR Order (MU)	Petition (MU)	ARR Order (Rs Crore)	Petition (Rs Crore)
Farrakka	917.19	884.38	328.68	294.24
Farrakka III	594.69	382.29	241.77	157.51
Khalagaon I	187.42	177.01	70.59	56.87
Talcher	627.26	518.33	222.85	158.10
Khalagaon II	316.43	167.70	108.89	48.85
Barh STPS-II	561.01	552.26	316.90	236.65
Korba	350.89	306.73	96.39	86.44
NTPC Darlipalli STPS	-	64.85	-	25.94
NTPC Nabinagar	-	87.08	-	39.10
Total	**3,554.89**	**3,140.63**	**1,386.06**	**1,103.70**
Rangit	45.15	44.58	18.44	15.99
Teesta	316.95	319.88	82.29	65.52

Particulars	Power Purchase Quantum		Power Purchase Cost	
	ARR Order (MU)	Petition (MU)	ARR Order (Rs Crore)	Petition (Rs Crore)
Total NHPC	**362.10**	**364.47**	**100.73**	**81.51**
Chukha	175.44	158.28	46.45	38.01
Tala	311.30	283.49	74.13	61.23
Total PTC	**486.74**	**441.77**	**120.58**	**99.25**
Total Central Sector	**3,650.20**	**3,946.86**	**1,175.14**	**1,284.45**
DVC	**4233.05**	**4,560.68**	**1789.92**	**2,367.05**
SHPS	158.32	8.61	47.37	2.17
TVNL	2,630.44	1,894.29	993.88	730.51
Total State Sector	**2,788.76**	**1,902.90**	**1,041.25**	**732.68**
Inland Power	409.77	393.50	175.63	192.04
APNRL	914.74	927.86	398.80	368.44
APNRL Adj.		-		-0.87
APNRL (Add. 66 MW)	447.21	498.48	253.40	201.08
Total Private Sector	**1,771.72**	**1,819.84**	**827.83**	**760.68**
Solar IPPs	25.59	18.19	45.96	32.67
SECI	20.26	16.00	11.37	9.65
RE (Wind)	104.59	785.21	36.92	267.84
Total Other RE	**150.44**	**819.41**	**94.25**	**310.17**
Rungta Mines	26.81	35.85	8.83	11.16
ABCIL	73.72	1.56	26.78	0.12
KBUNL Kanti TPS	-	91.62	-	55.14
Inter-State Transmission Charges			151.96	147.36
Posoco (ERLDC)		-		1.31
Posoco (Railway)				- 0.11
ERLDC(APNRL)	-	-		41.17
Net UI Payable		19.87		38.71
PTC (IEX) Net Sale		-314.47		-57.30
Supplementary Bills				23.54
Additional REC purchase		-	128.65	
Revenue due to Sale of Surplus Power		-143.90		-62.20
Grand Total	**13,448.22**	**12,740.21**	**5,676.86**	**5,653.94**

6.16 The Petitioner submitted that the Total Power Purchase Cost comes to Rs. 5,506.58 Crore excluding Inter-State Transmission charges.

Commission's Analysis

6.17 The Commission directed the Petitioner to provide the energy cost for each power station for FY 2019-20 and the Petitioner submitted the same vide its reply dated February 27, 2020, for the period April 2019 to December 2019.

6.18 The Commission has observed that the as per the power procurement mix submitted by the Petitioner it is not meeting the RPO Targets set as per JSERC (Renewable Energy

Purchase Obligation and its compliance) Regulations, 2016. The Petitioner was asked to justify the same. The Petitioner replied that the State has no potential for harnessing wind power commercially. Additionally, solar insolation in most of Jharkhand is on lower side as compared to other states like Rajasthan, Gujarat and Karnataka which results in significantly lower CUF and consequently higher solar tariff for solar plants located in Jharkhand. Due to these reasons, Jharkhand is primarily dependent on renewable capacity installed in other States for complying with its RPO. However as per recent MoP Order dated July 22, 2016, RPO target for FY 2018-19 was 17.00% (Solar 10.25% and Non-Solar-6.75%). This resulted into renewable rich States contracting most of renewable power situated in their State and this resulted into limited capacity which can be contracted by renewable deficient States like Jharkhand. This scenario has resulted into shortfall in RPO compliance for States through-out India. In FY 2017-18, the Petitioner submitted that 27 States couldn't even achieve even 60% of their respective RPO target. The Petitioner requested the Commission to consider prevalent situation throughout India for judging shortfall in RPO compliance by JBVNL. The Petitioner further submitted that in absence of long-term contract with renewable source, the only alternative with JBVNL for complying with RPO requirement was to purchase Renewable Energy Certificate (RECs). However, the same would have resulted in additional expenditure for JBVNL without getting any actual power. The Petitioner submitted that it has contracted much more renewable power, than is required for complying its RPO target in near future. The same would help it to clear backlog of deficiency in RPO compliance. Therefore, the Petitioner submitted that acting prudently in interest of consumers and in view of its own financial condition, didn't purchased REC.

6.19 The Petitioner also submitted that it is taking serious steps to comply with the RPO set as per the Regulations and directives of the Commission. As submitted in previous tariff petition in Case (Tariff) No.: 08 of 2018, JBVNL has tied up solar capacity of 700 MW from existing and upcoming solar parks of SECI, against 520 MW capacity required to fulfil the RPO requirement (JBVNL is going to file PPA against the same). The capacity is expected to be operationalized by October, 2020. Besides above, the Petitioner submitted that floating solar plant of 100 MW (Getalsud Dam) is presently under development. The Petitioner further submitted that in order to comply with non-solar RPO, JBVNL has tied up capacity of 500 MW against 355 MW capacity required to comply with RPO. The Petitioner added that due to overcapacity (with respect to RPO trajectory) of renewable capacity being contracted/constructed, JBVNL would be in a position to clear its backlog of RPO for previous years including FY 2019-20 along with fulfilment of RPO of future years.

6.20 The Commission is of the view that the Petitioner has been deferring the purchase of REC's over the past few years consistently quoting that the proposed RE Generation shall meet the RPO Compliance of the past years from FY 2020-21, in spite of claiming the provision consistently for each year. Hence, the Commission is not approving any provision for REC purchase presently and the same shall be trued up in the subsequent Order based on the actual REC purchase by the Petitioner.

6.21 The Commission has considered the normative/actual availability (PAF) of the thermal stations for estimating the normative energy availability for power purchase and the normative capacity allocation as per the Allocation Statement available in CEA's website and the submissions made by the Petitioner. The energy availability from Tala & Chuka has been considered based on the actual power purchased during the past 4 years. The design energy approved for NHPC Plants & Sikidri HPS has been considered for energy availability.

6.22 The Commission has considered the variable costs paid by the Petitioner for FY 2019-20. The fixed charges to be paid by JBVNL for the Generating Stations is considered as per the respective Tariff Orders issued by CERC/JSERC. Since the Tariffs for FY 2019-20 are not issued by CERC, the Commission has considered the fixed charges approved by CERC for FY 2018-19. The Commission has considered the ECR of new generating stations of NTPC as the average ECR of the NTPC Stations for FY 2019-20.

6.23 With regards to power purchased from DVC Koderma, the Commission is of the view that as separate proceedings are underway for the PPA approval and the PPA is yet to be approved as prima facie it is observed that the power purchase cost from DVC Koderma is higher vis-à-vis the DVC's Distribution tariff. Hence, the Commission, for projecting cost of power has estimated the normative power purchase cost of Rs. 3.69/kWh based on the Tariff Schedule approved by the Commission for DVC. The summary of Power Purchase Cost approved by the Commission is as below:

Table 62: Power Purchase Cost approved by the Commission

Particulars	Power Purchase Quantum		Power Purchase Cost	
	Petition (MU)	Approved (MU)	Petition (Rs Crore)	Approved (Rs. Crore)
NTPC				
Farakka, Stage-I&II	884.38	883.41	294.24	295.81
Farakka, Stage-III	382.29	0.00	157.51	89.05

Particulars	Power Purchase Quantum		Power Purchase Cost	
	Petition (MU)	Approved (MU)	Petition (Rs Crore)	Approved (Rs. Crore)
Kahalgaon, Stage-I	177.01	487.52	56.87	158.65
Talcher, Stage-I	518.33	506.17	158.10	154.50
Kahalgaon, Stage-II	167.70	131.44	48.85	42.28
Barh-II	552.26	645.98	236.65	227.51
Korba, Station-III	306.73	291.36	86.44	87.64
Darlipalli STPS	64.85	0.00	25.94	35.89
Nabinagar	87.08	0.00	39.10	105.00
Total	**3140.63**	**3466.70**	**1103.70**	**1196.33**
NHPC				
Rangit	44.58	58.23	15.99	17.12
Teesta-V	319.88	326.54	65.52	65.16
Total	**364.47**	**384.77**	**81.51**	**82.28**
PTC				
Chukha HPS (Bhutan)	158.28	171.15	38.01	41.10
Tala HPS (Bhutan)	283.49	306.25	61.23	66.15
Total	**441.77**	**477.40**	**99.25**	**107.25**
Total Central Sector	**3946.86**	**4328.88**	**1284.45**	**1385.87**
DVC as Consumer	**4560.68**	0.00	**2367.05**	43.20
DVC Koderma		4137.99		1526.92
State Sector				
Sikidiri HPS	8.61	48.16	2.17	18.03
TVNL	1894.29	1080.24	730.51	396.47
Total State Sector	**1902.90**	**1128.40**	**732.68**	**414.50**
Private				
Inland Power Limited (IPL)	393.50	409.77	192.04	166.85
APNRL-Unit-1	927.86	378.15	367.57	148.98
APNRL-Unit-2		378.15		149.85
APNRL (Add. 66MW)	498.48	369.74	201.08	146.10
Total Private Sector	**1819.84**	**1535.81**	**760.68**	**611.78**
Other RE				
State-Solar	18.19	18.19	32.67	32.68
SECI (Solar)	16.00	16.00	9.65	9.65
SECI (Wind)	785.21	785.21	267.84	267.84
Total Other RE	**819.41**	**819.40**	**310.17**	**310.17**
Rungta Mines	35.85	0.00	11.16	0.00
ABCIL	1.56	1.56	0.12	0.12
KBUNL MTPS	91.62	0.00	55.14	24.69
POSOCO		0.00	1.20	0.00
ERLDC (APNRL)		0.00	41.17	0.00
Net UI (Payable)	19.87	0.00	38.71	0.00
PTC- IEX (Net Sale)	-314.47	0.00	-57.30	0.00
Supplementary Bills		0.00	23.54	0.00
Revenue from Sale of Surplus Power	-143.90	0.00	-62.20	0.00
Grand Total	**12740.21**	**11437.12**	**5506.58**	**4317.24**

6.24 The Commission has approved the power purchase quantum from each generator by applying Merit Order Despatch (MOD) as per Clause 6.39 of the Tariff Regulations, 2015:

"6.39 While approving the cost of power purchase, the Commission shall determine the quantum of power to be purchased from various sources in accordance with the principles of merit order schedule and despatch based on a ranking of all approved sources of supply in the order of their variable cost of power purchase. All power purchase costs will be considered legitimate unless it is established that the merit order principle has been violated or power has been purchased at unreasonable rates;"

Energy Balance

Petitioner's Submission

6.25 The Petitioner submitted that energy availability for FY 2019-20 has been estimated based on the actual power purchase and sales until the month of September 2019, with projections for the remaining period of FY 2019-20.

6.26 The Petitioner also submitted that power purchase from various sources are segregated into different heads, while calculating the energy balance for the control period.

- Power Purchase from Outside JBVNL Boundary- NTPC, NHPC, PTC, APNRL, part of TVNL, NVVNL, SECI and RE (Wind)
- Energy Input Directly to State Transmission System- Input of power from TVNL directly to State Transmission System
- Energy Input through Renewables sources- Input from Solar IPPs selected through JREDA
- State-owned Generation- PTPS, SHPS, Rungta Mines, ABCIL and Inland Power
- Direct Input of Energy to Distribution System- DVC and Solar IPPs.

6.27 Based on the information provided above, Energy Balance as submitted by the Petitioner for FY 2019-20 is provided in the table below.

Table 63: Energy Balance submitted by the Petitioner (MU)

Particulars	FY 2019-20	
	ARR Order	Petition
Power Purchase from Outside JBVNL Boundary (MU)	10,062.56	7,247.14
Loss in External System (%)	3.00%	3.00%
Loss in External System (MU)	301.88	217.41
Net Outside Power Available (MU)	9,760.68	7,029.73

Particulars	FY 2019-20	
	ARR Order	Petition
Energy Input Directly to State Transmission System (MU)	409.77	770.15
State-owned Generation (MU)	1,131.58	730.32
Energy Available for Onward Transmission (MU)	11,302.04	8,634.78
Transmission Loss (%)	2.23%	5.00%
Transmission Loss (MU)	252.04	431.74
Net Energy Sent to Distribution System (MU)	11,050.00	8,203.05
Direct Input of Energy to Distribution System (MU)	25.59	4,971.96
Total Energy Available for Sales (MU)	**11,075.59**	**13,175.00**

Commission's Analysis

6.28 The Commission in its earlier Order dated June 21, 2017 had set the distribution loss targets for JBVNL for the second control period FY 2016-17 to FY 2020-21. The Commission now has considered the same distribution loss level for FY 2019-20 for the computation of Energy Balance.

6.29 The energy requirement as approved by the Commission for FY 2019-20 based on approved energy sales and distribution losses is summarized below:

Table 64: Energy Requirement approved by the Commission

Particulars	FY 2019-20
Energy Sales	9,529.50
Distribution Loss (%)	14%
Distribution Loss (MU)	1,551.31
Energy Required for Distribution (MU)	**11,080.81**

6.30 The Commission asked the Petitioner to justify the claim of 5% Transmission loss against 2.23% as approved by the Commission. The Petitioner replied that JUSNL in its MYT Tariff Order dated February 24, 2018 had itself claimed the transmission losses of 5% and that the transmission losses of CTU, i.e. PGCIL are in the range of 2.25%-3%, which has a network of majorly high voltage 765kV, 400kV and 220kV lines, whereas JUSNL has a network of mostly 132kV lines and the transmission losses are ought to be higher.

6.31 The Commission has observed that the Petitioner has proposed a distribution loss of 24.56%, while the Commission has calculated a distribution loss of 25.91% considering the approved Transmission Loss of 2.23%. However, the Commission has approved the normative distribution loss of 14%.

6.32 The Commission has worked out energy availability for the FY 2019-20 on the basis of actual generation from tied up power from Central, State-owned and other Generating

Stations. Further, the loss in external system has been considered at the same level as approved by the Commission in its earlier Order, while the intra-state-transmission loss has been considered at 2.23% as per the Tariff Order for JUSNL dated February 24, 2018. The energy availability from various sources has been summarized below:

Table 65: Energy Balance approved by the Commission

Particulars	FY 2019-20		
	ARR	Petition	Approved
Power Purchase from Outside JBVNL Boundary (MU)	10,062.56	7,247.14	6,415.86
Loss in External System (%)	3.00%	3.00%	3.00%
Loss in External System (MU)	301.88	217.41	192.48
Net Outside Power Available (MU)	9,760.68	7,029.73	6,223.38
Energy Input Directly to State Transmission System (MU)	409.77	770.15	411.34
State-owned Generation (MU)	1,131.58	730.32	447.85
Energy Available for Onward Transmission (MU)	11,302.04	8,634.78	7,082.57
Transmission Loss (%)	2.23%	5.00%	2.23%
Transmission Loss (MU)	252.04	431.74	157.94
Net Energy Sent to Distribution System (MU)	11,050.00	8,203.05	6,924.63
Direct Input of Energy to Distribution System (MU)	25.59	4,971.96	4156.18
Total Energy Available for Sales (MU)	**11,075.59**	**13,175.00**	**11,080.81**

Transmission Charges

Petitioner's Submission

6.33 The Petitioner submitted that transmission charges payable to Jharkhand Urja Sanchar Nigam Limited has been computed based on the approved rate in Tariff Order of JUSNL dated February 24, 2018.

6.34 The Petitioner submitted that the energy wheeled through transmission network as per Energy Balance submitted has been considered for calculating the Intra-State transmission charges payable to JUSNL and no transmission charges are applied on direct input of energy to distribution system. The estimated intra-state transmission charges payable to JUSNL for FY 2019-20 is as submitted by the Petitioner is in the table below.

Table 66: Transmission Charges submitted by the Petitioner (Rs. Crore)

Particulars	FY 2019-20	
	ARR Order	Petition
Intra-State Transmission Charges	326.73	202.26
Inter-State Transmission Charges	151.96	147.36

Commission's Analysis

6.35 The Commission has calculated the Transmission Charges based on the Tariffs approved during the respective years and the units transmitted as per the Energy Balance approved. The Inter-State Transmission Charges are approved as per the claims of the Petitioner.

Table 67: Transmission Charges approved by the Commission (Rs. Crore)

Particulars	FY 2019-20		
	ARR Order	Petition	Approved
Energy Wheeled in Transmission Network (MU)	11,302.04	8,634.78	7,082.57
Transmission Charges (Rs./kWh)	0.25	0.25	0.25
Intra-State Transmission Charges	326.73	202.26	177.06
Inter-State Transmission Charges	151.96	147.36	147.36

Capital Expenditure and Capitalisation

Petitioner's Submission

6.36 The Petitioner submitted the details of the schemes approved under JSBAY, DDUGJY, IPDS, RAPDRP, ADP+Misc. Works, Atal Gram Jyoti Yojana, Tilka Manjhi Krishi Pump Yojana, Saubhagya and IT Schemes. The Petitioner submitted the Capex Schedule as below:

Table 68: Capital Expenditure submitted by the Petitioner (Rs. Crore)

Scheme Name	FY 2019-20	
	ARR Order	Petition
DDUGJY	-	2,732.14
IPDS	-	384.20
RAPDRP - A	15.50	28.00
RAPDRP - B	-	561.85
DDUGJY 12th Plan	-	465.07
ADP + Misc.	770.80	849.75
Tilka Manjhi & AGJY	-	45.59
JSBAY - RE	-	961.00
SAUBHAGYA	-	90.00
IT Schemes (WB Supported)	-	28.34
Total	**786.30**	**6,145.94**

6.37 Considering the above capital expenditure schedule for FY 2019-20, the Petitioner has projected revised CWIP and creation of GFA. Considering the past experience, JBVNL has proposed a capitalization period of 3 years in the ratio of 20:40:40 for all the proposed works and capital expenditure of schemes in the respective years. Further, opening CWIP has been proposed to be capitalized in the proportion of 80:20 in first and second year.

Table 69: Capitalisation submitted by the Petitioner (Rs. Crore)

Particulars	FY 2019-20	
	ARR Order	Petition
Opening CWIP	4,200.15	5,745.22
Capex	786.30	6,285.95
Capitalisation	1,892.22	5,853.37
Closing CWIP	3,094.23	6,177.80

Commission's Analysis

6.38 The Scheme-wise capital expenditure under schemes viz., DDUGJY, IPDS, RAPDRP, ADP+Misc., etc., have been proposed much higher than the Capex approved by the Commission in the Business Plan vide its MYT Order. Hence, the Commission limits expenditure under the schemes discussed above for FY 2019-20 to the Capex approved for the MYT Period. In addition, the Commission has observed that the Petitioner has claimed Capital Expenses under heads viz., JSBAY RE, RE State Plan, SAUBHAGHYA and IT Schemes The Commission however, observes that all the works discussed above except IT Schemes have been entirely financed through Grants and therefore the same has also been approved.

Table 70: Capital Expenditure approved by the Commission (Rs. Crore)

Scheme Name	FY 2019-20		
	ARR Order	Petition	Approved
DDUGJY	-	2,732.14	-
IPDS	-	384.20	-
RAPDRP – A	15.50	28.00	15.50
RAPDRP - B	-	561.85	-
DDUGJY 12th Plan	-	465.07	-
ADP + Misc.	770.80	849.75	638.18
Tilka Manjhi & AGJY	-	45.59	45.59
RE State Plan	-	-	-
JSBAY – RE	-	961.00	961.00
RGGVY (10th & 11th Plan)	-	-	-
Deposit & others	-	-	-
JSBAY - Urban Electrification	-	-	-
JSBAY - IT, SCADA & TRW	-	-	-
SAUBHAGYA	-	90.00	90.00
IT Schemes (WB Supported)	-	28.34	-
Total	**786.30**	**6,145.94**	**1,750.27**

6.39 The Commission has approved the capitalisation for FY 2019-20 based on the actual capitalisation during FY 2016-17, FY 2017-18 and FY 2018-19 as a percentage the Opening CWIP and Capital Expenses incurred during the respective years and multiplying the same by the sum of Opening CWIP and Capex approved:

Table 71: GFA approved by the Commission (Rs. Crore)

Particulars	FY 2019-20		
	ARR Order	Petition	Approved
Opening GFA	8,990.03	10,556.73	10,556.73
GFA Additions	1,892.22	5,853.37	2,121.46
Deletions	0.00	0.00	0.00
Closing GFA	10,882.25	16,410.10	12,678.19

Table 72: Capitalisation approved by the Commission (Rs. Crore)

Particulars	FY 2019-20		
	ARR Order	Petition	Approved
Opening CWIP	4,200.15	5,745.22	5,745.22
Capex	786.30	6,285.95	1,750.27
Capitalisation	1,892.22	5,853.37	2,121.46
Closing CWIP	3,094.23	6,177.80	5,374.04

Consumer Contribution, Grants and Subsidies

Petitioner's Submission

6.40 The Petitioner submitted that the Consumer contribution and Grants of JBVNL for FY 2019-20, based on the actuals for FY 2018-19 is as provided in the table below:

Table 73: Consumer Contribution and Grants (CCG) submitted by the Petitioner (Rs. Crore)

Particulars	FY 2019-20	
	ARR Order	Petition
Opening CCG	7,000.93	6,882.51
Addition CCG	265.81	3,571.22
Closing CCG	7,266.74	10,453.72

Commission's Analysis

6.41 The Commission has calculated the value of Consumer Contribution Addition for FY 2019-20 by calculating the average Consumer Contribution addition against total GFA addition over the past years viz., FY 2016-17, FY 2017-18 and FY 2018-19 and then multiplying it with the approved GFA addition for FY 2019-20. The Grants are approved as per the funding pattern submitted by the Petitioner and the same has been allowed as per the capital expenditure approved for by the Commission for FY 2019-20.

Table 74: Consumer Contribution and Grants (CCG) approved by the Commission (Rs. Crore)

Particulars	FY 2019-20		
	ARR	Petition	Approved
Opening CCG	7,000.93	6,882.51	6,882.51
Addition in Consumer Contribution	265.81	3,571.22	1112.09
Addition in Grants			15.50
Closing CCG	7,266.74	10,453.72	8,199.42

6.42 The Commission has adopted the approach for calculation of Normative Loan and Equity as done in the previous Tariff Orders. For estimating the sources of finance required to fund the closing GFA, the Commission had reduced the GFA by the CCG available with the Petitioner.

6.43 For funding of above mentioned GFA, the Commission has considered the normative debt-equity ratio of 70:30 as provided in Tariff Regulations, 2015. Moreover, consumer contribution grants and subsidies for capital assets are first netted off from gross fixed assets and the normative debt-equity ratio is applied on the remaining gross fixed assets only.

6.44 The Commission has considered CCG as approved above. The normative net loans are estimated after deducting accumulated depreciation from the value of gross loans.

Table 75: Source of Funding of GFA approved (Rs. Crore)

Particulars	FY 2019-20
Opening CCG	6,882.51
Addition in CCG	1,316.91
Closing CCG	8,199.42
CCG towards CWIP	2,425.57
CCG towards GFA	4,456.94
Opening GFA (less CCG)	6,099.79
GFA Addition (less CCG)	819.89
Closing GFA (less CCG)	6,919.69
Accumulated Depreciation	3,070.19
Acc. Dep. towards GFA	1,675.69
Normative Loan (Closing)	**3,168.09**
Normative Equity (Closing)	**2,075.91**

Operation & Maintenance Expenses

Petitioner's Submission

6.45 The Petitioner submitted that Employee Expenses for FY 2019-20 has been calculated by escalating the Employee Expenses for FY 2018-19 by the inflation factor of 4.66 % and the methodology provided under Clause 6.6 (b) and (c) of the Tariff Regulations, 2015.

6.46 The projected employee cost for FY 2019-20 is provided in the table below:

Table 76: Employee Expenses submitted by the Petitioner (Rs. Crore)

Particulars	FY 2019-20	
	ARR Order	Petition
Total Emp. Expenses	233.29	307.86
Emp. Expenses	*211.20*	*288.23*
Terminal benefits	*22.10*	*19.63*

6.47 The Petitioner submitted that the in line with Clause 6.6 (b) and (c) of the Tariff Regulations, 2015, the A&G expenses have been calculated for FY 2019-20. The A&G expense of FY 2018-19 has been escalated by the inflation factor of 4.66%.

Table 77: A&G Expenses submitted by the Petitioner (Rs. Crore)

Particulars	FY 2019-20	
	ARR Order	Petition
A&G Expenses	82.65	105.42

6.48 The Petitioner submitted that the R&M expenses for FY 2019-20 have been estimated by considering the K-factor of 2.34% as approved by the Commission in Tariff Order dated February 28, 2019 on opening value of GFA for FY 2019-20.

Table 78: R&M Expenses submitted by the Petitioner (Rs. Crore)

Particulars	FY 2019-20	
	ARR Order	Petition
R&M Expenses	210.37	247.03

Commission's Analysis

6.49 The Commission has considered the actual Employee Expenses and A&G Expenses for FY 2018-19 and escalated the same based on the prevalent CPI and WPI. The Commission has approved the actual Terminal Benefits as approved for FY 2018-19 for FY 2019-20, which may be trued up based on the actuals for FY 2019-20.

6.50 The Commission has approved the O&M Expenses as per the provisions of Tariff Regulations, 2015 as reproduced below:

"6.5 The O&M expenses permissible towards ARR of each year of the Control Period shall be approved based on the formula shown below:

O&Mn = (R&Mn + EMPn + A&Gn)* (1-Xn) + Terminal Liabilities

Where,

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

EMPn – Employee Costs of the Licensee for the nth year excluding terminal liabilities;

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

Xn – is an efficiency factor for nth year. The value of Xn will be determined by the Commission in its first MYT order for the Control Period;

6.6 The above components shall be computed in the manner specified below:

a) ***R&Mn = K*GFA***

Where,

'K' is a constant (expressed in %) governing the relationship between R&M costs and Gross Fixed Assets (GFA) and will be calculated based on the % of R&M to GFA of the preceding year of the Base Year;

'GFA' is the opening value of the gross fixed asset of the nth year;

b) ***EMPn (excluding terminal liabilities) + A&Gn = (EMPn-1 + A&Gn-1)*(INDXn/INDXn-1) + Gn***

Where,

INDXn – Inflation factor to be used for indexing the employee cost and A&G cost. This will be a combination of the Consumer Price Index (CPI) and the Wholesale Price Index (WPI) for immediately preceding year before the base year;

Gn – Increase in Employee Expenses in nth year due to increase in consumer base/ load growth. Value of G for each year of the Control Period shall be determined by the Commission in the MYT Tariff order based on Licensee's filing, benchmarking with the efficient utilities, actual cost incurred by the licensee due to increase in consumer base/load growth in past, and any other factor considered appropriate by the Commission;

c) ***INDXn = 0.55*CPIn +0.45*WPIn;***

…"

6.51 The Inflation factor is calculated as 4.90% based on the WPI and CPI data available with the Commission for FY 2019-20.

6.52 The Commission has observed that the actual R&M Expenses in the past are very low in comparison to the R&M expenses incurred by the Petitioner. The Commission also observes that the Petitiner has projected an increase of 441% in R&M expenses of FY 2020-21 vis-à-vis actuals of FY 2018-19. It is further observed that the Petitioner has not provided appropriate details behing such increase in projections. Hence, the Commission has approved the R&M Expenses for FY 2019-20 based on the ratio of actual R&M Expenses incurred and Opening GFA for FY 2016-17, FY 2017-18 and FY 2018-19. The O&M Expenses approved by the Commission is summarised below:

Table 79: O&M Expenses approved by the Commission (Rs. Crore)

Particulars	FY 2019-20		
	APR	Petition	Approved
Total Emp. Expenses	233.29	307.86	307.63
Emp. Expenses	*211.20*	*288.23*	*288.87*
Terminal benefits	*22.10*	*19.63*	*18.75*
A&G Expenses	82.65	105.42	105.66
R&M	210.37	247.03	103.55
O&M Expenses	**526.31**	**660.31**	**516.84**

Depreciation

Petitioner's Submission

6.53 The Petitioner submitted that depreciation for FY 2019-20 has been computed in line with the approach adopted by the Commission in its Tariff Orders dated April 27, 2018 and February 28, 2019.

6.54 The Petitioner further submitted that it has arrived at the Opening and closing GFA of FY 2019-20, created out of Debt and Equity, by deducting the CCG portion deployed towards opening and closing GFA. Based on this GFA created out of debt and equity, the Petitioner has applied the depreciation rate as approved by the Commission in its previous Order to arrive at the total depreciation as given below:

Table 80: Depreciation submitted by the Petitioner (Rs. Crore)

Particulars	FY 2019-20	
	APR Order	Petition
GFA considered for Depreciation	4,278.17	7,457.64
Depreciation Rate	5.94%	5.94%
Depreciation	**254.12**	**442.98**

Commission's Analysis

6.55 According to Provision of Clause 6.32 of the Tariff Regulations, 2015, depreciation shall not be allowed on assets funded by consumer contribution and capital subsidies/grants. Considering the consumer contribution deployed towards GFA approved in this Order, the Commission has determined the depreciation on the GFA created out of debt and equity excluding the consumer contribution and grants for the FY 2019-20. The rate of depreciation has been considered at 5.94% as approved in the earlier Order dated June 21, 2017. The Commission has calculated the Depreciation on Average GFA as per the Tariff Regulations.

6.56 Accordingly, the Commission approves the depreciation for the FY 2019-20 as summarised in the following table:

Table 81: Depreciation approved by the Commission (Rs. Crore)

Particulars	FY 2019-20		
	ARR	Petition	Approved
GFA (Average as per Commission)	4,278.17	7,457.64	6,509.74
Depreciation Rate	5.94%	5.94%	5.94%
Depreciation	**254.12**	**442.98**	**386.68**

Interest on Loan

Petitioner's Submission

6.57 The Petitioner submitted that the opening debt for FY 2019-20 has been considered equal to closing value of FY 2018-19. Closing debt for FY 2019-20 has been calculated in line with the Clause 6.16 of the Tariff Regulations, 2015.

6.58 The Petitioner submitted that in line with Clause 6.22 of the Tariff Regulations, 2015, repayment of loan for FY 2019-20 has been considered equal to Depreciation. Further, the rate of interest on long-term loan, has been considered by the Petitioner at the Base rate of SBI as applicable on April 1 of FY 2019-20 plus 200 basis points as per Clause 6.24 of the Tariff Regulations, 2015. The Petitioner submitted the interest cost thus calculated vis-à-vis as approved by the Commission as shown in the table below:

Table 82: Interest on Loan submitted by the Petitioner (Rs. Crore)

Particulars	FY 2019-20	
	ARR Order	Petition
Opening Loan	1,862.24	2,719.29
Loan Addition	811.04	2,214.97
Loan Repayment	254.12	442.98

Particulars	FY 2019-20	
	ARR Order	Petition
Closing Loan	2,419.16	4,491.28
Average Loan	2,140.70	3,605.29
Interest Rate	10.70%	11.05%
Interest on Loan	**229.05**	**398.38**

Commission's Analysis

6.59 The Commission has calculated loans considering the debt-equity ratio in line with Clauses 6.15 and 6.16 of the Tariff Regulations, 2015. The loan arrived in this manner is considered as gross normative loan for calculation of interest on loan.

6.60 The Commission has excluded interest on loan amount, normative or otherwise, to the extent of capital cost funded by Consumer Contribution, Grants or Deposit Works carried out by Distribution Licensee in line with Clause 6.26 of the Tariff Regulations, 2015.

6.61 The repayment for the year has been considered as deemed to be equal to the depreciation allowed for that year. The opening value of loan for FY 2019-20 has been considered as per the closing value of FY 2018-19 as approved in the previous Sections of this Order. Further, the rate of interest has been considered at the Base rate of SBI as applicable on April 1 of the respective year plus 200 basis points as per the Tariff Regulations, 2015.

6.62 The interest on loan as approved by the Commission for FY 2019-20 is summarised in the following table:

Table 83: Interest on Loan approved by the Commission (Rs. Crore)

Particulars	FY 2019-20		
	ARR	Petition	Approved
Opening Loan	1,862.24	2,719.29	2,719.29
Loan Addition	811.04	2,214.97	835.47
Loan Repayment	254.12	442.98	386.68
Closing Loan	2,419.16	4,491.28	3,168.09
Average Loan	2,140.70	3,605.29	2,943.69
Interest Rate	10.70%	11.05%	11.05%
Interest on Loan	**229.05**	**398.38**	**325.28**

Interest on Consumer Security Deposit

Petitioner's Submission

6.63 The Petitioner submitted that in order to estimate the interest on consumer security deposit for FY 2019-20, the Petitioner has assumed an escalation of 5% over the accumulated consumer security of FY 2018-19 as per the Audited Accounts.

6.64 Further, the applicable interest rate as per JSERC Supply code Regulations, 2015 has been applied to estimate the Interest on consumer deposit for FY 2019-20. The interest rate considered is the SBI Base Rate prevailing on April 1, 2018, i.e., 9.05% p.a.

Table 84: Interest on CSD submitted by the Petitioner (Rs. Crore)

Particulars	FY 2019-20	
	ARR Order	Petition
Closing CSD	560.88	615.15
Interest Rate	8.70%	9.05%
Int. on CSD	**48.80**	**55.67**

Commission's Analysis

6.65 The Commission has considered the average security deposit per consumer as Rs.1454 per consumer as approved in the Tariff Order dated April 27, 2018 and the interest rate considered is as per JSERC Supply Code Regulations, 2015 at the SBI Base Rate prevailing on April 1, 2019. The Interest on Consumer Security Deposits as approved by the Commission for the FY 2019-20 is tabulated below:

Table 85: Interest on CSD approved by the Commission (Rs. Crore)

Particulars	FY 2019-20		
	ARR	Petition	Approved
Closing CSD	560.88	615.15	624.26
Interest Rate	8.70%	9.05%	9.05%
Int. on CSD	**48.80**	**55.67**	**56.50**

Interest on Working Capital (IoWC)

Petitioner's Submission

6.66 The Petitioner submitted that the working capital requirement has been calculated in line with the Clause 6.29 of the Tariff Regulations, 2015. Rate of Interest on Working Capital (IoWC) has been considered to be equal to the Base Rate of SBI as applicable on the 1st April of the respective year plus 350 Basis Points as per Clause 6.31 of the Tariff Regulations, 2015. Based on the expenditure for FY 2019-20, the Petitioner has estimated the working capital requirement and interest thereof, as provided in the Table below:

Table 86: Interest on Working Capital submitted by the Petitioner (Rs. Crore)

Particulars	FY 2019-20	
	ARR Order	Petition
1 month O&M Expenses	43.86	55.03
Maintenance Spares (@1% GFA)	33.32	88.15
2 months' Receivables	1,194.04	1,272.00

Particulars	FY 2019-20	
	ARR Order	Petition
Less: 1 month Power Purchase Cost	449.69	458.88
Less: Consumer Security Deposit	662.16	615.15
Total Working Capital requirement	159.37	341.14
Interest rate on WC	12.20%	12.55%
Interest on Working Capital	**19.44**	**42.81**

Commission's Analysis

6.67 The Commission has considered IoWC as per the norms specified in the Tariff Regulations, 2015. The Commission has approved the Maintenance Spares at 1% of the Opening GFA as provided under the Tariff Regulations while the Petitioner has proposed the recovery of the same on 1% of the Closing GFA. The Petitioner has claimed 2 months' receivables including the disallowances for excessive T&D Losses and Collection Efficiency while the Commission has excluded the same from the calculation of Receivables.

6.68 Rate of IoWC has been considered to be equal to the Base Rate of SBI as applicable on the 1st April of FY 2019-20, plus 350 Basis Points as per Clause 6.31 of the Tariff Regulations, 2015.

6.69 The Interest on Working Capital as computed by the Commission for the FY 2019-20 is summarized in the following table:

Table 87: Interest on Working Capital approved by the Commission (Rs. Crore)

Particulars	FY 2019-20		
	ARR	Petition	Approved
1 month O&M Expenses	43.86	55.03	43.07
Maintenance Spares (@1% GFA)	33.32	88.15	61.00
2 months' Receivables	1,194.04	1,272.00	1,004.34
Less: 1 month Power Purchase Cost	449.69	458.88	386.81
Less: Consumer Security Deposit	662.16	615.15	624.26
Total Working Capital requirement	159.37	341.14	97.35
Interest rate on WC	12.20%	12.55%	12.55%
Interest on Working Capital	**19.44**	**42.81**	**12.22**

Return on Equity

Petitioner's Submission

6.70 The Petitioner submitted that in order to estimate the equity balance, it has considered the approach adopted by the Commission in its Tariff Order dated April 27, 2018, whereby normative equity is arrived at by assuming the equity to be 30% of the GFA created out of debt and equity. Further, the rate of Return on Equity (RoE) is considered to be 15.50% as per the provisions of Clause 6.17 of the Tariff Regulations, 2015 is considered. The RoE is submitted by the Petitioner is summarised in the table below:

Table 88: RoE submitted by the Petitioner (Rs. Crore)

Particulars	FY 2019-20	
	ARR Order	Petition
Opening Equity	1,265.52	1,829.94
Equity Addition	301.76	814.70
Deletions	0.00	0.00
Closing Equity	1,567.29	2,644.64
Rate of RoE	15.50%	15.50%
RoE	**219.54**	**346.78**

Commission's Analysis

6.71 The Commission has approved the Return on Equity on the approved equity employed for FY 2019-20 as per the provisions of Clauses 6.16 and 6.17 as specified in the Tariff Regulations, 2015.

6.72 The Commission has considered the opening balance of normative equity for FY 2019-20 as approved closing balance for the FY 2018-19 in the previous Sections of this Order. Further, the rate of RoE is considered to be 15.50%. Accordingly, the Commission computed normative RoE as follows:

Table 89: RoE approved by the Commission (Rs. Crore)

Particulars	FY 2019-20		
	ARR	Petition	Approved
Opening Equity	1,265.52	1,829.94	1,829.94
Equity Addition	301.76	814.70	245.97
Deletions	0.00	0.00	0.00
Closing Equity	1,567.29	2,644.64	2,075.91
Rate of RoE	15.50%	15.50%	15.50%
RoE	**219.54**	**346.78**	**302.70**

Non-Tariff Income (NTI)

Petitioner's Submission

6.73 The Petitioner submitted that the Non-Tariff Income (Other Income) for FY 2019-20 has been projected based on the growth trend of historical figures as provided in the table below. The Petitioner has also submitted the rationale behind the computation of NTI and stated that the approach is in line with the Judgment of Hon'ble APTEL dated July 12, 2011 in Case No. 142 & 147 of 2009 and summarised the Non-tariff income as shown below:

Table 90: NTI submitted by the Petitioner (Rs. Crore)

Particulars	FY 2019-20	
	ARR Order	Petition
Interest Income from Investment in Fixed Deposits	1.41	
D.P.S from Consumer	300.00	442.80
Interest on advance to Supplier/Contractor	0.00	
Interest from Bank (Other than FD)	6.67	
Income from Staff Welfare activities	0.00	
Supervision Charges	1.82	
Miscellaneous Receipt	7.02	
Meter Rent	16.09	22.08
Wheeling Charges / Fuel surcharge	0.03	
Receipt from Consumers for capital works	0.00	
Miscellaneous Charges from Consumers	15.75	15.00
Total NTI	**348.79**	**479.89**
Interest rate for Receivables financing	12.20%	12.55%
Corresponding Receivables against DPS	1,666.67	2,460.01
Interest on Receivables against DPS	203.33	308.73
Net NTI to be considered	**145.46**	**171.15**

Commission's Analysis

6.74 The Commission has considered the Non-Tariff income approved for FY 2018-19 and the DPS as proposed by the Petitioner for approval of the NTI for FY 2019-20.

6.75 Further, the Commission has adopted a similar approach as adopted in the Tariff Order dated June 21, 2017 for approving the Non-Tariff income wherein, the Non-Tariff income has been calculated after considering financing cost for corresponding receivables, as accrued DPS is considered to be form of NTI. The Commission has taken due cognizance of the Judgement of Hon'ble APTEL in Appeal no.48 of 2016 and Appeal no.316 of 2016 & IA no.656 of 2016 dated May 31, 2017, while approving the Non-Tariff Income.

6.76 Non-Tariff income as approved by the Commission for FY 2019-20 is summarized in the following table:

Table 91: NTI approved by the Commission (Rs. Crore)

Particulars	FY 2019-20		
	ARR	Petition	Approved
Total NTI	**348.79**	**479.89**	**524.54**
Interest rate for Receivables financing	12.20%	12.55%	12.55%
Corresponding Receivables against DPS	1,666.67	2,460.01	2,460.01
Interest on Receivables against DPS	203.33	308.73	308.73
Net NTI to be considered	**145.46**	**171.15**	**215.81**

Disallowances on account of Excess AT&C Losses

Petitioner's Submission

6.77 The Petitioner submitted that several administrative measures have been undertaken to curb the AT&C losses along with the technical measures such as increasing the metering, focusing on billing efficiency and collection efficiency improvement. The Commission has approved 100% collection efficiency for FY 2019-20, which is on extremely higher side and even the most efficient utilities in the Country are not able to achieve the 100% collection efficiency. The Petitioner submitted that the Commission in its MYT Order and Tariff Order dated February 28, 2019 has fixed T&D loss target of 14% which is even less than UDAY target of 15%.

6.78 The Petitioner submitted that in order to reduce the losses JBVNL has already completed 100% Feeder Metering and is in process of ensuring 100% metering of DTs and Consumers to enable energy auditing. Further, Petitioner is also taking other measures like Name and Shame Campaign, preparation of MIS for performance monitoring and management, Feeder Improvement Program for network strengthening, Physical segregation of feeders, Installation of AMR meters, providing electricity access to unconnected households, Implementation of ERP systems, Installation of AB Cables, Tying up with Bank and Post Offices, Feeder Segregation, Revenue Intelligence Cell Formation, etc. Moreover, to enhance the collection efficiency, consumers are facilitated with multiple collection avenues such as Mobile App (ezy-bzly), online payment, E-wallet (through UM), ~4,500 Pragya Kendras, ~440 post offices, ~194 ATP machines etc.

6.79 Further, the Petitioner submitted that it has migrated to a centralized Android based mobile photo spot billing (with collection facility) platform, having complete control over consumer billing database. In order to ensure 100% billing coverage, a maximum of 1200 designated consumers have been assigned to each Urja Mitra, which also acts as a

JBVNL Touch-point for billing, collection and various other consumer services. The centralized billing database and software tool has dedicated dashboards for JBVNL, agencies and UMs, for real-time progress and performance monitoring and enhancing billing and collection.

6.80 The Petitioner submitted that it is prone to difficulties of T&D losses and collection inefficiencies due to difficult terrains and large rural consumers in overall consumer mix. Further, the Petitioner also has Universal Supply Obligation (USO) so it cannot stop/reduce the power supply in areas with poor collection efficiencies.

6.81 The Petitioner therefore requested the Commission to consider the revised target of T&D loss of 18% while approving the APR for FY 2019-20. Further the Petitioner requested the Commission to relax normative collection efficiency to 95% for FY 2019-20.

6.82 The Petitioner also requested the Commission that a reasonable amount of revenue which JBVNL has not been able to collect, may be allowed as provision for bad debt. The Petitioner submitted that the calculation for provision for bad debt is done by considering the difference between the Commissions approved collection efficiency i.e. 100% and the submission target of 95% for FY 2019-20 as provided in the table below.

Table 92: Provision for Bad & Doubtful Debt submitted by the Petitioner (Rs. Crore)

Particulars	FY 2019-20
Receivables (Rs. Crore)	5,486.03
Collection efficiency (%)	95.00%
Total disallowance (Bad debt) (Rs. Crore)	274.30

Commission's Analysis

6.83 The Commission is of the view that it had already set the targets for the Collection efficiency in Section "Targets for Distribution Losses and Collection Efficiency" of the Tariff Regulations, 2015 and as such the submission of the Petitioner regarding sudden change seems to be out of order. The Commission thus directs the Petitioner to abide by the targets set by the Commission and any provisions for the poor collection efficiency cannot be allowed.

6.84 Further, with respect to the Distribution Loss Targets, the Commission in its earlier Order dated June 21, 2017 had already set targets for the second control period based on the GoI, UDAY scheme. The Commission notes with concern that the actual level of AT&C submitted by the Petitioner are still higher as compared to the targets set by the

Commission. The Commission is of the view that such high loss levels due to Petitioner's inefficiency should not be passed on to the consumers.

6.85 The Commission has adopted the methodology followed in the previous Orders and has not allowed any recovery of Collection efficiency from the RGF. The Commission is of the view that the Petitioner should strive to achieve the Collection Efficiency Targets as stipulated in the Tariff Regulations, 2015 without any exceptions.

Summary of ARR for FY 2019-20

Petitioner's Submission

6.86 Based on the components of the ARR discussed in the above Sections, the final ARR submitted by the Petitioner for FY 2019-20 is as below:

Table 93: ARR submitted by the Petitioner (Rs. Crore)

Particulars	FY 2019-20	
	ARR Order	Petition
Power Purchase Cost	5,396.25	5,506.58
Inter-State Transmission Charges	151.96	147.36
Intra-State Transmission Charges	326.73	202.26
Additional REC Purchase to meet RPO	128.65	
O&M Expenses	526.31	660.31
Employee Expenses	*233.29*	*307.86*
A&G Expenses	*82.65*	*105.42*
R&M Expenses	*210.37*	*247.03*
Depreciation	254.12	442.98
Interest on Long Term Loan	229.05	398.38
Interest on Working Capital Loan	19.44	42.81
Interest on Consumer Security Deposit	57.61	55.67
Return on Equity	219.54	346.78
Total Expenses	**7,309.68**	**7,803.13**
Less: Non-Tariff Income	145.46	171.15
Add: Provision for Doubtful Debt		274.30
ARR Recoverable	**7,164.22**	**7,906.28**

Commission's Analysis

6.87 The table below summarizes the ARR approved by the Commission for FY 2019-20.

Table 94: ARR approved by the Commission (Rs. Crore)

Particulars	FY 2019-20		
	ARR Order	Petition	Approved
Power Purchase Cost	5,396.25	5,506.58	4,317.24
Inter-State Transmission Charges	151.96	147.36	147.36

Particulars	FY 2019-20		
	ARR Order	Petition	Approved
Intra-State Transmission Charges	326.73	202.26	177.06
Additional REC Purchase to meet RPO	128.65		0.00
O&M Expenses	526.31	660.31	516.84
Employee Expenses	*233.29*	*307.86*	*307.63*
A&G Expenses	*82.65*	*105.42*	*105.66*
R&M Expenses	*210.37*	*247.03*	*103.55*
Depreciation	254.12	442.98	386.68
Interest on Long Term Loan	229.05	398.38	325.28
Interest on Working Capital Loan	19.44	42.81	12.22
Interest on Consumer Security Deposit	57.61	55.67	56.50
Return on Equity	219.54	346.78	302.70
Total Expenses	**7,309.68**	**7,803.13**	**6,241.88**
Less: Non-Tariff Income	145.46	171.15	215.81
Add: Provision for Doubtful Debt	-	274.30	-
ARR Recoverable	**7,164.22**	**7,906.28**	**6,026.07**

Summary of Standalone Gap/(Surplus)

6.88 The summary of Standalone Gap/(Surplus) proposed by the Petitioner vis-à-vis approved by the Commission for FY 2019-20 is summarised below. The Commission has observed that GoJ has issued an amount of Rs. 1350.00 Crore against RGF for FY 2019-20, out of which an amount of Rs. 594.95 Crore has been towards subsidy to Consumers. The Commission has considered the remaining amount of Rs. 755.05 Crore as Revenue to the Petitioner for FY 2019-20.

Table 95: Summary of Gap/(Surplus) (Rs. Crore)

Particulars	FY 2019-20		
	ARR Order	Petition	Approved
ARR Recoverable	**7,164.22**	**7,906.28**	**6,026.07**
Revenue from Sales	**6,963.56**	**5,486.03**	**5,978.47**
RGF provided by the State Govt.	**-**	**-**	**755.05**
Less: Losses Disallowed	-	-	-
RGF to be adjusted in Gap	-	-	755.05
Gap/(Surplus) After Subsidy	**200.66**	**2,420.25**	**(707.45)**

A 7 ARR & TARIFF FOR FY 2020-21

7.1 The Petitioner submitted that the details of elements of ARR for FY 2020-21 are projected based on the provisions of Tariff Regulations, 2015, figures approved in previous Tariff Orders and Principles adopted by the Commission.

7.2 The Commission has approved the ARR and Tariff for FY 2020-21 taking into consideration:

a) Tariff Regulations, 2015.
b) Methodology adopted by the Commission in its earlier Orders.

Energy Sales

Petitioner's Submission

7.3 The Petitioner submitted that the sales for FY 2020-21 have been projected based on the addition of consumers, consumption pattern and past trend of consumption growth rate. The Petitioner submitted that it has witnessed a significant growth in the total sales across all categories in the last few years. This is primarily due to increase in the availability of power, reduced load shedding, consumer addition across all categories and uninterrupted supply of power. Further, the Petitioner submitted that it aims to provide 24x7 power to all consumers in the State, which shall be the key reason for increase in the energy sales in coming years.

7.4 The Petitioner further submitted that the pace of consumers getting added in the billing database of JBVNL is a bit slower than the pace of release of connections. The reason behind the same is that as per the Government mandate, connections must be released to the consumers with minimum requirement of essential documents. However, in order to start the billing of these new consumers, proper verification has to be done by JBVNL. This unavoidable lag in providing connection and bringing the consumer in the billing database has led to increase in number of domestic consumers from around 40 Lakh to 43.5 Lakh. It is also expected that JBVNL will complete its target of 1,00,000 agriculture connections by FY 2020-21 under Tilka Manjhi and DDUGJY schemes. For remaining categories, consumers would grow as per trend of previous years. The category-wise projection of consumers for FY 2020-21 are detailed below:

Table 96: Category-wise consumers submitted by the Petitioner (No.)

Particulars	FY 2020-21	
	MYT Order	Petition
Domestic	56,84,621	43,48,770
Commercial	2,73,285	2,54,411
Industrial LT/LTIS	14,925	16,432
Irrigation & Agricultural / IAS	4,04,518	1,00,000
Industrial HTS/HTSS/EHT	1,775	1,787
IS-I: Public Lighting / SS	553	418
IS-II: RTS, MES	11	10
Total	**63,79,688**	**47,21,828**

7.5 Based on the year on year growth of consumers and their energy sales, connected load has been estimated for FY 2020-21 by the Petitioner as detailed in the table below:

Table 97: Category-wise Connected Load submitted by the Petitioner (kW)

Particulars	FY 2020-21	
	MYT Order	Petition
Domestic	68,11,035	61,73,733
Commercial	7,25,274	5,16,889
Industrial LT/LTIS	3,19,620	71,032
Irrigation & Agricultural / IAS	6,36,448	2,95,776
Industrial HTS/HTSS/EHT	10,09,220	7,87,471
IS-I: Public Lighting / SS	15,909	10,032
IS-II: RTS, MES	6,822	47,330
Total	**95,24,327**	**79,02,263**

7.6 Based on the above, the Petitioner has projected the energy sales, keeping in view the average energy consumption per consumer in past, especially for domestic and irrigation consumer categories. A natural increase in energy sales has been considered for other consumer categories. The category-wise sales for FY 2020-21 as submitted by the Petitioner vis-à-vis that approved in MYT Order has been summarized in the table below:

Table 98: Category-wise Sales submitted by the Petitioner (MU)

Particulars	FY 2020-21	
	MYT Order	Petition
Domestic	10,612.60	6,624.37
Commercial/Non Domestic	620.07	837.90
Public Lighting / SS	159.93	26.36
Irrigation / IAS	641.39	334.91
Industrial LT / LTIS	196.68	220.33
Industrial HT / HTS / S/ EHT	2,491.78	2,294.80
RTS/MES	238.31	121.41
Total	**14,960.76**	**10,460.08**

Commission's Analysis

7.7 The Commission has calculated the 1-year, 2-year, 3-year, 4-year and 5-year CAGR of the actual sales till FY 2018-19 and has considered the appropriate CAGR as well as certain assumptions over the past few years for estimation of Sales for FY 2020-21. The Commission has considered the rate of 4%, 12%, 3%, 10%, 6%, 0% and 4% for escalation of Sales over the sales approved for FY 2019-20 for Domestic, Commercial, Streetlight, Irrigation, LT Industrial, HT Industrial and RTS/MES, respectively, for FY 2020-21 as summarised below:

Table 99: Category-wise Sales approved by the Commission (MU)

Particulars	FY 2020-21		
	MYT Order	Petition	Approved
Domestic	10,612.60	6,624.37	5,886.49
Commercial/Non Domestic	620.07	837.90	894.74
Public Lighting / SS	159.93	26.36	22.08
Irrigation / IAS	641.39	334.91	255.66
Industrial LT / LTIS	196.68	220.33	249.30
Industrial HT / HTS / S/ EHT	2,491.78	2,294.80	2,481.08
RTS/MES	238.31	121.41	104.44
Total	**14,960.76**	**10,460.08**	**9,893.78**

Power Purchase Quantum and Cost

Petitioner's Submission

7.8 The Petitioner submitted that it has projected the power purchase quantum for FY 2020-21 based on the following facts and assumptions:

- **Generation estimated during FY 2020-21:** Power Purchase quantum for existing power plants for FY 2020-21 has been considered equal to power purchase quantum considered for FY 2019-20. However, due to commissioning of new plants having PPA with Jharkhand, it is expected that existing power plants with high variable cost would be backed down as per Merit Order principle. Hence, expected reduction in generation from power plants has been projected. Additionally, due to migration of HT consumers from DVC command area, equivalent reduction in power purchase from KTPS has been done for FY 2020-21.
- **Power Requirement in FY 2020-21:** Based on estimated Sales and Energy balance for FY 2020-21, excess power available for sale in open market has been calculated.

- **Banking of Power:** Banking of Power has not been considered as amount of power availed and supplied through banking mechanism are roughly the same for full year.
- **Purchase through short-term sources:** No power purchase from IEX (PTC) or UI mechanism has been projected as power supply quantum in FY 2020-21 is greater than power requirement. However, due to emergency situation, like outage of a generation plant, JBVNL may be forced to purchase power from Power Exchange.
- **Current status of upcoming Power Stations:** As per CEA Thermal Power Plant Status report for the month of August 2019, JBVNL has considered expected COD of upcoming stations like NTPC Darlipalli, NTPC Barh I, Nabinagar, NTPC North Karanpura, PTPS phase-I, etc. Furthermore, PLF of new plants have been considered in range of 50%, as they would be under stabilization mode, just after commissioning, and auxiliary losses has been considered at 6%.
- **Commissioning of Renewable Plants:** As per correspondence with SECI and seasonal generation pattern, JBVNL has considered that 200 MW power from Inox Wind under 2000 MW ISTS Tranche-III (wind) would be available from April 01, 2020 and 700 MW solar power under 2000 MW ISTS (tranche-I) would be available from November 01, 2020. PLF of renewable sources have been considered at 19%.

7.9 The Petitioner has estimated the power purchase cost for FY 2020-21 based on following facts and assumptions:

- **Power Tariff during FY 2020-21:** Power Tariff for existing power plants except renewables as determined for FY 2019-20 has been escalated by 5% to arrive at power tariff for FY 2020-21. Tariff of Renewable plants having levellized tariff have been considered equal to tariff applicable in FY 2019-20.
- **Transmission and Scheduling Charges:** Actual Transmission and Scheduling Charges for FY 2019-20 has been escalated by 5% to arrive at corresponding figure for FY 2020-21.
- **Power Purchase Cost for new Plants:** Power Purchase cost of new NTPC plants has been considered at Rs 4.00 /kWh (Energy Charge - Rs 1.75/kWh and Capacity Charge - Rs 2.25/kWh).
- **Sale of Excess Power:** Sale of Excess power has been considered at Average Power Purchase Cost (except transmission and scheduling charges) at the rate of

Rs. 4.21/kWh as per methodology adopted by the Commission in its MYT Order dated June 21, 2017.

7.10 The station-wise provisional Power Purchase for FY 2020-21 is summarised in the table below:

Table 100: Power Purchase Cost submitted by the Petitioner

Particulars	Power Purchase Quantum		Power Purchase Cost	
	MYT Order (MU)	Petition (MU)	Approved (Rs Crore)	Petition (Rs Crore)
NTPC				
Farrakka	700.00	871.11	267.19	304.32
Farrakka III	100.00	376.55	51.27	162.90
Khalagaon I	184.93	174.35	66.94	58.82
Talcher	498.19	510.56	114.55	163.51
Khalagaon II	190.08	165.19	64.73	50.52
Barh STPS-II	100.00	343.98	63.02	154.77
Korba		302.13		89.40
NTPC Darlipalli STPS	742.50	453.92	193.81	181.57
Barh STPS-I		208.54		83.42
NTPC Nabinagar	367.20	114.42	97.18	51.38
NTPC North Karanpura	2,585.77	344.46	674.92	137.78
Total	**5,468.67**	**3,865.22**	**1,593.61**	**1,438.39**
NHPC				
Rangit	45.79	43.91	15.59	16.54
Teesta	329.69	315.09	88.03	67.76
Total	**375.48**	**359.00**	**103.62**	**84.30**
PTC				
Chukha	203.79	155.90	41.04	39.31
Punatsangchhu-II	533.44		190.15	
Tala	405.61	279.24	92.70	63.33
Total	**1,142.84**	**435.14**	**323.89**	**102.65**
Total Central Sector	**6,986.99**	**4,659.37**	**2,021.12**	**1,625.34**
DVC	**4,000.00**	**4,042.27**	**1,994.76**	**2,202.89**
State Sector				
PTPS	460.37		214.30	
PTPS NTPC Phase-I	2,606.00		689.75	
SHPS	55.19	8.48	24.98	2.24
TVNL	2,266.75	1,865.88	847.24	755.53
Total State Sector	**5,388.31**	**1,874.36**	**1,776.27**	**757.77**
Private				
Inland Power	422.94	387.60	162.31	198.61
APNRL	954.00	913.94		381.06
APNRL Adjustment		-	359.56	-
APNRL (Add. 66 MW)	-	491.01		207.96
Total Private Sector	**1,376.94**	**1,792.54**	**521.87**	**787.63**
Other RE				

Particulars	Power Purchase Quantum		Power Purchase Cost	
	MYT Order (MU)	Petition (MU)	Approved (Rs Crore)	Petition (Rs Crore)
Solar IPPs	16.87	17.92	30.30	32.18
Solar REC	13.14		4.60	
JREDA	977.52		621.70	
SECI		505.10	-	136.73
RE (Wind)	991.22	1,108.98	148.68	366.27
Total Other RE	**1,998.75**	**1,631.99**	**805.28**	**535.19**
Rungta Mines	-	35.31	-	11.54
ABCIL	-	1.54	-	0.12
KBUNL Kanti TPS	73.44	90.24	19.71	57.03
Inter-State Transmission Charges			128.09	154.73
Posoco (ERLDC)	-	-	1.58	1.38
Posoco (Railway)				-0.11
ERLDC(APNRL)	-	-		43.23
Amount added to purchase solar REC		-	101.84	
Revenue due to sale of Surplus power		-1,063.36		-448.10
Grand Total	**19,824.43**	**13,064.26**	**7,268.67**	**5,728.64**

7.11 The Petitioner requested the Commission to approve the power purchase quantum as summarized in the table above at Rs. 5573.91 Crore excluding Inter-State Transmission Charges and approve the power purchase cost accordingly.

Commission's Analysis

7.12 The Commission is of the view that the Petitioner has been consistently deferring the purchase of REC's over the past few years, quoting that the proposed RE Generation shall meet the RPO Compliance of the past years from FY 2020-21, in spite of claiming the provision consistently for each year. Hence, the Commission is not approving any provision for REC purchase presently and the same shall be trued up in the subsequent Order based on the actual REC purchased by the Petitioner.

7.13 The Commission has considered the Fixed Charges and Energy Charges of the Generating Stations, viz., APNRL, IPL and TVNL based on the latest Tariffs approved in their respective MYT Orders for FY 2020-21.

7.14 The Commission has considered the normative/actual availability (PAF) of the thermal stations for estimating the normative energy availability for power purchase. The energy availability from Tala and Chuka has been considered based on the actual power purchased during the past 4 years. The design energy approved for NHPC Plants and Sikidri HPS has been considered for energy availability for the same.

7.15 The Commission has considered the variable costs paid by the Petitioner as per the Variable Charges approved by the Commission for FY 2019-20. The fixed charges to be paid by JBVNL in FY 2020-21 for the Generating Stations is considered as per the respective Tariff Orders issued by the Commission, and the Fixed Charges approved by the Commission for FY 2018-19 for Generating Stations regulated by CERC. The Commission has considered the ECR of new generating stations of NTPC as the average ECR of the NTPC Stations for FY 2020-21.

7.16 As regards power purchased from DVC Koderma, the Commission is of the view that as separate proceedings are underway for the PPA approval and the PPA is yet to be approved as prima facie, it is observed that the power purchase cost from DVC Koderma is higher than the DVC's Distribution tariff. Hence, the Commission, for projecting cost of power has estimated the normative power purchase cost for power procured from DVC Licensee.

7.17 The Commission has observed that the actual distribution loss as proposed by the Petitioner is higher than the proposed distribution loss of 15%. The Petitioner has submitted that the projected surplus energy of ~1063 MU is notional in nature and is proposed as adjustment in the Power Purchase Cost. The Commission has considered the normative distribution loss of 13% and approved the Power Purchase Cost accordingly. The Commission has not allowed any Surplus power purchase or sale of the same. The Commission has approved the above power purchase quantum from each generator by applying Merit Order Despatch (MOD) as per Clause 6.39 of the Tariff Regulations, 2015, as under:

"6.39 While approving the cost of power purchase, the Commission shall determine the quantum of power to be purchased from various sources in accordance with the principles of merit order schedule and despatch based on a ranking of all approved sources of supply in the order of their variable cost of power purchase. All power purchase costs will be considered legitimate unless it is established that the merit order principle has been violated or power has been purchased at unreasonable rates;"

7.18 Accordingly, the summary of Power Purchase Cost approved by the Commission is as below:

Table 101: Power Purchase Cost approved by the Commission

Particulars	Power Purchase Quantum		Power Purchase Cost	
	Petition (MU)	Approved (MU)	Petition (Rs. Crore)	Approved (Rs. Crore)
NTPC				
Farakka, Stage-I&II	871.11	399.62	304.32	177.19
Farakka, Stage-III	376.55	0.00	162.9	89.05
Kahalgaon, Stage-I	174.35	465.74	58.82	153.77
Talcher, Stage-I	510.56	537.76	163.51	160.92
Kahalgaon, Stage-II	165.19	131.44	50.52	42.28
Barh-II	343.98	656.03	154.77	229.93
Korba, Station-III	302.13	350.89	89.4	102.92
Barh I	453.92	352.65	181.57	115.42
Darlipalli STPS	208.54	767.58	83.42	251.21
Nabinagar	114.42	341.85	51.38	114.15
North Karanpura	344.46	585.99	137.78	191.80
Total	**3,865.22**	**4,589.56**	**1,438.39**	**1,628.64**
NHPC				
Rangit	43.91	58.23	16.54	17.12
Teesta-V	315.09	326.54	67.76	65.16
Total	**359.00**	**384.77**	**84.30**	**82.28**
PTC				
Chukha HPS (Bhutan)	155.90	171.15	39.31	41.10
Tala HPS (Bhutan)	279.24	306.25	63.33	66.15
Total	**435.14**	**477.40**	**102.65**	**107.25**
Total Central Sector	**4,659.35**	**5,451.73**	**1,625.34**	**1,818.18**
DVC as Consumer	**4,042.27**	**0.00**	**2,202.89**	**43.20**
DVC Koderma		**4133.45**		**1525.24**
State Sector				
Sikidiri HPS	8.48	48.16	2.24	18.03
TVNL	1,865.88	0.00	755.53	253.64
Total State Sector	**1,874.36**	**48.16**	**757.77**	**271.67**
Private				
Inland Power Limited (IPL)	387.60	409.77	198.61	166.28
APNRL-Unit-1	913.94	0.00	381.06	50.92
APNRL-Unit-2		0.00		51.65
APNRL (Add. 66MW)	491.01	0.00	207.96	50.15
Total Private Sector	**1,792.54**	**409.77**	**787.63**	**319.00**
Other RE				
State-Solar	17.92	17.92	32.18	32.19
SECI (Solar)	505.10	505.10	136.73	136.73
SECI (Wind)	1108.98	1108.98	366.27	366.27
Total Other RE	**1631.99**	**1632.00**	**535.19**	**535.20**
Rungta Mines	35.31	0.00	11.54	0.00
ABCIL	1.54	73.72	0.12	5.45
KBUNL MTPS	90.24	0.00	57.03	24.69
POSOCO			1.27	0.00
ERLDC(APNRL)	-		43.23	0.00

Particulars	Power Purchase Quantum		Power Purchase Cost	
	Petition (MU)	Approved (MU)	Petition (Rs. Crore)	Approved (Rs. Crore)
Sale of Surplus Power	-1063.36		-448.1	
Grand Total	**13,064.26**	**11,748.83**	**5,573.91**	**4,542.63**

Energy Requirement and Energy Availability

Petitioner's Submission

7.19 The Petitioner submitted that energy availability for FY 2020-21 has been estimated based on the actual power purchase and sales.

7.20 The Petitioner also submitted that power purchase from various sources is segregated into different heads, while calculating the Energy Balance for the Control Period:

- Power Purchase from outside JBVNL Boundary - NTPC, NHPC, PTC, APNRL, part of TVNL, NVVNL, SECI and RE (Wind)
- Energy Input Directly to State Transmission System - Input of power from TVNL directly to State Transmission System
- Energy Input through Renewables sources - Input from Solar IPPs selected through JREDA
- State-owned Generation - PTPS, SHPS, Rungta Mines, ABCIL and Inland Power
- Direct Input of Energy to Distribution System - DVC and Solar IPPs.

7.21 Based on the information provided above, Energy Balance as submitted by the Petitioner for FY 2020-21 is provided in the table below:

Table 102: Energy Balance submitted by the Petitioner (MU)

Particulars	FY 2020-21	
	MYT Order	Petition
Power Purchase from Outside JBVNL Boundary (MU)	8,853.13	8,944.14
Loss in External System (%)	3.00%	3.00%
Loss in External System (MU)	265.59	268.32
Net Outside Power Available (MU)	8,587.53	8,675.81
Energy Input Directly to State Transmission System (MU)	1,428.05	424.45
State-owned Generation (MU)	3,544.50	698.85
Energy Available for Onward Transmission (MU)	15,059.15	9,799.11
Transmission Loss (%)	4.00%	5.00%
Transmission Loss (MU)	602.37	489.96
Net Energy Sent to Distribution System (MU)	14,456.78	9,309.16
Direct Input of Energy to Distribution System (MU)	4,499.69	4,060.18
Total Energy Available for Sales (MU)	**18,956.47**	**13,369.34**

Commission's Analysis

7.22 The Commission in its earlier Order dated June 21, 2017 had set the distribution loss targets for JBVNL for the second Control Period from FY 2016-17 to FY 2020-21. The Commission has considered the distribution loss target for FY 2020-21 for the computation of Energy Balance.

7.23 The energy requirement as approved by the Commission for FY 2020-21 based on approved energy sales and distribution losses is summarized below:

Table 103: Energy Requirement by the Commission

Particulars	FY 2020-21
Energy Sales	9,893.78
Distribution Loss (%)	13%
Distribution Loss (MU)	1,478.38
Energy Required for Distribution (MU)	**11,372.16**

7.24 The Commission has observed that the Petitioner has proposed a distribution loss of 21.76%, while the Commission has calculated a distribution loss of 23.32% considering the approved Transmission Loss of 2.23%. However, the Commission has approved the normative distribution loss of 13%.

7.25 The Commission has worked out energy availability for FY 2020-21 on the basis of actual generation from tied-up power from Central, State-owned and other Generating Stations. Further, the loss in external system has been considered at the same level as approved by the Commission in its earlier Order, while the Intra-State Transmission Loss has been considered at 2.23% as per the Tariff Order for JUSNL dated February 24, 2018. The energy availability from various sources has been summarized below:

Table 104: Energy Balance approved by the Commission

Particulars	FY 2020-21		
	MYT Order	Petition	Approved
Power Purchase from Outside JBVNL Boundary (MU)	8,853.13	8,944.14	7,016.78
Loss in External System (%)	3.00%	3.00%	3.00%
Loss in External System (MU)	265.59	268.32	210.50
Net Outside Power Available (MU)	8,587.53	8,675.81	6,806.27
Energy Input Directly to State Transmission System (MU)	1,428.05	424.45	483.49
State-owned Generation (MU)	3,544.50	698.85	95.72
Energy Available for Onward Transmission (MU)	15,059.15	9,799.11	7,385.49
Transmission Loss (%)	4.00%	5.00%	2.23%
Transmission Loss (MU)	602.37	489.96	164.70
Net Energy Sent to Distribution System (MU)	14,456.78	9,309.16	7,220.79
Direct Input of Energy to Distribution System (MU)	4,499.69	4,060.18	4151.37
Total Energy Available for Sales (MU)	**18,956.47**	**13,369.34**	**11,372.16**

Transmission Charges

Petitioner's Submission

7.26 The Petitioner submitted that transmission charges payable to Jharkhand Urja Sanchar Nigam Limited have been computed based on the rate approved in Tariff Order of JUSNL dated February 24, 2018.

7.27 The Petitioner further submitted that the energy wheeled through transmission network in the above Section of Energy Balance has been considered for calculating the Intra-State transmission charges payable to JUSNL and no transmission charges are applied on direct input of energy to distribution system. The estimated intra-State transmission charges payable to JUSNL for FY 2020-21 is provided in the table below:

Table 105: Transmission Charges submitted by the Petitioner (Rs. Crore)

Particulars	FY 2020-21	
	MYT Order	Petition
Intra-State Transmission Charges	310.77	244.98
Inter-State Transmission Charges	128.09	154.73

Commission's Analysis

7.28 The Commission has calculated the Transmission Charges based on the Tariffs approved in Tariff Order of JUSNL dated February 24, 2018 at Rs. 0.25/kWh and the units transmitted as per the approved Energy Balance. The Inter-State Transmission Charges are approved as per the claims of the Petitioner.

Table 106: Transmission Charges approved (Rs. Crore)

Particulars	FY 2020-21		
	MYT Order	Petition	Approved
Energy Wheeled in Transmission Network (MU)	14,456.78	9799.11	7,385.49
Transmission Charges (Rs./kWh)	0.21	0.25	0.25
Intra-State Transmission Charges	310.77	244.98	184.64
Inter-State Transmission Charges	128.09	154.73	154.73

Capital Expenditure and Capitalisation

Petitioner's Submission

7.29 The Petitioner submitted that it would build upon the huge capex incurred in FY 2018-19 and FY 2019-20 and continue the momentum in FY 2020-21. However, since most of central funded schemes would end in FY 2019-20, capex in FY 2020-21 would be a little less. The capex schedule as submitted by the Petitioner is as detailed below:

Table 107: Capital Expenditure submitted by the Petitioner (Rs. Crore)

Scheme Name	FY 2019-20	
	MYT Order	Petition
DDUGJY	-	-
IPDS	-	-
RAPDRP - A	16.50	57.00
RAPDRP - B	-	-
DDUGJY 12th Plan	-	-
ADP + Misc.	900.00	804.15
Tilka Manjhi & AGJY	-	-
RE State Plan	-	-
JSBAY - RE	-	3,975.56
RGGVY (10th & 11th Plan)	-	-
Deposit & others	-	-
JSBAY - Urban Electrification	-	-
JSBAY - IT, SCADA & TRW	-	-
SAUBHAGYA	-	-
IT Schemes (WB Supported)	-	386.60
Total	**916.50**	**5,223.31**

7.30 Considering the above capital expenditure schedule for FY 2020-21, the Petitioner has projected revised CWIP and creation of GFA. Considering the past experience, JBVNL has proposed a capitalization period of 3 years in the ratio of 20:40:40 for all the proposed works and capital expenditure of schemes in the respective years. Further, opening CWIP has been proposed to be capitalized in the proportion of 80:20 in first and second year.

Table 108: Capitalisation submitted by the Petitioner (Rs. Crore)

Particulars	FY 2020-21	
	MYT Order	Petition
Opening CWIP	2,464.47	6,177.80
Capex	916.50	5,362.24
Capitalisation	1,117.10	5,808.32
Closing CWIP	2,263.87	5,731.72

Commission's Analysis

7.31 The Scheme-wise capital expenditure under schemes viz., DDUGJY, IPDS, RAPDRP, ADP+Misc., etc., have been proposed much higher than the Capex approved by the Commission in the Business Plan vide its MYT Order. Hence, the Commission limits expenditure under the schemes discussed above for FY 2019-20 to the Capex approved for the MYT Period. In addition, the Commission has observed that the Petitioner has claimed Capital Expenses under other heads, viz., JSBAY RE, RE State Plan, SAUBHAGHYA and IT Schemes. The Commission however, observes that all the works discussed above except IT Schemes, have been entirely financed through Grants and therefore, the same have been approved.

Table 109: Capital Expenditure approved by the Commission (Rs. Crore)

Scheme Name	FY 2020-21		
	MYT Order	Petition	Approved
DDUGJY	-	-	-
IPDS	-	-	-
RAPDRP - A	16.50	57.00	57.00
RAPDRP - B	-	-	-
DDUGJY 12th Plan	-	-	-
ADP + Misc.	900.00	804.15	-
Tilka Manjhi & AGJY	-	-	-
RE State Plan	-	-	-
JSBAY - RE	-	3,975.56	3,975.56
RGGVY (10th & 11th Plan)	-	-	-
Deposit & others	-	-	-
JSBAY - Urban Electrification	-	-	-
JSBAY - IT, SCADA & TRW	-	-	-
SAUBHAGYA	-	-	-
IT Schemes (WB Supported)	-	386.60	-
Total	**916.50**	**5,223.31**	**4,032.56**

7.32 The Commission has approved the capitalisation for FY 2020-21 considering the actual capitalisation during FY 2016-17, FY 2017-18 and FY 2018-19 and the approved capitalisation for FY 2019-20 and subtracting it from the total capitalisation approved by the Commission for the MYT Control Period for FY 2016-17 to FY 2020-21, as summarised below:

Table 110: GFA approved by the Commission (Rs. Crore)

Particulars	FY 2020-21		
	MYT Order	Petition	Approved
Opening GFA	11,930.14	16,410.10	12,678.19
GFA Additions	1,117.10	5,808.32	2,931.41
Deletions	0.00	0.00	0.00
Closing GFA	13,047.24	22,218.42	15,609.60

Table 111: Capitalisation approved by the Commission (Rs. Crore)

Particulars	FY 2020-21		
	MYT Order	Petition	Approved
Opening CWIP	2,464.47	6,177.80	5,374.04

Particulars	FY 2020-21		
	MYT Order	Petition	Approved
Capex	916.50	5,362.24	4,032.56
Capitalisation	1,117.10	5,808.32	2,931.41
Closing CWIP	2,263.87	5,731.72	6,475.19

Consumer Contribution, Grants and Subsidies

Petitioner's Submission

7.33 The Petitioner submitted the Consumer contribution and Grants (CCG) of JBVNL for FY 2020-21, based on the actuals for FY 2018-19, as provided in the table below:

Table 112: Consumer Contribution and Grants (CCG) submitted by the Petitioner (Rs. Crore)

Particulars	FY 2020-21	
	MYT Order	Petition
Opening CCG	3,648.90	10.453.72
Addition CCG	218.93	4,420.46
Closing CCG	3,867.83	14,874.18

Commission's Analysis

7.34 The Commission has calculated the value of Consumer Contribution Addition for FY 2020-21 by calculating the average Consumer Contribution addition against total GFA addition over the past years, viz., FY 2016-17, FY 2017-18 and FY 2018-19 and multiplying it with the approved GFA addition for FY 2020-21. The Grants are approved as per the funding pattern submitted by the Petitioner and the same have been allowed as per the capital expenditure approved by the Commission for FY 2020-21.

Table 113: Consumer Contribution and Grants (CCG) approved by the Commission (Rs. Crore)

Particulars	FY 2020-21		
	MYT Order	Petition	Approved
Opening CCG	3,648.90	10,453.72	8,199.42
Addition in Consumer Contribution	218.93	138.93	283.02
Addition in Grants		4,281.53	4,032.56
Closing CCG	3,867.83	14,874.18	11,418.41

7.35 The Commission has adopted the approach for calculation of Normative Loan and Equity as per the previous Tariff Orders. For estimating the sources of finance required to fund the closing GFA, the Commission had reduced the GFA by the CCG available with the Petitioner.

7.36 For funding of above mentioned GFA, the Commission has considered the normative debt-equity ratio of 70:30 as specified in the Tariff Regulations, 2015. Moreover, consumer contribution grants and subsidies for capital assets are first netted off from Gross Fixed Assets (GFA) and the normative debt-equity ratio is applied on the remaining GFA only.

7.37 The Commission has considered CCG as approved above. The normative net loans are estimated after deducting accumulated depreciation from the value of gross loans as tabulated below. However, the Commission has observed that the GFA Addition (less CCG) is negative. Hence, the Commission has considered the same as zero and has recalculated the Normative Loan and Equity Closing for FY 2020-21 as summarised below:

Table 114: Source of Funding of GFA approved by the Commission (Rs. Crore)

Particulars	FY 2020-21
Opening CCG	8,199.42
Addition in CCG	4,315.58
Closing CCG	12,515.00
CCG towards CWIP	2,440.92
CCG towards GFA	5,758.50
Opening GFA (less CCG)	6,919.69
GFA Addition (less CCG)	0.00
Closing GFA (less CCG)	6,919.69
Accumulated Depreciation	3,481.22
Acc. Dep. towards GFA	1,543.21
Normative Loan (Closing)	**3,300.57**
Normative Equity (Closing)	**2,075.91**

Operation & Maintenance Expenses

Petitioner's Submission

7.38 The Petitioner submitted that Employee Expenses for FY 2020-21 have been calculated by escalating the Employee Expenses for FY 2019-20 by the inflation factor of 4.66 % and the methodology specified under Clause 6.6 (b) and (c) of the Tariff Regulations, 2015.

7.39 The projected employee cost for FY 2020-21 is provided in the table below:

Table 115: Employee Expenses submitted by the Petitioner (Rs. Crore)

Particulars	FY 2019-20	
	MYT Order	Petition
Total Emp. Expenses	252.84	322.21

Particulars	FY 2019-20	
	MYT Order	Petition
Emp. Expenses	*220.98*	*301.67*
Terminal benefits	*31.86*	*20.54*

7.40 The Petitioner submitted that the A&G expenses have been calculated for FY 2020-21 in line with the Clause 6.6 (b) and (c) of the Tariff Regulations, 2015,. The A&G expense of FY 2019-20 has been escalated by the inflation factor of 4.66%.

Table 116: A&G Expenses submitted by the Petitioner (Rs. Crore)

Particulars	FY 2020-21	
	MYT Order	Petition
A&G Expenses	59.86	110.34

7.41 The Petitioner submitted that the R&M expenses have been estimated for FY 2020-21 based on the K-factor of 2.34% as approved by the Commission in Tariff Order dated February 28, 2019.

Table 117: R&M Expenses submitted by the Petitioner (Rs. Crore)

Particulars	FY 2020-21	
	MYT Order	Petition
R&M Expenses	279.17	384.00

Commission's Analysis

7.42 The Commission has approved the O&M Expenses as per the provisions of the Tariff Regulations, 2015 as reproduced below:

"6.5 The O&M expenses permissible towards ARR of each year of the Control Period shall be approved based on the formula shown below:

O&Mn = (R&Mn + EMPn + A&Gn)* (1-Xn) + Terminal Liabilities

Where,

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

EMPn – Employee Costs of the Licensee for the nth year excluding terminal liabilities;

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

Xn – is an efficiency factor for nth year. The value of Xn will be determined by the Commission in its first MYT order for the Control Period;

6.6 The above components shall be computed in the manner specified below:

a) ***R&Mn = K*GFA***

Where,

'K' is a constant (expressed in %) governing the relationship between R&M costs and Gross Fixed Assets (GFA) and will be calculated based on the % of R&M to GFA of the preceding year of the Base Year;

'GFA' is the opening value of the gross fixed asset of the nth year;

b) ***EMPn (excluding terminal liabilities) + A&Gn = (EMPn-1 + A&Gn-1)*(INDXn/INDXn-1) + Gn***

Where,

INDXn – Inflation factor to be used for indexing the employee cost and A&G cost. This will be a combination of the Consumer Price Index (CPI) and the Wholesale Price Index (WPI) for immediately preceding year before the base year;

Gn – Increase in Employee Expenses in nth year due to increase in consumer base/ load growth. Value of G for each year of the Control Period shall be determined by the Commission in the MYT Tariff order based on Licensee's filing, benchmarking with the efficient utilities, actual cost incurred by the licensee due to increase in consumer base/load growth in past, and any other factor considered appropriate by the Commission;

c) ***INDXn = 0.55*CPIn +0.45*WPIn;***

…"

7.43 The Inflation factor is calculated as 4.90% based on the WPI and CPI data available with the Commission for FY 2020-21.

7.44 The Commission has considered the R&M Expenses as discussed in the previous Section, for approving the R&M Expenses for FY 2020-21, as it is observed that the R&M expenses claimed by the Petitioner are much higher when compared to the actuals as approved by the Commission for FY 2016-17 to FY 2018-19. The R&M Expenses approved by the Commission is summarised below:

Table 118: O&M Expenses approved by the Commission (Rs. Crore)

Particulars	FY 2020-21		
	MYT Order	Petition	Approved
Total Emp. Expenses	252.84	322.21	321.77
Emp. Expenses	*220.98*	*301.67*	*303.01*
Terminal benefits	*31.86*	*20.54*	*18.75*
A&G Expenses	59.86	110.34	110.83
R&M	279.17	384.00	124.36
O&M Expenses	**591.87**	**816.54**	**556.96**

Depreciation

Petitioner's Submission

7.45 The Petitioner has proposed the revised depreciation for FY 2020-21 in line with the approach adopted by the Commission in its Tariff Orders dated April 27, 2018 and February 28, 2019.

7.46 The Petitioner has first arrived at the Opening and closing GFA of FY 2020-21, created out of Debt and Equity, by deducting the Consumer Contribution & Grants portion deployed towards opening and closing GFA. The Petitioner has applied the depreciation rate as approved by the Commission on the average GFA thus calculated to arrive at the total depreciation as given below:

Table 119: Depreciation submitted by the Petitioner (Rs. Crore)

Particulars	FY 2020-21	
	MYT Order	Petition
GFA		9,604.98
Depreciation Rate		5.94%
Depreciation	**486.25**	**570.54**

Commission's Analysis

7.47 According to Clause 6.32 of the Tariff Regulations, 2015, depreciation shall not be allowed on assets funded by consumer contribution and capital subsidies/grants. Considering the consumer contribution deployed towards GFA approved in this Order, the Commission has determined the depreciation on the GFA created out of debt and equity excluding the consumer contribution, grants for FY 2020-21. The rate of depreciation has been considered at 5.94% as approved in the earlier Order dated June 21, 2017. However, the Commission has calculated the Depreciation on Average GFA as per the Tariff Regulations, 2015.

7.48 Accordingly, the Commission approves the depreciation for FY 2020-21 as summarised in the following table:

Table 120: Depreciation approved by the Commission (Rs. Crore)

Particulars	FY 2020-21		
	MYT Order	Petition	Approved
GFA (Average as per Commission)		9,604.98	6,919.69
Depreciation Rate		5.94%	5.94%
Depreciation	**486.25**	**570.54**	**411.03**

Interest and Finance Charges

Petitioner's Submission

7.49 The Petitioner submitted that the opening debt for FY 2020-21 has been considered equal to closing value of FY 2019-20. Closing debt for FY 2020-21 has been calculated in line with Clause 6.16 of the Tariff Regulations, 2015.

7.50 In line with Clause 6.22 of the Tariff Regulations, 2015, repayment of loan for FY 2020-21 has been considered equal to Depreciation.

7.51 Further, the rate of interest on long-term loan has been considered equal to prevailing Base Rate of SBI plus 200 basis points as per Clause 6.24 of the Tariff Regulations, 2015. Interest cost thus calculated vis-à-vis as approved by the Commission is provided in the table below:

Table 121: Interest on Loan submitted by the Petitioner (Rs. Crore)

Particulars	FY 2020-21	
	MYT Order	Petition
Opening Loan	1,862.24	4,491.28
Loan Addition	811.04	1,625.80
Loan Repayment	254.12	570.54
Closing Loan	2,419.16	5,546.55
Average Loan	2,140.70	5,018.92
Interest Rate	10.70%	10.45%
Interest on Loan	**229.05**	**524.48**

Commission's Analysis

7.52 The Commission has calculated loans considering the debt-equity ratio in line with Clause 6.15 and 6.16 of the Tariff Regulations, 2015. The loan arrived in this manner is considered as gross normative loan for calculation of interest on loan.

7.53 The Commission has excluded interest on loan amount, normative or otherwise, to the extent of capital cost funded by Consumer Contribution, Grants or Deposit Works carried out by Distribution Licensee in line with Clause 6.26 of the Tariff Regulations, 2015.

7.54 The repayment for FY 2020-21 has been considered equal to the depreciation allowed for FY 2020-21. The opening value of loan for FY 2020-21 has been considered as the closing value of FY 2019-20 as approved in the previous Sections of this Order. Further, the rate of interest has been considered at the Base Rate of SBI as applicable on April 1, 2020 plus 200 basis points as per the Tariff Regulations, 2015. The interest on loan as approved by the Commission for FY 2020-21 is summarised in the following table:

Table 122: Interest on Loan approved by the Commission (Rs. Crore)

Particulars	FY 2020-21		
	MYT Order	Petition	Approved
Opening Loan	1,862.24	4,491.28	3,168.09
Deemed Loan Addition	811.04	1,625.80	543.51
Deemed Loan Repayment	254.12	570.54	411.03
Closing Loan	2,419.16	5,546.55	3,300.57
Average Loan	2,140.70	5,018.92	3,234.33
Interest Rate	10.70%	10.45%	10.15%
Interest on Loan	**229.05**	**524.48**	**328.28**

Interest on Consumer Security Deposit

Petitioner's Submission

7.55 The Petitioner submitted that in order to estimate the interest on Consumer Security Deposit (CSD) for FY 2020-21, the Petitioner has assumed an escalation of 5% over the accumulated CSD of FY 2019-20.

7.56 Further, the Petitioner submitted that the applicable interest rate as per JSERC Supply code Regulations, 2015 has been applied to estimate the Interest on consumer deposit for FY 2020-21. The interest rate considered is the SBI Base Rate prevailing on date of filing Petition, i.e., 8.70% p.a.

Table 123: Interest on CSD submitted by the Petitioner (Rs. Crore)

Particulars	FY 2020-21	
	MYT Order	Petition
Closing CSD	1,202.47	645.91
Interest Rate	9.30%	8.45%
Int. on CSD	**111.83**	**54.58**

Commission's Analysis

7.57 The Commission has considered the average security deposit per consumer as Rs.1454 per consumer as approved in the previous Tariff Order dated February 28, 2019 and the interest rate considered is as per JSERC Supply Code Regulations, 2015 at the SBI Base Rate prevailing on April 1, 2020. The Interest on CSD as approved by the Commission for the FY 2020-21 is tabulated below:

Table 124: Interest on CSD approved by the Commission (Rs. Crore)

Particulars	FY 2019-20		
	MYT Order	Petition	Approved
Closing CSD	1,202.47	645.91	686.62
Interest Rate	9.30%	8.45%	8.15%
Int. on CSD	**111.83**	**54.58**	**55.96**

Interest on Working Capital (IoWC)

Petitioner's Submission

7.58 The Petitioner submitted that the working capital requirement has been calculated in line with Clause 6.29 and 6.30 of the Tariff Regulations, 2015. Rate of IoWC has been considered equal to the Base Rate of SBI prevailing as on date of filing Petition plus 350 Basis Points as per Clause 6.31 of the Tariff Regulations, 2015. Based on the expenditure for FY 2020-21, the Petitioner has estimated the working capital requirement and interest thereof, as provided in the Table below:

Table 125: Interest on Working Capital submitted by the Petitioner (Rs. Crore)

Particulars	FY 2020-21	
	MYT Order	Petition
1 month O&M Expenses		68.05
Maintenance Spares (@1% GFA)		103.94
2 months' Receivables		1,375.26
Less: 1 month Power Purchase Cost		464.49
Less: Consumer Security Deposit		645.91
Total Working Capital requirement		436.85
Interest rate on WC		11.95%
Interest on Working Capital	**0.00**	**52.20**

Commission's Analysis

7.59 The Commission has considered IoWC as per the norms specified in the Tariff Regulations, 2015. The Commission has approved the Maintenance Spares at 1% of the Opening GFA as provided under the Tariff Regulations while the Petitioner has proposed the recovery of the same on 1% of the Closing GFA. The Petitioner has claimed 2 months' receivables including the disallowances for excessive T&D Losses and Collection Efficiency while the Commission has excluded the same from the calculation of Receivables.

7.60 Rate of IoWC has been considered to be equal to the Base Rate of SBI as applicable on the April 01, 2020, plus 350 Basis Points as per Clause 6.31 of the Tariff Regulations, 2015.

7.61 The Interest on Working Capital as computed by the Commission for FY 2020-21 is summarized in the following table:

Table 126: Interest on Working Capital approved by the Commission (Rs. Crore)

Particulars	FY 2020-21		
	MYT Order	Petition	Approved
1 month O&M Expenses		68.05	46.41
Maintenance Spares (@1% GFA)		103.94	69.20
2 months' Receivables		1,375.26	1,054.33
Less: 1 month Power Purchase Cost		464.49	406.83
Less: Consumer Security Deposit		645.91	686.62
Total Working Capital requirement		436.85	76.50
Interest rate on WC		11.95%	11.65%
Interest on Working Capital	**0.00**	**52.20**	**8.91**

Return on Equity

Petitioner's Submission

7.62 The Petitioner submitted that it has considered the opening balance of normative equity for FY 2020-21 as per the closing balance of FY 2019-20. Closing equity in FY 2020-21 has been calculated using normative debt equity ratio (70:30), as per the provisions of Clause 6.16 of the Tariff Regulations, 2015. Further, the rate of Return on Equity (RoE) is considered to be 15.50% as per the provisions of Clause 6.17 of the Tariff Regulations, 2015. The Petitioner submitted the RoE as summarised below for FY 2020-21:

Table 127: RoE submitted by the Petitioner (Rs. Crore)

Particulars	FY 2020-21	
	MYT Order	Petition
Opening Equity	4,756.03	2,644.64
Equity Addition	556.54	473.70
Deletions	0.00	0.00
Closing Equity	5,312.57	3,118.34
Rate of RoE	15.50%	15.50%

Particulars	FY 2020-21	
	MYT Order	Petition
RoE	**805.49**	**446.63**

Commission's Analysis

7.63 The Commission has approved the Return on Equity on the approved equity employed for the FY 2020-21 as per the provisions of Clause 6.16 to 6.19 as specified in the Tariff Regulations, 2015.

7.64 The Commission has considered the opening balance of normative equity as the closing balance approved for FY 2019-20 as approved in the previous Sections of this Order. Further, the rate of RoE is considered to be 15.50%. Accordingly, the Commission computed normative RoE as follows:

Table 128: RoE approved by the Commission (Rs. Crore)

Particulars	FY 2020-21		
	MYT Order	Petition	Approved
Opening Equity	4,756.03	2,644.64	2,075.91
Equity Addition	556.54	473.70	0.00
Deletions	0.00	0.00	0.00
Closing Equity	5,312.57	3,118.34	2,075.91
Rate of RoE	15.50%	15.50%	15.50%
RoE	**805.49**	**446.63**	**321.77**

Non-Tariff Income (NTI)

Petitioner's Submission

7.65 The Petitioner submitted that the Non-Tariff Income (NTI) for FY 2020-21 has been projected based on the growth trend of historical figures. The Petitioner further submitted that the rationale behind the computation of NTI is in line with the Judgment of Hon'ble APTEL dated July 12, 2011 in Appeal No. 142 & 147 of 2009 and summarised the NTI as outlined below:

Table 129: NTI submitted by the Petitioner (Rs. Crore)

Particulars	FY 2020-21	
	MYT Order	Petition
D.P.S from Consumer		442.80
Meter Rent		23.19
Miscellaneous Charges from Consumers		15.00
Total NTI		**480.99**
Interest rate for Receivables financing		11.95%
Corresponding Receivables against DPS		2,460.01

Particulars	FY 2020-21	
	MYT Order	Petition
Interest on Receivables against DPS		293.97
Net NTI to be considered	**163.24**	**187.02**

Commission's Analysis

7.66 The Commission has considered the NTI approved for FY 2018-19 and the DPS as submitted by the Petitioner for calculation of the NTI for FY 2020-21.

7.67 Further, the Commission has adopted a similar approach as adopted in the Tariff Order dated June 21, 2017 for approving the NTI wherein, the NTI has been calculated after considering financing cost for corresponding receivables, as accrued DPS is considered to be form of NTI. The Commission has taken due cognizance of the Judgment of Hon'ble APTEL in Appeal No. 48 of 2016 and Appeal No. 316 of 2016 & IA No.656 of 2016 dated May 31, 2017, while approving the NTI. The Commission has observed that as per the Tariff Regulations, 2015, the income from Meter Rent is part of NTI. Since the Commission has done away with the Meter Rent in this Order, the Non Tariff Income approved shall be subject to true up based on the actuals.

7.68 NTI as approved by the Commission for FY 2020-21 is summarized in the following table:

Table 130: NTI approved by the Commission (Rs. Crore)

Particulars	FY 2020-21		
	MYT Order	Petition	Approved
Interest Income from Investment in Fixed Deposits	-	-	11.33
D.P.S from Consumer	-	442.80	442.80
Interest from Bank (Other than FD)	-	-	13.20
Supervision Charges	-	-	2.15
Miscellaneous Receipt	-	-	10.55
Meter Rent	-	23.19	32.86
Receipt from Consumers for capital works	-	-	18.06
Miscellaneous Charges from Consumers	-	15.00	1.92
Total NTI	-	**480.99**	**532.87**
Interest rate for Receivables financing	-	11.95%	11.95%
Corresponding Receivables against DPS	-	2,460.01	2,460.01
Interest on Receivables against DPS	-	293.97	293.97
Net NTI to be considered	**163.24**	**187.02**	**238.90**

Disallowances on account of Excessive AT&C Losses

Petitioner's Submission

7.69 The Petitioner submitted that it has undertaken several administrative measures to curb the AT&C losses along with the technical measures such as increasing the metering, focusing on billing efficiency and collection efficiency improvement.

7.70 However, keeping in view the addition of large numbers of rural consumers, it has become very challenging to attain 100% collection efficiency, owing to limited paying capacity of such consumers. Moreover, the Commission has fixed T&D loss target of 13%, which is even stricter than the UDAY target of 15%T&D loss.

7.71 The Petitioner requested the Commission to consider the revised target of T&D loss of 15% while approving the ARR for FY 2020-21 as per UDAY benchmark. Further, the Commission was requested to relax normative collection efficiency to 98% for FY 2020-21 as it is an impossible target to achieve even by utilities considered to be best in the country and plying in ideal scenario, let alone by JBVNL.

7.72 A reasonable amount of revenue which JBVNL has not been able to collect, may be allowed as provision for bad debt. The calculation of provision for bad debt is done by considering the difference between the Commission's approved collection efficiency, i.e., 100% and the proposed target of 98% for FY 2020-21 as provided in the table below.

Table 131: Provision for Bad & Doubtful Debt submitted by the Petitioner (Rs. Crore)

Particulars	FY 2020-21
Receivables	6,660.72
Collection efficiency (%)	98.00%
Total disallowance (Bad debt)	133.21

7.73 The Petitioner requested the Commission to approve the provision for bad debt in total ARR.

Commission's Analysis

7.74 The Commission had already set the targets for Collection Eefficiency in the Section "Targets for Distribution Losses and Collection Efficiency" of the Tariff Regulations, 2015, which clearly specifies that the AT&C Losses for FY 2020-21 should be at 13% including a collection efficiency of 100% (i.e., distribution loss of 13%) and as such the submission of the Petitioner regarding sudden change seems to be out of order. The Commission thus directs the Petitioner to abide by the targets set by the Commission and any provisions for the poor collection efficiency cannot be allowed. Accordingly, the amount of Rs. 133.21 Crore claimed towards provision for bad debt has no justification and should not be passed on to the Consumers.

7.75 The Commission has observed that the actual distribution loss as proposed by the Petitioner is higher than the proposed distribution loss of 15%. The Petitioner has submitted that the Surplus energy proposed of ~1063 MU is notional in nature and is proposed as adjustment in the Power Purchase Cost.

7.76 Hence, with respect to the Distribution Loss Targets, the Commission in its earlier Order dated June 21, 2017 had already set targets for the Second Control Period based on the GoI, UDAY scheme. The Commission notes with concern that the actual level of Distribution losses submitted by the Petitioner are still higher as compared to the targets set by the Commission. The Commission is of the view that such high loss levels due to Petitioner's inefficiency should not be passed on to the consumers. As discussed earlier, the Commission has considered the distribution loss for FY 2020-21 as per the target approved while estimating the energy input requirement.

Summary of ARR for FY 2020-21

Petitioner's Submission

7.77 Based on the components of the ARR discussed in the above Sections, the final ARR claimed by the Petitioner for FY 2020-21 is as below:

Table 132: ARR submitted by the Petitioner (Rs. Crore)

Particulars	FY 2020-21	
	MYT Order	Petition
Power Purchase Cost	6,548.22	5,573.91
Inter-State Transmission Charges	-	154.73
Intra-State Transmission Charges	282.25	244.98
O&M Expenses	535.87	816.54
Employee Expenses	*243.61*	*322.21*
A&G Expenses	*57.37*	*110.34*
R&M Expenses	*234.89*	*384.00*
Depreciation	212.52	570.54
Interest on Long Term Loan	202.15	524.48
Interest on Working Capital Loan	0.00	52.20
Interest on Consumer Security Deposit	110.09	54.58
Return on Equity	175.16	446.63
Total Expenses	**8,066.27**	**8,438.59**
Less: Non-Tariff Income	155.47	187.02
Add: Provision for Doubtful Debt	-	133.21

Particulars	FY 2020-21	
	MYT Order	Petition
ARR Recoverable	**7,910.80**	**8,384.78**

Commission's Analysis

7.78 The table below summarizes the ARR approved by the Commission for FY 2020-21:

Table 133: ARR approved by the Commission (Rs. Crore)

Particulars	FY 2020-21		
	MYT Order	Petition	Approved
Power Purchase Cost	6,618.57*	5,573.91	4,542.63
Inter-State Transmission Charges	-	154.73	154.73
Intra-State Transmission Charges	310.77	244.98	184.64
Additional REC Purchase to meet RPO	-	-	0.00
O&M Expenses	591.87	816.54	556.96
Employee Expenses	*252.84*	*322.21*	*321.77*
A&G Expenses	*59.86*	*110.34*	*110.83*
R&M Expenses	*279.17*	*384.00*	*124.36*
Depreciation	236.32	570.54	411.03
Interest on Long Term Loan	202.62	524.48	328.28
Interest on Working Capital Loan	0.00	52.20	8.91
Interest on Consumer Security Deposit	111.83	54.58	55.96
Return on Equity	186.99	446.63	321.77
Total Expenses	**8,258.98**	**8,438.59**	**6,564.91**
Less: Non-Tariff Income	163.24	187.02	238.90
Add: Provision for Doubtful Debt	-	296.43	-
ARR Recoverable	**8,095.74**	**8,547.99**	**6,326.00**

* Inter-State Transmission Charges included in Power Purchase Cost in MYT Order

Revenue at Existing Tariff

Petitioner's Submission

7.79 The category-wise calculation of revenue from existing tariff as submitted by the Petitioner for FY 2020-21 is summarized in the following table:

Table 134: Revenue at Existing Tariff as submitted by the Petitioner (Rs. Crore)

Particulars	FY 2020-21		
	Energy Charges	Fixed Charges	Total Revenue
Domestic	3,918.98	178.25	4,097.23
Commercial/Non Domestic	518.09	38.45	556.54
Public Lighting / SS	16.48	1.20	17.68
Irrigation / IAS	167.45	2.29	169.74
Industrial LT / LTIS	133.08	26.95	160.03
Industrial HT / HTS / S/ EHT	1,304.76	257.93	1,562.69

Particulars	FY 2020-21		
	Energy Charges	Fixed Charges	Total Revenue
RTS/MES	78.56	18.24	96.80
Total	**6,137.41**	**523.31**	**6,660.72**

Commission's Analysis

7.80 The Commission has computed the category-wise revenue from sale of power for FY 2020-21 based on the approved sales, number of consumers and connected load for the relevant year as per this Order and the category-wise existing tariffs, categories and slabs as per the Tariff Order dated February 28, 2019.

7.81 The details of category wise revenue at existing tariff for FY 2020-21 as approved by the Commission is provided in the table below:

Table 135: Category wise Revenue at Existing Tariff approved by the Commission (Rs. Crore)

Particulars	FY 2020-21		
	Energy Charges	Fixed Charges	Total Revenue
Domestic	3,530.64	178.31	3,708.95
Commercial/Non Domestic	557.11	39.58	596.69
Public Lighting / SS	13.80	1.20	15.00
Irrigation / IAS	127.83	4.50	132.33
Industrial LT / LTIS	168.65	29.23	197.88
Industrial HT / HTS / S/ EHT	1,429.48	302.12	1,731.60
RTS/MES	60.46	20.92	81.39
Total	**5,887.98**	**575.87**	**6,463.84**

Summary of Standalone Gap/(Surplus)

7.82 The summary of Standalone Gap/(Surplus) proposed by the Petitioner vis-à-vis approved by the Commission for FY 2020-21 is summarised below:

Table 136: Summary of Gap/(Surplus) (Rs. Crore)

Particulars	FY 2020-21		
	MYT Order	Petition	Approved
ARR Recoverable	**8,095.74**	**8,384.78**	**6,326.00**
Revenue from Sales	**-**	**6,660.72**	**6,463.48**
RGF provided by the State Govt.	**-**	**-**	**0.00**
Less: Losses Disallowed	-	-	-
RGF to be adjusted in Gap	-	-	0.00
Gap After Subsidy	**-**	**1,724.06**	**-137.47**

A 8 REVENUE GAP AND ITS TREATMENT

Revenue Gap till FY 2019-20

Petitioner's Submission

8.1 The Petitioner submitted that in the previous Tariff Order dated February 28, 2019, regarding True-up for FY 2016-17 & FY 2017-18, APR for FY 2018-19 and ARR & Tariff for FY 2019-20, the Commission had calculated cumulative revenue surplus of Rs. 179.58 Crore till FY 2018-19. Thereafter it had calculated revenue gap of Rs 692.70 Crore till FY 2019-20 including opening revenue surplus till FY 2018-19 and carrying cost. The Commission in clause 8.23 of the said Order stated that it has increased and rationalized the tariff across different consumer categories so that the above gap can be recovered through revised tariff. Hence, it is assumed that the Commission has not left unrecovered revenue gap till FY 2019-20 after increase in tariff.

8.2 The Petitioner in the current Petition submitted that the Petitioner has recalculated ARR of FY 2018-19 and FY 2019-20, based on accounts audited by the Statutory Auditor, performance in first six months of FY 2019-20 and relevant Clauses of the Tariff Regulations, 2015 as submitted above. Since no changes are being proposed in ARR for FY 2017-18 and before, opening revenue gap for FY 2018-19 is considered to be nil.

8.3 The Petitioner submitted that as per letter sent by Energy Dept., Govt of Jharkhand vide letter No. 4020 dated October 20, 2017, to the Commission which specifies that RGF shall not be provided to JBVNL and upcoming Tariff fixation shall be done without considering the impact of RGF. Therefore, revenue gap for FY 2019-20 and FY 2020-21 have been calculated without accounting for any RGF.

8.4 Furthermore, the Petitioner submitted that it has filed Appeal No. 22 and 223 of 2018, against the Commission's Order dated April 27, 2018, regarding consideration of loan restructured under UDAY scheme for reducing revenue gap. Furthermore, the Petitioner has also filed Review Petition before the Commission in Case No. 06 of 2019 against Order dated February 28, 2019 regarding True-up for FY 2016-17 & FY 2017-18, APR for FY 2018-19 and ARR & Tariff for FY 2019-20. The Petitioner has made following prayers to the Commission regarding the impugned Order:

- To rectify the treatment of DVC Delayed Payment Surcharge of Rs 352.85 Crore, along with the other incidental components of Annual Revenue Requirement of FY 2017-18.

- To revise the depreciation allowed for FY 2017-18, FY 2018-19 and FY 2019-20 along with the other incidental components of Annual Revenue Requirement.
- To consider the arguments made by the Petitioner and to recalculate the approved revenue gap at the end of FY 2019-20.

8.5 The above Appeal and Review Petition are still pending and therefore, the Petitioner for purpose of present Petition has not considered impact of these items in revenue gap. However, submissions made in this Petition are without prejudice to the prayers made in above Appeal and Review Petition. The Petitioner submitted that if in future date, Hon'ble APTEL and the Commission dispose the Appeal and Review Petition in favour of the Petitioner (in part or full), it is requested that the effect of the same should be considered in recalculation of revenue gap either in this Tariff Petition or any future Petition.

8.6 The Petitioner has calculated the Revenue Gap at the end of FY 2019-20 using the same methodology adopted by the Commission in its earlier Orders.

Table 137: Estimated Revenue Gap by the Petitioner till FY 2019-20 (Rs. Crore)

Particular	FY 2018-19	FY 2019-20
Opening Revenue Gap	0.00	1,591.94
Net Aggregate Revenue Requirement	6,064.21	7,906.28
Revenue from Sale of Power	4,053.77	5,486.03
RGF to be adjusted from ARR	591.59	
Revenue Gap / (Surplus) created during the Year	1,418.85	2,420.25
Closing Gap at end of the Year	1,418.85	4,012.19
Rate of Interest (As per prevailing SBI PLR rate)	12.20%	12.55%
Carrying Cost on Opening Balance	0.00	199.79
Carrying cost on Additional Gap Created during the Year	173.10	303.74
Total Gap including carrying cost	**1,591.94**	**4,515.72**

8.7 The Petitioner requested the Commission to approve the cumulative revenue gap until FY 2019-20 as proposed by the Petitioner. Considering the above cumulative revenue gap until FY 2019-20, the Petitioner submitted that the revenue from proposed tariff will only provide a partial relief to the Petitioner in recovering its revenue gap. The Petitioner submitted that given the significant amount of revenue gap, the whole impact may be not be possible to be passed on to consumers, by way of revision in retail tariffs, as it may lead to an inexorable tariff shock. Therefore, the Petitioner proposed creation of Regulatory Asset, as per Clause 10 of Tariff Regulations 2015, as reproduced below-

"10.3 Provided that if such variations are large, and it is not feasible to recover

in one year alone, the Commission may take a view to create a regulatory asset, as per the guidelines provided in clause 8.2.2 of the National Tariff Policy;"

8.8 The Petitioner proposed and requested the Commission for creation of Regulatory Assets of such uncovered revenue gap.

Commission's Analysis

8.9 The Commission has calculated the effect of the Review Order dated September 30, 2020 in this Section. The Commission has calculated the cumulative effect of change in the methodology for calculation of Depreciation for FY 2016-17 and FY 2017-18 and the approval of Delayed Payment Surcharge paid by JBVNL to DVC for FY 2017-18 as Rs. 389.04 Crore till FY 2017-18 along with carrying cost. Hence, the Commission has considered the same amount as the opening Gap for FY 2018-19. The Commission has considered the cumulative gap as the opening gap for FY 2018-19 and has considered 10% of the opening losses for FY 2018-19 to be taken over by the State Government as per Clause 1.2 (i) of the MoU signed under UDAY Scheme.

8.10 The Commission has also observed that the Petitioner has claimed carrying cost for the whole year on the gap created during FY 2018-19 and directed the Petitioner to provide justification for the same. The Petitioner submitted the revised calculation considering the carrying cost for 6 months. Hence, the Commission has considered the gap created during FY 2018-19 and has provided carrying cost on the same for 6 months.

8.11 The Commission has considered the cumulative gap as the opening gap for FY 2019-20 and has considered 25% of the opening losses for FY 2019-20 to be taken over by the State Government as per Clause 1.2 (i) of the MoU signed under UDAY Scheme. The Commission has provided carrying cost on the Opening gap for the complete year and the resultant gap approved for 6 months. The Cumulative Gap approved by the Commission at the end of FY 2019-20 is summarised below:

Table 138: Cumulative Revenue Gap Approved by the Commission till FY 2019-20 (Rs. Crore)

Particulars	FY 2018-19	FY 2019-20
Opening Revenue Gap	389.04	1,596.64
Revenue Gap / (Surplus) created during the Year	1,132.34	-707.45
UDAY Grants	38.90	399.16
Resultant Gap/Surplus during the Year	1,093.44	-1,106.61
Closing Gap at end of the Year	1,482.48	490.02
Rate of Interest	12.20%	12.55%
Carrying Cost on Opening Balance	47.46	200.38
Carrying cost on Additional Gap Created during the Year	66.70	-69.44

Particulars	FY 2018-19	FY 2019-20
Total Gap including carrying cost	**1,596.64**	**620.96**

Treatment of Revenue gap and Creation of Regulatory Asset

Petitioner's Submission

8.12 The Petitioner submitted that there is a revenue gap of Rs. 4,515.72 Crore until FY 2019-20, which the Petitioner proposes to be met through creation of Regulatory Asset.

8.13 The Petitioner requested the Commission to approve the above Regulatory Assets worth Rs 4,515.72 Crore and provide an appropriate recovery mechanism to recover the Regulatory Assets as per the provisions of Tariff Regulations, 2015 and guidelines of the Tariff Policy, 2016. A proposed period of 5 years may be considered by the Commission to amortize the Regulatory Assets and be passed on to the consumers over the same period in equal tranches. During the period, the Petitioner also prayed for providing return on such regulatory asset to the tune of interest on working capital, i.e., 12.45%.

8.14 The Petitioner has computed the expected revenue for FY 2020-21 from sale of power by considering the fixed charges and energy charges per unit. Further, to arrive at the final gap for FY 2020-21, the Petitioner has adjusted the impact of recovery of previous cumulative revenue gap till FY 2019-20. The Petitioner has proposed to amortize the Regulatory Asset in five years period starting from FY 2021-22.

Table 139: Treatment of Revenue Gap submitted by the Petitioner for FY 2020-21 (Rs. Crore)

Particular	Amount
ARR required for FY 2020-21	8,384.78
Revenue Gap till FY 2019-20	4,012.19
Carrying Cost of Revenue Gap till FY 2019-20	503.53
Total Revenue Gap for FY 2020-21 (Incl. Revenue Gap with carrying cost till FY 2019-20)	12,900.51
Revenue at current Tariff	6,660.72
Gap at Current Tariff	6,239.79
Revenue at Proposed Tariff	8,129.21
Revenue from tariff Increase	1,468.49
Balance Gap	4,771.30

8.15 The Petitioner submitted that after adjusting the revenue and ARR for FY 2020-21, the Petitioner is still left with the uncovered revenue gap to the tune of Rs. 4,771.30 Crore. The Petitioner requested the Commission to approve the revenue gap for FY 2020-21 as proposed by the Petitioner and requested that the same to be allowed in subsequent Tariff Orders.

Commission's Analysis

8.16 The Commission has computed total revenue gap till FY 2019-20 after factoring in the financial assistance under UDAY Scheme. The Commission has considered that 50% of the overall loss in FY 2019-20 shall be taken over by GoJ in FY 2020-21 as per the MoU signed under UDAY Scheme. The Commission has considered the Gap/Surplus approved till FY 2019-20 as part of FY 2020-21. The Revenue Gap approved till FY 2020-21 is summarised below:

Table 140: Revenue Gap approved till FY 2020-21 (Rs. Crore)

Particulars	FY 2020-21
ARR approved for FY 2020-21	**6,326.00**
Revenue at Approved for FY 2020-21	**6,462.16**
Opening Revenue Gap	620.96
Revenue Gap / (Surplus) created during the Year	-136.16
UDAY Grants	310.48
Resultant Gap/(Surplus) during the Year	-446.64
Closing Gap at end of the Year	174.32
Rate of Interest	11.65%
Carrying Cost on Opening Balance	47.75
Carrying cost on Additional Gap Created during the Year	-26.02
Total Gap including carrying cost	**196.06**

8.17 The Commission observes that the issue of consistent non-compliance by the Petitioner was raised by several Stakeholders during the Public Hearing and was also vociferously put forward by Members of the State Advisory Committee Meeting in the meeting held on September 08, 2020. The Commission also expressed its dissatisfaction over non-compliance of its directions during the above events and listed out several non-compliances by the Petitioner especially related to safety of personnel and directions related to improving the quality of supply. Further, the Commission has observed that the Petitioner has neither complied to the provisions of JSERC (Compensation to Victims of Electrical Accidents) Regulations, 2018, nor has provided compensation as per the Regulations.

8.18 The Commission has considered the persistent non-compliance of the Petitioner gravely as many lives have been lost and deaths/injury to personnel continues due to non-compliance of safety protocols. The Commission is of the view that it has provided enough opportunity in the past to the Petitioner but in vain. The Commission has therefore, withheld the liquidation of gap amount determined in this Order till the time the Petitioner complies with all the directions of the Commission. The Commission would further like to clarify that no carrying cost on the gap for this withheld period will be allowed to the Petitioner and therefore, it is in the interest of the Petitioner to expedite the compliance of pending directions.

8.19 The Commission therefore, approves no overall tariff hike for FY 2020-21. However, the Commission has carried out the Tariff simplification and Rationalization. The Tariff Schedule approved by the Commission for FY 2020-21 is detailed in **Section A 13** of this Order.

A 9 DETERMINATION OF WHEELING CHARGE, WHEELING LOSSES AND CROSS SUBSIDY SURCHARGE FOR FY 2020-21

9.1 As per Clause 3.1 of the Tariff Regulations, 2015, the Commission shall determine wheeling tariff, cross-subsidy surcharge, additional surcharge and other Open Access related charges. The relevant extract of the Regulations has been reproduced below:

> *"3.1*
>
> *…*
>
> *Provided further that where the Commission has permitted open access to any category of consumers under Section 42 of the Act, the Commission shall determine the wheeling tariff, cross-subsidy surcharge, additional surcharge and other open access related charges in accordance with these Regulations and JSERC (Open Access in Intra-State Transmission and Distribution) Regulations, 2005 and as amended from time to time;"*

9.2 As per the Jharkhand State Electricity Regulatory Commission (Terms and Conditions for Intra-State Open Access) Regulations, 2016, the Open Access charges includes wheeling charges, wheeling losses, Cross Subsidy Surcharge and Additional Surcharge apportioned voltage-wise at 33 kV and above, 11kV and LT levels.

9.3 The Petitioner has submitted its model/calculations for the determination of wheeling charge, cross subsidy surcharge for FY 2020-21 in response to the Commission's queries dated February 10, 2020.

9.4 The following Sections summarize the Petitioner's submission and Commission's analysis thereof:

Wheeling Charges

Petitioner's Submission

9.5 The methodology used for calculating voltage level wise wheeling charges as submitted by the Petitioner is as follows:

- Step 1: Segregation of distribution ARR into wires and supply business
- Step 2: Allocation of wires business ARR to various voltage levels
- Step 3: Stacking of higher voltage level costs onto lower voltage levels

9.6 In order to compute the wheeling charges, the Petitioner has apportioned the estimated sales for FY 2020-21 into 33 kV and above, 11 kV and LT voltage levels. The Petitioner has also computed the voltage-wise distribution loss based on the study performed on voltage-wise cost of supply. Further, the bifurcation of assets into different voltage levels has been based on the latest available network details and usage of network at each level.

9.7 The Petitioner submitted that the ARR proposed in the Tariff Petition for FY 2020-21 has been segregated into wires and supply business based on the allocation ratios specified under sub-clause 42.4 of the Jharkhand State Electricity Regulatory Commission (Power Regulatory Accounting) Regulations 2016. The segregation as provided by the Petitioner has been tabulated below:

Table 141: Segregation of ARR submitted by the Petitioner for FY 2020-21 (Rs. Crore)

Particulars	Share of Supply Business	Share of Wires Business	ARR proposed for FY 2020-21	Supply Business ARR (Rs Crore)	Wires Business ARR (Rs Crore)
O&M Cost					
Employee cost	40%	60%	322.21	128.88	193.33
A&G Expense	50%	50%	110.34	55.17	55.17
R&M Cost	10%	90%	384.00	38.40	345.60
Power purchase (Inc. PGCIL & RLDC)	100%	0%	5,973.62	5,973.62	0.00
Interest on security deposit	100%	0%	54.58	5.46	49.12
Interest Cost	10%	90%	524.48	52.45	472.03
Interest on working capital	90%	10%	52.20	46.98	5.22
Depreciation	10%	90%	570.54	57.05	513.49
Return on Equity	10%	90%	446.63	44.66	401.97
Provision of Bad Debt			133.21	133.21	0.00
Less: Other income	90%	10%	-187.02	-168.32	-18.70
Total ARR			**8,384.79**	**6,367.57**	**2,017.22**

9.8 The Petitioner then allocated the Wires Business ARR to different supply voltages in the ratio of fixed assets, related to wires business, at each voltage level. The Petitioner submitted that in the absence of an Asset Register, detailed information of such assets, segregated among different voltage levels is not available and segregation of voltage-wise assets would require determining the original cost of each asset, their present cost after depreciation, their remaining life and their classification into voltage levels.

9.9 Further, due to growing village electrification and increasing power demand in Jharkhand, there has been significant growth in the power distribution infrastructure. The present distribution system of JBVNL consists of both old depreciated as well as newly laid infrastructure. Due to these complexities, collecting this data would take substantial effort and time, which may delay the determination of wheeling and Open Access charges further.

9.10 The Petitioner submitted that in the present situation, in order to estimate the ratio of fixed assets at various voltage levels, the network details of JBVNL as on December, 2019 have been used for determining the assets at each voltage level. Further, the number of assets is multiplied by the present purchase cost of assets as per Cost Data book of JBVNL for FY 2018-19 to estimate their present cost (without considering depreciation). The value of different asset types (calculated based on the assumptions discussed above) and their classification into voltage level as submitted by the Petitioner, are detailed in the tables below:

Table 142: Estimated Cost of PSS submitted by the Petitioner for FY 2020-21 (Rs. Lakh)

PSS (capacity)	Quantity (Nos)	Cost/ PSS	Total Cost
10 MVA	151	180.2	27,206.95
7.5 MVA	2	160.0	320.00
7.15 MVA	10	150.0	1,500.00
5 MVA	555	113.7	63,106.96
3.15 MVA	123	105.0	12,915.00
3 MVA	18	90.0	1,620.00
1.6 MVA	16	80.0	1,280.00

Table 143: Estimated Cost of Lines submitted by the Petitioner for FY 2020-21 (Rs. Lakh)

Line Length	Length	Cost/ km	Total Cost
33 kV Incoming (in km.)	2,738	20.6	56,532.79
33 kV Outgoing (in km.)	65,636	7.0	4,57,270.98
11 kV Length (in km.)	1,13,677	6.0	6,83,071.95
LT Length (in km.)	2,738	20.6	56,532.79

Table 144: Estimated Cost of DTRs submitted by the Petitioner for FY 2020-21 (Rs. Lakh)

DTR (capacity)	Quantity	Cost/ DTR	Total Cost
700 kVA	1	9.00	9.00
400 kVA	11	7.00	77.00
500 kVA	354	7.65	2,707.69
315 kVA	3	6.50	19.50
250 kVA	52	6.00	312.00
200 kVA	8,545	4.39	37,491.19
150 kVA	4	4.00	16.00
100 kVA	23,131	3.31	76,554.59
63 KVA	13,207	2.94	38,840.99
25 KVA	32,130	2.20	70,766.00
16 KVA	9,787	1.90	18,595.30
10 KVA	13,304	1.70	22,616.80

9.11 The Petitioner submitted that in the absence of Asset Register, the consideration of present cost of creating the distribution infrastructure is built on the premise that the high voltage and low voltage assets have been created simultaneously. Thus, the depreciation of all HT and LT assets is assumed to be at the similar level.

9.12 Based on the above, the estimated present cost of assets, apportioned into different voltage levels as submitted by the petitioner is depicted in the table below:

Table 145: Voltage-wise Asset Ratio submitted by the Petitioner for FY 2020-21 (Rs. Lakh)

Voltage levels	Total cost	Ratio
33 kV	2,87,709.09	16.96%
11 kV	4,57,270.98	26.96%
LT	9,51,078.02	56.08%

9.13 Based on the voltage wise asset bifurcation, the Petitioner has allocated the Wires Business ARR at respective voltage levels, as depicted in the table below:

Table 146: Voltage-wise Allocation of ARR of wire business submitted by the Petitioner for FY 2020-21 (Rs. Crore)

Voltage levels	Asset Segregation	Asset Segregation (%)	Segregation of ARR
LT	9,51,078.02	56.08%	1,131.17
11 kV	4,57,270.98	26.96%	543.86
33 kV and above	2,87,709.09	16.96%	342.19
Total	16,96,058.09		2,017.22

9.14 The Petitioner submitted that the above methodology of segregation of ARR is in line with several other States, whereby the average cost of assets is utilized to arrive at the ratio for segregation.

9.15 Further, assuming power is injected at higher voltage levels and flows linearly from higher to lower voltage levels, the Petitioner assumed that:

- The power wheeled to LT consumers first passes though the 33 kV network, then 11 kV network and finally into LT network.
- The power wheeled to 11 kV consumer would first pass through 33 kV network and then into 11 kV network. Therefore, the assets pertaining to 33 kV and above voltage level are being used to supply power to consumers connected at 33 kV and above, 11 kV and LT level.

- The assets pertaining to 11 kV are being used to supply power to consumers connected at 11 kV and LT level. Finally, the assets at LT level are being used by LT consumer only.

9.16 Based on the above, the Wires Business ARR of higher voltage levels, is apportioned by the Petitioner between lower voltage levels in the ratio of voltage wise energy sales, and stacked accordingly. The consumer category wise energy sales allocated to different voltage levels by the Petitioner is depicted in the table below:

Table 147: Voltage-wise Sales submitted by the Petitioner for FY 2020-21

Category	Voltage level	Voltage-wise Sales	Aggregated sales
Domestic	LT	6,600.46	**6,624.37**
	11 kV	23.91	
	33 kV and Above		
Commercial/Non Domestic	LT	837.90	**837.90**
	11 kV		
	33 kV and Above		
Irrigation / IAS	LT	220.33	**220.33**
	11 kV		
	33 kV and Above		
Industrial	LT	334.91	**2,629.72**
	11 kV	981.14	
	33 kV and Above	1,313.67	
Institution	LT	26.36	**147.77**
	11 kV	19.41	
	33 kV and Above	102.00	
Total sales	All voltage level	10,460.09	**10,460.09**

9.17 Accordingly, the voltage wise energy sales ratio as submitted by the Petitioner is provided in the table below:

Table 148: Voltage-wise Sales Ratio submitted by the Petitioner for FY 2020-21

Voltage level	Sales in MU	Sales Ratio
LT	8,019.96	76.7%
11 kV	1,024.46	9.8%
33 kV and Above	1,415.67	13.5%
Total	10,460.09	

9.18 The voltage wise Wires Business ARR (allocated earlier in the ratio of fixed assets), is now stacked from higher to lower voltage levels, based on energy sales ratio, as tabulated below:

Table 149: Cost Stacking submitted by the Petitioner for FY 2020-21 (Rs. Crore)

Voltage level	Total Wires Business ARR allocated in the ratio of fixed assets	Cost Staking on the basis of energy sales		
		LT	11 kV	33 kV
LT	1,131.17	1,131.17		
11 kV	543.86	482.26	61.60	
33 kV and Above	342.19	262.36	33.51	46.31
Total	2,017.22	1,875.79	95.12	46.31

9.19 Based on the above, the voltage-wise wheeling charges for the FY 2020-21 submitted by the Petitioner has been tabulated below:

Table 150: Wheeling Cost submitted by the Petitioner for FY 2020-21

Voltage level	Wires Business ARR (Rs. Crore)	Energy Sales (MU)	Wheeling Charge (Rs./unit)
LT	1,875.79	8,019.96	2.34
11 kV	95.12	1,024.46	0.93
33 kV and Above	46.31	1,415.67	0.33

Commission's Analysis

9.20 According to Clause 5.4 and Clause 5.5 of the Tariff Regulations, 2015, the Petitioner is required to segregate the accounts of the Licensed Business into Wheeling Business and Retail Supply Business. In the absence of segregated accounts, the Petitioner is required to submit an allocation statement duly approved by the Board of Directors accompanied with an explanation of the basis and methodology used for segregation. The relevant extract of the Regulation has been reproduced hereunder:

> *"5.4 The Licensee shall segregate the accounts of the Licensed Business into Wheeling Business and Retail Supply Business. The ARR for Wheeling Business shall be used to determine Wheeling Tariff and the ARR for Retail Supply Business to determine Retail Supply Tariff;*
>
> *5.5 For such period until accounts are segregated, the Licensees shall prepare an Allocation Statement to apportion costs and revenues to respective business. The Allocation Statement, approved by the Board of Directors of the Licensee, shall be accompanied with an explanation of the basis and methodology used for segregation which should be consistent over the Control Period."*

9.21 The Petitioner has not submitted the duly approved allocation statement. The Commission in its earlier Order dated June 21, 2017 had directed the Petitioner to make separate accounting for wheeling and retail supply business. The relevant excerpts of the Order is reproduced below:

> *"13.34 The Commission strictly directs the Petitioner to make separate accounting for both the businesses and submit the allocation statement for the FY 2016-17 duly approved by the Board of Directors within 3 months of the date of issue of the Tariff Order."*

9.22 The Petitioner has not complied with the directions of the Commission. The Petitioner has not submitted allocation statement approved by the Board for the segregation into wheeling and retail business. The Commission observed that the Petitioner has not justified the basis for allocation of the ARR among Wheeling and Supply businesses.

9.23 The Petitioner further submitted that it is in the process of preparing a separate Petition for wheeling charges and cross-subsidy surcharges under which it has attempted to segregate the figures for ARR among the Retail and Wheeling Business with proper justification.

9.24 The Petitioner in its Petition for determination of wheeling and cross subsidy surcharge has segregated the ARR based on the methodology adopted by the Commission in its earlier Order.

9.25 In absence of separate accounting for wheeling and retail supply business and allocation statement approved by the Board, the Commission is constrained to consider the allocation ratios as per clause 42.4 of the JSERC (Power Regulatory Accounting) Regulations, 2016. The allocation ratios considered as per the Regulations and the wheeling supply ARR as tabulated below:

Table 151: Segregation of ARR approved for FY 2020-21 (Rs. Crore)

Particulars	Share of Supply Business	Share of Wires Business	ARR approved for FY 2020-21	Supply Business ARR (Rs. Crore)	Wires Business ARR (Rs. Crore)
O&M Cost					
Employee cost	40%	60%	321.77	128.71	193.06
A&G Expense	50%	50%	110.83	55.41	55.41
R&M Cost	10%	90%	124.36	12.44	111.93
Power purchase (Inc. PGCIL & RLDC)	100%	0%	4,881.99	4,881.99	0.00
Interest on security deposit	100%	0%	55.96	55.96	0.00
Interest Cost	10%	90%	328.28	32.83	295.46
Interest on Working Capital	90%	10%	8.91	8.02	0.89
Depreciation	10%	90%	411.03	41.10	369.93

Particulars	Share of Supply Business	Share of Wires Business	ARR approved for FY 2020-21	Supply Business ARR (Rs. Crore)	Wires Business ARR (Rs. Crore)
Return on Equity	10%	90%	321.77	32.18	289.59
Less: Other income	90%	10%	-238.90	-215.01	-23.89
Total ARR			6,326.00	5,033.63	**1,292.38**

9.26 In absence of asset register, to estimate the ratio of fixed assets at various voltage levels, the Petitioner has considered the network details of JBVNL on the premise that the high voltage and low voltage assets have been created simultaneously. Thus, the depreciation of all HT and LT assets is assumed to be at the similar level.

9.27 In absence of the voltage wise depreciated value of fixed asset costs (Net fixed assets), the Commission is constrained to consider the methodology adopted by the Petitioner by considering that all the assets are created simultaneously.

9.28 Further, the number of assets is multiplied by the present purchase cost of assets as per Cost Data book of JBVNL as for FY 2018-19 to estimate their present cost (without taking consideration of depreciation). The value of different assets types (calculated based on the assumptions discussed above) and their classification into voltage level as approved by the Commission, are detailed in the tables below:

Table 152: Estimated Cost of PSS approved for FY 2020-21 (Rs. Lakh)

PSS (capacity)	Quantity (Nos)	Cost/ PSS	Total Cost
10 MVA	151	180.2	27,207
7.5 MVA	2	160.0	320
7.15 MVA	10	150.0	1,500
5 MVA	555	113.7	63,107
3.15 MVA	123	105.0	12,915
3 MVA	18	90.0	1,620
1.6 MVA	16	80.0	1,280

Table 153: Estimated Cost of 33 kV, 11 kV and LT Lines as approved for FY 2020-21 (Rs. Lakh)

Line Length	Length	Cost/ km	Total Cost
33 kV Incoming (in km.)	5,967	21	1,23,227
33 kV Outgoing (in km.)	2,738	21	56,533
11 kV Length (in km.)	65,636	7	4,57,271
LT Length (in km.)	1,13,677	6	6,83,072

Table 154: Estimated Cost of DTRs approved for FY 2020-21 (Rs. Lakh)

DTR (capacity)	Quantity	Cost/ DTR	Total Cost
700 kVA	1	9.00	9.00
400 kVA	11	7.00	77.00
500 kVA	354	7.65	2,707.69
315 kVA	3	6.50	19.50
250 kVA	52	6.00	312.00
200 kVA	8,545	4.39	37,491.19
150 kVA	4	4.00	16.00
100 kVA	23,131	3.31	76,554.59
63 kVA	13,207	2.94	38,840.99
25 kVA	32,130	2.20	70,766.00
16 kVA	9,787	1.90	18,595.30
10 kVA	13,304	1.70	22,616.80

9.29 Based on the above, the estimated present cost of assets, apportioned into different voltage levels is depicted in the table below:

Table 155: Voltage-wise Asset Ratio approved for FY 2020-21 (Rs. Lakh)

Voltage levels	Total cost	Ratio
33 kV	2,87,709.09	17%
11 kV	4,57,270.98	27%
LT	9,50,992.02	56%

9.30 Based on the voltage wise asset bifurcation, the Wires Business ARR at respective voltage levels, is depicted in the table below:

Table 156: Voltage-wise ARR of wire business approved for FY 2020-21 (Rs. Crore)

Voltage levels	Asset Segregation	Asset Segregation (%)	Segregation of ARR
LT	9,509.92	56%	724.68
11 kV	4,572.71	27%	348.45
33 kV and above	2,877.09	17%	219.24
Total	16,959.72		1,292.38

9.31 The Wires Business ARR for different voltage levels as approved by the Commission has been apportioned between lower voltage levels in the ratio of voltage-wise energy sales, and stacked accordingly in line with the methodology adopted by the Petitioner as discussed earlier in this Order. The consumer category wise energy sales as approved by the Commission has been allocated to different voltage levels as depicted in the table below:

Table 157: Voltage-wise Sales approved for FY 2020-21 (Rs. Crore)

Category	Voltage level	Voltage-wise Sales	Aggregated sales
Domestic	LT	5,865	**5,886**
	11 kV	21	
	33 kV and Above	-	
Commercial/Non Domestic	LT	895	**895**
	11 kV	-	
	33 kV and Above	-	
Irrigation / IAS	LT	256	**256**
	11 kV	-	
	33 kV and Above	-	
Industrial	LT	249	**2,730**
	11 kV	1,061	
	33 kV and Above	1,420	
Institution	LT	23	**127**
	11 kV	17	
	33 kV and Above	87	
Total sales	All voltage level	9,894	**9,894**

9.32 Accordingly, the voltage wise energy sales ratio as approved by the Commission is provided in the table below:

Table 158: Sales Ratio approved for FY 2020-21 (Rs. Crore)

Voltage Level	Sales	Sales Ratio
LT	7,288	74%
11 kV	1,099	11%
33 kV and Above	1,508	15%
Total	9,894	-

9.33 The voltage wise Wires Business ARR (allocated earlier in the ratio of fixed assets), is now stacked from higher to lower voltage levels, based on energy sales ratio, as tabulated below:

Table 159: Cost Stacking approved for FY 2020-21 (Rs. Crore)

Voltage level	Voltage-wise ARR Allocation	Cost Staking on the basis of energy sales		
		LT	11 kV	33 kV
LT	724.68	724.68		
11 kV	348.45	302.80	45.65	
33 kV and Above	219.24	161.49	24.35	33.41
Total	1,292.38	1,188.97	69.99	33.41

9.34 Based on the above, the voltage-wise Wheeling Charges for FY 2020-21 as approved by the Commission has been tabulated below:

Table 160: Wheeling Tariff approved by the Commission for FY 2020-21

Voltage Categories	ARR (Rs. Crore)	Sales (MU)	Wheeling Tariff (Rs./kWh)
LT	1,189	7,288	**1.63**
11 kV	70	1,099	**0.64**
33 kV and above	33	1,508	**0.22**

Voltage-wise Cost of Supply

9.35 The cost of supply is defined as the sum of all costs including the cost of power incurred by a distribution utility to supply electricity to a group of consumers.

9.36 The cost of supply is an essential parameter to arrive at the cross-subsidy levels. Further, Section 61(g) of the Electricity Act, 2003, as amended on June 15, 2007, states that

> *"Section 61. (Tariff regulations)*
>
> *The Appropriate Commission shall, subject to the provisions of this Act, specify the terms and conditions for the determination of tariff, and in doing so, shall be guided by the following, namely:-*
>
> *……*
>
> *(g) that the tariff progressively reflects the cost of supply of electricity and also, reduces cross-subsidies in the manner specified by the Appropriate Commission;*
>
> *…."*

9.37 Also, clause 8.3 of the Tariff Policy, 2016 states that the Commission should determine a roadmap so that tariffs are brought within +/-20% of the average cost of supply. The relevant excerpts of the Policy have been reproduced below:

> *"8.3 Tariff design: Linkage of tariffs to cost of service*
>
> *…..*
>
> *(2) For achieving the objective that the tariff progressively reflects the cost of supply of electricity, the Appropriate Commission would notify a roadmap such that tariffs are brought within ±20% of the average cost of supply.*
>
> *….."*

9.38 Further, if strict commercial principles are to be followed, then the tariffs for each category of consumers is to be set based on the cost of supply for each category. However, it is difficult to determine the same pertaining to the issues of data adequacy.

9.39 The Commission is of the view that waiting indefinitely for the required data is not prudent and decided to initiate the computation of voltage wise cost of supply based on the data made available by the Petitioner as of now, which, to a great extent would reflect the actual voltage wise cost of supply.

9.40 In view of the same, the Commission decided to follow the methodology proposed by Hon'ble APTEL for the computation of voltage wise cost of supply in its Order dated May 10, 2012. The key interpretations made by the Hon'ble APTEL has been summarized below:

a. Identical consumers connected at different nodes in the distribution network need not be differentiated.

b. In the absence of segregated network costs, it would be prudent to work out the voltage-wise cost of supply taking into account the distribution losses at different voltage levels.

c. The Power Purchase cost, which is the major component of tariff can be segregated for different voltage levels taking into account the transmission and distribution losses, both commercial and technical, for the relevant voltage level and upstream system.

d. All consumer categories connected to the same voltage will have the same cost of supply.

9.41 The Commission based on the methodology proposed by Hon'ble APTEL has computed the voltage wise cost of supply as detailed below.

9.42 **Apportionment of Sales:** The approved sales for the FY 2020-21 have been apportioned to different voltage levels as tabulated below:

Table 161: Voltage-wise Sales approved for FY 2020-21 (Rs. Crore)

Category	Voltage level	Voltage-wise Sales	Aggregated sales
Domestic	LT	5,865	**5,886**
	11 kV	21	
	33 kV and Above	-	
Commercial/Non Domestic	LT	895	**895**
	11 kV	-	
	33 kV and Above	-	
Irrigation / IAS	LT	256	**256**
	11 kV	-	
	33 kV and Above	-	
Industrial	LT	249	**2,730**

Category	Voltage level	Voltage-wise Sales	Aggregated sales
	11 kV	1,061	
	33 kV and Above	1,420	
Institution	LT	23	**127**
	11 kV	17	
	33 kV and Above	87	
Total sales	All voltage level	9,894	**9,894**

9.43 **Voltage wise Technical losses:** As per para 33 of the APTEL Order dated May 10, 2012

"33. The technical distribution system losses in the distribution network can be assessed by carrying out system studies based on the available load data. Some difficulty might be faced in reflecting the entire distribution system at 11 KV and 0.4 KV due to vastness of data. This could be simplified by carrying out field studies with representative feeders of the various consumer mix prevailing in the distribution system.

...."

9.44 The Commission in its earlier Order dated February 28, 2019 had directed the Petitioner to conduct a detailed technical study on the voltage wise losses on the distribution network. The Petitioner has submitted the Report on Voltage-wise losses along with its Petition. However, the Commission had observed that no details regarding the selection of feeders were submitted by the Petitioner for the Study. The Petitioner, vide its reply dated March 12, 2020 has submitted the Assumptions made by the Study Agency while performing the Study on Voltage-wise Cost of Supply. On detailed scrutiny of the Assumptions made by the Study Agency, the Commission has observed that enough metering arrangements were not available to perform the same effectively. Hence, the Commission has not considered the submissions made by the Petitioner in the Report as the same may not be indicative of the actual status of the Voltage-wise losses and Cost of Supply.

9.45 The Commission decided to compute voltage wise cost of supply based on the data made available by the Petitioner based on an earlier study.

9.46 The Commission considered the technical loss levels at 13% for FY 2020-21 as approved in the relevant Sections of this Order and accordingly computed the voltage wise losses at different levels as tabulated below:

Table 162: Voltage-wise loss approved by the Commission for FY 2020-21

Voltage Level	Dist. loss level	Sales	Input	Tech Loss
33 kV	3.00%	1,507.63	1,554.26	46.63
11kV	8.00%	1,098.64	1,194.17	95.53
LT	15.50%	7,287.51	8,624.27	1,336.76
		9,893.78	11,372.70	1,478.92

9.47 As per para 34 of APTEL order dated May 10, 2012

"34. Thus Power Purchase Cost which is the major component of tariff can be segregated for different voltage levels taking into account the transmission and distribution losses, both commercial and technical, for the relevant voltage level and upstream system.

....."

9.48 Accordingly, the Commission has computed the power purchase quantum at different voltage levels as tabulated below:

Table 163: Voltage-wise Power Purchase approved by the Commission for FY 2020-21

Voltage Level	Voltage wise Losses	Sales (MU)	Input (MU)	Technical Loss (MU)	Commercial Loss (MU)	Total Power Purchase (MU)
33 kV & above	3.00%	1,507.63	1,554.26	46.63	-	1,554.26
11kV	8.00%	1,098.64	1,194.17	95.53	-	1,194.17
LT	15.50%	7,287.51	8,624.27	1,336.76	-	8,624.27
		9,893.78	11,372.70	1,478.92	-	11,372.70

*Note: Commercial Losses considered as 0% as per the AT&C Loss Trajectory approved by the Commission

9.49 **Allocation of power purchase cost for different voltage levels:** The Net power purchase cost approved by the Commission has been allotted to different voltage levels as tabulated below:

Table 164: Voltage-wise Power Purchase Cost approved by the Commission for FY 2020-21

Voltage Level	Dist. loss level	Sales (MU)	Input (MU)	Net APPC (Rs./kWh)	Voltage-wise PP Cost (Rs./kWh)
33 kV	3.00%	1,507.63	1,554.26	4.29	4.43
11kV	8.00%	1,098.64	1,194.17	4.29	4.67
LT	15.50%	7,287.51	8,624.27	4.29	5.08
		9,893.78	11,372.70	4.29	4.93

9.50 **Network Cost:** As per para 34 of the APTEL Order dated May 10, 1012

"34……

As segregated network costs are not available, all the other costs such as Return on Equity, Interest on Loan, depreciation, interest on working capital and O&M costs can be pooled and apportioned equitably, on pro-rata basis, to all the voltage levels including the appellant's category to determine the cost of supply.

...."

9.51 As per the above methodology, the Commission has calculated a uniform network cost for all the categories as tabulated below:

Table 165: Network Cost approved by the Commission for FY 2020-21

Particulars	Share of Wheeling Business (Rs Crore)
O&M Cost	
Employee cost	193.06
A&G Expense	55.41
R&M Cost	111.93
Power purchase (Inc. Trans. Charges and RPO)	0.00
Interest on security deposit	0.00
Interest Cost	295.46
Interest on working capital	0.89
Depreciation	369.93
Return on Equity	289.59
Less: Other income	-23.89
Total ARR	**1,292.38**
Total Sales (MU)	**9,893.78**
Network Cost (Rs./kWh)	**1.31**

9.52 The voltage wise cost of supply for FY 2020-21 as approved by the Commission has been tabulated below:

Table 166: VCoS approved by the Commission for FY 2020-21

Voltage Level	Voltage-wise PP Cost (Rs./kWh)	Network Cost (Rs./kWh)	VCoS (Rs./kWh)
33 kV	4.43	1.31	5.73
11kV	4.67	1.31	5.97
LT	5.08	1.31	6.39

Cross Subsidy Surcharge

Commission's Analysis

9.53 As per Clause 21.5 of the Jharkhand State Electricity Regulatory Commission (Terms and Conditions for Intra-State Open Access) Regulations, 2016:

"The Cross subsidy surcharge shall be determined by the Commission in accordance with the principles and formula stipulated in the National Tariff Policy and shall be leviable at the rate as determined by the Commission from time to time."

9.54 The Tariff Policy, 2016 has stipulated the following formula for computation of Cross Subsidy Surcharge:

$$S = T - [C/(1 - (L/100)) + D + R]$$

Where,
S is the surcharge;
T is the Tariff payable by the relevant category of consumers, including reflecting the Renewable Purchase Obligation;
C is the per unit weighted average cost of power purchase by the Licensee including meeting the renewable purchase obligation;
L is the aggregate of transmission, distribution and commercial losses, applicable to the relevant voltage level, as a percentage;
D is the aggregate of transmission, distribution and wheeling charge applicable to the relevant voltage level;
R is the per unit cost of carrying regulatory assets.
Provided that the surcharge shall not exceed 20% of the tariff applicable to the category of the consumers seeking open access."

9.55 The Commission has considered the Voltage-wise losses as approved in the previous Section and grossed it up with the approved Transmission losses of 2.23% for calculation of "L".

9.56 Weighted average purchase cost at the Discom for CSS computation works out to Rs 4.29 per unit by considering the Power Purchase Cost of Rs. 4881.99 Crore (considering transmission charges and RPO compliance) and Power Purchase Quantum of 11,372.16 MU as approved by the Commission at the Distribution Periphery.

9.57 The Tariff Policy stipulates that the CSS shall not exceed 20% of the tariff applicable to the category of the consumers seeking Open Access. Accordingly, the CSS approved by the Commission for FY 2020-21 is as follows:

- HT Services 11 kV

  CSS= 7.07-4.29/ (1-10.05%)-0.89-0 = 1.41

❖ HT Services 33 kV & Above

CSS= 7.07-4.29/ (1-5.26%)-0.47-0 = 2.07

9.58 The CSS approved by the Commission for FY 2020-21 is summarised below:

Table 167: Cross Subsidy Surcharge approved for FY 2020-21 (Rs./kWh)

Category	ABR (T)	APPC (C)	Losses (L) %	Charges (D)	Reg. Assets (R)	CSS
HT Services 11 kV	7.07	4.29	10.05%	0.89	0.00	**1.41**
HT Services 33 kV & Above	7.07	4.29	5.16%	0.47	0.00	**1.41**

9.59 All consumers who wish to avail Open Access will be levied no charge for the use of distribution network other than wheeling charge and CSS.

A 10 TARIFF PHILOSOPHY

One State One Tariff

Petitioner's Submission

10.1 The Petitioner submitted that Jharkhand State has a total of five distribution licensees - JBVNL, DVC, Tata Steel Limited (TSL), Jamshedpur Utilities & Services Company Limited (JUSCO) and Steel Authority of India Limited (SAIL), Bokaro, with multiple Licensees operating in common geographic areas with varied sales mix. The Petitioner further submitted that except JBVNL, rest of the distribution utilities are primarily focused on serving HT Industrial consumers. Broadly, JBVNL sells 50% of power in whole Jharkhand, however 93% of domestic sales in Jharkhand is being done by JBVNL. This skewed sales mix has raised various commercial and socio-economic issues as discussed in subsequent Sections.

10.2 Earlier also in Case No. 10 of 2016, JBVNL and DVC had filed a joint Petition on August 24, 2016, praying to provide a roadmap/mechanism to create a level playing field between the Petitioners in order to promote free and fair competition in distribution of electricity in their common area of supply so as to serve the larger consumer interest. The Commission in its Order dated July 18, 2018 passed following judgment:

> *"7. We verified from the records and found that DVC as well as JBVNL were directed to deliberate and suggest mutually acceptable and workable methodology for consideration of the Commission and for further orders. From the record we find that no concrete suggestions have been brought by the petitioners –DVC as well as JBVNL which are mutually acceptable and workable methodology for consideration of the Commission despite several adjournments even after a lapse of about two years.*
>
> *8. In view of the said admitted position and the facts and circumstances appearing on record, we are of the view that no purpose would be served in keeping the case pending for decision in the absence of any concrete suggestions mutually acceptable and workable methodology. The petitioners are at liberty to approach this Commission after arriving at concrete suggestions and formulate workable methodology, which are mutually acceptable to them and are legally tenable.*
>
> *9. With the above observations, the petition is disposed off accordingly."*

10.3 In view of above, the Petitioner has proposed a mechanism for creating a level playing field between various Distribution Licensees of Jharkhand to address the looming issue.

10.4 The Petitioner submitted that it has recently filed a Petition with the Commission for obtaining approval for the Proposal of M/s JUSCO and TSL for right to use of 11 kV feeders, DTs and LT lines (currently with JBVNL) for providing power to LT consumers. This is a testimony to the fact that the anomaly of adversarial consumer mix is well recognized and calls for an urgent solution by the Commission.

10.5 The Petitioner further deliberated on the following points, viz.,

- Higher Average Cost of Supply for JBVNL
- Non-compliance of Universal Supply Obligation (USO) and Conditions of Licence by Other Licensees
- Socio-Economic Disparity between Industrialized and Non-Industrialized Districts

The Petitioner requested the Commission to implement a uniform Tariff Structure throughout the State creating level playing field for all the existing electricity Distribution Licensees providing the examples of States such as Gujarat, Madhya Pradesh, Delhi and Uttar Pradesh.

10.6 The Petitioner submitted that the Distribution Licensees of Jharkhand other than JBVNL have been gradually expanding their consumer base in the lucrative consumer categories who have good paying capacity. These Licensees enjoy lower cost of supply. Due to shifting of the subsidsing consumers of JBVNL to other Licensees, the consumer mix of JBVNL has worsened, affecting its ability to sustain supply of electricity to the marginal and rural consumers in the State. Such practice is also not in line with USO as per EA, 2003 as well as conditions for grant of Licence for some of the Licensees. This has also led to socio-economic disparity between different districts of Jharkhand.

10.7 The Petitioner requested the Commission to impose additional terms and conditions to remove violation of terms of grant of Licence. As per Order in Case No. 10 of 2016, JBVNL is required to submit a practical and commercially tenable methodology to ensure level playing field for Distribution Licensees in the State.

10.8 JBVNL proposed the concept of Uniform Cost of Supply through-out the State of Jharkhand for every Distribution Licensee.

10.9 In order to maintain uniform tariff through-out the State, having different Distribution Licensees, various SERC's have adopted different strategy in their respective Tariff Orders as elucidated above. However, in Jharkhand, JBVNL and other Discoms neither receive subsidy from common source nor have common power purchase pool, which are utilized as cost adjusting measure by respective SERCs for equating Average Cost of Supply for different Distribution Licensees.

10.10 Therefore, JBVNL proposed the following mechanism for adoption of uniform Cost of Supply through-out the State of Jharkhand.

- ❖ The Commission may estimate a single Cost of Supply for the State as a whole by following formula:

  Uniform Cost of Supply = ∑ ACOSi X Salesi,

  Where,

  ACOSi–Average Cost of Supply for ith Distribution Licensee as calculated for subsequent FY including previous year gaps/surplus and regulatory assets

  Salesi –Estimated sales for ith Distribution Licensee to all consumer categories in subsequent FY

- ❖ Thereafter, each Distribution Licensee will either receive or provide fund to a common pool depending whether its ACOS is greater than or less than Uniform Cost of supply for whole Jharkhand. The amount would be calculated for each Discom of Jharkhand as per following formulae:

  (Uniform Cost of Supply- ACOSi) x Salesi (Negative value implies that Distribution Licensee will receive fund from the pool and vice-versa)

  The above annual amount would be payable/receivable in 12 equal monthly installments in subsequent year.

- ❖ Thereafter, the Commission would determine Tariff for each category of consumer for various Discoms considering Uniform Cost of Supply and level of cross subsidy.

Commission's Analysis

10.11 The Commission has perused the submission made by the Petitioner. The Commission is of the view that the proposal for cost sharing between Discoms may lead to promoting costly power purchased by JBVNL while the other Licensees are optimising their power purchase based on their demand. Further, the proposal of the Petitioner is unilateral and does not have concurrence of other Distribution Licensees of the State and hence, cannot be taken at face value. The Commission is of the view that the Petitioner should instead divert resources to reduction of power purchase cost which constitutes the major share of ACoS.

10.12 The Commission is also of the view that the proposal of the Petitioner amounts to cross-subsidising of one Distribution Licensee by other Distribution Licensees, which has no legal sanction and is not in accordance with the EA 2003. The tariff of each Distribution Licensee has to be determined based on its ARR and consumption mix. In addition, the proposal for a Uniform Tariff within the State does not promote competition within the Discoms. The Commission is of the view that JBVNL should reduce its ACOS by optimising its expenses and improving its metering and billing instead of considering being subsidised for its poor performance by other efficient Discoms. Hence, the Commission is continuing with the approach followed in the previous Orders as the proposal by the Petitioner seems retrograde in the scenario where all the other Licensees are striving to reduce their Average Power Purchase Cost, while JBVNL has been entering costly PPAs without approval of this Commission and improper load forecasting.

Voltage-wise Cost of Supply

Petitioner's Submission

10.13 The Petitioner has submitted the Voltage-wise Cost of Supply (VCoS) for FY 2017-18 and has reappropriated the same for FY 2020-21 and has proposed Tariff for various categories in line with the VCoS.

Commission's Analysis

10.14 The Commission has perused the submission made by the Petitioner including the basis considered for sampling of feeders, availability of data from meters, cost classification, loss calculation for transmission and distribution and has observed that the Sample Feeders selected is not appropriate and data from meters are incomplete. Though the Commission has computed the VCOS earlier in this Order, the same is based on too many assumptions, and determining the category-wise tariffs based on such computations may not be appropriate. The Commission is therefore constrained to adopt its earlier approach of tariff determination based on ACoS due to insufficient data samples provided by the Petitioner.

kW based Fixed Charges for Commercial Consumers

Petitioner's Submission

10.15 The Petitioner submitted that commercial category consumers are being charged fixed cost on 'per connection' basis. Commercial installations (Urban) vary from small shops to big hotels and offices. Fixed charge on 'per connection' basis leads to overcharging from consumers with less load and undercharging from consumers with more load. Hence, the Petitioner requested the Commission to approve fixed charge of commercial category consumers in terms of 'Rs/kW/Month' where kW is connected load of the consumer. The same principle is also followed in States like Delhi and Gujarat.

Commission's Analysis

10.16 As regards Fixed Charge billing of Commercial Category, the Commission is of the view that levying Fixed Charges on per connection basis is not appropriate especially considering that the marginal consumers having load upto 5 kW will now be charged at Domestic Tariff. The Commission is therefore, of the view that consumers with load above 5 kW should be billed based on the Contracted Load/Demand rather than on per connection basis. Further, in order to protect the Consumers from any hassles on Connected Load determination and minimise any dispute arising out of billing load, the Commission approves billing based on the Recorded Demand as done in LTIS category. Further, as Fixed Charges on per kW basis will lead to increase in recovery through Fixed Charges, in order to nullify the impact of such increase in Fixed Charges, the Commission has reduced the Energy Charges in a manner that there is no/marginal increase/reduction in the Average Billing Rate (ABR) for such consumers..

Contract Demand Limit for Consumer Categorisation

Petitioner's Submission

10.17 The Petitioner submitted that rate of domestic service would be applicable for all consumers having connected load below '5 kW' irrespective of any usage of power as per the Previous Tariff Order dated February 28, 2019. The Petitioner submitted that as per Clause 4.3 of Electricity Supply Code Regulations, all installations below 5 kW contract load would be supplied power at single phase, 230 Volts. Further, Commercial Service (rural) have to be supplied power at single phase (230 V) only. This implies that all Commercial Service (rural) category consumers would fall under domestic rural category, hence, no consumer would be charged tariff for Commercial (Rural) category and the tariff approved by the Commission for the category would be redundant. This also leads to inference that no commercial category consumer in rural area can be given connection with contracted capacity above 5 kW and requested the Commission to provide clarification on the matter.

Commission's Analysis

10.18 The Commission has gone through the submissions of the Petitioner. The Commission has clarified the same is **Section A 13** of this Order.

Unmetered Category

Petitioner's Submission

10.19 The Petitioner submitted that as per the Commission's Order dated February 28, 2019 regarding Tariff for FY 2019-20, tariff for unmetered connections as per the Order dated April 27, 2018 shall be applicable until June 30, 2019. However, from July 2019 onwards, the Commission directed metering of all consumers as all billing would have to be done as per the meter readings only. In compliance with the directives of the Commission, the Petitioner is trying its level best to meter all un-metered consumers. However, due to resistance from consumers for installation of meters and also due to large number of un-metered consumers in far-flung areas, the Petitioner has not succeeded in its endeavour in FY 2019-20. However, from FY 2020-21, the Petitioner proposes removal of all unmetered consumers and billing would be done as per the meter readings or assessment basis where meters get damaged. However, JBVNL may be constrained to bill some of the consumers without meter for reasons beyond its control. The Petitioner requested the Commission to approve tariff for unmetered consumers as approved in Tariff Order dated April 27, 2018 for FY 2017-18 and FY 2018-19.

Commission's Analysis

10.20 The Commission has observed that the Petitioner still has ~4.75 lakh consumers, which remain to be metered. The Commission disagrees with the submissions made by the Petitioner. The Petitioner during the previous tariff proceedings on several occasions including during Public Hearing as well as during SAC meeting committed to meter every consumer by March 2019 and therefore, the excuse put forward by the Petitioner does not hold any merit. The Commission, however, considering the pandemic situation prevailing since March 2020, provides last opportunity to the Petitioner to get all its unmetered consumers metered by December 31, 2020. The Petitioner shall not be allowed to bill any unmetered consumers from January 01, 2021.

Simplification and Rationalisation of Tariff

Petitioner's Submission

10.21 The Petitioner submitted that as per Clause 8.3 of the Tariff Policy, the tariffs need to be simplified and the consumer categories and slabs need to be reduced. In order to further simplify the tariff structure and in accordance with the Tariff Policy, 2016, the Petitioner has removed the slabs among the tariff categories and sub-categories and the same has been approved by the Commission in its Tariff Order dated February 28, 2019. However, in order to reduce the financial burden on the low income and needy consumers segments, the Petitioner has proposed that the subsidy from the State Government should be given in slab-wise manner. This would ensure that the consumers would not be impacted with the removal of slabs among the categories and sub-categories.

Commission's Analysis

10.22 The Commission has simplified the tariff and wherever necessary has rationalized the tariff structure in line with the Tariff Policy, 2016 with an intent to gradually move towards cost reflective tariff.

10.23 The Commission has rationalised the Fixed Charges of different Consumer Categories in such a way that it is more or less uniform with the Fixed Charges of the other Licensees in the State. The Commission has also kept in mind that there is no/marginal increase/decrease in ABR for each consumer category, while re-allocating recovery from Fixed and Energy Charges.

10.24 As regards the existing mechanism of charging Fixed Charges to Domestic HT consumers and Commercial Consumers, some of the stakeholders during Public Hearing of Distribution Licensees requested that the Fixed Charge should not be billed for entire Contracted Capacity, instead the same should also take into consideration the maximum Demand of such consumers similar to that of LTIS and HTS consumers. The Commission has gone through the submissions of the Stakeholders and is of the view that for billing purposes, for all HT-Domestic Consumers and LT Commercial Consumers (CD > 5kW), the Maximum Demand for such categories should also be considered along with Contracted Demand. The Commission has therefore, made necessary amendment to Fixed Charge billing mechanism as discussed in detail in **Section A 14** of this Order.

10.25 Historically, the Commission has been allowing Load Factor Rebate which was allowed only on the incremental consumption above a specified load factor. However, taking into cognisance the detrimental impact of pandemic situation and since, energy cost is one of the major cost components of industries of the State, the Commission is of the view that in order to speed up the economic recovery process, which is vital for general socio-economic development of the State, there is need to modify the Load Factor Rebate mechanism. The Commission has therefore, enhanced the Load Factor rebate as stated in **Section A 14** of this Order.

10.26 In the wake of the COVID-19 pandemic and the sluggish market situation, the Commission has reduced the Delayed Payment Surcharges to be paid by the consumers from 1.50% per month or part thereof to 1.00% per month or part thereof.

10.27 The Commission has eliminated Meter Rent currently paid by consumers since the Meters bought by the Licensees are already included in the GFA and its servicing cost forms part of ARR, which in turn is recovered through tariff. Further, any Meter Rent collected as per current provisions are reduced from the ARR as part of Non-Tariff Income. The Commission is therefore, of the view that there is little rationale in collecting these rents from consumers, which is finally refunded to the consumers. The Commission has therefore, in order to simplify the process, eliminated the need to collect Meter Rent.

10.28 The Commission in order to implement transparent recovery of Fixed/Demand Charges based on the actual availability of power to the Consumer has introduced recovery of Fixed/Demand Charges based on the actual Hours of Supply as recorded in the Consumer's meter. The Commission is of the view that the Distribution Licensees should be held accountable for round the clock availability of power to the Consumers. The Licensees should compensate the Consumers for unavailability of power at least in terms of reduced Fixed/Demand Charges as per the mechanism approved in **Section A 14** of this Order.

10.29 As regards ToD Tariff mechanism, the Commission is of the view that it is an important tool for Utilities to shift demand from peak hours to off-peak hours. In order to assess the necessity of such mechanism for the Petitioner, **the Commission directs the Petitioner to submit the load curves for days with maximum peak demand and minimum peak**

demand for each month of FY 2019-20 and April 2020 to September 2020 along with its technical preparedness for implementation of ToD Tariffs, while submitting the Business Plan and MYT Petition for FY 2021-22 to FY 2025-26. In the meanwhile, the Commission has introduced ToD uniformly for all Discoms as an Option for HTS and HT Institutional Consumers.

10.30 The Commission has introduced Rebate to Consumers on the Delayed billing by the Licensees, to promote timely billing practices in the License Area.

10.31 The Commission has also introduced Prepaid Metering primarily to promote billing and collection efficiency of the Licensee. The target Consumers who shall have Prepaid Meters installed on priority basis shall be the Consumers from whom the Collection/Billing Efficiency is the lowest, e.g., Government Utilities/offices/officials, Pockets where LT Domestic collection is very low, etc.

10.32 The Commission has modified the earlier Rebate on Prompt Online Payment to promote transparent and immediate payment of Bills by the Consumers.

10.33 The Commission has reintroduced the HT Institutional Supply Category to implement a Uniform Tariff Structure across the State and since these institutional consumers either utilise this power for public welfare (Railways) or procure power to distribute to its various consumers comprising of domestic, agricultural, LT as well as HT consumers, hence, the Commission is of the view that separate tariff for such Institutional category is required. The HT Institutional Supply Category shall include Railway Traction Supply (RTS), Military & Engineering Services (MES) and Sale to Other Licensees. The Commission has also clarified that the RPO Compliance of all such consumers should be met by the Petitioner.

10.34 The Commission has approved Terms and Conditions of Supply consistent with JSERC (Electricity Supply Code) Regulations, 2015, as amended from time to time.

A 11 APPROVED RETAIL TARIFF FOR FY 2020-21

Petitioner's Submission

11.1 The summary of Tariff proposed by the Petitioner is provided below:

Table 168: Summary of Proposed Tariff submitted for FY 2020-21 (Rs.)

Category/ Sub-Category	Sub-Category	Existing Tariff (FY 2019-20)		Proposed Tariff (FY 2020-21)	
		Energy Charges	Fixed Charges	Energy Charges	Fixed Charges
Domestic	Rural	5.75 / kWh	20 / Conn./ Mon	7.00 / kWh	75 / Conn./ Mon
	Urban	6.25 / kWh	75 / Conn./ Mon	7.50 / kWh	150 / Conn./ Mon
	HT	6.00 / kVAh	100 / kVA / Mon	5.00 / kVAh	300 / kVA / Mon
Commercial	Less than 5 kW (Rural)	6.00 / kWh	40 / Conn./ Mon	7.00 / kWh	75 / Conn./ Mon
	Less than 5 kW (Urban)			7.50 / kWh	150 / Conn./ Mon
	Urban (More than 5 kW)	6.25 / kWh	150 / Conn./ Mon	7.50 / kWh	300 / kW/ Mon
Irrigation and Agriculture		5.00 / kWh	20 / HP/ Mon	6.50 / kWh	20 / HP / Mon
Industrial	Low Tension	5.75 / kVAh	100 / kVA / Mon	6.50 / kVAh	300 / kVA / Mon
	High Tension	5.50 / kVAh	350 / kVA / Mon	5.00 / kVAh	500 / kVA / Mon
	Special Service	5.50 / kVAh	350 / kVA / Mon	4.25 / kVAh	500 / kVA / Mon
Institutional	Streetlight Service	6.25 / kWh	100 / kW/ Mon	7.00/ kWh	100 / kW / Mon
	RTS	5.50 / kVAh	350 / kVA / Mon	4.25 / kVAh	500 / kVA / Mon
	MES	5.50 / kVAh	350 / kVA / Mon	4.25 / kVAh	500 / kVA / Mon
	Other Distribution Licensees	5.50 / kVAh	350 / kVA / Mon	5.00 / kVAh	500 / kVA / Mon

Commission's Analysis

11.2 Based on the above discussions, the summary of Tariff approved by the Commission for FY 2020-21 is as below:

Table 169: Summary of Approved Tariff for FY 2020-21 (Rs.)

Sub-Category	Existing Tariff (FY 2019-20)		Approved Tariff (FY 2020-21)	
	Energy Charges	Fixed Charges	Energy Charges	Fixed Charges
Domestic (Rural) and Others (Rural) upto 5kW	5.75/kWh	20/Conn./Mon	5.75/kWh	20/Conn./Mon
Domestic (Urban) and Others (Urban) upto 5kW	6.25/kWh	75/Conn./Mon	6.25/kWh	75/Conn./Mon
Domestic HT	6.00/kVAh	100/kVA/Mon	6.00/kVAh	100/kVA/Mon
Commercial (Rural> 5 kW)	6.00/kWh	40/Conn./Mon	5.75/kWh	50/kW/Mon
Commercial (Urban> 5 kW)	6.25/kWh	150/Conn./Mon	6.00/kWh	100/kW/Mon
Irrigation and Agriculture	5.00/kWh	20/HP/Mon	5.00/kWh	20/HP/Mon
LT Industrial Supply	5.75/kVAh	100/kVA/Mon	5.75/kVAh	100/kVA/Mon
Streetlight Service	6.25/kWh	100/kW/Mon	6.25/kWh	100/kW/Mon
HT Supply	5.50/kVAh	350/kVA/Mon	5.50/kVAh	350/kVA/Mon
HT Institutional Supply	5.50/kVAh	350/kVA/Mon	5.25/kVAh	350/kVA/Mon

A 12 SCHEDULE OF CHARGES

Petitioner's Submission

12.1 The Petitioner submitted that there has not been much increase in Miscellaneous Charges in last 10 years. Though the Miscellaneous Charges have been slightly revised by the Commission for FY 2018-19 and 2019-20, these Charges are not in line with the current inflation and the Charges levied in other States. The Petitioner has calculated the inflation at 4.66% in line with the JSERC Regulations, 2015, based on the actual Wholesale Price Index (WPI) and Consumer Price Index (CPI) for the last few years.

12.2 The Petitioner also submitted that the labour charges for a skilled worker is Rs. 355/day as per the Department of Labour, Employment & Training, Government of Jharkhand. However, charges for works related to testing of meter/installation for single/three phase consumers have been kept at Rs. 100 and charges for work relating to removing/refixing of Meter/Changing of Meter or Meter Equipment has been kept at only Rs. 200. Hence, it is noteworthy that the current Miscellaneous Charges are not in line with the industry standards and need to be revised to bring them to a realistic level.

12.3 The Petitioner further submitted that JBVNL is the Distribution Utility with one of the lowest Miscellaneous Charges in the country. Even neighbouring States like Bihar, Odisha, Chhattisgarh and West Bengal have significantly higher Charges.

12.4 The Petitioner has proposed the revised schedule of Miscellaneous Charges along with simplification of Charges with only seven major Charges namely - New Connection Application charges, Disconnection charges, Reconnection charges, Consumer service charges, Meter Testing charges, Meter Rent and Transformer Rent.

12.5 The Petitioner submitted that the New Connection Application fees includes the application fees for new connection, which is exclusive of other charges related to new connection (applicable as per the cost estimate). The Petitioner further submitted that free of cost/ instalment basis electricity connections are being provided under various Central and State sponsored schemes. Therefore, the charges shall be applicable as per the Scheme guidelines for the consumers covered under any Central or State Government sponsored scheme. Significantly higher effort is required for processing connection at 11 kV and higher, hence the charge for them should be increased.

12.6 The Petitioner has also revised the Temporary and Permanent disconnection charges. The Petitioner submitted that significant effort is being required for permanent disconnection as the job includes removal of meter, metering units, cables and wires and other allied materials, transportation charges, labor charges, etc. Therefore, a higher amount as compared to temporary charges is being proposed for Permanent disconnection. Also, Reconnection charges have been proposed in line with the temporary disconnection charges.

12.7 The Petitioner has also proposed a single charge related to consumer services, which includes- re-sealing, fuse replacement, modification in connection layout/ meter shifting, meter fixing/ removal, service line replacement, name change, load modification, subsequent installation testing, Replacement of Defective or Burnt meters. The Petitioner submitted that considering the average life of 5 years of meters, the burnt meter charges shall not be applicable, if the meter gets defective after 5 years from the date of installation and the consumer has to bear the actual cost of meter as the penalty in case of burnt meters and defective meters (in case of consumers' fault).

12.8 The Petitioner has not proposed any increase in the charges related to meter rent. However, the charges related to meter testing are proposed which is inclusive of metering unit in case CT operated and Tri-vector meter. The Petitioner submitted that in case where the consumer opts for meter testing through a third party/ external agency, the charges of external agency shall be borne by the consumer itself, in addition to the above applicable service charges.

12.9 The Petitioner submitted that industrial consumers have to make a separate arrangement of required capacity transformer for availing electricity. However, in some special cases, JBVNL has provided a temporary arrangement of transformer to Industrial consumers or in some cases of temporary supply. Therefore, the approved charges pertaining to transformer rent is inevitable to bring clarity among consumer as well as to utility. However, the Petitioner submitted that charge for the transformer should be levied on per kiloWatt basis.

12.10 Based on the above, the Petitioner has proposed the charges related to transformer rent based on the capacity of transformer required. To discourage the consumer from opting for transformer on rent and to make self-arrangement of the same, the Petitioner has proposed for slightly higher transformer rent, which shall only be applicable for maximum of 3 months.

12.11 The summary of Miscellaneous Charges proposed by the Petitioner is detailed in the table below.

Table 170: Miscellaneous Charges proposed for FY 2020-21 (Rs.)

Types of Charges		Single phase	3 Phase (whole-current)	3 Phase (CT operated)	Meter at 11kV	Meter at 33kV	132/ 220 kV
New Connection application fees		100	100	100	500	1000	1500
Dis-connection charges (on consumer request)	Temporary	200	200	500	1500	1500	1500
	Permanent	200	400	1000	2000	5000	5000
Re-connection charges		200	200	500	1500	1500	1500
Consumer service for each incidence (including, re-sealing, fuse replacement, modification in connection layout/ meter shifting, meter fixing/ removal, service line replacement, name change, load modification, subsequent installation testing, Replacement of Defective or Burnt meters)		200	500	700	1,000	2,000	5,000
Meter Testing (including combined metering unit)		100	200	300/ 1,800 (Trivector)	5,000	5,000	8,000
Meter Rent/ meter/ month		20	50	250	400	2500	15,000
Transformer Rent- if provided by JBVNL on request of consumer		NA	NA	Rs. 100/kVA/month of transformer capacity			

Commission's Analysis

12.12 The Commission has analysed the various aspects of these charges, and the Schedule of Miscellaneous Charges applicable to other Distribution Licensee in the State of Jharkhand. The Commission observes that the Schedule of Miscellaneous Charges are already specified in the JSERC (Electricity Supply Code) Regulations, 2015, as amended from time to time. However, since the Commission has approved the Miscellaneous Charges in the previous Order, the Commission continues with the charges approved in its previous Order, as reiterated in the **Section A 13** of this Order until amendment of the JSERC (Electricity Supply Code) Regulations, 2015.

A 13 TARIFF SCHEDULE FOR FY 2020-21

APPLICABLE FROM 01.10.2020

Consumer Tariff

Ceiling Tariff

The Tariffs approved below are Ceiling Tariffs and the Licensee is at liberty to Supply at lower and more competitive rates based on the requirement of the Consumers. However, this reduced recovery shall be attributable to the Licensee and shall not be recoverable in the ARR.

Domestic Service- Rural and Urban

Applicability:

This schedule shall apply to private residential premises for domestic use for household electric appliances such as Radios, Fans, Televisions, Desert Coolers, Air Conditioner, etc. and including motor pumps for lifting water for domestic purposes and other household electrical appliances not covered under any other schedule.

This rate is also applicable for supply to religious institutions such as Temples, Gurudwaras, Mosques, Church and Burial/ Crematorium grounds, Rural Drinking Water Schemes and other recognised charitable institutions, where no rental/fees are charged for the energy needs and for its products and services.

This rate is also applicable for all consumers with contracted demand of upto 5 kW mixed, commercial, industrial, educational institutions, drinking water schemes or for any other purpose, except streetlight connections and agriculture/allied connections.

Category of Services:

Domestic Service-Rural: areas not covered by Nagar Nigam, Nagar Parishad and Nagar Panchayat.

Domestic Service -Urban: areas covered by Nagar Nigam, Nagar Parishad and Nagar Panchayat.

Service Character:

(i) For Rural: AC, 50 Cycles, Single Phase at 230 Volts, Three Phase at 400 Volts.

(ii) For Urban: AC, 50 Cycles, Single Phase at 230 Volts, Three Phase at 400 Volts.

Tariff:

Category	Fixed Charges		Energy Charges (Rs./kWh)
	Unit	Rate	
Rural	Rs./Conn./month	20	5.75
Urban	Rs./Conn./month	75	6.25

As the Fixed Charges are applicable per connection basis, there is little relevance of load for Tariff purpose, the Petitioner should not normally inspect consumer premises on the pretext of load verification.

Delayed Payment Surcharge: In accordance with **Clause III: Delayed Payment Surcharge** of Terms & Conditions of Supply as provided in **Section A 14** of this Tariff Order.

Rebate for Online Payment and Due Date Payment: In accordance with **Clause VIII: Rebate for Online Payment and Due Date Payment** of Terms & Conditions of Supply as provided in **Section A 14** of this Tariff Order.

Domestic Service - HT

Applicability:

This schedule shall apply to private residential premises for domestic use for household electric appliances such as Radios, Fans, Televisions, Desert Coolers, Air Conditioner, etc. and including motor pumps for lifting water for domestic purposes and other household electrical appliances not covered under any other schedule.

Category of Services:

Domestic Service - HT: This Schedule shall apply for domestic connection in Housing Colonies/ Housing Complex/Houses of multi storied buildings purely for residential use for single point metered supply, with power supply at 33kV or 11kV voltage level. DS-HT consumers, who supply power to individual households, the average per unit charges billed to an individual consumer shall not exceed 105% of average per unit cost paid to the Petitioner. This additional 5% allowed reflects the internal distribution losses in housing complex and administrative and distribution costs.

Service Character:

(i) For HT: AC, 50 Cycles, at 11kV or 33kV

Tariff:

Category	Fixed Charges		Energy Charges
	Unit	Rate	(Rs./kVAh)
DS-HT	Rs./kVA/month	100	6.00

Billing Demand: The Billing Demand shall be the Maximum Demand recorded during the month or 75% of Contract Demand whichever is higher. The penalty on exceeding Billing Demand will be applicable in accordance with **Clause I: Penalty for exceeding Billing/ Contract Demand** of Terms & Conditions of Supply as provided in **Section A 14** of this Tariff Order.

Delayed Payment Surcharge: In accordance with **Clause III: Delayed Payment Surcharge** of Terms & Conditions of Supply as provided in **Section A 14** of this Tariff Order.

Rebate for Online Payment and Due Date Payment: In accordance with **Clause VIII: Rebate for Online Payment and Due Date Payment** of Terms & Conditions of Supply as provided in **Section A 14** of this Tariff Order.

Irrigation & Agriculture Service (IAS)

Applicability:

This schedule shall apply to all consumers for use of electrical energy for Agriculture purposes including tube wells and processing of the agricultural produce, confined to Chaff-Cutter, Thresher, Cane crusher and Rice-Hauler, when operated by the agriculturist in the field or farm and does not include Rice mills, Flour mills, Oil mills, Dal mills.

Service Character:

AC 50 Cycles, Single Phase at 230 volts /Three Phase at 400 volts

Tariff:

Category	Fixed Charges		Energy Charges
	Unit	Rate	(Rs./kWh)
IAS	Rs./HP/month	20	5.00

Delayed Payment Surcharge: In accordance with **Clause III: Delayed Payment Surcharge** of Terms & Conditions of Supply as provided in **Section A 14** of this Tariff Order.

Rebate for Online Payment and Due Date Payment: In accordance with **Clause VIII: Rebate for Online Payment and Due Date Payment** of Terms & Conditions of Supply as provided in **Section A 14** of this Tariff Order.

Commercial Services

Applicability:

This schedule shall apply to all consumers, using electrical energy for light, fan and power loads for non-domestic purposes like shops, hospitals (govt. or private), nursing homes, clinics, dispensaries, restaurants, hotels, clubs, guest houses, marriage houses, public halls, show rooms, workshops, central air-conditioning units, offices (govt. or private), commercial establishments, cinemas, X-ray plants, schools and colleges (govt. or private), boarding/ lodging houses, libraries (govt. or private), research institutes (govt. or private), railway stations, fuel - oil stations, service stations (including vehicle service stations), All India Radio / T.V. installations, printing presses, commercial trusts / societies, Museums, poultry farms, banks, theatres, common facilities in multi-storied commercial office/buildings, Dharmshalas, public Electric Vehicles Charging stations and such other installations not covered under any other tariff schedule whose Contracted Demand is greater than 5 kW and less than or equal to 100 kVA (or equivalent in terms of HP or kW). The equivalent HP for 100 kVA shall be 114 HP and the equivalent kW for 100 kVA shall be 85 kW.

This schedule shall also be applicable to electricity supply availed through separate (independent) connections for the purpose of advertisements, hoardings and other conspicuous consumption such as external flood light, displays, neon signs at public places (roads, railway stations, airports etc.), departmental stores, commercial establishments, malls, multiplexes, theatres, clubs, hotels and other such entertainment/ leisure establishments whose Connected Load/Contracted Demand is greater than 5kW and less than or equal to 100 kVA (or equivalent in terms of HP or kW). The equivalent HP for 100 kVA shall be 114 HP and the equivalent kW for 100 kVA shall be 85 kW.

Service Category:

Commercial Service-Rural: Areas not covered by area indicated for Commercial Service Urban.
Commercial Service-Urban: Areas covered by Nagar Nigam, Nagar Parishad, Nagar Panchayat.

Service Character:

Rural: AC 50 Cycles, Single phase at 230 Volts or Three Phase at 400 Volts.
Urban: AC 50 Cycles, Single phase at 230 Volts or Three Phase at 400 Volts.

Tariff:

Category	**Fixed Charges**		**Energy Charges**
	Unit	**Rate**	**(Rs./kWh)**
Rural	Rs./kW/month	50	5.75
Urban	Rs./kW/month	100	6.00

Billing Demand: The Billing Demand shall be the Maximum Demand recorded during the month or 50% of Contract Demand whichever is higher. The penalty on exceeding Contract Demand will be applicable in accordance with **Clause I: Penalty for exceeding Billing/ Contract Demand** of Terms & Conditions of Supply as provided in **Section A 14** of this Tariff Order. In case Recorded Demand is more than 100 kVA/85 kW for any month for more than three instances within a Financial Year, the average of the Maximum Demand recorded during such instances shall be treated as the new Contract Demand for the purpose of billing of future months and the consumer will have to get into a new Agreement under the HTS category.

Delayed Payment Surcharge: In accordance with **Clause III: Delayed Payment Surcharge** of Terms & Conditions of Supply as provided in **Section A 14** of this Tariff Order.

Installation of Shunt Capacitors: In accordance with **Clause VI: Installation of Shunt Capacitors** of Terms & Conditions of Supply as provided in **Section A 14** of this Tariff Order.

Rebate for Online Payment and Due Date Payment: In accordance with **Clause VIII: Rebate for Online Payment and Due Date Payment** of Terms & Conditions of Supply as provided in **Section A 14** of this Tariff Order.

Low Tension Industrial Services

Applicability:

Low Tension Industrial Service (LTIS): This schedule shall apply to all industrial units having a Contracted Load more than 5 kW and less than or equal to 100 kVA (or equivalent in terms of HP or kW). The equivalent HP for 100 kVA shall be 114 HP and the equivalent kW for 100 kVA shall be 85 kW.

Service Character:

Low Tension Industrial Service (LTIS): AC, 50 Cycles, Single Phase supply at 230 Volts or Three Phase Supply at 400 Volts.

Tariff:

Category	Fixed Charges		Energy Charges
	Unit	Rate	(Rs./kVAh)
LTIS	Rs./kVA/month	100	5.75

Billing Demand: The Billing Demand shall be the Maximum Demand recorded during the month or 50% of Contract Demand whichever is higher. The penalty on exceeding Contract Demand will be applicable in accordance with **Clause I: Penalty for exceeding Billing/ Contract Demand** of Terms & Conditions of Supply as provided in **Section A 14** of this Tariff Order. In case Recorded Demand is more than 100 kVA/85 kW for any month for more than three instances within a Financial Year, the average of the Maximum Demand recorded during such instances shall be treated as the new Contract Demand for the purpose of billing of future months and the consumer will have to get into a new Agreement under the HTS category.

Delayed Payment Surcharge: In accordance with **Clause III: Delayed Payment Surcharge** of Terms & Conditions of Supply as provided in **Section A 14** of this Tariff Order.

Installation of Shunt Capacitors: In accordance with **Clause VI: Installation of Shunt Capacitors** of Terms & Conditions of Supply as provided in **Section A 14** of this Tariff Order.

Rebate for Online Payment and Due Date Payment: In accordance with **Clause VIII: Rebate for Online Payment and Due Date Payment** of Terms & Conditions of Supply as provided in **Section A 14** of this Tariff Order.

HT Services

Applicability:

High Tension Service (HTS): All the consumers drawing power at voltage level at 6.6 kV and above except Domestic-HT consumers and HT- Institutional Consumers.

Service Character:

High Tension Service (HTS): 50 Cycles, Three Phase at 6.6 kV/11 kV/33 kV/132 kV/220 kV/400 kV

Tariff:

Category	Fixed Charges		Energy Charges
	Unit	Rate	(Rs.kVAh)
HTS	Rs./kVA/month	350	5.50

Billing Demand: The Billing Demand shall be the Maximum Demand recorded during the month or 75% of Contract Demand, whichever is higher. The penalty on exceeding Contract Demand will be applicable in accordance with **Clause I: Penalty for exceeding Billing/ Contract Demand** of Terms & Conditions of Supply as provided in **Section A 14** of this Tariff Order.

Load Factor Rebate: In accordance with **Clause V: Load Factor Rebate** of Terms & Conditions of Supply as provided in **Section A 14** of this Tariff Order.

Voltage Rebate: In accordance with **Clause IV: Voltage Rebate** of Terms & Conditions of Supply as provided in **Section A 14** of this Tariff Order.

Delayed Payment Surcharge: In accordance with **Clause III: Delayed Payment Surcharge** of Terms & Conditions of Supply as provided in **Section A 14** of this Tariff Order.

Rebate for Online Payment and Due Date Payment: In accordance with **Clause VIII: Rebate for Online Payment and Due Date Payment** of Terms & Conditions of Supply as provided in **Section A 14** of this Tariff Order.

TOD Tariff: In accordance with **Clause VII: ToD Tariff** as provided in section on Terms & Conditions of Supply as provided in **Section A 14** of this Tariff Order.

Street Light

This tariff schedule shall apply for use of Street Lighting system.

Applicability:

Street Light Service (SS): This tariff schedule shall apply for use of Street Lighting system, including single system in corporation, municipality, Notified Area Committee, panchayats etc., and also in areas not covered by municipalities and Notified Area Committee provided the number of lamps served from a point of supply is not less than 5.

Service Character:

Street Light Service (SS): AC, 50 cycles, Single phase at 230 Volts or Three phase at 400 Volts

Tariff:

Category	Fixed Charges		Energy Charges
	Unit	Rate	(Rs./kWh)
Streetlight	Rs./kW/month	100	6.25

Delayed Payment Surcharge: In accordance with **Clause III: Delayed Payment Surcharge** of Terms & Conditions of Supply as provided in **Section A 14** of this Tariff Order.

Rebate for Online Payment and Due Date Payment: In accordance with **Clause VIII: Rebate for Online Payment and Due Date Payment** of Terms & Conditions of Supply as provided in **Section A 14** of this Tariff Order.

HT Institutional Services

This tariff schedule shall apply for use of Railway Traction, Military Engineering Services and Other Distribution Licensees.

Applicability:

Railway Traction (RTS) and Military Engineering Services (MES): This tariff schedule shall apply for use of railway traction and Military Engineering Services (MES) for a mixed load in defence cantonment and related area.

Other Distribution Licensees: This tariff schedule shall apply to other distribution licensees procuring power from the Licensee for the sole purpose of supplying it to its consumers. It is clarified that such tariff shall not be applicable for the quantum of power utilised in industrial units owned by it or its parent or affiliate company.

Service Character:

Railway Traction Service (RTS): AC, 50 cycles, Single phase at 25 kV/ 132 kV.

Military Engineering Services (MES): AC, 50 cycles, three phase at 6.6 kV and above

Other Distribution Licensees: AC, 50 cycles, three phase at 6.6 kV and above

Tariff:

Category	Fixed Charges		Energy Charges
	Unit	Rate	(Rs./kVAh)
HT- Institutional Services	Rs./kVA/month	350	5.25

Billing Demand: The Billing Demand shall be the Maximum Demand recorded during the month or 75% of Contract Demand, whichever is higher. The penalty on exceeding Contract Demand will be applicable in accordance with **Clause I: Penalty for exceeding Billing/ Contract Demand** of Terms & Conditions of Supply as provided in **Section A 14** of this Tariff Order.

Load Factor Rebate: In accordance with **Clause V: Load Factor Rebate** of Terms & Conditions of Supply as provided in **Section A 14** of this Tariff Order.

Voltage Rebate: In accordance with **Clause IV: Voltage Rebate** of Terms & Conditions of Supply as provided in **Section A 14** of this Tariff Order.

Delayed Payment Surcharge: In accordance with **Clause III: Delayed Payment Surcharge** of Terms & Conditions of Supply as provided in **Section A 14** of this Tariff Order.

Rebate for Online Payment and Due Date Payment: In accordance with **Clause VIII: Rebate for Online Payment and Due Date Payment** of Terms & Conditions of Supply as provided in **Section A 14** of this Tariff Order.

TOD Tariff: In accordance with **Clause VII: ToD Tariff** as provided in section on Terms & Conditions of Supply as provided in **Section A 14** of this Tariff Order.

RPO Compliance: RPO Compliance for Sale to Other Licensees, RTS and MES shall be made by the first Licensee which sells the power viz., in case TSL has procured such quantum of power from JBVNL then the onus to comply with RPO will be with JBVNL only.

Temporary Connections

Applicability:

The Temporary tariff shall be applicable as per the following conditions:

(a) Temporary tariff shall be equivalent to 1.5 times of the applicable fixed and energy charges for temporary connections falling in each prescribed tariff category with all other terms and conditions of tariff remaining the same.

(b) Temporary connections may be given with normal meters with security deposit as per JSERC (Electricity Supply Code) Regulations, 2015.

(c) Temporary connections may also be given with prepaid meters with minimum prepaid balance equivalent to 45 days of sale of power, which shall be based on the assessment formula as per JSERC (Electricity Supply Code) Regulations, 2015 and amendment thereof.

Tariff:

Category	Fixed Charges	Energy Charges
	Rate	(Rs.)
All Units	1.5 times of the applicable Fixed Charges	1.5 times of the applicable Energy Charges

Tariff to be paid by the Licensee for Gross/Net Metering of rooftop Solar PV projects

The Commission had notified the JSERC (Rooftop Solar PV Grid Interaction Systems and Net/Gross Metering) Regulations, 2015, on November 10, 2015, and further notified its 1st amendment as JSERC (Rooftop Solar PV Grid Interaction Systems and Net/Gross Metering) (1st Amendment) Regulations, 2019. The Tariff for sale of surplus power by Gross/Net metering of Rooftop Solar PV for FY 2020-21 for such eligible consumers of the Petitioner shall be as under:

Gross Metering: Rs. 4.16/kWh
Net Metering: Rs. 3.80/kWh

The tariff approved as above for FY 2020-21 shall remain effective till the issue of subsequent Tariff Order/Individual Order as the case may be.

Schedule for Miscellaneous Charges

The Miscellaneous Charges are approved as per the previous Order dated February 28, 2019.

Sl. No.	Purpose	Scale of Charges	Payment Realisation
1.	**Application Fee**		
	LT Connection	Rs.100	Payable with Energy Bill
	HT Connection	Rs. 500	
2	**Revision of Estimate on Consumer Request based on Revision in Original Application**		
	LT Connection	Rs. 100	Payable with Energy Bill
	HT Connection	Rs. 500	
3	**Testing of Consumers Installation**[1]		
	LT Supply	Rs. 100	Payable with Energy Bill
	HT Supply	Rs. 500	
4	**Meter Test when Accuracy disputed by Consumer**[2]		
	Single Phase/Three Phase	Rs. 100	Payable with Energy Bill
	Trivector/Special Type Meter, HT, EHT Metering Equipment	Rs. 1000	
5	**Removing/Refixing of Meter/Changing of Meter or Meter Equipment/Fixing of Sub Meter on the request of the Consumer/Fixing of Sub Meter Resealing of Meter when seals are found broken**		
	Single Phase/Three Phase	Rs. 200	Payable with Energy Bill
	Trivector/Special Type Meter, HT, EHT Metering Equipment	Rs. 1000	
6	**Fuse call-Replacement**		
	Consumer Fuse	Rs. 100	Payable with Energy Bill
7	**Disconnection/ Reconnection**		
	LT Connection	Rs. 200	Payable in advance along with the Consumer request. In case, the same consumer is reconnected or disconnected within 12 months, 50% will be charged extra.
	HT Connection	Rs. 1500	
10	**Replacement of meter card, if lost or damaged by Consumer**	Rs. 100	Payable with Energy Bill
11	**Security Deposit**	As per JSERC (Electricity Supply Code) Regulations, 2015 as amended from time to time	
12	**Replacement of Burnt Meter**	Cost of Meter	Payable with Energy Bill
13	**Transformer Rent**[3]		
	Upto 200 kVA	Rs. 5500/Month	Payable with Energy Bill
	Above 200 kVA	Rs. 7500/Month	Payable with Energy Bill

[1]*First test & Inspection free of charge, but should any further test and inspection be necessitated by faults in the installation or by not compliance with the conditions of supply for each extra test or inspection.*
[2]*If the meter is found defective within the meaning of the Indian Electricity Rules 1956, no charge shall be levied. If it is proved to be correct within the permissible limits laid down in the Rules, the amount will be charged in the next energy bill.*
[3]*Applicable for 6 month duration from the date of taking the transformer on rent, thereafter monthly escalation of 10% would be applicable.*
**** Note: Meter Rent is Deleted as the same is done away with in this Order.***

A 14 TERMS AND CONDITIONS OF SUPPLY

Clause I: Penalty for exceeding Billing/ Contract Demand

In case the Recorded/Actual Demand exceeds 110% of the Contract Demand, the consumer shall pay penal charges. The penal charges would be charged as follows: If the Recorded Demand exceeds 110% of Contract Demand, then the Demand Charge up to Contract Demand will be charged as per the normal Tariff rate. The remaining Recorded Demand over and above the Contract Demand will be charged at 1.5 times the normal Tariff rate.

In case Recorded Demand is higher than the Contract Demand by the quantum and for the duration as specified in the JSERC (Electricity Supply Code) Regulations, 2015, as amendment from time to time, the Contract Demand shall be revised as per the procedure specified therein.

Clause II: Jharkhand Electricity Duty

The charges in this tariff schedule do not include charges on account of State Electricity Duty/Surcharge to the consumers under the State Electricity Duty Act and the rules framed there under as amended from time to time and any other Statutory levy which may take effect from time to time.

Clause III: Delayed Payment Surcharge

The Delayed Payment Surcharge will be at the rate of 1.00% per month chargeable proportionately. The due date for making payment of energy bills or other charges shall be 21 days after issue date of bill. The bill should be generated and delivered on monthly basis. In case, the Licensee defaults in generating and delivering bills on monthly basis, Delayed Payment Surcharge will not be charged for the period of default by Licensee. The consumer should not be deprived of any subsidy/benefit which could have been otherwise accrued to the consumers i.e. energy units/amount (in case of unmetered) billed has to be apportioned on average monthly basis for the whole billing duration.

Illustration:

In case the payment is made 10 days after the due date, the DPS shall be at:

10/30*1%= 0.33%

Clause IV: Voltage Rebate

Voltage rebate* will be applicable on Demand and Energy Charges as per the JSERC (Electricity Supply Code) Regulations, 2015 as amended from time to time at the rate given below:

Consumer Category	Voltage Rebate
HTS/HT Institutional -33 kV	3.00%
HTS/ HT Institutional -132 kV	5.00%
HTS/ HT Institutional – 220 kV	5.50%
HTS/ HT Institutional – 400 kV	6.00%

*** Note:** The above rebate will be available only on monthly basis and consumer with arrears shall not be eligible for the above rebate. However, the applicable rebate shall be allowed to consumers with outstanding dues, wherein such dues have been stayed by the appropriate Courts.

Clause V: Load Factor Rebate

As also discussed in the Tariff Rationalisation section, the Commission is of the view that in order to speed up the economic recovery process which is vital for general socio-economic development of the State there is need to modify the Load Factor Rebate mechanism.

The Commission observed that the average Load Factor of HT Consumers of JBVNL for FY 2019-20 is approx. 32% and therefore in order to encourage consumption at higher Load Factor, incentive should be applicable for consumption over and above the average current Load Factor.

The Commission therefore taking in cognisance the existing Load Factor and necessity to revive the Industries approves the following rebate.

The Load factor rebate shall be allowed to all the consumers whose load factor exceeds 45%. For any ‘X’ % increase in the load factor over and above 45%, the rebate shall be allowed at the rate of ‘X’ % on the total energy charges corresponding to energy consumption of the consumer subject to a maximum ceiling rebate of 15%.

Illustration: If a consumer’s load factor for a given billing month is 58.50% then the percentage rebate allowed to such consumer shall be (58.50%-45.00%) i.e., 13.50%. The percentage rebate thus calculated (13.50%) shall be multiplied with the total energy charges corresponding to the entire energy consumption of the consumers and the rebate amount shall be allowed.

The above rebate will be available only on monthly basis and consumer with arrears shall not be eligible for the above rebate. However, the applicable rebate shall be allowed to consumers with outstanding dues, wherein such dues have been stayed by the appropriate Courts.

Clause VI: Installation of Shunt Capacitors

Connections with inductive load/motors as specified in Clauses 8.2.34 and 8.2.35 of the JSERC (Electricity Supply Code) Regulations, 2015, as amended from time to time, shall be installed with Shunt Capacitors to meet the Power Factor requirements.

For existing consumer, the Petitioner should first serve one month's notice to all such consumers who do not have or have defective shunt capacitors. In case the consumers do not get the capacitor installed/replaced within the notice period, the consumer shall be levied a surcharge at 5% on the total billed amount charge (metered or flat), till they have installed the required capacitors.

Clause VII: ToD Tariff

TOD tariff shall be applicable as an option to HTS and HT Institutional Consumers as follows:-

- **Off Peak Hours: 10:00 PM to 06:00 AM:** 85% of normal rate of energy charge
- **Normal Hours: 10:00 AM to 06:00 PM:** 100% of normal rate of energy charge
- **Peak Hours: 06:00 AM to 10:00 AM and 06:00 PM to 10:00 PM:** 120% of normal rate of energy charge

Clause VIII: Rebate for Online Payment and Due Date Payment

The due date for making payment of energy bills or other charges shall be 21 days after issue date of the bill.

A rebate of 1.00% shall be allowed on the billed amount for payment within the due date of the entire billed amount made either through online or any digital mode or through cash.

Further, additional 1.00% rebate shall be allowed if the bills are paid in full within the due date through online web portal or any digital methods.

It is clarified that in accordance with the above, if a person pays the entire billed amount through online web portal or any digital mode, the consumer shall be entitled to 2.00% rebate on the total billed amount. Further no rebate shall be allowed after due date irrespective of the mode of payment.

Clause IX: Rebate for Prepaid Metering

The Commission has introduced rebate to prepaid meters at 3% of the Energy Charges for the respective Consumer Category. For such consumers, the Petitioner shall refund the entire Security Deposit within one month from the date of installation of such prepaid meters.

Clause X: Rebate for Delayed Billing

The Commission has introduced rebate in case of delayed billing to consumers to promote prompt billing by the Licensees. In case the bill is not received for two continuous billing cycles, a rebate at the rate of 1.00% on the bill amount per month for delay beyond two months or part thereof shall be applicable subject to a ceiling of 3%. The Utility shall not be eligible to claim such Rebate as a part of ARR. The same shall be treated as a Compensation for the consumers out of the RoE of the Licensee. This clause shall be applicable for all consumers.

Clause XI: Other Terms and Conditions

Reduction in Fixed Charges

Recovery of Complete Fixed/Demand Charges from consumers shall be based on the availability of hours of supply recorded by meters installed in the consumer's premises. JBVNL to include the same in the consumer’s bill and recover the Fixed Charges only in proportion to the hours of supply as per the meter. The cut off hours for complete recovery from Fixed/Demand Charges shall be 21 hours per day for LT consumers and 23 hours per day for HT Consumers.

Provided that the planned outages/Rostering in the network that are uploaded on its website seven days in advance with a copy to the Commission and intimation to the respective consumers shall be excluded while computing scheduled supply hours.

Provided that any reduction in recovery of Fixed/Demand Charges on account of lower than stipulated hours of supply shall not be claimed as a part of the ARR. Any reduction in the Fixed/Demand Charges shall be considered as a compensation to be paid to the Consumer by the Licensee.

The Commission directs the Petitioner to submit a report on implementation of the above for all categories except for LT- Domestic, within 30 days of issue of this Order and implement the same from the subsequent billing cycle following the issuance of this Order. For LT-Domestic the Petitioner shall implement the same with effect from January 01, 2021.

However, till the time the above mechanism is implemented (i.e., December 31, 2020) for LT-Domestic, earlier mechanism for recovering fixed charge on the basis of the below mechanism specified in its earlier Order dated February 28, 2019 shall be applicable.

$$\mathbf{FC_r = FC \times (20\text{-}Y)/20}$$

FC = Total Fixed Charges for the consumer for the Billing Period.

FCr = Fixed Charges recoverable by the Petitioner for the Billing Period.

Y = Average duration of no supply of power beyond 4 hours per day as recorded for the previous quarter.

The Petitioner is directed to adjust from the monthly fixed charges as per the above specified mechanism based on the SAIDI recorded in the previous quarter.

Point of Supply

The Power supply shall normally be provided at a single point for the entire premises. In certain categories like coal mines power may be supplied at more than one point on request of consumer subject to technical feasibility. But in such cases metering and billing shall be done separately for each point.

Dishonoured Cheques

In terms of Regulation 10.10.5 of the JSERC (Electricity Supply Code) Regulations, 2015 as amended from time to time, in the event of dishonoured cheque for payment against a particular bill, the Licensee shall charge a minimum of Rs. 300 or 0.5% of the billed amount, whichever is higher. In addition to the same, the Delay Payment Surcharge shall be levied extra as per the applicable terms and conditions of Delay Payment Surcharge.

Stopped/Defective Meters

In case of existing consumers with previous consumption pattern, the provisional average bill shall be issued as per Clause 10.3.1 of the JSERC (Electricity Supply Code) Regulations, 2015 as amended from time to time.

In case of meter being out of order from the period before which no pattern of consumption is available, the provisional average bill shall be issued on the basis of Sanctioned/Contract Load on following Load Factor applicable to respective categories:

Consumer Category	Load Factor
Domestic	0.15
Non-Domestic	0.20
LTIS	0.20
DS-HT	0.15
HT Consumers-Below 132 kV	0.30
HT Consumers- 132 kV & Above	0.50

Sale of Energy

No consumer shall be allowed to sell the electricity purchased from the Licensee to any other person/entity. In case of DS-HT consumers, who supply power to individual households, the average per unit charges billed to an individual consumer shall not exceed 105% of average per unit cost paid to the Petitioner. This additional 5% allowed reflects the internal distribution losses in housing complex and administrative and distribution costs.

Release of New Connections

No new connections shall be provided without appropriate meter.

Unmetered Category

The tariff for unmetered connections as per the Order dated April 27, 2018 shall be applicable until December 31, 2020. By this time all consumers should have been metered and thereafter all billing shall be done as per the meter readings only.

Conversion Factors

The following shall be the conversion factors, as and where applicable: (PF=0.85):

1 kiloWatt (kW) = 1.176 kiloVolt Ampere (kVA)
1 kiloWatt (kW) = 1/0.746 Horse Power (HP)
1 Horse Power (1 HP) = 0.878 kiloVolt Ampere (kVA)

Fuel & Power Purchase Cost Adjustment (FPPCA)

Applicable as per JSERC (Terms and Conditions for Determination of Distribution Tariff) Regulations, 2015 and as amended by the Commission from time to time.

A 15 STATUS OF EARLIER DIRECTIVES

The Commission has time and again issued various directives in order to improve the functioning of the Petitioner. However, the Commission notes with concern that the Petitioner has repeatedly failed to comply with the directives of the Commission. The Commission as discussed earlier has already decided to withhold the liquidation of gap due to repeated non compliance and has directed the Petitioner to comply with the directives in its own interest.

Directives	Submission of the Petitioner	Views of the Commission
Abolishment of Un-metered Category		
The Commission observes that the Petitioner has not been able to comply with its self-declared target of December 2018. The Commission takes serious note of the same. The Commission however, provides final opportunity to the Petitioner to complete the metering of by June 2019 and submit the completion report by July 2019.	The Petitioner vide letter no. 1096/CE(C&R) dated September 12, 2019 and Petition in Case No. 20 of 2019 has sought an extension of the timeline for metering of un-metered consumers as provided in Tariff Order dated February 28, 2019. Vide the above communication, the Petitioner had informed the Commission that despite its best efforts, there were still ~4.75 lakh consumers which remained to be metered. JBVNL also requested the Commission to allow Tariff for the unmetered consumers which has been abolished from July 2019 as per the clause 16.1 of the Tariff Order dated February 28, 2019.	The Commission observes that the Petitioner has not been able to comply with its self-declared target of December 2018. The Commission takes serious note of the same. The Commission has therefore not approved billing to unmetered category.
Power Purchase Cell		
The Commission directs the Petitioner to form a dedicated power purchase cell with a high qualified team so that short term as well as long term power procurement of the Discom can be continuously monitored and the power procurement cost of the Utility can be optimised. The Commission also observes that the Petitioner has paid UI	JBVNL has already formed a Centralized Power Purchase Cell which is fully functional. The Power purchase cell has dedicated officers headed by General Manager (Commercial), 2-Dy. General Managers (ESEs), 2-Senior Managers (EEEs) and 4-Managers (AEEs). Further, in order to strengthen	The Commission has noted the submissions of the Petitioner and directs the Petitioner to expedite the process.

Directives	Submission of the Petitioner	Views of the Commission
charges, which may indicate non-optimum forecasting and planning on behalf of the Utility. Such power purchase cell shall aid the Utility in effective demand forecasting and planning. The Petitioner should finalize the agency and submit the compliance report by June 2019.	the Power Purchase Cell, the Petitioner is in process of procuring of specialized services with an integrated software based solution for forecasting, planning and procurement of power, under the World Bank Technical Assistance program. JBVNL had floated tender for the same, however none of the bidder was found to be eligible with respect to qualification requirement of the RFP document and the tender had to be cancelled in April, 2018. Thereafter two stage tendering process for the same has been re-initiated with an aim of optimum competition between available organizations rendering their services to utilities for power purchase optimization. The EOI and RFP stages have been completed. JBVNL has opened and evaluated the bids and has submitted its evaluation report to the World Bank. Upon approval, finalization and selection of consultants shall be completed.	
RPO Obligation		
The Commission direct the Petitioner to comply with the RPO Obligation by March 2019 for period till FY 2018-19 and submit the report by April 2019. The Petitioner is required to submit the quarterly report on RPO compliance for FY 2019-20. The Commission, in this Order has not imposed a penalty for	The Petitioner is getting power from solar plants having capacity of 26 MW since FY 2012-13. (10 MW from SECI and 16 MW from solar plants situated in state). JBVNL is also getting power from wind plants having capacity of 295 MW from August, 2018 onwards. Only 121 MW renewable	The Commission direct the Petitioner to comply with the RPO Obligation by August 2020 for period till FY 2019-20 and submit the report by September 2020. The Petitioner is required to submit the quarterly report on RPO compliance for FY 2020-21.

Directives	Submission of the Petitioner	Views of the Commission
non-fulfilment of RPO. The Commission may be constrained to levy penalty in future, if the Petitioner do not comply with the same. A monetary penalty may also be imposed on the Managing Director and/ or senior management of the Discoms, if the Commission deems so.	capacity was operationalized in FY 2018-19. The operationalized capacity may not suffice for meeting solar RPO of 5.50% and non-solar RPO of 4.50% as per JSERC (Renewable Energy Purchase Obligation and its compliance) Regulations, 2016 in FY 2018-19. JBVNL has only been able to purchase 0.3% of its power (excluding hydro power) from solar plants and 1% of its power (excluding hydro power) from non-solar renewable plants in FY 2018-19. **Steps taken for Complying with RPO** JBVNL is taking serious steps to comply with the RPO targets set as per the Regulations and directives of the Commission. As submitted in previous tariff petition in Case (Tariff) No.: 08 of 2018, JBVNL has tied up solar capacity of 700 MW from existing and upcoming solar parks of SECI, against the 520 MW capacity required to fulfil the RPO requirement (JBVNL is in process of filing Petition for approval of PPA). The capacity is expected to be operationalized by October, 2020. Besides above, floating solar plant of 150 MW (100 MW Getalsud Dam +50MW Dhurwa Dam) is presently under development. To comply with non-solar RPO, JBVNL has tied up capacity of 500 MW against 355 MW capacity required to comply with RPO.	The Commission, observes that the Petitioner has again not met RPO targets for FY 2018-19. In this Order the Commission has not imposed a penalty for non-fulfilment of RPO. The Commission may be constrained to levy penalty in future, if the Petitioner do not comply with the same. A monetary penalty may also be imposed on the Senior Management of the Discoms, if the Commission deems so.

Directives	Submission of the Petitioner	Views of the Commission
	As the Commission would appreciate that due to overcapacity (with respect to RPO trajectory) of renewable capacity being contracted/constructed, JBVNL would be in a position to clear its backlog of RPO for previous years including FY 2018-19 along with fulfilment of RPO of future years. The Petitioner submitted the RPO compliance report of Q1 and Q2 of FY 2019-20. The Petitioner would also be hence-forth submitting quarterly RPO compliance status to the Commission.	
Quality of Power/ Reliability Indices and Standard of Performance (SOP)		
The Commission directs the Petitioner to continue implementing SoP as per Standards of Performance as per the JSERC (Standards of Performance) Regulations, 2015 and report to the Commission as per Regulation. The Commission directs the Petitioner to ensure that the toll free number is available round the clock. It is the duty of the Petitioner to deploy adequate and qualified manpower in shift to attend consumers' complaints.	The Petitioner has tried in its best capacity to resolve consumer complaints as per timelines given in SoP Regulations. JBVNL has already submitted compliance with SoP as per formats given in JSERC SoP Regulations for first quarter of FY 2019-20 vide letter dated 1170 dated September 30, 2019. The Petitioner submitted SoP in format as per given format for Q2 of FY 2019-20. The Petitioner would also be hence-forth submitting quarterly SoP compliance status to the Commission regularly. The Petitioner would like to submit that toll free consumer helpline number is available round the clock for registering complaint and is adequately	The Commission directs the Petitioner to continue implementing SoP as per Standards of Performance as per the JSERC (Standards of Performance) Regulations, 2015 and report to the Commission as per Regulation. The Commission further directs the Petitioner to ensure that the toll free number is available round the clock. It is the duty of the Petitioner to deploy adequate and qualified manpower in shift to attend consumers' complaints.

Directives	Submission of the Petitioner	Views of the Commission
	staffed.	
Strengthening of Distribution Network		
The Commission has noted the submission made by the Petitioner on the Safety Manual. The Commission directs the Petitioner to follow the same to reduce accidents and also follow the continuous routine maintenance schedule for improved services to the consumers.	The Petitioner submitted that it is committed to ensure 100% safety for its employees at all levels and avoid any unfortunate events. To this effect, the Petitioner has implemented the safety manual rigorously. The Petitioner also submitted that it is making best endeavour to follow continuous routine maintenance schedule. Further, in order to ensure the maintenance standards are enhanced the Petitioner is in process of appointment of dedicated agencies for maintenance contract of 33/11 kV PSS and 33 kV Lines at Circle Level. Work shall be awarded in following 2 packages: • Maintenance work of 33/11kV PSS & 33kV Lines. • Maintenance work of 11/0.4kV DSS, 11kV Lines, LT lines & Disposal of Fuse Calls. Following Key activities shall be covered in scope of work of allotted Vendors: a) Preventive and Routine Maintenance b) Breakdown Maintenance c) Quick Restoration and Disposal of power Complaints For above activities material manpower, vehicle and other	The Commission observes that there have been several instances in the recent past of accidental deaths and injuries which continue to happed despite all tall claims of the Petitioner. It has further come to the notice of this Commission that even compensations are not been paid to the deceased/injured. The Commission has taken this issue very seriously and may be compelled to initiate suo-motu proceedings against concerned officers. Further, the Petitioner is directed to comply the JSERC (Compensation to Victims of Electrical Accidents) Regulations, 2018.

Directives	Submission of the Petitioner	Views of the Commission
	miscellaneous cost (PPE/Store, etc) has been considered in proposed O&M budget for FY 2019-20. After implementing the above activities, following key advantages shall come as outcome: • Improvement in Power Quality • Quick Restoration and Disposal of Complaints & Breakdown by maintaining SOPs • Healthy Monitoring of Infrastructure • Direct impact in improvement against Billing Collection • Compliance of O&M Cum Safety Manual to avoid Accidents	
Energy Audit & T&D Loss Reduction Plan		
The Commission directs the Petitioner in its earlier Order to conduct division-wise Energy Audit & prepare circle-wise T&D Reduction Plan and submit the same along with its progress to the Commission within six months of issue of this Tariff Order. The Commission also directs the Petitioner to submit sample energy audit report for transformers having different consumer mix along with action taken, if any, for reducing losses within six	In accordance with the directive issued by the Commission, the Petitioner submitted the sample energy audit report for transformers having different consumer mix. The Petitioner has prepared a detailed action plan for implementation of smart meters with capability of pre-paid mode across the State and the tender for Phase – I (Ranchi Circle, excluding Khunti Sub-division covering nearly 3.65 Lac consumers)	The Commission observes that the Report submitted have several data shortcomings. Further, with regards to detailed action plan the petitioner has not provided specific area/circle wise issues which needs to be taken care of. The Commission provides a final opportunity for the Petitioner to conduct proper division-wise Energy Audit & prepare circle-wise T&D

Directives	Submission of the Petitioner	Views of the Commission
months from the date of issuance of the order. The Commission infers that there is a huge gap in billing and collection efficiency based on the sample audit data submitted by the Petitioner. The Commission directs to submit the verified audit report on sample basis within 3 months from the date of issuance of this Order without any fail. The Commission also directs the Petitioner to move towards prepaid meters to improve the collection efficiency.	has been completed under the World Bank funding program and award process is underway. Once the smart meters are installed, the dual objectives of installing pre-paid as well as smart meters shall be achieved. Phase II and Phase III of the program shall cover additional ~10 Lakh consumers.	Reduction Plan and submit the same along with its progress to the Commission within six months of issue of this Tariff Order. The Commission further observed that a formal report has not been submitted by the Petitioner along with the efforts made to reduce such losses. The Commission directs to submit the verified audit report on sample basis within 3 months from the date of issuance of this Order without any fail. The Commission also directs the Petitioner to move towards prepaid meters to improve the collection efficiency.
Interest on Consumer Security Deposit (CSD)		
The Commission takes note of the steps taken by the Petitioner. However, the Petitioner is yet to ensure that the interest is paid to all the consumers on the security deposits. The Commission directs the Petitioner to continuously update its data bases and submit the monthly compliance report to the Commission. The Petitioner is required to submit data related to total amount of consumer security received by the Petitioner, interest payable on consumer security deposit	The Petitioner has already submitted data related to total amount of consumer security received, interest payable on consumer security deposit and actual amount paid for FY 2019-20 till September 2019, during the State Advisory Committee Meeting held on November 5, 2019. The Petitioner would further submit data related to consumer security received, interest payable on consumer security deposit and actual amount paid for quarter ending December 2019 in January 2020.	The Commission notes that though the Petitioner has been booking Interest expenses on accrul basis only fraction of that amount is being distributed. The Petitioner is directed to put its efforts in providing the same on time else the Commission would be compelled to considere Interest expenses on paid basis. The Commission directs the Petitioner to ensure that the interest is paid to all the consumers on the

Directives	Submission of the Petitioner	Views of the Commission
and actual amount paid till date on quarterly basis to Commission.		security deposits and submit the monthly compliance report to the Commission. The Petitioner is directed to submit data related to total amount of consumer security received by the Petitioner, interest payable on consumer security deposit and actual amount paid till date on quarterly basis to Commission.
Segregation into Retail & Wheeling Supply of Business		
According to the Regulation 5.4 of the JSERC Distribution Tariff Regulations 2015, separate accounting has to be done for Wheeling & Retail supply of Business which has not been the case till now. As per Regulation 5.5 of JSERC Distribution Tariff Regulations 2015, until the time accounts are not segregated an Allocation Statement shall be prepared and submitted to apportion the costs and revenues after the approval of the Board of Directors. The Commission strictly directs the Petitioner to prepare the FAR and submit the same before Commission. The Commission directs the Petitioner to submit the same within six months from the date of this Order.	The Petitioner has submitted the segregated ARR towards wheeling and retail business as per the JSERC Power Regulatory Accounting Regulations 2016 and the segregated accounts based on appropriate assumptions and duly approved by the Board of Director shall be submitted subsequently. It is understood that segregation of accounts into wheeling and retail would require the drawing of Fixed Asset Register, without which 100% accuracy in such segregation may not be feasible. Hence Petitioner is in process of appointment of agency for preparation of FAR. It is expected that consultant for preparation of FAR would be appointed by end of January 2020 and the work shall initiate from February 2020 onwards, with a completion target timeline of 18 months.	The Commission again notes non compliance in this regard and directs the Petitioner to stick to its self declared timelines.

Directives	Submission of the Petitioner	Views of the Commission
Actual Supply Hours in Rural Areas		
The Petitioner is directed to comply with the SOP and submit the monthly report in the prescribed formats.	The Petitioner has submitted SoP in format as per given format for Q2 of FY 2019-20.	The Commission notes the compliance of the Petitioner. The Petitioner is directed to comply with the SOP and submit the monthly report in the prescribed formats.
Voltage wise- Cost of Supply		
The Commission directs the Petitioner to carry out a detailed technical study on voltage wise losses on Distribution network and furnish a report within 3 months from the date of issuance of this Order.	The Petitioner has conducted Voltage-Wise Cost of Supply and has submitted report on the same. Detailed Technical study on voltage wise losses on Distribution network is submitted along with the Petition. The Petitioner has also submitted the assumptions made for calculation of the VCoS.	The Commission has noted the submissions of the Petitioner. The Petitioner is directed to submit the complete study along with all its annexures and clear methodology used for calculation of VCoS within 1 month from the date of issue of this Order.
Wheeling Charges		
The Commission directs the Petitioner to prepare the FAR and submit detailed calculation for voltage wise wheeling charge in the next tariff petition.	JBVNL in compliance of the directive has issued NIT No. 127/PR/JBVNL/18-19 regarding consultancy services for preparation of FAR For JBVNL. Techno-commercial Bids received against the said Tender have been opened and are undergoing evaluation. It is expected that consultant for preparation of FAR would be appointed by end of January 2020 and the work shall initiate from February 2020 onwards, with a completion target timeline of 18 months.	The Commission observes the persistence in delay in execution of the current directive and directs the Petitioner strictly to prepare the FAR and submit detailed calculation for voltage wise wheeling charge.
Theft of Electricity		
The Commission directs the Petitioner to develop web based application where anyone can upload a picture or provide information about power theft. The Petitioner may also develop a suitable	The Petitioner submitted that it is committed to ensure that the incidence of theft and pilferages are contained. Massive raids are being conducted regularly and FIRs are being lodged against theft	The Commission notes the various steps taken by the Petitioner. The Commission also raised the concern that the Petitioner is not able to comply with the AT&C

Directives	Submission of the Petitioner	Views of the Commission
scheme for rewarding the people who provide credible/actionable information of power theft.	of electricity. The Petitioner has provided several modes for the consumers to report cases related to theft like • Written complaints • Jan Samwad • JBVNL website • Customer Care Centres • Social Media platforms like Facebook and Twitter. Additionally, JBVNL has also made a provision of award of Rs 100/ to Urja Mitras, appointed by Billing agencies for reporting of Theft cases detected by them. In FY 2019-20 (Till September, 2019) total 10,910 nos. raids have been conducted which has resulted in 2018 FIRs being lodged for theft or improper use of electricity. Further a fine of Rs 5.86 Crore have been imposed for such cases.	loss levels set by the Commission in its MYT Order. The Commission directs the Petitioner to continue doing such activities to curb the AT&C losses and bring it down to the levels as set by the Commission.
Employee Performance Appraisal		
The Commission observes that the Petitioner has made some interim arrangement. The Commission directs the Petitioner to develop an arrangement whether the quality of supply can be objectified into performance indicators and for an area is linked to respective Officers. The Petitioner to submit the compliance report in 3 months	The Petitioner submitted that a revamped organization structure was approved by the Board of Directors in June 2018. In line with the revised organization structure, JBVNL is in process of revising the HR policies for its organization, keeping the long term organizational goal in view. The proposed Policies are also being developed to address the issue of legacy Employee	The Commission observes that its been two years since approval of BoD and till date every thing is on paper and nothing has been completed. Further, the Petitioner is not even submitted any report in this regard to the Commission. The Commission directs the Petitioner to expedite

Directives	Submission of the Petitioner	Views of the Commission
from the date of issue of this order.	Performance Management System, which shall be replaced with performance driven parameters/KPIs such as service quality, AT&C loss reduction and revenue enhancement for monitoring the performance of the employees. Further to operationalize the organizational structure and Performance Management System, JBVNL is in process of appointment of consultancy agency. The project is funded by World Bank as part of Jharkhand Power System Improvement Project.	the process at the earliest.
Capacity Building of Employees		
The Commission directs the Petitioner to ensure such capacity building program should be conducted on regular basis and submit details of such workshops undertaken along with the next Tariff Petition.	The Petitioner has conducted intensive workshop for AEE level employees at its headquarters from August 5, 2019 to August 9, 2019. In the workshop, the employees were given training on JSERC Terms and Conditions of determination of distribution tariff, 2015 JSERC Supply Code Regulations, 2015. An evaluation test was also conducted to assess understanding of the employees. Going forward, several such workshops are being planned and it shall also be instituted as part of performance management system for employees.	The Commission takes note of the compliance of the directive. However, the Commission directs the Petitioner to ensure such capacity building program should be conducted on regular basis and submit details of such workshops undertaken along with the next Tariff Petition.
Monitoring of Compliance to Directives		
The Commission observes that the Petitioner has not been prompt in complying with the directions of the Commission	The Petitioner has been prompt in complying with all directives of the Commission. However, in wake of some	The Commission observes that the Petitioner has not been prompt in complying with the directions of the

Directives	Submission of the Petitioner	Views of the Commission
and several directions are yet to be complied with even after repeated reminders. The Commission directs the Petitioner to strictly comply with the directions of the Commission and regularly apprise the Commission on the compliances.	constraints, it has not been able to fully comply with all directives of the Commission, but is making effort in that direction. The Petitioner would further also endeavour towards fulfilling all directives of the Commission.	Commission and several directions are yet to be complied with even after repeated reminders. The Commission directs the Petitioner to strictly comply with the directions of the Commission and regularly apprise the Commission on the compliances.
Investment in Cyber Security Solutions		
The Petitioner is required to submit the implementation and completion report of ERP Implementation. The Petitioner should further submit the quarterly status report of implementation of Integrated Technology Roadmap - IT/OT Feasibility.	The Petitioner is currently undergoing major reforms using Information Technology as the key enabler for improving revenue collection, Optimizing Utility operations, minimizing AT&C losses, proper energy accounting and efficient consumer services. Further, in order to implement the cyber security solutions in IT, Petitioner has already prepared an IT Roadmap which summarizes the "Integrated Technology Roadmap - IT/OT Feasibility" study conducted by the TATA Power Delhi Distribution Ltd. The IT Roadmap has already been submitted. Further, JBVNL is currently exploring the below mentioned steps for building and scaling of its cyber-defence capabilities: • Investigate a platform approach to cybersecurity capabilities	The Commission again observes that everything is on still under planning stages with little work on ground. The Commission directs the Petitioner to start executing the plans/road maps charted out.

Directives	Submission of the Petitioner	Views of the Commission
	• Integrate resilience into asset and process design • Share threat information • Develop Security and Emergency management governance models.	
Quarterly forecast of the Quantum of Short Term Power to be purchased		
The Commission directs the Petitioner to submit the rolling quarterly forecast of the quantum of short term power to be purchased in FY 2019-20 as per Regulation 5.20 of the Distribution Tariff Regulations, 2015.	There has been no agreement with any generator or trader for purchase of short term power. The purchase of power from IEX through PTC (as a client member) is the Spot Power procured on day-ahead basis or term-ahead basis to meet the immediate requirement arising out of demand and supply imbalances such as forced shut down of any generating unit or spike/fall in demand due to weather conditions. Since it is not possible to predict such scenarios (shutdown of any power plant, spike/fall in power demand etc) in advance, it may not be possible to submit rolling forecast of short term power to be purchased. JBVNL has already submitted detail of short-term power procured from IEX through PTC on day-ahead basis or term-ahead basis till June 15, 2019. Detail of short-term power purchase from July 1, 2019 to September 30, 2019 is also submitted with the Petition.	The Petitioner has again failed to submit its forecast. The Commission directs the Petitioner to submit the rolling quarterly forecast of the quantum of short term power to be purchased in FY 2020-21 as per Regulation 5.20 of the Tariff Regulations, 2015.
Submission of PPA		
The Petitioner needs to optimise its power purchase	The Petition for approval of PPA with DVC has been	The Commission takes note of the compliance of

Directives	Submission of the Petitioner	Views of the Commission
cost. It is required to get all PPAs approved by the Commission. The Commission has noticed that the PPA with DVC is yet to be approved by the Commission. The therefore Commission directs the Petitioner to apply for approval of the PPA with DVC to the Commission within 1 month of the issue of this Order. The Commission has considered the power purchase from DVC (Koderma) as a Generator provisionally and shall approve the same subject to approval of the PPA.	submitted to the Commission vide letter no. 778/CE (C&R) dated June 25, 2019. The same has been listed as case no. 13 of 2019 by the Commission.	the directive.
Computation of SAIDI		
The Petitioner shall compute SAIDI on quarterly basis starting from the first quarter of FY 2019-20 and submit the report before the Commission by first week of the following quarter and also publish it on its website as it indicates the average hours of supply available to the consumers. The Commission has considered 20 hours of supply for recovery of the entire fixed charges. Considering 20 hours of supply the SAIDI should not exceed 4 hrs per day on an average basis. If SAIDI exceeds 4 hrs for the quarter on average basis, the fixed charges for the consumers shall be pro-rata reduced in the following manner. FCr = FC x (20-Y)/20	The Petitioner has calculated SAIDI for Q1 and has already submitted to the Commission in State Advisory Committee meeting held on November 5, 2019. Since the SAIDI for the whole state is greater than 20 hours; there has been no requirement for reduction in fixed charges for the consumers. The Petitioner has also submitted the methodology utilised for calculation of SAIDI vide its Reply dated March 12, 2020.	The Commission has noted the submission made by the Petitioner and is of the view that SAIDI should be calculated based on data from a representative mix of urban, rural and agriculture feeders. The Commission directs the Petitioner to submit the quarterly report on calculation of SAIDI with the details of feeders utilised for calculation of the same to the Commission and update the same in its website.

A 16 DIRECTIVES

Abolishment of Un-metered Category

16.1 The Commission observes that the Petitioner has not been able to comply with its self-declared target of December 2018. The Commission takes serious note of the same.

16.2 The Commission, however, considering the pandemic situation prevailing since March 2020, provides last opportunity to the Petitioner to get all its unmetered consumers metered by December 31, 2020. The Petitioner shall not be allowed to bill any unmetered consumers from January 01, 2021. The Commission however, provides final opportunity to the Petitioner to complete the metering of by December 2020 and submit the completion report by December 31, 2020.

Power Purchase Cell

16.3 The Commission observes that the response of the Petitioner towards the process for selection of the Agency has been negligent at the outset and urges the Petitioner to fast track the appointment of the Agency for efficient reduction in the Power Purchase Cost.

RPO Obligation

16.4 The Commission direct the Petitioner to comply with the RPO Obligation by August 2020 for period till FY 2019-20 and submit the report by September 2020. The Petitioner is required to submit the quarterly report on RPO compliance for FY 2020-21.

16.5 The Commission, in this Order has not imposed a penalty for non-fulfilment of RPO. The Commission may be constrained to levy penalty in future, if the Petitioner do not comply with the same. A monetary penalty may also be imposed on the Managing Director and/ or senior management of the Discoms, if the Commission deems so.

Quality of power/Reliability Indices and Standard of Performance (SOP)

16.6 The Commission directs the Petitioner to continue implementing SoP as per Standards of Performance as per the JSERC (Standards of Performance) Regulations, 2015 and report to the Commission as per Regulation.

16.7 The Commission directs the Petitioner to ensure that the toll free number is available round the clock. It is the duty of the Petitioner to deploy adequate and qualified manpower in shift to attend consumers' complaints.

Strengthening of Distribution Network

16.8 The Commission directs the Petitioner to submit the Cost Benefit Analysis of the Investments proposed along with Quarterly Reports on the Reduction of Accidents due to implementation of the schemes proposed by the Petitioner. Further, the Commission has observed that the Petitioner has neither complied to the provisions of JSERC (Compensation to Victims of Electrical Accidents) Regulations, 2018, nor has provided compensation as per the Regulations. Hence, the Commission has taken this Non-Compliance seriously and directs the Petitioner to comply to the abovementioned Regulations meticulously.

Energy Audit & T&D Loss Reduction Plan

16.9 The Commission observes that the Petitioner has been consistently sidestepping the directions of the Commission for compliance of the directives on Energy Audit and T&D Loss Reduction Plan. The Commission provides a final opportunity for the Petitioner to conduct division-wise Energy Audit & prepare circle-wise T&D Reduction Plan and submit the same along with its progress to the Commission within six months of issue of this Tariff Order.

16.10 The Commission has observed that a formal report has not been submitted by the Petitioner along with the efforts made to reduce such losses.

16.11 The Commission directs to submit the verified audit report on sample basis within 3 months from the date of issuance of this Order without any fail.

16.12 The Commission also directs the Petitioner to move towards prepaid meters to improve the collection efficiency.

Interest on Consumer Security Deposit

16.13 The Commission has noted that the Petitioner has not made any official submissions on the issue to the Commission and directs the Petitioner to ensure that the interest is paid to all the consumers on the security deposits and submit the monthly compliance report to the Commission.

16.14 The Petitioner is required to submit data related to total amount of consumer security received by the Petitioner, interest payable on consumer security deposit and actual amount paid till date on quarterly basis to Commission.

Segregation into Retail & wheeling supply of business

16.15 According to the Regulation 5.4 of the Tariff Regulations 2015, separate accounting has to be done for Wheeling & Retail supply of Business which has not been the case till now. As per Regulation 5.5 of Tariff Regulations 2015, until the time accounts are not segregated an Allocation Statement shall be prepared and submitted to apportion the costs and revenues after the approval of the Board of Directors.

16.16 The Commission strictly directs the Petitioner and directed to prepare the FAR and submit the same before Commission along with the MYT Petition.

Actual Supply Hours in Rural Areas

16.17 The Petitioner is directed to comply with the SOP and submit the monthly report in the prescribed formats.

Voltage Wise-Cost of Supply

16.18 The Commission has noted the submissions of the Petitioner. The Petitioner is directed to submit the complete study along with all its annexures and clear methodology used for calculation of VCoS within 1 month from the date of issue of this Order.

Wheeling Charges

16.19 The Commission observes the persistence in delay in execution of the current directive and directs the Petitioner strictly to prepare the FAR and submit detailed calculation for voltage wise wheeling charge in the MYT Petition.

Theft of Electricity

16.20 The Commission raised the concern that the Petitioner is not able to comply with the AT&C loss levels set by the Commission in its MYT Order. The Commission directs the Petitioner to continue doing such activities to curb the AT&C losses and bring it down to the levels as set by the Commission.

Employee Performance Appraisal

16.21 The Commission observes that the Petitioner is yet to submit any report in this regard to the Commission. The Commission observes that the Petitioner has made some interim arrangement. The Commission directs the Petitioner to develop an arrangement whether the quality of supply can be objectified into performance indicators and for an area is linked to respective Officers. The Petitioner to submit the compliance report in 3 months from the date of issue of this order

Capacity Building of Employees

16.22 The Commission directs the Petitioner to ensure such capacity building program should be conducted on regular basis and submit details of such workshops undertaken along with the next Tariff Petition.

Monitoring of Compliance to Directives

16.23 The Commission observes that the Petitioner has not been prompt in complying with the directions of the Commission and several directions are yet to be complied with even after repeated reminders.

16.24 The Commission directs the Petitioner to strictly comply with the directions of the Commission and regularly apprise the Commission on the compliances.

Quarterly forecast of the Quantum of Short Term Power to be purchased

16.25 The Commission observes that the Petitioner has not submitted the rolling quarterly forecast of the Short Term Power to be purchased as directed by the Commission vide its previous Order dated February 28, 2019. Hence, the Commission directs the Petitioner to submit the rolling quarterly forecast of the quantum of short term power to be purchased in FY 2020-21 as per Regulation 5.20 of the Tariff Regulations, 2015.

Conversion of UDAY Loan into Grant/Equity

16.26 The Commission directs the Petitioner to expedite the conversion of State Government loan into grant/ equity as per the agreed UDAY MoU.

Computation of SAIDI

16.27 SAIDI should be calculated based on data from a representative mix of urban, rural and agriculture feeders. The Commission directs the Petitioner to submit the quarterly report on calculation of SAIDI with the details of feeders utilised for calculation of the same to the Commission and update the same in its website.

Consumer Awareness Programmes

16.28 The Commission directs the Petitioner to improve the Consumer Awareness Programme to enhance awareness of the consumers Electricity Tariffs, Standards of Perfromance and Other Regulations as applicable.

Submission of impact analysis and requisite data along with proposal for introduction of ToD Tariff

16.29 The Commission directs the Petitioner to submit the load curves for days with maximum peak demand and minimum peak demand for each month of FY 2019-20 and April 2020 to September 2020 along with its technical preparedness for implementation of ToD Tariffs while submitting the Business Plan and MYT Petition for FY 2021-22 to FY 2025-26.

Publicising Tariff Approved by the Commission

16.30 The Commission directs the Petitioner to submit a draft Notice to the Commission on the Tariff Approved by the Commission along with the Terms and Conditions of Supply for approval and publishing in the newspapers within a week of issue of this Order for enhancing consumer awareness of the applicable Rate Schedule and salient features of the Order impacting general consumers in the Licensee area.

Reduction in Fixed Charges

16.31 The Commission directs the Petitioner to submit a report on implementation of the reduction in Fixed Charges based on billing hours for all categories except LT - Domestic, within 30 days of issue of this Order and implement the same from the subsequent billing cycle following the issuance of this Order. With regard to LT-Domestic category, the Commission directs the Petitioner to implement the same from January 01, 2021.

This Order is signed and issued by the Jharkhand State Electricity Regulatory Commission on October 01, 2020.

It is made clear that the Order regarding revision of tariff shall come into effect from October 01, 2020 and shall remain in force till the next order of the Commission to this regard.

Date: 01.10.2020
Place: Ranchi

Sd/-	**Sd/-**
(Pravas Kumar Singh)	**(Rabindra Narayan Singh)**
MEMBER (Legal)	**MEMBER (Engg.)**

ANNEXURES

Annexure-1: List of participating members of public in the public hearing

Sr. No.	Name	Address/Organization
		Date: August 20, 21 & 24, 2020, 2:30 PM
1.	Yogesh Manek	Director, Chintpurni Steel Pvt. Ltd.
2.	Anjay Pacheriwal	Secretary, Jharkhand Small Industries Association
3.	Anurag Singhania	Director, Chintpurni Steel Pvt. Ltd.
4.	Kesav Agarwal	Director, Chintpurni Steel Pvt. Ltd.
5.	Hari Budhia	CEO, Chintpurni Steel Pvt. Ltd.
6.	Bhushan Rastogi	Consultant, Chintpurni Steel Pvt. Ltd.
7.	Jayesh Chauhan	Consultant, Chintpurni Steel Pvt. Ltd.
8.	Priyami Dutta	Consultant, Chintpurni Steel Pvt. Ltd.
9.	Shreekant Dhuri	Consultant, Chintpurni Steel Pvt. Ltd.
10.	Ashish Agarwal	Tandt Metal Pvt. Ltd.
11.	Alok Mallik	Federation of Jharkhand Chamber of Commerce & Industries
12.	N. K. Patodia	Vice President, Usha Martin Limited, Tatisilway, Ranchi
13.	Binod Tulsyan	Energy Sub-Committee, FJCCI
14.	Tapas Biswas	Times of India
15.	Chandan Kumar	Public/Stakeholder
16.	Suman Shekhar	Public/Stakeholder
17.	Rikesh Kumar	Public/Stakeholder
18.	Subhash Mandal	Public/Stakeholder
19.	Prabhat Kumar	Hariom Apartment, Hariharsingh Road, Ranchi
20.	Ajay Bhandari	President, Tupudana Industries Association
21.	Shivcharan Sharma	Tupudana Industries Association
22.	Philip Mathews	MD, Manglam Lubricants Pvt. Ltd.
23.	CA Satya N. Prasad	202, Max Complex, Ranchi
24.	Mohit Bhardwaj	Consultant, JBVNL
25.	Rishi Nandan	GM (Coml.), JBVNL
26.	Manprit Singh	Consultant, JBVNL
27.	Anita Prasad	JBVNL
28.	Vibha Kumari	JBVNL
29.	Mahesh Sonthalia	Public/Stakeholder
30.	Sachin Poddar	Gajanan Ferro Pvt. Ltd.
31.	Jitendra Kumar Agarwal	RP Cylinders Pvt. Ltd.
32.	Harsh Kansal	Galaxy Steel Pvt. Ltd.
33.	Shivesh Jaiswal	Maker Casting Pvt. Ltd.
34.	Gautam Jalan	Madhura Ingot & Steel Pvt. Ltd.
35.	Amar Kansal	Public/Stakeholder
36.	Er. K. K. Singh	Director, HEC
37.	Kailash Kumar Mahto	Public/Stakeholder

Sr. No.	Name	Address/Organization
38.	R. N. Sharma	Deoghar
39.	Deepak Kumar Maroo	Public/Stakeholder
40.	Nirmal Jhunjhunwala	Gridih District Chamber of Commerce
41.	R. P. Sahi	Public/Stakeholder
42.	Hemlata Oraon	Chanho, Ranchi
43.	Dheeraj Lohra	Public/Stakeholder
44.	Prasuram Prasad	Public/Stakeholder
45.	Omprakash Singh	Public/Stakeholder
46.	Bablu Jaiswal	Maker Casting Pvt. Ltd.
47.	T and T Metal Pvt. Ltd	Public/Stakeholder
48.	Ujjawal Agarwal	Vaishnavi Steel Pvt. Ltd.
49.	Birsa Oraon	Chachkapi, Bero, Ranchi
50.	Mireel Minz	Chachkapi, Bero, Ranchi
51.	Vikash Minz	Chachkapi, Bero, Ranchi
52.	Jitendra Minz	Chachkapi, Bero, Ranchi
53.	Etga Oraon	Chachkapi, Bero, Ranchi
54.	Gulshan Minz	Chachkapi, Bero, Ranchi
55.	Jage Minz	Chachkapi, Bero, Ranchi
56.	Santosh Minz	Chachkapi, Bero, Ranchi
57.	Punia Oraon	Chachkapi, Bero, Ranchi
58.	Jhirga Oraon	Chachkapi, Bero, Ranchi
59.	Bishnath Minz	Chachkapi, Bero, Ranchi
60.	Sangam Minz	Chachkapi, Bero, Ranchi
61.	Birsa Minz	Chachkapi, Bero, Ranchi
62.	Kuldeep Tirki	Chachkapi, Bero, Ranchi
63.	Jorj Minz	Chachkapi, Bero, Ranchi
64.	Manjari Oraon	Chachkapi, Bero, Ranchi
65.	Sukra Minz	Chachkapi, Bero, Ranchi
66.	Mangri Minz	Chachkapi, Bero, Ranchi
67.	Etga Tirki	Chachkapi, Bero, Ranchi
68.	Jatri Oraon	Chachkapi, Bero, Ranchi
69.	Jitesh Minz	Chachkapi, Bero, Ranchi
70.	Gudhwa Minz	Chachkapi, Bero, Ranchi
71.	Sangita Tirki	Chachkapi, Bero, Ranchi
72.	Somma Oraon	Chachkapi, Bero, Ranchi
73.	Md. Raees	Chachkapi, Bero, Ranchi
74.	Shanti Oraon	Chachkapi, Bero, Ranchi
75.	Majlum Mallik	Chachkapi, Bero, Ranchi
76.	Titia Oraon	Chachkapi, Bero, Ranchi
77.	Lodo Minz	Chachkapi, Bero, Ranchi
78.	Suman Minz	Chachkapi, Bero, Ranchi
79.	Ranjan Pradeep	Public/Stakeholder

Sr. No.	Name	Address/Organization
80.	Kishor	Chanho, Ranchi
81.	Dheeeraj Kachhap	Chanho, Ranchi
82.	Shiva Kumar Singh	Public/Stakeholder
83.	Kedar Nath Das	Public/Stakeholder
84.	Omprakash	Chanho, Ranchi
85.	Vivek Jay	Public/Stakeholder
86.	Shreekant Ambasth	Public/Stakeholder
87.	Abhishek	Public/Stakeholder

Annexure-2: Minutes of Meeting (MOM) of the SAC Meeting

दिनांक 08.09.2020 को संपन्न हुए राज्य सलाहकार समिति की बैठक की कार्यवृत्ति

राज्य सलाहकार समिति की बैठक श्री रवीन्द्र नारायण सिंह, माननीय सदस्य (तकनीकी), झारखण्ड राज्य विद्युत नियामक आयोग, राँची की अध्यक्षता में दिनांक 08.09.2020 को आयोग के सभाकक्ष में विडियो कॉन्फ्रेंसिंग के माध्यम से संपन्न हुई । इस बैठक में राज्य सलाहकार समिति के निम्नांकित सदस्यों/सदस्यों के प्रतिनिधियों ने भाग लिया :-

क्र० सं०	सदस्यों के नाम	सदस्य/ प्रतिनिधि
1	श्री प्रवास कुमार सिंह, माननीय सदस्य (विधि), झारखण्ड राज्य विद्युत नियामक आयोग, राँची।	सदस्य
2	श्री ऋषी नंदन, महाप्रबंधक (वाणिज्य), झारखण्ड बिजली वितरण निगम लिमिटेड, अभियंत्रण भवन, एच०ई०सी०, धुर्वा, राँची।	प्रतिनिधि
3	श्री विश्वजीत कुमार, टाटा स्टील लिमिटेड, जमशेदपुर ।	प्रतिनिधि
4	श्री अजय भंडारी, फेडरेशन ऑफ झारखण्ड चैम्बर ऑफ कॉमर्स एण्ड इंडस्ट्री, राँची श्री बी०के० तुलस्यान, फेडरेशन ऑफ झारखण्ड चैम्बर ऑफ कॉमर्स एण्ड इंडस्ट्री, राँची	प्रतिनिधि
5	श्री अंजय पचेरीवाला, सचिव, झारखण्ड स्मॉल इन्डस्ट्रीज एशोसिएशन, राँची।	प्रतिनिधि
6	श्री विजय प्रकाश सिंह, प्रबंधक, टाटा स्टील यूटिलिटीज एण्ड इंफ्रास्ट्रक्चर सर्विसेज लिमिटेड, जमशेदपुर ।	प्रतिनिधि
7	श्री आलोक मल्लिक, लोक प्रेरणा समाधान, देवघर	सदस्य
8	श्रीमती हेमलता उराँव, ग्राम-मुर्तो,पी०एस०- चान्हों, राँची।	सदस्य
9	श्री आर०एन० शर्मा, महासचिव, संथाल परगना स्मॉल इंडस्ट्रीज एसोसिएशन, देवघर ।	सदस्य
10	प्रोफेसर श्री एस० के० समदर्शी, विद्युत अभियंत्रण विभाग, केन्द्रीय विश्वविद्यालय, ब्राम्बे, राँची, झारखण्ड।	विशेष आमंत्रितसदस्य
11	प्रोफेसर सुश्री साक्षी, भारतीय प्रबंधन संस्थान, राँची ।	प्रतिनिधि

सर्वप्रथम माननीय सदस्य (तकनीकी), श्री रवीन्द्र नारायण सिंह महोदय ने राज्य सलाहकार समिति के सदस्यों को संबोधित करते हुए कहा कि आप सबों के सहयोग से हमलोग JBVNL के टैरिफ निर्धारण के अंतिम चरण में पहुँच गये हैं ।

उन्होंने सदस्यों से आग्रह किया कि सबों के हितों को ध्यान में रखकर अपना सुझाव दें ताकि हमें समुचित निर्णय लेने में सुविधा हो ।

तत्पश्चात जे0बी0वि0एन0एल0 के महाप्रबंधक (वाणिज्य) श्री ऋषी नंदन ने पीपीटी (प्रतिलिपि संलग्न) के माध्यम से एजेंडा का प्रस्तुतीकरण किया ।

तत्पश्चात **श्री विश्वजीत कुमार, टाटा स्टील लिमिटेड, जमशेदपुर** के प्रतिनिधि ने One state one Tariff के संबंध में कहा कि यह अच्छा सुझाव है लेकिन इसे लागू करने में कुछ परेशानियाँ आ सकती हैं जैसे कि अलग-अलग लाइसेंसी का Cost Structure अलग-अलग होता है । उन्होंने कहा कि अलग-अलग लाईसेंसी का Load profile, Customer profile भी अलग-अलग होता है । इस कारण इसे लागू करने में कठिनाई हो सकती है । उन्होंने Tariff determination based on cost of supply at the voltage level के संबंध में कहा कि यह अच्छा सुझाव है । इस पर हम सबों को काम करना चाहिए और इस पर हमसे जो सहयोग हो सकेगा हम करने के लिए तैयार हैं ।

Abolition of un-metered Tariff जहाँ भी मीटर नहीं लगा होता है उस तरह के टैरिफ सब कैटेगरी को हटा देने के संबंध में उन्होंने कहा कि कुछ कुछ जगह लोड बहुत कम होता है वैसी जगह जैसे - सीसीटीवी एवं Wi-fi कनेक्शन है वैसे जगहों पर मीटर का रेन्ट ही उसके के मासिक बिल से ज्यादा हो जाएगा । ऐसी जगहों को छोड़कर बाकी जगहों पर इसे उपयोग में लाया जा सकता है ।

Billing of the Domestic consumers on basis of Hours of power supply के संबंध उन्होंने कहा कि अगर इसे पूरी तरह से लागू किया जाता है तो सिस्टम चरमराने की संभावना है । जेनरेशन टैरिफ को भी देखा जाय तो पाते हैं कि अगर 85% भी जेनरेशन करते हैं तो 100% तक फिक्स चार्ज Recovery की छूट दी जाती है । अगर हमारा दृष्टिकोण इस प्रकार होगा तो किसी लाईसेंसी को दिक्कत भी नहीं होगी और रास्ता भी सुगम होगा जबकि इससे उपभोक्ताओं को ज्यादा से ज्यादा बिजली मिल सकेगी और अगर नहीं मिलता है तो इसके लिए लाईसेंसी ही उत्तरदायी होगा ।

Interest on security deposit के संबंध में उन्होंने कहा कि जैसा कि रेगुलेसन में भी दिया हुआ है कि सभी लाईसेंसी द्वारा वार्षिक स्तर पर Security deposit पर ब्याज देना उत्तम रहेगा ।

Non compliance on directives of the Commission के संबंध में उन्होंने कहा कि हमारा तो यही प्रयास रहता है कि आयोग के निर्देशों को पालन हो और अगर कहीं कमी रह जाती है तो हम इसको पूरा करने का हर संभव प्रयास करते हैं ।

Page **2** of **10**

मीटर रेन्ट के संबंध में उन्होंने कहा कि इसका एक पार्ट ARR से निकल जाता है तो फिर उपभोक्ताओं से इसका पैसा नहीं लिया जाना चाहिए । क्योंकि मीटर लग जाने के बाद मीटर मेंटेनेंस का भार लाईसेंसी का होता है । क्योंकि मीटर ही है जिसके आधार पर लाईसेंसी को बिल का भुगतान होता है ।

Load factor rebate के संबंध में उन्होंने कहा कि यह सबका एक समान करना मुश्किल है इसका सबसे बड़ा कारण यह है कि सबका Load profile एक जैसा नहीं होता है ।

Billing demand के संबंध में अपना सुझाव देते हुए उन्होंने कहा कि सभी उपभोक्ता चाहे वह LTIS, HTSS या DSHT है उनके लिए वैसा ही कर दिया जाय जैसा कि औद्योगिक उपभोक्ताओ के लिए करते हैं या फिर उनका जो मैक्सिमम डिमांड है दोनों में से जो ज्यादा होता है उसके आधार पर डिमांड चार्ज लिया जा सकता है ।

Additional demand charge के संबंध में उन्होंने कहा कि यह काफी अच्छा सुझाव है । और हमें इस दिशा में काम करना चाहिए ।

Introduction of Quality Power Regulations के संबंध में उन्होंने कहा कि यह एक सार्थक और दूरगामी प्रभाव लाने वाला सुझाव है । लेकिन इसके लिये जो मूलभूत सुविधायें चाहिए, उसको किस तरह से लागू करेंगे उसका रोडमैप होना चाहिए और इस पर हमें सोच विचार कर कमबद्ध तरीके से आगे बढ़ना चाहिए ताकि लाईसेंसी पर भी कोई असर न पड़े और उपभोक्ताओं को भी फायदा हो ।

तत्पश्चात **श्री अजय भंडारी, फेडरेशन ऑफ झारखण्ड चैम्बर ऑफ कॉमर्स एण्ड इंडस्ट्री, राँची** ने कहा कि वर्तमान में लाईसेंसी के साथ–साथ पावर सेक्टर को भी बचाने की जरूरत है क्योंकि वर्तमान में लाईसेंसी को बचाने के क्रम में पावर सेक्टर की स्थिति एकदम चरमरा गयी है । उन्होंने One State One Tariff के संबंध में कहा कि यह अच्छा प्रस्ताव है लेकिन JBVNL वर्तमान में इसे लागू करना मुश्किल है ।

Average cost of supply के संबंध में उन्होंने कहा कि JBVNL ने जो एकाउंट प्रस्तुत किया है वह संदेहास्पद है इसलिए उसे Unqualified Audit Report कहा जा सकता है । जब इनका Accounting System ही सही नहीं है तो ये Average cost of supply निकालेंगे कैसे और जब तक ये Average cost of supply की गणना नहीं कर सकते हैं तब तक One State One Tariff वाली बात बेमानी लगती है । उन्होंने कहा कि हमारा प्रयास यह रहना चाहिए कि लाईसेंसियों को आपस में प्रतिस्पर्धा रहे ताकि उपभोक्ताओं को गुणवत्तापूर्ण बिजली की आपूर्ति हो सके । पहले

Page **3** of **10**

JBVNL अपना Accounts को सुधारें क्योंकि Average cost of supply पर ही सब कुछ निर्भर करता है। जब तक इनका Accounting system नहीं सुधरेगा तब तक टैरिफ पर चर्चा करना ही बेमानी सा लगता है ।

Voltage wise cost of supply के संबंध में उन्होंने कहा कि टैरिफ को अलग–अलग श्रेणी के Cost of supply से जोड़ने का तरीका गलत है । उन्होंने यह भी कहा कि शहरी क्षेत्र में भी ये सही प्रकार से बिलिंग नहीं कर पाते हैं । इनकी Inefficiency के कारण इन पर लगा हुआ पेनाल्टी और इनके घाटे का बोझ भी ईमानदार उपभोक्ता से ही वसूला जाता है । इन्होंने Security deposit पर ब्याज नहीं मिलने की भी बात कही ।

श्री बी०के० तुलस्यान ने Billing of Domestic Consumers on basis of Hours of Supply के संबंध में कहा कि यह प्रस्ताव बढिया है और यह घरेलू उपभोक्ता के साथ–साथ सभी उपभोक्ताओं को उपलब्ध कराया जाना चाहिए बशर्ते कि लाईसेंसी सक्षम मीटर स्थापित करने की स्थिति में हो ।

Demand based billing for Commercial Consumers के संबंध में उन्होंने कहा कि वर्तमान में Installation based एवं Demand based दोनों का प्रावधान होना चाहिए क्योंकि Demand based में Convert करने में लाईसेंसी को समय लगेगा और इसके लिये लाईसेंसी को समय–सीमा के अंदर इस कार्य को करने का निर्देश दिया जाय और तब तक के लिए Installation based और Demand based दोनों टैरिफ का प्रावधान किया जाना चाहिए ।

Categorization of Consumers having Contract Demand below '5 kW' के संबंध में उन्होंने 2 kW के Load की सिफारिश की ।

Interest on security deposit पर JBVNL के रवैये पर चिंता जाहिर की और कहा कि पदाधिकारियों की लापरवाही से हुए नुकसान के लिए उनकी जिम्मेवारी तय की जाय और उन पर आर्थिक दण्ड का प्रावधान होना चाहिए जो कि उनके द्वारा ही वहन किया जाना चाहिए न कि लाईसेंसी के द्वारा ।

Non Compliance of directive of the Commission के संबंध में उन्होंने कहा कि लाईसेंसियों के द्वारा आयोग के निर्देशों का पालन नहीं करना चिंता का विषय है ।

Load factor rebate के संबंध उन्होंने कहा कि संसाधनों के बेहतर इस्तेमाल के लिए Load factor rebate को होना आवश्यक है । अभी यह सिर्फ HT consumers को मिल रहा है लेकिन यह सभी उपभोक्ताओं को मिलना चाहिए ।

Additional demand charges के संबंध में उन्होंने कहा कि जब उपभोक्ता का लोड Contract demand से बढ़ जाता है तो Demand charge पर दण्ड लगाया जाता है । लेकिन यह दण्ड Energy charge पर भी लगाने का प्रस्ताव दिया गया है जो कि उचित नहीं जान पड़ता है ।

अंत में उन्होंने कहा कि Covid 19 का दुष्प्रभाव अभी लंबे समय तक चलने की संभावना है इस कारण उद्योग एवं व्यवसाय बहुत अधिक प्रभावित है इसलिए बिजली के दरों में कोई भी बढ़ोत्तरी नहीं की जाय ।

श्री अंजय पचेरीवाला ने कहा कि आज की स्थिति में जब तक Alternate licensee का प्रावधान नहीं होगा तब तक बिजली की स्थिति में सुधार करना मुश्किल है । JBVNL का सारा प्रस्ताव एकतरफा है । ये कहीं भी यह आश्वस्त नहीं करते हैं कि उपभोक्ताओं को गुणवत्तापूर्ण विद्युत आपूर्ति करेंगे । उन्होंने यह भी कहा कि जब ये आयोग के निर्देशों का अनुपालन नहीं करते हैं तो आम निरीह उपभोक्ता की परेशानियों का अंदाजा लगाया जा सकता है । उन्होंने यह भी कहा कि जो पदाधिकारी गलत Submission करता है आयोग उनके उपर दण्डात्मक कार्रवाई करे इससे धीरे-धीरे इनके कार्यशैली में सुधार होना शुरू हो जायेगा ।

Unmetered tariff के विरोध में उन्होंने कहा Unmetered उपभोक्ता के T&D loss की गणना करना मुश्किल है । उन्होंने कहा कि ये Hours of supply की बात करते हैं । यहाँ तो बिल भी सही समय पर नहीं बन पाता है तो इनसे Hours of supply की गणना की अपेक्षा करना बेमानी है।

Commercial consumer को Demand based tariff के प्रस्ताव का उन्होंने समर्थन किया और कहा कि फेज 1 में 50 किलावाट और इसी तरह फेज 2, फेज 3 आदि का रोल आउट करने का प्लान बनाकर काम करने से लाईसेंसी को भी फायदा होगा और उपभोक्ता को भी ।

Interest on security deposit के संबंध में उन्होंने कहा कि इस संबंध में ये आयोग को भी दिगभ्रमित करते आ रहे हैं ।

Non compliance of directives of the Commission के संबंध में उन्होंने कहा कि जब तक पदाधिकारियों Personal responsibility का निर्धारण नहीं होगा तब तक परिस्थिति में सुधार होना मुश्किल है ।

उन्होंने यह भी कहा Energy charge के उपर Additional charge तर्कसंगत नहीं है । नये कनेक्शन पर Security deposit के संबंध में उन्होंने कहा कि नये कनेक्शन पर Load Factor का Formula व्यवहारिक नहीं है और यह JBVNL के

Page **5** of **10**

हित में भी नहीं है क्योंकि इसपर इनको करीब–करीब 9% ब्याज देना पड़ेगा । यह उपभोक्ता पर भी भार है और लाईसेंसी पर भी ।

JBVNL का यह कहना कि इनका 90% उपभोक्ता LT consumer है तो 2010 का टैरिफ ऑर्डर देखा जा सकता है इनका 56% उपभोक्ता HT consumer था जो कि अब घटकर 10% रह गया है जो कि किसी भी व्यवसायिक संगठन के लिए अच्छा संकेत नहीं है । जिस उपभोक्ता के पास विकल्प थे वे दूसरे लाईसेंसी के पास चले गये क्योंकि उनको गुणवत्तापूर्ण बिजली मिल रही है वो भी सस्ते दाम में । वर्तमान में वही लाचार उपभोक्ता इनसे बिजली ले रहे हैं जिनके पास कोई विकल्प नहीं है।

श्री वी0पी0सिंह, टाटा स्टील यूटिलिटीज एण्ड इंफ़ास्ट्रक्चर सर्विसेज लिमिटेड, जमशेदपुर ने कहा कि DSHT, HTIS एवं LTIS उपभोक्ता को कम से कम 75% demand charge या Actual charge जो भी उच्च होगा का प्रावधान होता है तो इससे घरेलू Domestic HT Consumer को पूरे Sanction load पर जो भुगतान करना पड़ता है वो नहीं करना पड़ेगा और जिस तर्क से HTIS के लिए है उसी तर्क से DSHT के लिए भी उसको दिया जा सकता है । उन्होंने यह भी कहा कि ग्रामीण क्षेत्रों कई बड़े–बड़े संस्थान खुले हैं जैसे स्कूल एवं व्यवसायिक संस्थान आदि जिन्हें ग्रामीण उपभोक्ताओं का टैरिफ चार्ज किया जाता है लेकिन वो दूसरों से पूरा व्यवसायिक फी चार्ज करते हैं । वे 80 – 80 किलोवाट का दो कनेक्शन ले लेते हैं क्योंकि उन्हें HT के श्रेणी में नहीं जाना पड़े । ग्रामीण टैरिफ जो कि Subsidised tariff है इसे 2.5 किलोवाट या जैसा आयोग समझे इसे सीमित किये जाने की आवश्यकता है ।

Voltage rebate के प्रावधान पर उन्होंने कहा कि यह पूरे राज्य में एक समान होना चाहिए क्योंकि Voltage rebate एक Technical विषय है Technical lossess एक जैसा रह सकता है ।

Unmetered connection के सुझाव के संबंध में उन्होंने कहा कि नहीं रहना चाहिए लेकिन सीसीटीवी कैमरा के उपयोग में महीने में 2–3 यूनिट बिजली ही Consume करेगा उसके लिए मीटर लगाना Commercially viable नहीं है क्योंकि उनका Meter reading cost ही ज्यादा हो जायगा ।

Billing demand के सुझाव के संबंध में कहा कि जब उपभोक्ता Excess demand draw करते हैं तो उसमें Energy पर भी चार्ज रहना चाहिए। ऐसा पहले से होता आ रहा है और यह उचित भी जान पड़ता है।

Page 6 of 10

श्री आलोक मल्लिक, लोक प्रेरणा समाधान, देवघर ने भी One state one tariff के संबंध में कहा कि यह अच्छा प्रस्ताव है लेकिन इससे पहले लाईसेंसी द्वारा उपभोक्ताओं को गुणवत्तापूर्ण बिजली की आपूर्ति की गारंटी देनी चाहिए और उपभोक्ता को लाईसेंसी चुनने का विकल्प भी मिलना चाहिए । तभी उपभोक्ताओं को One state one tariff का लाभ मिल सकेगा।

उन्होंने Tariff determination based on cost of supply on voltage level के संबंध में विरोध जताते हुए कहा कि JBVNL का जो Audited balance है वह विश्वसनीय नहीं ठहराया जा सकता है ऐसी स्थिति में इस प्रस्ताव को स्वीकार नहीं किया जाना चाहिए ।

Non compliance के संबंध में उन्होंने यह कहा कि यह बहुत ही दुर्भाग्य की बात है बार–बार निर्देश के बाद भी उपभोक्ताओं की समस्याओं को लाईसेंसी द्वारा अनदेखा किया जाता है । इस पर आयोग द्वारा सख्त कदम उठाया जाय और समय निर्धारित कर दिया जाय कि इसमें लाईसेंसी कितने दिनों में सुधार कर लेंगे । उन्होंने मीटर रेन्ट के संबंध में कहा कि मीटर रेन्ट का प्रावधान को हटा देना चाहिए और मीटर का भार उपभोक्ता के जिम्मे कर देना चाहिए । Load factor rebate को उपभोक्ता को प्रोत्साहित करने का अच्छा कदम बताया । अगर लाईसेंसी इस पर ईमानदार है तो लाईसेंसी को भी इससे फायदा होगा । Billing demand के संबंध में उन्होंने कहा कि वर्तमान में Domestic HT consumers को बिल 100% sanctioned load पर मिलता है इसे घटाकर 75% किया जा सकता है । उन्होंने कहा कि Additional demand charge को लागू नहीं करना चाहिए । उन्होंने कहा कि गुणवत्तापूर्ण बिजली की आपूर्ति उपभोक्ताओं का अधिकार है और गुणवत्तापूर्ण बिजली की आपूर्ति नहीं होने पर बिल में Rebate रहना चाहिए । उन्होंने कहा कि Covid 19 जैसे वैश्विक महामारी के समय में किसी भी तरह की बढ़ोत्तरी पर विचार नहीं किया जाना चाहिए क्योंकि बिलिंग की समस्या उपभोक्ताओं में सबसे ज्यादा है । किसी को ओवर बिलिंग की समस्या है तो किसी को महीने से बिल ही नहीं मिल रहा है । महीनों बाद बिल मिलने से उपभोक्ताअें ब्याज का भी भुगतान करना पड़ता है । उन्होंने कहा कि मुझे खुद 19 महीनों का बिल एक साथ मिला वो भी विभाग के अनेको बार चक्कर लगाने के बाद ।

श्रीमती हेमलता उरांव, ग्रामीण प्रतिनिधि ने कहा JBVNL हमेशा टैरिफ बढ़ाने के लिए नये – नये हथकंडे अपनाता है लेकिन गुणवत्ता पर कभी ध्यान नहीं देता है । इसी का एक उदाहरण है One state one tariff । टैरिफ में बढ़ोत्तरी के लिए ये हमेशा आयोग एवं उपभोक्ताओं को दिग्भ्रमित करते रहे हैं । उन्होंने कहा कि

Page 7 of 10

किसी भी क्षेत्र के विकास के लिए प्रतिस्पर्धा होना बहुत जरूरी है । JBVNL अन्य लाईसेंसियों की अपेक्षा प्रतिस्पर्धा में बहुत पीछे है और इसका एजेंडा आधारहीन है । इनका टैरिफ का प्रस्ताव पूर्णतः खारिज कर देना चाहिए । इससे पहले इनको अपनी कार्यक्षमता में सुधार की जरूरत है । उन्होंने ट्रांसफॉर्मर के रख रखाव के संबंध में कहा कि ये एक बार ट्रांसफॉर्मर लगा देने के बाद उसकी कोई देखभाल नहीं करते हैं जिस कारण दिनों दिन ट्रांसफॉर्मर के जलने की संख्या में बढ़ोत्तरी हो रही है । उन्होंने भी बिजली बिल की समस्या पर समिति का ध्यान आकृष्ट करते हुए कहा कि ग्रामीण क्षेत्र में उपभोक्ताओं का महीनों तक बिजली बिल नहीं आता है और इसका असर इनके राजस्व पर पड़ता है । उन्होंने यह भी कहा कि इनके यहाँ मैन पावर की भी कमी है जिस कारण उपभोक्ता को सही रूप से सेवा नहीं मिल पाता है । ये बिजली चोरी नहीं रोक पा रहे हैं और इसके घाटे को ईमानदार उपभोक्ताओं से वसूला जाता है । उन्होंने कहा कि आयोग को एक आधार तय कर देना चाहिए की कब और किस अुनपात में दर में बढ़ोत्तरी होना चाहिए नहीं तो ये हमेशा मनमाने ढ़ंग से टैरिफ बढ़ाने का प्रस्ताव लाते रहेंगे । उन्होंने खेद प्रकट करते हुए कहा कि गरीबों के लिए जो कुटीर ज्योति योजना थी उसको इन्होंने अपने प्रस्ताव में समाप्त कर दिया है इसका आधार क्या है इस पर भी ध्यान देने की आवश्यकता है ।

श्री आर0एन0 शर्मा, देवघर ने Non compliance of directives पर इन्होंने कहा कि वर्तमान में जितनी बातें सामने आयी हैं उस पर आयोग पहले से ही निर्देश दे रखा है लेकिन JBVNL उन निर्देशों का पालन नहीं कर रहा है इसलिए आयोग द्वारा कठोर कदम उठोन की आवश्यकता है । आयोग को इन बातों पर ध्यान देना चाहिए कि JBVNL जब आयोग द्वारा बनाये गये नियमों का पालन नहीं कर रहा है तो आम उपभोक्ताओं की क्या दुर्दशा होगी । उन्होंने कहा कि JBVNL ने Unmetered उपभोक्ताओं को मीटर लगाने के लिए 3 महीने का जो समय मांगा है ऐसा वे पहले भी वर्षो से मांगते आ रहें हैं और आयोग द्वारा इनको मोहलत भी मिलता रहा है लेकिन रिजल्ट सबों के सामने है वो आज भी समय ही समय ही मांग रहे हैं जो कि विश्वसनीय नहीं है । उन्होंने कहा कि Unmetered उपभोक्ताओं के T&D Loss की गणना करना मुश्किल है और जब ये T&D Loss की गणना ही नहीं कर पायेंगे तो इसका सारा भार इमानदार उपभोक्ता पर लाद दिया जायगा । इसलिए Unmetered Tariff पर विचार नहीं किया जाना चाहिए । उन्होंने यह भी कहा कि इनका सरकारी विभागों में करोड़ो का बकाया है और इसका वसूली नहीं कर पा रहे हैं जिससे इनका घाटा बढ़ना लाजमी है और इस घाटे को ईमानदार और लाचार उपभोक्ताओं पर ही डाल दिया जाता है ।

प्रोफेसर श्री एस०के० समदर्शी, Central University of Jharkhand, Ranchi ने कहा JBVNL द्वारा डाटा उपलब्ध कराने की आवश्यकता है ताकि इन्हें डाटा संबंधी आरोपों को नहीं सुनना पड़े । उन्होंने कहा कि इसके लिए JBVNL ने Central University of Jharkhand से जो MOU किया है और इसमें ये आगे भी बढ़ रहे हैं थोड़ा और आगे बढ़ें तो Central University of Jharkhand भी अपना Input भी दे पायेगा । उन्होंने कहा कि डाटा के तरफ ध्यान देना बहुत जरूरी है और इससे आयोग को निर्णय लेने में सहायता मिलगी । उन्होंने कहा कि वर्तमान में बहुत सारे निर्णय लिये जाते हैं लेकिन सही डाटा के अभाव में उसका अच्छा प्रभाव नहीं हो पाता है ।

तत्पश्चात माननीय सदस्य विधि, श्री प्रवास कुमार सिंह ने समिति को संबोधित करते हुए सबसे पहले विद्युत अधिनियम 2003 के उद्देश्यों पर प्रकाश डालते हुए कहा कि इसका उद्देश्य मुख्यतः बिजली उद्योग का विकास, उसमें प्रतिस्पर्धा को बढ़ावा देना, उपभोक्ता के हितों की रक्षा, सभी क्षेत्रों में बिजली की आपूर्ति एवं नीतियों में पारदर्शिता सुनिश्चित करना है । उन्होंने राज्य सलाहकार समिति के उद्देश्य की चर्चा करते हुए कहा कि इसका काम मुख्यतः 5 विंदुओं पर सलाह देना है –

1. नीति के प्रमुख विंदु
2. लाईसेंसी द्वारा प्रदान किया गया सेवा, गुणवत्ता एवं निरंतरता से संबंधित मामले
3. लाईसेंसियों द्वारा लाईसेंस के लिए आवश्यक शर्तों का अनुपालन
4. उपभोक्ताओं के हितों की सुरक्षा
5. विद्युत आपूर्ति के लिए निर्धारित मानक के आधार पर आपूर्ति ।

उन्होंने कहा कि विद्युत बोर्ड को तीन भागों में बॉटा गया ताकि इसकी व्यवस्था दुरूस्त हो सके लेकिन यह सरकारी ही रह गया और इसका व्यवसायिक विकास नहीं हो सका । इस प्रतिस्पर्धा की दौर में अपने आपको बचाये रखने के लिए बहुत मेहनत करना पड़ता है । उन्होंने Tata Steel Utilities & Infrastructures Services Ltd. (TSUISL) की सेवा की सराहना करते हुए कहा कि TSUISL का काम करने का तरीका बहुत ही बढ़िया है और इसके कई कारण हैं । इनका विकास योजनाबद्ध तरीके से हुआ है । इनके यहाँ बिजली चोरी, बिलिंग की समस्या इत्यादि की घटना नहीं है । उन्होंने कहा कि इनके यहाँ देर रात में भी उपभोक्ताओं की समस्या का समाधान किया जाता है । इसका एक कारण यह भी है कि इनका दायरा छोटा है । उन्होंने कहा कि JBVNL के कार्यप्रणाली में निरंतर सुधार की जरूरत है चूँकि इनका दायरा बहुत बड़ा है लेकिन इनको भी व्यापारिक दृष्टिकोण अपनाते हुए कार्य करना होगा ताकि ये भी अन्य लाईसेंसियों की

Page 9 of 10

प्रतिस्पर्धा में आ सकें । उन्होंने JBVNL के पदाधिकारियों से अपील की कि उनको यहाँ पर जो समस्या है उससे समिति को भी अवगत करायें ताकि हम सभी लोग मिलकर इसका निराकरण कर सकें ।

सबों की बातों का जवाब देते हुए जे0बी0वि0एन0एल0 के महाप्रबंधक (वाणिज्य) श्री ऋषी नंदन ने कहा कि उपरोक्त सभी समस्या को जल्द से जल्द दूर करने की कोशिश करेंगे ।

तत्पश्चात माननीय सदस्य (तकनीकी), श्री रवीन्द्र नारायण सिंह ने सभी सदस्यों का बैठक में भाग लेने एवं महत्वपूर्ण विचारों के आदान – प्रदान के लिए सभी सदस्यों को धन्यवाद दिया ।

राजेन्द्र

(राजेन्द्र प्रसाद नायक)
सचिव

ज्ञाप सं0:झा0रा0वि0नि0आ0/27(Vol.-VII)/257 दिनांकः 01.10.2020

प्रतिलिपिः–

राज्य सलाहकार समिति के सभी सदस्यों को सूचनार्थ एवं आवश्यक कार्य हेतु प्रेषित।

राजेन्द्र
सचिव

Page **10** of **10**