Jharkhand State Electricity Regulatory Commission

Order on
Annual Performance Review for FY 2016-17
and
Determination of Revised ARR
and Tariff for the
FY 2017-18 & FY 2018-19
for
Jharkhand Bijli Vitran Nigam Limited
(JBVNL)

Ranchi

27.04.2018

TABLE OF CONTENTS

List of Abbreviations

Abbreviation	Description
A&G	Administrative and General
APTEL	Appellate Tribunal for Electricity
ARR	Aggregate Revenue Requirement
ATE	Appellate Tribunal for Electricity
CWIP	Capital Works In Progress
DPS	Delayed Payment Surcharge
DSM	Demand Side Management
FY	Financial Year
GFA	Gross Fixed Assets
GoI	Government of India
JBVNL	Jharkhand Bijli Vitran Nigam Limited
JSERC	Jharkhand State Electricity Regulatory Commission
JUSCO	Jamshedpur Utilities & Services Company Limited
Kcal	Kilocalorie
kWh	Kilowatt-hour
kVA	Kilovolt-ampere
MAT	Minimum Alternative Tax
Ml	Millilitre
MT	Million Tonnes
MU	Million Units
MW	Megawatt
NTI	Non-Tariff Income
O&M	Operations and Maintenance
PLF	Plant Load Factor
PPA	Power Purchase Agreement
R&M	Repair and Maintenance
RGF	Resource Gap Funding
REC	Renewable Energy Certificates
RoE	Return on Equity
Rs	Rupees
SBI	State Bank of India
SERC	State Electricity Regulatory Commission
SLM	Straight Line Method

List of Tables

BEFORE

Jharkhand State Electricity Regulatory Commission, Ranchi

Case (T) No: 13 of 2017

In the matter of:

Petition for the approval of
Annual Performance Review (APR) for FY 2016-17 and
Revised ARR, Tariff determination for the FY 2017-18 and FY 2018-19;

In the matter:

Jharkhand Bijli Vitaran Nigam Limited (JBVNL),
Dhurva, HEC, Ranchi ………………..…………………… Petitioner

PRESENT

Hon'ble Mr. Arbind Prasad - Chairman

Hon'ble Mr. R N Singh - Member (Engg.)

Order dated 27.04.2018

In this Petition, Jharkhand Bijli Vitaran Nigam Limited (hereinafter referred to as JBVNL) has prayed for the approval of APR for FY 2016-17 and determination of Revised ARR and Tariff for FY 2017-18 and FY 2018-19**.**

A1. INTRODUCTION

Jharkhand State Electricity Regulatory Commission

1.1 The Jharkhand State Electricity Regulatory Commission (hereinafter referred to as "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 came into force, the earlier Electricity Regulatory Commission Act of 1998 stands repealed and the JSERC is discharging its functions as prescribed in Section 86 of the Act.

1.4 In accordance with provisions of the said 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 advises the State Government 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 guided by the National Tariff Policy framed and published by Government of India under the provisions of Section 3 of the Act. The objectives of the present National 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 Vitaran 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 28th June 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 Vitaran 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 Vikas Nigam Ltd. (herein after to be referred to as “JBVNL” or “the Petitioner” or “erstwhile JSEB-Distribution function”) 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 6th January 2014, and is duly registered with the Registrar of Companies, Ranchi.

1.12 Jharkhand Bijli Vitran Nigam Ltd was incorporated on 23rd October 2013 with the Registrar of Companies, Jharkhand, Ranchi and obtained Certificate of Commencement of Business on 28th November 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 its Petitions has prayed before the Commission:

- To admit the APR Petition of JBVNL for FY 2016-17 in accordance with Regulation 6 of the JSERC (Terms and Conditions for Determination of Distribution Tariff) Regulations, 2015
- To admit the ARR Petition of JBVNL for FY 2017-18 in accordance with Regulation 6 of the JSERC (Terms and Conditions for Determination of Distribution Tariff) Regulations, 2015
- To admit the ARR Petition of JBVNL for FY 2018-19 in accordance with Regulation 6 of the JSERC (Terms and Conditions for Determination of Distribution Tariff) Regulations, 2015
- To approve the proposed tariff to meet the revenue gap and to minimise the gap between ARR and ACS
- To allow adjustment of RGF against the disallowances first and remaining RGF to be utilized to reduce the tariff for particular consumer categories.
- To approve revised schedule of charges.
- To approve the terms and conditions of tariff as proposed by the Petitioner
- 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.

Scope of the Present Order

1.16 The Commission in this Order has approved the Annual Performance Review for the FY 2016-17, revised ARR and Tariff for FY 2017-18 and FY 2018-19.

1.17 While approving the Annual Performance Review for the FY 2016-17, revised ARR and Tariff for FY 2017-18 and FY 2018-19, the Commission has taken into consideration:

a) Material placed on record

b) Provisions of the Electricity Act, 2003;

c) Principles laid down in the National Electricity Policy;

d) Principles laid down in the National Tariff Policy;

e) Provisions of the JSERC (Terms and Conditions for Determination of Distribution Tariff) Regulations, 2015 (hereinafter referred to as 'Distribution Tariff Regulations, 2015');

1.18 Accordingly, the Commission has scrutinized the Petition in detail and hereby issues the Order on the Annual performance Review for the FY 2016-17, determination of revised ARR and tariff for FY 2017-18 and FY 2018-19.

A2. PROCEDURAL BACKGROUND

2.1 The Commission had issued its last Tariff Order for JBVNL on June 21, 2017 on the approval of Business plan and ARR for the second control period FY 2016-17 to FY 2020-21 including retail tariffs for FY 2016-17.

2.2 The Petitioner has now filed the petition for approval of Annual performance Review for the FY 2016-17, Revised ARR and Tariff determination for FY 2017-18 and FY 2018-19

Information Gaps in the Petitions

2.3 As part of tariff determination exercise, several deficiencies/ information gaps were observed in the Petitions submitted by the Petitioner that were communicated to the Petitioner vide letter no. JSERC/Case (T) No 13 of 2017/604 dt. 28.12.2017 & Letter No. JSERC/Case(T) No. 13 of 2017/654 dt. 11.01.2018.

2.4 The Petitioner submitted its response to the aforesaid letters and furnished additional data/ information to the Commission vide letter no. 40/C.E. (C&R)/Ranchi dt. 08.01.2018 & letter no. 64/C.E. (C&R)/Ranchi dt. 15.01.2018.

2.5 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 only on material already on record in the Petitions filed by the Petitioner.

2.6 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 Regulation(s) framed by the Commission and in order to ensure transparency in the process of tariff determination, the Commission decided to hold public hearing at divisional headquarters.

Inviting Public Comments/ Suggestions

2.7 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 Annual performance Review for the FY 2016-17, Revised ARR and Tariff determination for FY 2017-18 and FY 2018-19.

2.8 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 on which the public notice by JBVNL appeared

Sl. No.	Newspaper	Date of Publication
1.	Dainik Bhaskar	23.01.2018 & 24.01.2018
2.	Prabhat Khabar	23.01.2018, 24.01.2018 & 31.01.2018
3.	Telegraph	23.01.2018 & 25.01.2018
4.	Times of India	23.01.2018
5.	Dainik Jagran	31.01.2018

2.9 Subsequently, the Commission also issued a notice on its website www.jserc.org and various newspapers for conducting the public hearing on the Petition. The details of the newspapers publishing the notice by the Commission are as under:

Table 2: List of newspapers and dates on which the public notice by JSERC appeared

Sl. No.	Newspaper (Jharkhand edition)	Date of Publication
1.	Hindustan	14, 15 & 22 February 2018
2.	Dainik Jagran	14, 15 & 22 February 2018
3.	Pioneer	14, 15 & 22 February 2018
4.	Prabhat Khabar	14, 15 & 22 February 2018
5.	Dainik Bhaskar	14, 15 & 22 February 2018
6.	The Times of India	14, 15 & 22 February 2018

Meeting of the State Advisory Committee

2.10 The Commission convened a meeting of the State Advisory Committee (SAC) on 21.03.2018 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.

2.11 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

2.12 The public hearings were held at revenue divisional headquarters across the state of Jharkhand during 24th February, 2018 to 7th March , 2018 on the dates as detailed under:

Table 3: Locations and Dates of Public Hearing

Sl. No.	Location	Date
1.	Chaibasa	24.02.2018
2.	Dhanbad	26.02.2018
3.	Dumka	27.02.2018
4.	Medininagar	06.03.2018
5.	Ranchi	07.03.2018

2.13 For wider coverage and maximum response from the public, the Commission also issued notice for public hearings in the local newspapers on the day prior to the day of public hearing and also on the date of the hearing.

2.14 Numerous objections/ comments/ suggestions on the Petitions were received. The objections/ comments/ suggestions of the Public, Petitioner's responses and Commission's views thereon are detailed in **Section A4** of this Order.

A3. BRIEF FACTS OF THE PETITION

Annual performance Review for the FY 2016-17

a) Energy Sales

3.1 The details of energy sales approved by the Commission in its MYT Order dated 21.06.2017 for the FY 2016-17 vis-à-vis actual energy sales as submitted by the Petitioner now is provided in the table below:

Table 4: Sales (in MU) of JBVNL for the FY 2016-17

Category	Approved in MYT Order	Submitted now by JBVNL
Domestic	4,972.2	5,037.30
Commercial/ Non domestic	496.5	569.04
Public Lighting/SS	146.7	239.33
Irrigation & Agricultural (IAS)	247.5	148.27
MES	15.7	15.92
Industrial LT/LTIS	181.9	193.83
Industrial HT/HTS /S/ EHT	2,368.0	2,347.37
Railway Traction	222.0	170.00
Total Energy Sales	**8,650.5**	**8,721.07**

b) Energy Balance:

3.2 The energy balance details as submitted by the Petitioner for FY 2016-17 is provided in the table below:

Table 5 Energy Balance for the FY 2016-17 as submitted by the Petitioner

Particulars	Approved in MYT Order	Submitted now by JBVNL
Power Purchase from Outside JSEB Boundary (MUs)	4934.1	5721.4
Loss in External System (%)	3.00%	3.00%
Loss in External System (MUs)	148	171.6
Net Outside Power Available (MUs)	4,786.10	5,549.80
Energy Input Directly to State Transmission System (MUs)	1,428.10	766.4
State-owned Generation (MUs)	938.5	808
Energy input through renewable sources (MUs)	478.3	-
Payable (MUs)	-	399.5
UI Sale / Receivable (MUs)	-	103.6
Energy Available for Onward Transmission (MUs)	7,631.00	7,420.10
Transmission Loss (%)	5%	5%
Transmission Loss (MUs)	381.5	371
Net Energy Sent to Distribution System (MUs)	7,249.40	7,049.10
Direct Input of Energy to Distribution System (MUs)	4,924.40	4,897.60

Particulars	Approved in MYT Order	Submitted now by JBVNL
Total Energy Available for Sales (MUs)	**12,173.80**	**11,946.60**

c) Aggregate Revenue Requirement:

3.3 The Aggregate Revenue Requirement for the FY 2016-17 as submitted by the Petitioner has been tabulated below:

Table 6: ARR* for the FY 2016-17 (in Rs Cr) as submitted by the Petitioner

Particulars	FY 2016-17	
	Approved in earlier Order	As submitted now by the Petitioner*
Power Purchase cost	4,629.5	5,025.5
Transmission charges	141.2	185.4
O&M expenses	334.5	324.1
Depreciation	93.7	203.0
Interest on Loan	58.4	159.3
Return on Equity	66.2	143.9
Interest on Working Capital	-	24.2
Interest on security deposit	55.7	49.1
Provision for doubtful debts		196.9
Less: Non-Tariff Income	-134.3	-112.5
Gross ARR	**5,244.9**	**6,199.0**

**Revised in the reply to 2nd Discrepancy note*

3.4 Based on the ARR and revenue at existing tariff, the Petitioner estimated the revenue gap for the FY 2016-17 after taking into consideration the impact of RGF as summarized below:

Table 7: Revenue gap (in Rs Cr) fr the FY 2016-17 as submitted by the Petitioner

Particulars	FY 2016-17*
Gross ARR	6,199.0
Less: RGF Considered	805.9
Revenue Realized from sale	2,813.5
Gap	**2,579.5**

**Revised in the reply to 2nd Discrepancy note*

Revised ARR and Tariff determination for the FY 2017-18 and FY 2018-19

d) Energy Sales

3.5 The Energy sales (in MU) as approved by the Commission in its MYT Order dated 21.06.2017 vis-à-vis as submitted by the Petitioner now has been tabulated below:

Table 8 : Sales (in MU)* as submitted by the Petitioner for the FY 2017-18 and FY 2018-19

Particulars	FY 2017-18		FY 2018-19	
	Approved in MYT Order	Revised submission	Approved in MYT Order	Revised submission
Domestic	7204.5	5,590.2	10078.5	6,459.0
Commercial/Non Domestic	535.6	792.7	562.4	991.5
Irrigation / IAS	399	154.0	550.5	261.7
Industrial Services				
Industrial LT / LTIS	185.5	219.5	189.2	223.6
Industrial HT / HTS / S/ EHT	2,398.4	2,357.5	2,429.10	2,468.7
Institutional Services				
IS-I : Public Lighting / SS, Govt buildings	149.9	243.6	153.2	248.7
IS-II : Railways, MES				
MES	15.9	119.0	16	119.0
Railway / RTS	222		222	
IS-III: DS-HT	-	22.3	-	24.7
Total Sales	**11,110.7**	**9498.8**	**14,200.8**	**10796.9**

**Revised in the reply to Discrepancy note*

e) Energy Balance:

3.6 The energy balance details for FY 2017-18 and FY 2018-19 as submitted by the Petitioner has been tabulated below:

Table 9 Energy Balance* as submitted by the Petitioner for the Company Period

Particulars	FY 2017-18		FY 2018-19	
	Approved in earlier Order	As submitted now by the Petitioner	Approved in earlier Order	As submitted now by the Petitioner
Power Purchase from Outside JSEB Boundary (MU)	6415.9	6,339.40	7485.9	6,192.20
Loss in External System (%)	3.00%	3.00%	3.00%	3.00%
Loss in External System (MU)	192.5	190.20	224.6	185.80
Net Outside Power Available (MU)	6,223.4	6,149.3	7,261.3	6,006.40
Energy Input Directly to State Transmission System (MU)	1,428.1	984.7	1,428.1	1,428.10
State-owned Generation (MU)	1,416.5	565.6	2,720.5	565.60
Energy Input through Renewable Sources (MU)	713.7		1,051.10	312.00
Energy Available for Onward Transmission (MU)	9,781.60	7,699.5	12,460.90	8,312.00
Transmission Loss (%)	5%	5.00%	5%	4.50%
Transmission Loss (MU)	489.1	385.0	560.7	374.00

Particulars	FY 2017-18		FY 2018-19	
	Approved in earlier Order	As submitted now by the Petitioner	Approved in earlier Order	As submitted now by the Petitioner
Net Energy Sent to Distribution System (MU)	9292.6	7,314.5	11900.1	7,938.00
Direct Input of Energy to Distribution System (MU)	5189.6	4,971.4	5302.1	4,971.40
Total Energy Available for Sales (MU)	**14,482.2**	**12,285.9**	**17,202.2**	**12,909.40**

**Revised submission by the Petitioner*

3.7 The following table summarizes the ARR as approved by the Commission in its earlier MYT Order dated June 21, 2017 and the revised ARR as submitted by the Petitioner now for the FY 2017-18 to FY 2018-19 as submitted by the Petitioner.

Table 10: Revised ARR* (in Rs Cr) for the FY 2017-18 and FY 2018-19 as submitted by the Petitioner

Particulars	FY 2017-18		FY 2018-19	
	Approved in earlier Order	As submitted now by the Petitioner	Approved in earlier Order	As submitted now by the Petitioner
Power Purchase cost	5,495.9	5,531.8	6,648.1	5,909.0
Transmission charges	185.5	165.7	243.5	187.0
O&M expenses	377.9	409.4	454.7	521.5
Depreciation	138.3	248.9	184.4	332.5
Interest on Loan	118.5	201.4	176.8	271.4
Return on Equity	111.7	176.9	152.5	227.6
Interest on Working Capital	-	21.2	-	13.9
Interest on security deposit	79.3	46.6	108.8	60.5
Provision for doubtful debts				
Less: Non-Tariff Income	-141.0	-126.9	-148.1	-138.1
Gross ARR	**6,366.1**	**6,674.9**	**7,820.8**	**7,385.4**

**Revised submission by the Petitioner*

3.8 Based on the projected ARR and the revenue from existing tariff, the Petitioner estimated the revenue gap at existing tariff for the FY 2017-18 and FY 2018-19 after accounting for the impact of RGF, as summarised in the table below:

Table 11: Revenue Gap* (in Rs Cr) at existing tariff as submitted by the Petitioner

Particulars	FY 2017-18	FY 2018-19
Total ARR	6,674.9	7,385.4
Less: RGF considered	2,321.4	-
Revenue from Retail sales at existing tariff	3,572.2	4078.7
Revenue Gap at existing tariff	**781.24**	**3306.70**

**Revised in the reply to Discrepancy note*

3.9 Based on the above and earlier submissions of revenue gap for FY 2016-17 to FY 2017-18 and for FY 2013-14 (Company period) to FY 2015-16, the Petitioner has estimated the cumulative revenue gap till FY 2017-18 as summarized below:

Table 12: Cumulative Revenue Gap (in Rs Cr) till FY 2017-18 as submitted by the Petitioner

Particulars	FY 2013-14 (Company period)	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18
Opening Revenue Gap as on 1st April	-	657.12	1,468.39	3,479.8	6,669.8
Revenue Gap / (Surplus) created during the Year	612.84	665.28	1,671.53	2,579.5	781.2
Closing Gap at end of the Year	612.84	1,322.40	3,139.92	6,059.3	7,451.0
Rate of Interest (As per prevailing SBI PLR rate)	14.45%	14.75%	14.8%	12.8%	12.5%
Carrying Cost on Additional Gap Created	44.28	145.99	339.86	610.5	882.6
Total Gap including carrying cost	**657.12**	**1,468.39**	**3,479.79**	**6,669.8**	**8,333.6**

3.10 The Petitioner submitted that given the significant amount of revenue gap, the whole impact may be not be plausible 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 8333.6 Cr 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. 12.5%.

3.11 In order to cover the projected revenue gap for the Control Period, the Petitioner has proposed revision in retail tariff for FY 2017-18 & FY 2018-19 for various categories. The tariff schedule proposed by the Petitioner is summarised below:

Table 13: Proposed Tariff Schedule by the Petitioner for FY 2017-18 and FY 2018-19

Category	Sub-Category		Existing Slabs	Existing Component of Tariff (FY 17)		Proposed Component of Tariff (FY 18 and FY 19)	
				Energy Charges (Rs.)	Fixed Charges (Rs.)	Energy Charges (Rs.)	Fixed Charges (Rs.)
Domestic							
	PTG					5.25/kWh	40/kW
	DS- I	Metered	DS- I (a), Kutir Jyoti (0-50 units)	1.25/kWh	16/conn	6.25/kWh	60/kW
			DS- I (a), Kutir Jyoti (51-100 units)	1.25/kWh	16/conn		
			DS-I (b), (0-200 units)	1.6/kWh	30/conn		
			DS-I (b), (above 200 units)	1.7/kWh	30/conn		
			DS-I (a),	NIL	60/conn	NIL	700/kW

<table>
<tr><th rowspan="2">Category</th><th rowspan="2">Sub-Category</th><th rowspan="2">Existing Slabs</th><th colspan="2">Existing Component of Tariff (FY 17)</th><th colspan="2">Proposed Component of Tariff (FY 18 and FY 19)</th></tr>
<tr><th>Energy Charges (Rs.)</th><th>Fixed Charges (Rs.)</th><th>Energy Charges (Rs.)</th><th>Fixed Charges (Rs.)</th></tr>
<tr><td rowspan="8">Commercial</td><td>Unmetered</td><td>DS-I (b),</td><td>NIL</td><td>170/conn</td><td></td><td></td></tr>
<tr><td rowspan="2">DS- II</td><td>0-200 units</td><td>3/kWh</td><td>50/conn</td><td rowspan="2">7.00/kWh</td><td rowspan="2">80/kW</td></tr>
<tr><td>201 & above units</td><td>3.6/kWh</td><td>80/conn</td></tr>
<tr><td rowspan="3">CS- I</td><td>0-100 Units</td><td>2.2/kWh</td><td>45/conn</td><td rowspan="2">6.50/kWh</td><td rowspan="2">100/kW</td></tr>
<tr><td>Above 100 Units</td><td>2.25/kWh</td><td>45/conn</td></tr>
<tr><td>Unmetered</td><td>NIL</td><td>250/kW</td><td>NIL</td><td>700/kW</td></tr>
<tr><td rowspan="2">CS- II</td><td>NDS-II</td><td>6.0kWh</td><td>225/kW</td><td rowspan="2">6.50/kWh</td><td rowspan="2">225/kW</td></tr>
<tr><td>NDS-III</td><td>6.8/kWh</td><td>200/conn</td></tr>
<tr><td rowspan="7">Industrial</td><td rowspan="2">LTIS</td><td>Demand based</td><td>5.50/kWh</td><td>275/kVA</td><td>5.50/ kVAh</td><td>275/kVA</td></tr>
<tr><td>Installation based</td><td>5.50 / kWh</td><td>160/HP/Month</td><td>6.50 /kWh</td><td>200/HP/Month</td></tr>
<tr><td rowspan="5">HTIS</td><td>HTS - 11KV</td><td>6.25/kWh</td><td>300/kVA</td><td rowspan="5">6.00/ kVAh</td><td rowspan="5">300/kVA</td></tr>
<tr><td>HTS - 33KV</td><td>6.25/kWh</td><td>300/kVA</td></tr>
<tr><td>HTS - 132KV</td><td>6.25/kWh</td><td>300/kVA</td></tr>
<tr><td>HTSS - 11KV</td><td>4.00/kWh</td><td>490/kVA</td></tr>
<tr><td>HTSS - 33KV</td><td>4.00/kWh</td><td>490/kVA</td></tr>
<tr><td rowspan="4">Irrigation and Agriculture</td><td rowspan="2">IAS-I</td><td>IAS - I Metered</td><td>0.70/kWh</td><td>-</td><td>5.25/kWh</td><td>30/HP</td></tr>
<tr><td>IAS - I Unmetered</td><td>-</td><td>100/HP</td><td>-</td><td>650/HP</td></tr>
<tr><td rowspan="2">IAS-II</td><td>IAS - II Metered</td><td>1.20/kWh</td><td>-</td><td>6.00/kWh</td><td>100/HP</td></tr>
<tr><td>IAS - II Unmetered</td><td>-</td><td>375/HP</td><td>-</td><td>650/HP</td></tr>
<tr><td rowspan="5">Institutional</td><td rowspan="2">Ins- I</td><td>Metered</td><td>5.25/kWh</td><td>55/conn</td><td>6.50/kWh</td><td>100/kW</td></tr>
<tr><td>Un-metered</td><td>NIL</td><td>Rs 250 per 100 watt/ month and Rs 55 for every additional 50 Watt</td><td>NIL</td><td>Rs 650 per 100 watt/ month and Rs 100 for every additional 50 Watt</td></tr>
<tr><td rowspan="2">Ins- II</td><td>RTS</td><td>6.00/kWh</td><td>235/kVA</td><td rowspan="2">4.80/kVAh</td><td rowspan="2">400/kVA</td></tr>
<tr><td>MES</td><td>4.60/kWh</td><td>260/kVA</td></tr>
<tr><td>Ins- III</td><td>DS (HT)</td><td>3.50/kWh</td><td>110/kVA</td><td>5.25/kWh</td><td>200/kVA</td></tr>
</table>

3.12 The proposed tariff schedule would yield revenue of Rs.8045.2 crores as against Rs.4078.7 crores at the existing tariff.

A4. PUBLIC CONSULTATION PROCESS

4.1 The Petitions filed by the Petitioner evoked response from several stakeholders. The public hearings were held in various locations across the State of Jharkhand to ensure the maximum public participation wherein stakeholders put forth their comments and suggestions before the Commission in the presence of the Petitioner. In all, 491 persons participated in the public hearing process. 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:

Sales

Public Comments/ Suggestions

4.4 The Objector pointed out that the reduction in sales estimates as submitted by the Petitioner clearly indicates the Petitioner's intention of loading cost on upfront basis in its previous MYT Petition.

Petitioner's Response

4.5 The Petitioner submitted that it has already provided reasons for downward projections of sales for FY 2017-18 and FY 2018-19 in the Tariff Petition itself. The Petitioner further submitted that the delay in execution of some Central schemes is due to external factors such as delay in approval of Standard Bidding Documents, packaging of projects necessitated the Petitioner etc.

Views of the Commission

4.6 The Petitioner had made ambitious plans to undertake rural electrification at a greater pace and accordingly made his submissions in its Petition for the approval of Business plan for the second control period. The Commission after prudence check approved the sales in line with the submissions made by the Petitioner.

4.7 However, it is pertinent to mention that sales is an uncontrollable parameter and the Petitioner has provided proper justification in its submission for such downward revision of sales. The Commission now considers the submissions made by the Petitioner, but directs the Petitioner to take necessary measures so that there is no delay in achieving electrification targets in future.

Dis-incentive for the non-achievement of T&D Loss

Public Comments/ Suggestions

4.8 The Objector pointed out that Petitioner has not proposed any disincentive on account of non-achievement of loss reduction targets as per the methodology adopted by the Commission in its earlier Orders.

Petitioner's Response

4.9 The Petitioner submitted that in clause 2.46 of Tariff Petition, it has provided the disallowed cost for FY 2016-17 due to non-achievement of T&D loss reduction targets.

4.10 The Petitioner further submitted that it is in the process of revision of UDAY targets for AT&C loss and a letter in this regard has been already been sent to Jharkhand Govt. and Ministry of Power. Accordingly, it has considered the revised T&D loss trajectory for FY 2017-18 and FY 2018-19.

Views of the Commission

4.11 The Commission had considered the disincentive for the non-achievement of T&D loss in the relevant sections of this Order.

T&D Loss levels of JBVNL

Public Comments/ Suggestions

4.12 The Objector pointed out that the T&D loss levels of the Petitioner are beyond the targets set by the Commission and any inefficiency on the part of the Petitioner shall not be passed on to consumers.

4.13 The Objector further submitted that the Petitioner has claimed loss in external system and transmission loss in its Petition. The Objector pointed out that the loss in external system and transmission loss does not relate to the distribution licensee and therefore should not be allowed.

4.14 The Objector submitted that the AT&C loss as per the audited accounts stand at 13.80%, while the Petitioner in it Petition has submitted the same at 29%.

Petitioner's Response

4.15 The Petitioner further submitted that it is committed to reduce T&D losses and all efforts are being made to reduce losses to normative levels and is taking various steps to meet the benchmarks given by Commission.

4.16 The petitioner submitted that it has already completed 100% Feeder Metering and is in process of ensuring 100% metering of DTs and Consumers to cover the entire distribution value chain and enable energy auditing. Further, the Petitioner has provided the disallowed cost for FY 2016-17 due to non-achievement of T&D loss reduction targets.

4.17 The Petitioner submitted that the energy balance reflects the actual quantum of energy input to distribution system and energy available for sales for which loss in external system and transmission losses are to be taken into consideration. The Petitioner further submitted that Commission has also approved the loss percentage for MYT control period in its Order dated 21st June, 2017.

4.18 The Petitioner submitted that the Objector has wrongly calculated the distribution loss as 29% considering the total purchase of power which is incorrect, as the distribution loss of has been arrived by subtracting the energy sales within state from energy available for sales at the distribution periphery and not the gross energy procured at generator's bus-bar.

Views of the Commission

4.19 The Commission notes with concern that the Petitioner is not able to contain its loss levels within the levels set by the Commission. The Commission agrees with the views of the objector that the inefficiency on the part of the Petitioner shall not be passed onto consumers and has appropriately allowed only the prudent cost as discussed in relevant sections of this Order.

4.20 The Commission is of the view that loss in external system and intra-state transmission loss are to be taken into consideration as per the fundamentals of the computation of energy balance which is as per the methodology approved by the Commission in its earlier Orders dated 14th December, 2015 and 21st June, 2017. The Commission agrees with the submission of the Petitioner with respect to methodology for computation of distribution loss.

Power purchase cost

Public Comments/ Suggestions

4.21 The Objector pointed out that JBVNL has claimed power purchase from state sector i.e from PTPS, SHPS, and TVNL for which the Commission has not approved any tariff. The Objector further submitted that the Petitioner has not provided any details on variable cost of power purchase based on which the Commission shall determine the quantum of power as per merit order schedule.

4.22 The Objector also queried that whether any PPA has been signed with JREDA and the rationale behind JBVNL planning to procure power from JREDA at Rs 6.36 Rs/kWh when it has given consent to NTPC for purchase of 200 MW solar power at much cheaper rate (Rs 3/kWh).

4.23 The Objector pointed out that the cost of power purchase from NTPC Barh, DVC, PUVNL is high and requires a suitable mechanism on how such cost can be optimised.

Petitioner's Response

4.24 The Petitioner submitted that the power purchase from state sector sources i.e. PTPS, SHPS and TVNL have been duly approved by the Commission in the Order dated 21st June, 2017. The Petitioner further submitted that JBVNL is currently not procuring any power from PTPS and the tariff for SHPS is in line with average power purchase cost.

4.25 The Petitioner further submitted that it is committed to optimizing the power purchase cost and special cognizance of tariff and quantum has been taken while procuring power from any source and the estimate provided for power purchase for FY 2016-17 in tariff petition is in line with the audited accounts.

4.26 The Petitioner submitted that no PPA has been signed between JBVNL and JREDA and it has projected the power intake from sources for which the bid process has been done by JREDA for FY 2018-19, which is subject to signing of PPA and commissioning of solar IPPs.

4.27 The Petitioner further submitted that to optimise the power purchase from renewable sources, JBVNL has placed requisition for allocation of 200 MW of solar power from 980 MW Nokh Solar PV Power Project at Nokh Solar Park, Rajasthan by NTPC at the levelised tariff with a top ceiling of Rs. 3/kWh Dec'17. However, the process of JREDA for setting up of solar IPPs has been initiated almost 3 years back.

4.28 The Petitioner submitted that it has not been procuring any power from PTPS and in order to optimise the power purchase cost of DVC, JBVNL has signed a PPA with DVC for procurement of 600 MW power from Koderma STPS at the tariff determined by CERC in scheduled mode. Further, PUVNL (a JV between JUUNL and NTPC) is expected to develop a 4000 MW coal based plant (phase-wise) by FY 2021-22 from where JBVNL is expected to procure power at competitive rates.

Views of the Commission

4.29 The Commission in its Order dated 21st June, 2017 had already approved the per unit cost (fixed and variable separately) for all the stations for the MYT period FY 2016-17 to FY 2020-21. Further, the Commission vide its discrepancy note had directed the Petitioner to submit station wise segregated details of fixed and variable cost (Rs./kWh) for the FY 2016-17 and FY 2017-18 (H-1). The Commission after due scrutiny of the same has approved the power purchase cost as discussed in detail in relevant sections of this Order.

Capital expenditure

Public Comments/ Suggestions

4.30 The Objector submitted that no reference of the approval of the capital investment plan by the Commission has been shown in the Petition. Further, various grants and receipts from state and central government under different schemes have not been mentioned in the tariff proposal.

Petitioner's Response

4.31 The Petitioner submitted that the Business plan which contains details of the funding plan of various central/state Govt schemes has already been approved by the Commission in its Order dated 21st June, 2017.

Views of the Commission

4.32 The Commission has already approved the Business plan for the MYT period FY 2016-17 to FY 2020-21 in chapter no 5 of the Order dated 21st June, 2017.

Gross Fixed Assets

Public Comments/ Suggestions

4.33 The Objector derived its own GFA based on the annual accounts of the Petitioner for the FY 2016-17 and submitted that there has been a difference in the amount claimed by the Petitioner in its Petition vis-à-vis the annual accounts of the Petitioner.

Petitioner's Response

4.34 The Petitioner submitted that it has computed the GFA as per the annual accounts based on the methodology adopted by the Commission in its earlier Orders dated 21st June, 2017 and 14th December, 2015.

4.35 Further, the Petitioner submitted that the Objector has not considered the consumer contribution and grants attributable to CWIP while deducting it from GFA. Accordingly, there has been a cascading impact on the equity, loan and depreciation component computed by the Objector.

Views of the Commission

4.36 The Commission has computed the GFA based on the audited accounts for the FY 2016-17 in line with the methodology followed by it in the earlier Orders dated 21st June, 2017 and 14th December, 2015

4.37 The detailed methodology adopted by the Commission in approving the GFA can be found in relevant chapters of this Order.

Violation of accounting standards

Public Comments/ Suggestions

4.38 The Objector pointed out that the Note-18 (other current liabilities) of the audited accounts for the FY 2016-17 show an amount of Rs 70 Cr towards receipt from consumers. However, no such amount has been recorded in the earlier years.

4.39 The Objector pointed out that Statutory Auditors were never shown the rates of power purchase as such the amount of power purchase as shown in the audited accounts cannot be relied upon.

4.40 The Objector submitted that both the statutory auditor & CAG have reported adversely regarding the Capital Works in Process (CWIP) as the stock of materials at construction site is very high.

4.41 The Objector pointed out that the auditor had raised objections on the inventories of the company which have not been verified physically by the company and a policy should be framed for physical verification at regular intervals.

4.42 The Objector also mentioned various other violations of the Accounting Standards.

Petitioner's Response

4.43 The Petitioner submitted that at the time of unbundling of erstwhile JSEB and creation of JBVNL, the transition was not very smooth, leaving a room for huge improvements. However, an improvement can be clearly seen through reduction in audit observations from 19 in FY 2013-14 to less than 10 in FY 2016-17 in almost an year.

4.44 The Petitioner further submitted that the audit report issued by the statutory auditor for FY 2016-17 has a qualified opinion from the auditor and not a disclaimer of opinion as pointed out by the Objector during the presentation given in Public Hearing held at Ranchi.

4.45 The Petitioner submitted that some of the observations pointed out by auditor in its report have no financial implications in the books of accounts but have been provided simply as an information.

4.46 The Petitioner submitted that the amount is towards the deposit made for electrification of Government Schools. As per IND AS 18, such deposits can be recognized as revenue in the books only after the completion of work and not otherwise.

4.47 The Petitioner submitted that the statutory auditors have audited the accounts for the fourth consecutive year and all the necessary documents were duly provided for the verification of power purchase expenses. The Petitioner further submitted that as per the supplementary audit by CAG, power purchase is an item which has been checked thoroughly as well. Thus, the figures related to the same are quite reliable.

4.48 The Petitioner submitted that it is in the process of preparing Fixed Asset Register has been started which also takes care of CWIP. As far as high balance of Stock is concerned, the Petitioner submitted that it is undergoing large number of Turnkey projects for which it needs several materials of high value in stock to execute the projects in timely manner.\

4.49 The Petitioner submitted that the process of preparation of fixed asset register has been started already, the issues pertaining to physical verification of inventories will be also be taken care of. At present, there is a stores register which is maintained manually and the auditors have advised to maintain the same through online system/ERP.

Views of the Commission

4.50 The Commission agrees with the views of the Objector that the audited accounts of the Petitioner are in non-compliance to the accounting standards. Further, the Commission, in its earlier Order dated June 21, 2017 had expressed serious concerns over the objections raised by the auditor on the issues pertaining to Depreciation, Accounting for fixed assets, revenue recognition, accounting of Government grants etc.

4.51 The Commission observes that even though the Petitioner has made efforts towards resolving some of the issues but not not all exceptions raised by the Auditor have been addressed in an appropriate manner. 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, exceptions of the Auditor still persist.

4.52 Accordingly, the Commission once again directs the Petitioner to address the exceptions raised by the Auditor in an appropriate manner so that reliable data is available.

Erroneous computations & clerical errors in the Petition

Public Comments/ Suggestions

4.53 The Objector pointed out that the Petitioner has made clerical error in its submission viz. Computation of energy available for onward transmission for FY 2016-17, O&M expenses, consideration of different revenue gaps for FY 13-14 to FY 15-16claimed in the True-up Petition for FY 11-12 to FY 15-16 and the instant Tariff Petition and Proposal of different voltage rebate for HT consumers at different places

Petitioner's Response

4.54 The Petitioner submitted that no clerical errors have been made and the Petition has been filed as per the methodology adopted by the Commission in its earlier Tariff Orders.

4.55 With respect to consideration of different revenue gaps, the Petitioner submitted that the cumulative revenue gap has been revised in the reply to 1st discrepancy note and the same has been considered for estimating the cumulative revenue gap till FY 2017-18.

4.56 Further, the Petitioner submitted that similar proposal as existing has been made with respect to voltage rebate for HT consumers at different places.

Views of the Commission

4.57 The Commission has made detailed examination of the submissions made by the Petitioner. Further, the Commission vide its discrepancy notes has sought clarifications on the data submitted, mismatches in the data and after due prudence check of the same approved the ARR as explained in relevant sections of the Order

Revised ARR & Tariff determination

Public Comments/ Suggestions

4.58 The Objector submitted that the JSERC Distribution Tariff Regulations, 2015 does not provide any provisions for the revision of ARR. Rather, there is only a provision for APR (Annual Performance Review) once the business plan and MYT are approved.

Petitioner's Response

4.59 The Petitioner submitted that revision in ARR is not required to be filed as per the MYT regulations 2015, but it has been done for the sole purpose of revision in tariff. The Petitioner submitted that it has not introduced any new element per se or revised the basis of projections et al.

4.60 The Petitioner further submitted that the revision in ARR for FY 2017-18 and FY 2018-19 is majorly to account for uncontrollable factors and submitted that the impact of revisions in the element of ARR is only in the benefit of consumers, as the revised ARR has been reduced vis-à-vis as approved by the Commission in its Tariff Order dated 21st June 2017.

Views of the Commission

4.61 As per regulation 9.2 of the Distribution Tariff Regulations, 2015, the licensee is required to file an annual performance review based on the audited/authenticated accounts, based on which the tariff shall be worked out. The Commission, in line with the above regulation has carried out the APR for FY 2016-17. Once the APR is carried out, the ARR for the subsequent year is revised to the extent of uncontrollable parameters as well as revision in parameters in the APR.

Reliability of audited accounts

Public Comments/ Suggestions

4.62 The Objector pointed out that the Commission in its earlier Order dated 21st June, 2017 has not considered the opening balances for FY 2016-17 as per the audited accounts as many objections were raised on the same by the auditor.

4.63 Another Objector pointed out that the Commission in case no: I.A. no.78 of 2009 in appeal no. 129 of 2007 noted that in absence of reliable accounts, the status of the entity would not reflect the correct and true picture and in absence of the audited accounts for FY 2016-17, the review should not be allowed as there can be difference in the provisional and audited figures.

Petitioner's Response

4.64 The Petitioner submitted that it has taken several measures to overcome the exceptions raised by the auditor and the annual audited accounts for FY 2016-17 have been prepared and made available in the public domain as well.

4.65 The Petitioner further submitted that it is making all possible efforts to bring about a change in legacy issues and enhance regulatory effectiveness so that the regulatory process is streamlined which has not been the case earlier.

4.66 The Petitioner further submitted that it is completely committed to maintain transparency and at the time of filing of MYT petition for FY 2017-18 and FY 2018-19, only the compiled accounts for FY 2016-17 were available. However, the annual accounts for FY 2016-17 have been audited and are available for the Objector to reconsider its submission.

Views of the Commission

4.67 The Commission in its earlier Order dated 21st June, 2017, for the approval of Business plan and MYT for the second control period, has not considered the opening balances as per audited accounts owing to the comments raised by the auditor in the audited financials.

4.68 The Commission in the last Order had opined that the Petitioner had not filed any Petition for the approval of true-up for the FY 2011-12 to FY 2015-16, and in absence of the same, the Commission, found it prudent not to consider the opening balances as per the stand alone audited accounts for the FY 2015-16 as it does not depict the actual scenario. Further, the Commission in the same Order had directed the Petitioner to file the true-up petitions for the aforementioned period.

4.69 In line with the directions of the Commission, the Petitioner has filed a petition for the True-up for the FY 2011-12 to FY 2015-16. Further, the Commission had carried out a detailed scrutiny on the audited accounts as explained in relevant sections of this Order, only after which the Commission has approved the ARR vis-à-vis Revenue Gap/(Surplus)for the aforementioned period.

Transition from kWh billing to kVAh billing

Public Comments/ Suggestions

4.70 The Objector pointed out that the Petitioner, instead of carrying out an impact assessment study from kWh billing from kVAh billing, has directly proposed the change in the current Petition.

4.71 The Objector submitted that the proposal of the Petitioner is irrational, illogical and allegedly appears to possess an ill intent that may lead to closure of the induction furnace based industries in the state as the Petitioner has proposed hike of around 57% in HTSS category.

4.72 Another Objector submitted that the benefit derived with the shift of PF from 0.85 to 1.00, should be passed on to the LTIS and HT industrial consumer through reduction in the energy tariff rates.

4.73 Another Objector submitted that the Commission in its earlier Order for MYT period dated 21st June, 2017 had not approved kVAh based tariff and hence the same cannot be proposed by JBVNL at this point of time.

Petitioner's Response

4.74 The Petitioner submitted that as per the direction of the Commission, the Petitioner has studied the Power Factor of sample set of LTIS and HT consumers.

4.75 With respect to impact of kVAh tariff on HTSS consumers, the Petitioner submitted that that the fixed charges of HTSS consumers has been decreased from Rs 490/kVA to Rs 300/kVA, which shall counterbalance the impact of increase of energy charges and existing HTSS consumers shall not have a significant impact of the tariff proposal of Petitioner.

4.76 The Petitioner submitted that it has not specified power factor while proposing the tariffs for Industrial and other consumers being migrated to kVAh based billing and any benefit arising out of kVAh based billing in future shall be passed on to industrial consumers.

4.77 The Petitioner submitted that the proposal of KVAh based billing for certain categories of consumers is in compliance of the directive (Clause 13.42 of MYT order dated 21'st Jun'17) of Commission.

Views of the Commission

4.78 The Commission in its earlier Order had directed the Petitioner to undertake an impact assessment study for transition from kWh to kVAh based billing in compliance to which, it had submitted a report on transition from kWh to kVAh billing based on sample data.

4.79 The Commission based on the report submitted by the Petitioner and after detailed analysis of the effects of the implementation of kVAh based tariff in neighbouring states like Bihar, Chattisgarh etc, found it prudent to introduce kVAh based billing in some of the categories proposed by the Petitioner. The kVAh tariff approved by the Commission HTS, HTSS, RTS, MES can be found in relevant sections of this Order.

Removal of Clause 13 from the HT agreement

Public Comments/ Suggestions

4.80 The Objector pointed out that the proposal of the Petitioner for the removal of Clause 13 is in violation of JSEB circular no 5058 dt 29/08/2002 issued by JSEB pursuant to directions of the Energy Dept. Govt. of Jharkhand and is still not superseded by any other circular or withdrawn by Govt. of Jharkhand.

4.81 The Objector pointed out that out that the Petitioner has repeatedly raised this issue in earlier petitions also, in spite of the fact that it has already been settled by the Commission in plethora of its Tariff Orders.

Petitioner’s Response

4.82 The Petitioner submitted that the inclusion of this clause in HT agreement in the Bihar Tariff order was only to protect consumers who are not able to fulfil the AMG/MMG clause due to default on the part of the JBVNL (erstwhile JSEB) to supply sufficient power. However in the current scenario when the clause on the AMG/MMG has been removed long back, the existence of clause 13 regarding relief in demand charges in case the consumer is unable to purchase or the utility is unable to supply owing to uncontrollable events such as strikes, riots and Act of God or any other case reasonable beyond control or if the board is prevented from supplying should be removed because it defeats the purpose for which it was introduced and in case it is enforced, it would adversely impact the financial interest of JBVNL.

Views of the Commission

4.83 The Commission has dealt with the proposal to remove clause 13 from HT agreement in detail in the relevant sections of this Order.

Resource Gap funding

Public Comments/ Suggestions

4.84 The Objector pointed out that resource gap funding provided by the State Government has always been used as grants-in-aid to meet the revenue obligations of the Petitioner irrespective of the disallowances by the Commission.

4.85 The Objector further submitted that communication from the State Government with respect to RGF only pertains to the year FY 2014-15.

Petitioner's Response

4.86 The Petitioner submitted that the Commission has considered the disallowed cost from Resource Gap Funding for meeting the revenue gap in Tariff Order for 'Review of ARR for FY 2013-14 & FY 2014-15; ARR & Tariff Determination for FY 2015-16 dated 14th December 2015.

Views of the Commission

4.87 The Commission in line with the methodology adopted in its earlier Tariff Order dated 14th December, 2015 has appropriately adjusted RGF towards slashes/ disallowances made on account of non-achievement of T&D loss as discussed in relevant paragraphs of this Order.

Revenue Gap

Public Comments/ Suggestions

4.88 The Objector submitted that as per its assessment the Petitioner has a net revenue gap of Rs. 1728.24 cr. in FY 2016-17 and Rs. 191.08 cr. in FY 2017-18.

4.89 The Objector further submitted that the cumulative revenue gap till FY 2017-18 as per its assessment comes out to be Rs 938.34 Cr as against Rs 8317.80 Cr claimed by the Petitioner.

Petitioner's Response

4.90 The Petitioner submitted that the Objector while calculating the cumulative revenue gap till FY 2017-18 has reduced the cumulative gap till FY 15-16 as Rs (1960.37) Crs without any reasoning/ justification. Moreover, the Objector has considered the revenue surplus of the operating years of erstwhile JSEB to be included as part of surplus of the period from when the Petitioner, JBVNL, has come in existence which shouldn't be the case.

Views of the Commission

4.91 The Commission has approved the ARR and revenue gap for the FY 2016-17 to FY 2018-19 for JBVNL as per JSERC Distribution Tariff Regulations, 2015 and the principles adopted by it in its earlier Tariff Orders as discussed in relevant sections of this Order.

Voltage wise cost of service

Public Comments/ Suggestions

4.92 The Objector pointed out that the Petitioner has not conducted any study to determine the voltage wise cost of supply as directed by the Commission. The Objector further submitted that the Petitioner has even failed to depict that it made any efforts to undertake such loss estimation study based on which voltage wise cost of service can be determined.

Petitioner's Response

4.93 The Petitioner submitted that such study takes substantial amount of effort and time as it includes various surveys, analytics, designing load flow diagram, etc. The Petitioner submitted that it is committed to follow the directives of the Commission and the technical study on voltage wise losses on Distribution network.

Views of the Commission

4.94 The Commission in its earlier Order dated 21st June, 2017 had directed the Petitioner to conduct detailed technical study to determine voltage wise cost of supply. However, the Petitioner has not submitted any report to the Commission. The Commission affords one more opportunity to the Petitioner to conduct such study and submit a report failing which may attract penalty.

Power factor Penalty/Rebate

Public Comments/ Suggestions

4.95 The Objector pointed out that the Petitioner has proposed to impose power factor penalty/rebates based on voltage levels with a threshold of 90% for the 33 kV consumers. The Objector submitted that a large number of small industrial consumers are never able to improve their power factor beyond 80% owing to technical limitations.

Petitioner's Response

4.96 The Petitioner submitted that the power factor penalty/rebate has been proposed to encourage consumers to maintain the grid discipline and optimum utilization of the distribution assets without unnecessarily overburdening the conductors.

4.97 The Petitioner further submitted that the proposal has been made after making a detailed comparison and benchmarking with other states.

Views of the Commission

4.98 The Commission finds it appropriate to continue with the existing provisions related to conditions for Power factor penalty/Rebate without any changes.

Issues related to HTSS Category

Public Comments/ Suggestions

4.99 The Objector pointed out that increase in tariff for HTSS category would be highly unviable and units cannot survive without cross subsidization.

4.100 The Objector further submitted that the Petitioner without any rationale, proposed to merge HTS & HTSS categories as HTSS tariff category was conceived as a special category way back in 2001 and came into effect after extensive consultations with the consumers and stakeholders in the erstwhile Bihar state.

Petitioner's Response

4.101 The Petitioner submitted that considering the importance of development of competitive market in the State and to rationalise the tariff, it has proposed the cost reflective tariff for all consumer categories.

4.102 The Petitioner further submitted that as per clause 8.30 of National Tariff Policy, 2016, JBVNL has also taken a leap forward to simplify the existing tariffs, as it has proposed only 5 categories having 13 Sub-categories/slabs, In line with the above, it has proposed to merge the HTS and HTSS subcategories into HTIS sub-category.

Views of the Commission

4.103 The Commission has dealt the issue in the relevant sections of the Order,

Tariff for Domestic consumers

Public Comments/ Suggestions

4.104 The Objector pointed out that domestic category has been subjected to maximum increase as compared to other class of consumers as commercial rates have been proposed to increase by 4%, whereas the town DS supply will increase by 233.33 %.

4.105 The Objector submitted that introduction of fixed charges for Domestic & Agriculture category consumers on per kW basis will open new doors for inspection and inspector raj. It will introduce unfair activities and access to the privacy of individual homes under the guise of load verification which will be prone to litigations.

4.106 Another Objector submitted that domestic connections are to be released with a minimum load of 2 kW each and proper monitoring is to be done as there are chances of consumers using higher load than sanctioned load.

4.107 The Objector submitted that fixed charges based on per kW basis would not only result in steep increase in the electricity bill of the consumers but also result in under reporting of load, overloading on Transformer, Inspection of Load etc.

4.108 The Objector submitted that no justification has been provided by the Petitioner on why the tariff for DS-HT has been proposed at a lower rate than DS-II.

Petitioner's Response

4.109 The Petitioner submitted that it has one of the lowest Tariff across country as compared with its neighbouring state especially in domestic category. The Petitioner further submitted that the Petitioner has proposed to increase the Tariff for FY 2017-18 and FY 2018-19 in line with the National Tariff Policy, 2016.

4.110 The Petitioner submitted that Petitioner has proposed the fixed charges on per kW basis for FY 2017-18 and FY 2018-19 in order to ensure the full recovery of fixed costs. This will also enable the Petitioner to conduct effective load assessment and to plan the future demand.

4.111 The Petitioner submitted that the load for domestic consumers is decided based on the actual load profile by the consumer and the Objector's proposal to release connection with minimum 2 kW load is misconceived. Further, the Petitioner submitted that massive raids are being conducted to identify any possible theft/misuse of electricity.

4.112 The Petitioner submitted that it has proposed cost on per kW basis to ensure full recovery of the fixed cost that has been incurred. Also, tariff has been proposed for FY 2017-18 & FY 2018-19 within +/- 20% of the cost of supply.

Views of the Commission

4.113 The Commission after taking due cognizance of the submissions made by the Objectors has approved the tariff for domestic categories as discussed in relevant sections of this Order.

4.114 Further, the Commission as for now, in absence of maximum demand meters for domestic category, found it prudent to continue with the existing fixed charge tariff regime for domestic category instead of Rs/kW basis as proposed by the Petitioner.

Tariff for LTIS Category

Public Comments/ Suggestions

4.115 The Objector pointed out that any further increase in electric tariff rates would make small and medium scale industries uncompetitive as other big industries are getting cheap power directly from DVC

Petitioner's Response

4.116 The Petitioner submitted that it has not proposed for any increase in the tariff of LTIS (Demand Based) for FY 2017-18 and FY 2018-19. However, for LTIS (Installation based), the Petitioner has proposed a tariff hike as the Petitioner has planned to abolish the installation based tariff completely and shift all these small industrial units to MDI meters.

Views of the Commission

4.117 The Commission has appropriately dealt the issue in relevant sections of this Tariff Order.

Information in public domain

Public Comments/ Suggestions

4.118 The Objector pointed out that the relevant information /financial statements have not been made available by the Petitioner in the public domain.

Petitioner's Response

4.119 The Petitioner submitted that the Objector's submission that the relevant details have not been made available in the public domain is misconceived as the required data has already been uploaded on the website of the Petitioner as well as the Commission. Further, a time period of twenty one (21) days has been provided to all stakeholders to submit their objections.

Views of the Commission

4.120 The petitions and the audited accounts as submitted by the Petitioner have been uploaded on the website of the Commission for the reference of the stakeholders. Further, during the course of public hearings, the stakeholders submitted that the audited accounts along with the auditor's reports have not been made available in the public domain by the Petitioner. The Commission during the course of hearing had directed the Petitioner to upload all the relevant documents in the public domain.

4.121 The Commission further directed the Petitioner to notify the same in the local newspapers inviting public comments, giving the public one more opportunity to file their objections. The Commission after taking into consideration, all the comments submitted by the stakeholders and replies filed by JBVNL has passed this Order.

4.122 The 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 31st May, 2017, while passing this Order.

Interest on consumer security deposit

Public Comments/ Suggestions

4.123 The Objector pointed out that JBVNL has been making provision for interest on consumer security deposit and has not paid the interest amount to the consumers for very long period despite repeated directives by the Commission. The Objector further submitted that the Petitioner should be penalized for non-compliance for the directions of the Commission.

Petitioner's Response

4.124 The Petitioner submitted that it has already developed an online portal for claiming interest on security deposit and it is already being paid to the HT consumers. Also, for the remaining consumers, where security deposit details are available in JBVNL's database, the interest shall be paid from April 2018.

4.125 The Petitioner further submitted that for consumers whose security deposit details are not available with JBVNL, a web-portal has been created, where consumer can submit such details and claim the interest thereof.

Views of the Commission

4.126 The Commission in its earlier Orders had repeatedly directed the Petitioner to prepare a list of consumers who have not been paid interest on consumer security deposit as per applicable Regulations and clear the dues pending on the Petitioner with immediate effect. However, the Petitioner has not submitted any compliance report to the Commission.

4.127 This shows the lackadaisical attitude of the Petitioner. The Commission directs the Petitioner to clear the pending dues with respect to the interest on security deposit within 3 months of issuance of this Tariff Order, failing which there would be a reduction of 5% in the fixed charges billed to the consumers for every month of non-compliance.

4.128 Also, few respondents during the course of public hearing have mentioned that the amount of security deposits being charged is unreasonably high. In case of genuine difficulties faced by the consumers, they may approach the Commission for amendment of the JSERC Supply code Regulations, 2015 duly backed by supporting information and detailed reasonings.

Collection efficiency

Public Comments/ Suggestions

4.129 The Objector pointed out that JBVNL has proposed 93% collection efficiency against the target of 100% approved by the Commission. This matter has been repeatedly dealt in earlier tariff orders and no relaxation should be allowed for the reason already spelt and recorded in the earlier orders.

4.130 The Objector pointed out that the auditors had pointed out issues related to collection efficiency in its comments.

Petitioner's Response

4.131 The Petitioner submitted that 100% collection efficiency is on extremely higher side and even the most efficient utilities in the country are not able to achieve the same. Further, the collection efficiency being approved under UDAY scheme is 97% for FY 2017-18 in comparison to 100% set by the Commission.

4.132 The Petitioner submitted that the collection efficiency would improve in the coming future since the process of converting unmetered connections into metered connections is being done. The Petitioner further submitted that it is also facilitating its consumer through several collection avenues such as Mobile App, Online payment etc.

Views of the Commission

4.133 The Commission is of the view that any inefficiency in the part of the Petitioner shall not be passed on to consumers. The Commission approves collection efficiency at 100% as per the JSERC Distribution Tariff Regulations, 2015. Further, in case of genuine difficulties faced by the Petitioner in collecting 100% of its dues, it may approach the Commission for amendment of the Regulations, duly backed by supporting information and detailed reasonings.

Load factor rebate

Public Comments/ Suggestions

4.134 The Objector pointed out that load factor rebate is being given for the load factor achieved beyond 60% instead of the entire consumption once the load factor of 60% is achieved.

Petitioner's Response

4.135 The Petitioner submitted that load factor rebate is being computed as per the prescribed guidelines of JSERC.

Views of the Commission

4.136 The Commission directs the Petitioner to implement the load factor rebate as per the guidelines issued by the Commission in this Order.

Miscellaneous charges

Public Comments/ Suggestions

4.137 The Objector pointed out that the proposed increase in miscellaneous charges are not justified as the same are already on the higher side.

4.138 The Petitioner further submitted that there is no justification to link the same with the present minimum wages as an individual can attend to many calls during the working hours.

Petitioner's Response

4.139 The Petitioner submitted that Objector's claim that miscellaneous charges of JBVNL is on higher side is not valid and further submitted that sufficient justification for increasing the miscellaneous charges has been provided in the Petition.

Views of the Commission

4.140 The Commission in its earlier Order dated 21st June, 2017 had already revised the miscellaneous charges. In view of the same, the Commission finds it prudent to continue with the existing charges.

Fixed Charges

Public Comments/ Suggestions

4.141 The Objector pointed out that even though the Petitioner is collecting fixed charges, there is no guarantee of supply and any such inefficiency should be borne by JBVNL and shall not be collected from consumers.

Petitioner's Response

4.142 The Petitioner submitted that the fixed charges being levied, is to recover network costs incurred. The Petitioner further submitted that it is committed to supply 24*7 power supply by mean of various central schemes like DDDUJY, IPDS, R-APDRP, etc.

Views of the Commission

4.143 The Commission has approved the fixed charges in relevant sections of the Order.

Quality of supply

Public Comments/ Suggestions

4.144 The Objector pointed out that the Petitioner has proposed a huge tariff hike, but the quality of supply remains bad. The service of supply remains very poor and no measures have been taken till date to rectify the same.

Petitioner's Response

4.145 The Petitioner submitted that it has proposed cost-reflective tariff in line with the National Tariff Policy, 2016 which stipulated that the tariff for every category ought to lie within 20% of cost of supply. Further, to reduce the burden on the consumers, the state government may provide direct subsidy to few categories of consumers.

4.146 The Petitioner further submitted that the State Govt. has already communicated that it would not provide any resource gap to the Petitioner and the subsidy will be directly given to consumers through electricity bill. Hence, the proposal from has been made without the consideration of any contribution from the State Govt.

Views of the Commission

4.147 During the course of public hearings, it has come to the notice of the Commission that the quality of supply is very poor especially in the rural areas. The Commission in its earlier Order dated 21st June, 2017 had directed the Petitioner to take appropriate steps to strengthen its distribution network and submit a detailed plan with expected benefits with the next tariff Petition. The Petitioner has now submitted an action plan to strengthen its distribution network. The Commission directs the Petitioner to take necessary measures so that quality and reliable power is supplied to consumers.

Revenue from the sale of power

Public Comments/ Suggestions

4.148 The Objector pointed out that in case the Commission allows kVAh billing, realisation of JBVNL shall go up considerably which requires detailed re-calculation & suitable reduction in rates.

Petitioner's Response

4.149 The Petitioner submitted that it has calculated its revenue realization from different categories for FY 2017-18 and FY 2018-19 based on the respective units of fixed and energy charges as proposed in category wise tariff proposal. The proposed revenue of consumer categories having kVAh based billing has been calculated on the basis of kVAh and not on kWh basis.

Views of the Commission

4.150 The Commission has approved the revenue from the sale of power based on the fixed and energy charges. Further, the energy charges for HTS, HTSS, MES, RTS have been computed as per approved kVAh tariff.

Terms and conditions of supply

Public Comments/ Suggestions

4.151 The Objector pointed out that terms and conditions of supply form part of 'Supply Code Regulations' and should not be a part of Tariff Order.

Petitioner's Response

4.152 The Petitioner submitted that such revision must be done by the Commission.

Views of the Commission

4.153 The Commission is of the view that the Terms and Conditions of Supply as provided under the Tariff Order are additional terms and conditions of supply specific to the Petitioner in addition to the terms and conditions provided in the JSERC Electricity Supply Code, Regulations, 2015. In case the Objectors or the Petitioner, find any inconsistencies in the provisions of the Supply Code and the provisions specified in the Tariff Order, they should approach the Commission for resolution of those specific issues.

Removal of Installation based tariff

Public Comments/ Suggestions

4.154 The Objector pointed out that Till the MDI meters are replaced or installed, this process of compulsory converting the LTIS of Installed based to demand based should be put on hold.

4.155 The Objector submitted that the Petitioner has not provided any impact analysis for increasing the minimum demand charges from 50% to 75% and such proposal of the Petitioner shall not be considered by the Commission.

Petitioner's Response

4.156 The Petitioner submitted that such proposal shall ensure the judicial usage of energy and prevent the need for inspecting officer to regularly inspect the consumers premise for regularization or excess load. The Petitioner further submitted that, it is committed towards the replacement of these non-MDI meters and has planned to replace all such meters in phased manner.

4.157 The Petitioner submitted that it has proposed to increase the billing demand charges for LTIS consumers from 50% to 75% based upon practices followed in other States.

Views of the Commission

4.158 The Commission has appropriately dealt the issue in Chapter A9 of this Tariff Order.

Tariff for unmetered categories

Public Comments/ Suggestions

4.159 The Objector pointed out that the petitioner has proposed steep increase in the tariff for unmetered categories which has been done without accessing the ground realities.

Petitioner's Response

4.160 The Petitioner submitted that it has proposed a higher amount of fixed charges for all the unmetered consumer categories as it will not only encourage the consumers to get their connections metered but will also be important for justifying the high existing consumption by these consumers.

4.161 The Petitioner further submitted that the higher tariff for un-metered consumers shall exist till December 2018 only, as the same is the target made by the Petitioner to achieve 100% metering of all un-metered consumers. Beyond December 2018, the higher tariff of un-metered consumer may cease to exist, which shall be binding on the Petitioner to essentially convert the un-metered consumers to metered categories

Views of the Commission

4.162 The Commission has approved the tariff for unmetered categories in the relevant sections of this Order.

4.163 With respect to abolishment of unmetered category, the Commission agrees with the views of the Petitioner that all the consumers should be metered. Further, as per the directions of the Commission, the petitioner has provided a metering plan for the replacement of burnt, defective meters. The Commission directs the Petitioner to strictly adhere to the timelines committed by it so that no consumer is left unmetered by December 2018.

A5. ANNUAL PERFORMANCE REVIEW FOR FY 2016-17

5.1 As per Clause 9.2 of the Distribution 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;"

5.2 The Petitioner submitted that the Annual Performance Review (APR) for FY 2016-17 has been prepared based on the provisional accounts taking into consideration the provisions of JSERC Distribution Tariff Regulations, 2015 and the methodology adopted by the Commission in its earlier Orders. The Petitioner has also submitted audited accounts for the FY 2016-17 to the Commission.

5.3 The Commission based on the aforementioned regulation (Clause 9.2) has now carried out Annual performance review for the FY 2016-17 taking into consideration

a) Audited (Statutory) accounts for the FY 2016-17.

b) JSERC Distribution Tariff Regulations, 2015.

c) Methodology adopted by the Commission in its earlier Orders.

5.4 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 31st May, 2017, while passing this Order.

Energy Sales

Petitioner's submission

5.5 The energy sales (in MU) as submitted by the Petitioner for the FY 2016-17 are summarized below:

Table 14: Sales (in MU) as submitted by the Petitioner

Particulars	FY 2016-17	
	Approved in earlier Order	As submitted now by the Petitioner
Domestic	4972.16	5,037.30
Commercial/Non Domestic	496.52	569.04
Public Lighting / SS	146.70	239.33
Irrigation / IAS	247.49	148.27
MES	15.72	15.92
Industrial LT / LTIS	181.93	193.83
Industrial HT / HTS / S/ EHT	2368.01	2,470.74

Particulars	FY 2016-17	
	Approved in earlier Order	As submitted now by the Petitioner
Railway / RTS	222.00	46.63
Total	**8650.53**	**8,721.07**

Commission's analysis

5.6 The Commission, in its MYT Order dated 21st June, 2017, had approved the sales by applying relevant compounded annual growth rate (CAGR) trends on the sales for the FY 2011-12 to FY 2015-16. Further, the Commission had appropriately adjusted energy sales for few categories based on the submissions of the Petitioner.

5.7 The Petitioner has now submitted provisional sales for the FY 2016-17. The Commission during scrutiny of the sales submitted by the Petitioner found that the submission of the Petitioner was in line with the energy sales approved by the Commission in its earlier Order.

5.8 Accordingly, the Commission now approves the sales as submitted by the Petitioner for FY 2016-17 subject to True-up based on audited data. The approved energy sales, for the FY 2016-17, is tabulated hereunder:

Table 15 Energy Sales (in MU) as approved by the Commission for FY 2016-17

Particulars	Approved now by the Commission
Domestic	5,037.30
Commercial/Non Domestic	569.04
Public Lighting / SS	239.33
Irrigation / IAS	148.27
MES	15.92
Industrial LT / LTIS	193.83
Industrial HT / HTS / S/ EHT	2,470.74
Railway / RTS	46.63
Total	**8,721.07**

Power Purchase Cost

Petitioner's submission

5.9 The Petitioner submitted that JBVNL 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 with certain purchase from renewable sources during FY 2016-17.

5.10 The station wise power purchase cost of JBVNL for FY 2016-17 as submitted by the Petitioner has been tabulated below:

Table 16: Power Purchase Quantum (in MU) and Cost (in Cr)* as submitted by the Petitioner

Particulars	FY 2016-17			
	Quantum in (MUs)		Power Purchase Cost (in Rs Cr)	
	Approved in the earlier Order	As submitted now by the Petitioner	Approved in the earlier Order	As submitted now by the Petitioner
NTPC	2,156.60	2,840.37	787.70	996.88
NHPC	375.50	374.01	93.90	94.68
PTC	609.40	599.76	121.20	122.91
Total Central Sector	**3,141.4**	**3,814.14**	**1,002.8**	**1,214.47**
DVC	4,764.90	4,877.90	2,335.10	2,402.6
Total Others	**4,764.90**	**4,877.90**	**2,335.10**	**2,402.6**
State Sector				
PTPS / PUVNL	460.40	325.05	208.50	119.5
SHPS	55.20	31.20	22.60	3.5
TVNL	2,266.80	1,216.55	806.40	465.2
Total State Sector	**2,782.30**	**1,572.79**	**1,037.50**	**588.2**
Private				
Inland Power	422.90	364.29	157.90	133.3
APNRL - 12%	954.00	953.93	346.50	374.9
APNRL - 13%		-		-
APNRL- Additional 66 MW		330.21		120.2
Total Private Sector	**1,376.90**	**1,648.42**	**504.50**	**628.4**
-				
Other RE				
Solar IPP's	16.90	19.70	30.30	35.3
Solar REC's	13.10	-	4.60	-
JREDA	163.10	-	103.80	-
SECI (Solar)		19.10		11.4
RE Others / Wind	444.60	-	66.70	-
Total Other RE	**637.80**	**38.80**	**205.30**	**46.70**
PGCIL		-	116.00	162.0
Posoco (ERLDC)		-	1.40	1.4
UI Payable		399.50		120.8
UI Receivable		103.60		-
Rungta Mines		42.30		14.0
ABCIL		45.20		17.4
NVVNL(Korba III & Farrakka III)		153.90		57.4
ERLDC(APNRL)		-		-
GBI/ Rebate		-		(30.3)
Additional REC purchase		-	12.40	-

Particulars	FY 2016-17			
	Quantum in (MUs)		Power Purchase Cost (in Rs Cr)	
	Approved in the earlier Order	As submitted now by the Petitioner	Approved in the earlier Order	As submitted now by the Petitioner
Less: Sale of Surplus Power		-	585.60	-
Grand Total	**12,703.38**	**12,489.36**	**4,629.50**	**5,223.2**

**Revised in the reply to discrepancy note*

Commission's analysis

5.11 The Commission while scrutinizing the submission of the Petitioner observed that, as per Note 25 of the Audited (Statutory) accounts of JBVNL for the FY 2016-17, the power purchase charges are Rs. 5408.40 Cr while the power purchase cost as submitted by the Petitioner, in the Petition, was Rs.5204.6 Cr. The Commission directed the Petitioner to provide justification on the same vide its discrepancy note.

5.12 The Commission further directed the Petitioner to submit month-wise station-wise details of power purchase cost (in Rs. Cr.) and per unit cost (Rs /kWh) (segregated into energy and fixed charges) for the FY 2016-17.

5.13 Further, the Commission found that the Petitioner has not been able to comply with the Renewable Purchase Obligation (RPO) for the FY 2016-17. The Commission directed the Petitioner to provide reasons for the same along with the plan to comply with same in the future.

5.14 The Petitioner replied that at the time of finalization of annual accounts of JBVNL (duly approved by Board), the total power purchase cost including transmission cost, had been revised to 5408 Cr which included the total power purchase cost of Rs 5,223 Cr. and transmission cost of Rs 185 Cr. The Petitioner further submitted station wise, month wise, power purchase cost segregated into fixed charge and energy charge.

5.15 With respect to RPO, the Petitioner submitted that the primary reason for the non-compliance is that the Renewable Energy Certificates (REC) were not in motion during last year due to which it was not able to purchase the RECs.

5.16 The Petitioner further submitted that the State had completed the bidding process for commissioning of 1,100 MW of solar power for purchase of power from solar plant, but the PPAs were not signed and the process was put on hold, due to higher tariffs as compared to the recently discovered solar tariffs in the competitive bidding for solar parks. The Petitioner further submitted that it has signed a PPA with SECI for 300 MW of wind power to meet the non-solar RPO, which shall be available in the following financial year. Additionally, the Petitioner has approached SECI for allocation of 200 MW of wind power from the upcoming bids. In solar, 684.5 MW of Solar installation is under process of signing PPA, the bid process for which has already been completed by JREDA. The Petitioner submitted that it has also approached SECI and NTPC for purchase of solar power from upcoming solar parks to comply with RPO for the FY 2017-18.

5.17 The power purchase quantum (in MUs) and total power purchase cost (in Rs Cr) for the FY 2016-17 as approved by the Commission after considering the submissions made by the Petitioner is summarized in the table below:

Table 17: Power Purchase Quantum (in MU) and Cost (in Rs Cr) as approved by the Commission

Particulars	FY 2016-17	
	Quantum in (MUs)	Power Purchase Cost (in Rs Cr)
NTPC		
Farrakka	929.24	314.5
Farakka III	252.51	100.0
Khalagaon I	258.40	84.0
Talcher	524.76	136.9
Khalagaon II	334.14	97.9
Barh	541.32	263.7
NTPC Darlipalli STPS		
NTPC Nabinagar		
NTPC North Karanpura		
KBUNL Kanti TPS		
Korba		
Total - NTPC	**2,840.37**	**996.88**
NHPC		
Rangit	43.51	16.27
Teesta	330.50	78.41
Total - NHPC	**374.01**	**94.68**
PTC		
Chukha	220.72	46.1
Tala	379.04	76.8
Total - PTC	**599.76**	**122.91**
Total Central Sector	**3,814.14**	**1,214.47**

Particulars	FY 2016-17	
	Quantum in (MUs)	Power Purchase Cost (in Rs Cr)
Others (outside Boundaries)		
DVC	4,877.90	2,402.63
DVC STOA	-	-
Total Others	**4,877.90**	**2,402.63**
State Sector		
PTPS / PUVNL	325.05	119.49
PTPS-NTPC Phase-1 / PUVNL Phase-1	-	-
SHPS	31.20	3.51
TVNL	1,216.55	465.25
Total State Sector	**1,572.79**	**588.25**
Private		
Inland Power	364.29	133.27
APNRL - 12% APNRL - 13%	953.93	374.92
APNRL- Additional 66 MW	330.21	120.25
Total Private Sector	**1,648.42**	**628.44**
Other RE		
Solar IPP's	19.70	35.3
Solar REC's	-	-
JREDA	-	-
SECI (Solar)	19.10	11.4
RE Others / Wind	-	-
Total Other RE	**38.80**	**46.7**
PGCIL	-	162.0
Posoco (ERLDC)	-	1.4
UI Payable	399.50	120.8
UI Receivable	103.60	-
Rungta Mines	42.30	14.0
ABCIL	45.20	17.4
NVVNL(Korba III & Farrakka III)	153.90	57.4
ERLDC(APNRL)	-	-
GBI/ Rebate	-	(30.3)
Additional REC purchase		
Grand Total	**12,489.36**	**5,223.19**

Energy Requirement and Energy Availability

Petitioner's submission

5.18 The Petitioner submitted that energy availability for FY 2016-17 has been computed based on the actual power purchase and sales.

5.19 The Petitioner further submitted that power purchase from various sources are segregated into different heads, while calculating the energy balance for the FY 2016-17 as explained below:

- Power Purchase from Outside JSEB 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.

5.20 Based on the above information, the Petitioner has submitted the Energy Balance for JBVNL for the FY 2016-2017 as shown below:

Table 18: Energy Balance as Submitted by the Petitioner for the FY 2016-17 (in MU)

Particulars	FY 2016-17	
	Approved in earlier Order	As submitted now by the Petitioner
Power Purchase from Outside JSEB Boundary	4,934.10	5,721.40
Loss in External System (%)	3.00%	3.00%
Loss in External System	148	171.6
Net Outside Power Available	4,786.10	5,549.80
Energy Input Directly to State Transmission System	1,428.10	766.4
State-owned Generation	938.5	808
Energy Input through Renewables sources	478.3	
Payable	-	399.5
UI Sale / Receivable	-	103.6
Energy Available for Onward Transmission	7,631.00	7,420.10
Transmission Loss (%)	5%	5%
Transmission Loss	381.5	371
Net Energy Sent to Distribution System	7,249.40	7,049.10
Direct Input of Energy to Distribution System	4,924.40	4,897.60
Total Energy Available for Sales	12,173.80	11,946.60

Commission's analysis

5.21 The Commission in its MYT 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 has considered the same distribution loss level for the FY 2016-17 for the computation of energy balance.

5.22 The energy requirement as approved by the Commission for the FY 2016-17 based on approved energy sales and distribution losses is summarized below:

Table 19: Energy Requirement as approved by the Commission for the FY 2016-17 (in MU)

Particulars	FY 2016-17
Energy Sales	8721.07
Distribution Loss (%)	24.20%
Distribution Loss	2784.30
Energy Required for Distribution	11505.37
Inter-State Sales	-
Total Energy Required	**11505.37**

5.23 The Commission has worked out energy availability for the FY 2016-17 on the basis of actual generation from tied up power from central, state-owned and other 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 24th February, 2018. The energy availability from various sources has been summarized below:

Table 20: Energy Balance as approved by the Commission for the MYT Period (in MU)

Particulars (Energy Balance)	FY 2016-17 As approved now by the Commission
Power Purchase from outside JSEB boundary	5,721.40
Loss in External System (%)	3%
Loss in External System	171.64
Net Outside Power Available	5,549.76
Energy Input Directly to State Transmission System	766.42
State-owned Generation	808.04
Energy Input through Renewable Sources	
Payable	399.50
UI Sale / Receivable	103.60
Energy Available for Onward Transmission	7,420.12
Transmission Loss (%)	2.23%
Transmission Loss	165.47
Net Energy Sent to Distribution System	7,254.65
Direct Input of Energy to Distribution System	4,897.60
Total energy available for Sale	**12,152.25**

Intra-State Transmission Charges

Petitioner's submission

5.24 The Petitioner submitted that the transmission charges payable to Jharkhand Urja Sanchar Nigam Limited been computed based on the provisionally approved rate in Tariff Order of JBVNL dated 21st June 2017.

5.25 The Petitioner submitted that the energy wheeled through transmission network as per the Energy Balance for FY 2016-17 has been considered for calculating the Intra-State transmission charges payable to JUSNL. The Petitioner further submitted that no transmission charges are applied on direct input of energy to distribution system.

5.26 The actual Intra-state transmission charges payable to JUSNL for FY 2016-17 as submitted by the Petitioner has been tabulated below:

Table 21: Intra-State Transmission Charges* for the FY 2016-17 (in Rs Cr) as submitted by the Petitioner

Particulars	FY 2016-17	
	Approved in earlier Order	As submitted now by the Petitioner
Transmission charges (in Rs Cr)	141.2	185.4

** Revised in the reply to 1st Discrepancy note.*

Commission's analysis

5.27 The Commission while approving the Intra-state transmission charges has scrutinized the audited (statutory) accounts for the FY 2016-17 and found that there was a mismatch in figures of the total power purchase cost including intra-state transmission charges as submitted by the Petitioner vis-à-vis the accounts. The Commission directed the Petitioner to provide proper justification on the same.

5.28 The Petitioner vide its reply submitted that the original petition had been prepared based on the provisional accounts where the total power purchase cost was considered to be Rs 5365.9 Cr including intra-state transmission charges of Rs 161.3 Cr. However, at the time of finalization of accounts, the total power purchase cost including transmission cost, has been revised to Rs 5408 Cr which includes the total power purchase cost of Rs 5,223 Cr. and transmission cost of Rs 185 Cr.

5.29 The Commission after taking Petitioner's submissions into consideration approves the intra-state Transmission charges, subject to True-up as tabulated below:

Table 22: Intra-state Transmission Charges (in Rs Cr) as approved by the Commission.

Particulars	FY 2016-17 As approved now by the Commission
Transmission charges (in Rs Cr)	185.4

Capital Expenditure and Capitalization

Petitioner's submission

5.30 The Petitioner submitted that the actual GFA and capital expenditure during FY 2016-17 was Rs. 73.4 Cr and Rs. 636.9 Cr respectively. On the other hand, the Commission, in its earlier order dated 21st June 2017 for FY 2016-17, had approved Rs. 1411.3 Cr and Rs. 3528.2 Cr as GFA and capital expenditure, respectively. The Petitioner submitted that the difference in capex and GFA is due to delay in selection of vendors and disbursement of sanctioned amount under various schemes.

5.31 The capital expenditure schedule as submitted by the Petitioner for the FY 2016-17 has been tabulated below:

Table 23: Capital expenditure schedule* for the FY 2016-17 (in Rs Cr) as submitted by the Petitioner

Particulars	FY 2016-17	
	Approved in earlier Order (Rs Cr.)	As submitted now by the Petitioner (Rs Cr.)
Opening CWIP	1,556.70	2,077.80
Capex during the year	3,528.20	636.9
Transfer to GFA	1,411.30	73.4
Closing CWIP	**3,673.60**	**2,641.20**

**Revised submission by the Petitioner*

Commission's analysis

5.32 The Commission while scrutinizing the audited (statutory) accounts found that the opening balance of CWIP and capital expenditure for the FY 2016-17 as submitted by the Petitioner in its original Petition was Rs. 2079.40 Cr & Rs. 635.3 Cr. respectively. However as per Note 3A of the audited (statutory) accounts for the FY 2016-17, the opening balance of CWIP and the capital expenditure is Rs. 2077.76 Cr. and Rs. 636.84 Cr respectively. The Commission vide its discrepancy note has directed the Petitioner to provide proper justification on the same.

5.33 The Petitioner vide its reply submitted that at the time of preparation of the Petition, the accounts were not finalised and the audited (statutory) accounts, were made available subsequent to filing of the Petition due to which there has been a mismatch in figures.

5.34 Further, the Commission found that the actual capitalization as per audited (statutory) accounts for the FY 2016-17 was Rs. 73.4 Cr. as against Rs. 1411.3 Cr. approved by the Commission for the FY 2016-17 in its MYT order dated 21.06.17. The Commission directed the Petitioner to submit details of scheme-wise actual progress of the Petitioner along with the reasons for such significant variation from the approved figures for FY 2016-17.

5.35 The Petitioner vide its reply submitted that the actual capitalization for the FY 2016-17 is 73.4 Cr. which is due to delay in award of works under the various schemes. The delay in finalization of Standard Bidding Documents (SBD) and award of works under various schemes led to consequential delay in initiation of works during FY 2016-17. Thus, the actual capitalization was lower than the approved target given by the Commission.

5.36 Further, the Petitioner provided the details of funds utilized under various schemes and transferred to CWIP for the FY 2016-17 as tabulated below:

Table 24: Scheme wise Capital expenditure schedule* for the FY 2016-17 as submitted by the Petitioner

Scheme / Description		Utilized Amount (in Rs Cr)	Transferred to CWIP (in Rs Cr)
ADP	ADP (Description)- New	278.56	234.13
RE	RE/State plan	44.28	116.36
	RGGVY	0.12	
	Tilka Manjhi	1.33	
	DDUGJY	50.94	
	Atal Gramin Jyoti Yojna	1.78	
R-ARDRP	R-ARDRP (Part-A)	2.24	42.63
	R-ARDRP (Part-B)	34.28	
	R-ARDRP (SCADA) (Part-A)	0.61	
	IPDS		6.50
	Deposit		17.19
	Total	**414.15**	**416.82**

reply to discrepancy note

5.37 The Petitioner submitted that in addition to Rs.563.45 Cr as appearing under addition to CWIP, in the Note 3A of annual accounts, the Petitioner has also undertaken capital expenditure of Rs.73.4 Cr., which has been directly capitalized under the ADP and Deposit Works and not appearing in the capital works in progress, thus amounting to a total capital expenditure of Rs. 636.9 Cr.

5.38 The Petitioner further submitted that the amount of Rs.563.45 Crore appearing in Note 3A comprises Rs. 416.81 Crore, as transferred to CWIP in different schemes as tabulated above. The Petitioner submitted that the above amount of Rs. 416.81 Cr, consists of Rs. 101.95 Cr. on account of Interest and Finance Charges towards CWIP, which has been reduced by Rs. 4.93 Cr. on account of reversal of interest inadvertently provided under the UDAY loan during FY 2015-16, resulting in a total Interest and Finance charges of Rs. 97.02 Cr., as per Note 3A.

5.39 Further, the Petitioner considered the value of stock of material at construction site to the tune of Rs. 151.57 Cr. as per note 3A, to arrive at the total capital expenditure of Rs.636.9 Cr. The Petitioner submitted that the spill over amount which was not capitalized in FY 2016-17 would be utilized in the coming years.

5.40 The Commission after scrutinizing the submissions made by the Petitioner, finds it prudent to consider the values of CWIP, GFA as per the audited (statutory) accounts submitted by the Petitioner.

5.41 Further, the Commission notes with concern that the Petitioner is not able to comply with the timelines for capitalization as specified by the Commission in its earlier Order dated June 21, 2017 where the Petitioner itself had proposed 60:40 ratio for the capitalization and the Commission based on the past performance had approved a capitalization ratio of 40:40:20 for the approved capital expenditure.

5.42 It is to be noted that financing structure of few Capital expenditure schemes viz. DDUGJY, IPDS, RAPDRP-B etc. have provisions for conversion of debt into additional grants upon successful adherence to timelines by the Petitioner. The Commission while approving the MYT Order for the second control period considered the same considering the Petitioners submissions. The Commission is of the view that any inefficiency in the future on the part of the Petitioner should not be passed on to consumers. Hence, the Commission at this point shall not revise the financing structure of the approved capex schemes.

5.43 Accordingly, the GFA and CWIP as approved by the Commission based on audited (statutory) accounts has been tabulated below

Table 25: GFA (in Rs Cr) as approved by the Commission for the FY 2016-17

Particulars	FY 2016-17 As approved now by the Commission
Opening GFA	5,377.21
Additions to GFA during the Year	73.39
Deletions (if any)	-
Closing GFA	**5,450.60**

Table 26: CWIP (in Rs Cr) as approved by the Commission for the FY 2016-17

Particulars	FY 2016-17 As approved now by the Commission
Opening CWIP	2,077.76
Capex during the year	636.85
Transfer to GFA	73.39
Closing CWIP	**2,641.21**

Consumer Contribution, Grants and Subsidies

Petitioner's submission

5.44 The details of the Consumer contribution and Grants of JBVNL, based on the provisional accounts vis-à-vis as approved by the Commission in its earlier Order as submitted by the Petitioner has been tabulated below

Table 27: Consumer contribution and Grants* as submitted by the Petitioner

Particulars	FY 2016-17	
	Approved in earlier Order (Rs Cr.)	As submitted now by the Petitioner (Rs Cr.)
Opening	1,861.0	3,490.2
Addition	472.1	-472.5**
Closing	2,333.1	3,017.7

**Revised in the reply to 2nd discrepancy note*
***(Rs. -542.75 + Rs.70 Cr.), where Rs. 70 Cr. pertains to consumer contribution during FY 2016-17*

Commission's analysis

5.45 The Commission while verifying the claims made by the Petitioner with respect to consumer contribution and grants found a mismatch in the figures as submitted by the Petitioner vis-à-vis the audited (statutory) accounts for the FY 2016-17.

5.46 The Commission vide its discrepancy note directed the Petitioner to submit scheme wise details of funds received in terms of grants, debt and equity under various Central and State schemes for the FY 2016-17.

5.47 The Petitioner vide its reply submitted that the figures of Consumer Contribution and Grants have undergone certain changes on account of following:

(a) The grant of Rs. 115 Cr received during FY 2015-16 was wrongly recorded as Rs. 1150 Cr. due to typographical error. The total grant amount was reconciled in FY 2016-17 and necessary correction/ reversal entry for the excess booking of grant to the tune of Rs. 1,035Cr. has been done, resulting in negative figure during the year. In addition to above, there was an amortization of Rs.181.95 Cr. and total grant received during FY 2016-17 was Rs. 674.19 Cr. Thus, the total grants addition during FY 2016-17 has been negative to the tune of Rs. 542.7 Cr. as provided in Note 17 of the annual accounts.

(b) The amount of grant as submitted towards RE State Plan has been removed as the same has been completed and there shall be no funds available during FY 2017-18 and FY 2018-19, as proposed in the Tariff Petition.

5.48 Further, the Petitioner provided the scheme wise details of funds as received under various schemes for the FY 2016-17 as tabulated below:

Table 28: Scheme wise funds (in Rs Cr) as received during FY 2016-17 as submitted by the Petitioner

S. No.	Description	Fund Received (in Rs Cr)	Nature of funding	Source of funding
1	ADP (Description)- New	569.92	Loan	State
2	RE/State plan	67.82	Grant	State
3	RGGVY	5.00	Grant	State
4	Tilka Manjhi	50.00	Grant	State

S. No.	Description	Fund Received (in Rs Cr)	Nature of funding	Source of funding
5	DDUGJY	150.00	Grant	State
6	Atal Gramm Jyoti Yojna	50.00	Grant	State
7	R-ARDRP (Part-B)	100.00	Loan	State
8	RGGVY	15.40	Loan	Central Govt.
9	APDRP-PFC Loan	198.28	Loan	PFC
10	DDUGJY	34.64	Loan	Central Govt.
11	DDUGJY	312.40	Grant	Central Govt
12	IPDS	38.97	Grant	PFC
	Total	**1592.43**		

5.49 The Commission after due scrutiny of the submissions made by the Petitioner and the audited (statutory) accounts approves the Grants for the FY 2016-17 at Rs. -542.75 Cr in line with Note-17 of the audited (statutory) accounts. Further the consumer contribution has been approved as per Note-18 of the audited (statutory) accounts. The Consumer contribution and grants as approved by the Commission for the FY 2016-17 has been tabulated below:

Table 29: Consumer Contribution and Grants (in Rs Cr) as approved by the Commission

S No	Particulars	Amount in Rs Cr
1	Grants received during the FY 2016-17	674.19
2	Correction of grants pertaining to FY 2015-16	-1035
3	Amortization of the grants during FY 2015-16	-181.95
4	Net grants for the FY 2016-17 - Sum(1 to 3)	-542.76
5	Consumer Contribution	70
6	**Total- CC and Grants - (4+5)**	**-472.76**

5.50 Further, for estimating the sources of finance required to fund the closing GFA, the Commission had reduced the GFA by the consumer contribution, grants & subsidies available with the Petitioner.

5.51 For funding of above mentioned GFA, the Commission has considered the normative debt-equity ratio of 70:30 as provided in Distribution Tariff Regulation, 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.

5.52 The Commission has considered the consumer contribution, grants and capital subsidy (if any) on the basis of the audited annual accounts as submitted by the Petitioner. The normative net loans are estimated after deducting accumulated depreciation from the value of gross loans.

5.53 Accordingly, the funding of GFA as approved by the Commission for the FY 2016-17 has been tabulated below:

Table 30: Sources of funding of GFA (in Rs Cr) as approved by the Commission

Particulars	FY 2016-17
GFA	5450.60
Cons Contribution and Grants	3017.47
Consumer contribution, Grants towards GFA	2032.55
Debt & Equity towards GFA	3418.04
Equity @30%	1025.41
Acc. Dep	1741.92
Acc Dep as net of CC & grants	649.57
Net Accumulated Depreciation	1092.35
Normative Loan	1300.28

Operation & Maintenance Expenses

Petitioner's submission

5.54 As per JSERC Distribution Tariff Regulations 2015, Operation and Maintenance (O&M) expenses include

- Salaries, wages, pension contribution and other employee costs;
- Administration and General expenses;
- Repairs and Maintenance;

5.55 The Petitioner submitted that the Employee expenses comprises salaries, dearness allowance, bonus, terminal benefits in the form of pension & gratuity, leave encashment and staff welfare expenses. The Employee expenses as submitted by the Petitioner for the FY 2016-17 based on the provisional accounts have been tabulated below:

Table 31: Employee Cost (in Rs Cr) as submitted by the Petitioner

Particulars	FY 2016-17	
	As approved in the earlier Order	As submitted by the Petitioner
Employee Cost	218.2	213.2

5.56 The Petitioner submitted the A&G expenses as per the provisional accounts for the FY 2016-17. Further, the Petitioner submitted that there has been a slight increase in the A&G expenses, which is majorly due to various steps being undertaken by the Petitioner in terms of outsourcing the tasks and utilizing consultancy services for capacity building of the entity. The A&G expenses as submitted by the Petitioner has been tabulated below:

Table 32: A&G Cost (in Rs Cr) as submitted by the Petitioner

Particulars	FY 2016-17	
	As approved in the earlier Order	As submitted by the Petitioner
A&G Cost	50.5	56.9

5.57 The Petitioner submitted that the R&M expense for FY 2016-17 is lower than that of approved by the Commission in its earlier Order dated June 21, 2017. The R&M expenses as submitted by the Petitioner for FY 2016-17 based on provisional accounts has been tabulated below:

Table 33: R&M Cost (in Rs Cr) as submitted by the Petitioner

Particulars	FY 2016-17	
	As approved in the earlier Order	As submitted by the Petitioner
R&M Cost	65.9	54.0

Commission's analysis

5.58 The Commission has determined the employee cost, A&G expenses and R&M cost as per Note-26, Note-28 and Note-29 respectively of the audited (statutory) accounts for the FY 2016-17 as submitted by the Petitioner.

5.59 The O&M expenses as approved by the Commission for the FY 2016-17 is summarised in the following table:

Table 34: O&M expenses (in Rs Cr) as approved by the Commission

Particulars	FY 2016-17 Amount in Rs Cr
Employee cost	213.21
A&G Cost	56.83
R&M Cost	54.04
Total – O&M	**324.08**

Depreciation

Petitioner's submission

5.60 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, it has followed the similar approach adopted by the Commission in its Tariff orders dated 21st June 2017 and 14th Dec 2015.

5.61 The Petitioner 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 35: Computation of Depreciation as per Petitioner's submission (Rs Cr.)

Particulars	As approved in the earlier Order	As per provisional Accounts	As per Commissions approach
GFA Considered for Dep – Excl. GFA out of CC and Grants (Rs. Cr.)			3,417.90
Depreciation Rate	5.94%		5.94%
Depreciation Cost (Rs Cr.)	93.6	328.7	203

Commission's analysis

5.62 According to provision of Regulation 6.32 of JSERC Distribution 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 Table 30 of this Order, the Commission has determined the depreciation on the GFA created out of debt and equity excluding the consumer contribution, grants for the FY 2016-17. The rate of depreciation has been considered at 5.94% as approved in the earlier Order dated June 21, 2017.

5.63 Accordingly, the Commission approves the depreciation for the FY 2016-17 as summarised in the following table:

Table 36: Depreciation as approved by the Commission (in Rs Cr) for the FY 2016-17

Particulars	FY 2016-17 As approved now by the Commission
GFA Considered for Dep (Net of cons cont. and Grants)	3,418.04
Rate of depreciation	5.94%
Depreciation	**203.03**

Interest and finance charges

Petitioner's submission

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

5.65 The Petitioner submitted that the repayment of debt has been considered to be equal to the depreciation applicable to GFA created out of debt and equity and the rate of interest equal to SBI base rate, which is prevailing at 9.5% as on 1st April 2016, plus 200 basis points, thus totalling to 11.5% in line with the clause 6.31 of JSERC Tariff regulations 2015.

5.66 The Interest and finance charges as as submitted by the Petitioner is provided in the table below:

Table 37: Interest & finance charges (in Rs Cr) as submitted by the Petitioner

Particulars	As approved in the earlier Order	As submitted now by the Petitioner
Opening Balance	294.62	1256.7
Deemed Addition during the year	537.35	508.6
Deemed Repayments during the year	93.67	203
Closing Balance	738.29	1,562.2
Average balance during the Year	516.45	1,409.5
Interest Rate	11.30%	11.30%
Interest Expenses	58.36	159.3

Commission's analysis

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

5.68 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 Regulation 6.26 of the JSERC MYT Regulations 2015.

5.69 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 values for FY 2016-17 has been considered as per the closing values of FY 2015-16 as approved in the True-up Order for FY 2015-16.Further, the rate of interest has been considered at the Base rate of SBI as applicable on April 1, 2016 (9.3%) plus 200 basis points as per JSERC Distribution Tariff Regulations, 2015.

5.70 The interest on normative loan as approved by the Commission for the FY 2016-17 is summarized in the following table:

Table 38: Interest on Normative Loan (in Rs Cr) as approved by the Commission

Particulars	FY 2016-17 As approved now by the Commission
Opening Balance	1,256.61
Deemed Addition during the year	246.71
Deemed Repayments during the year	203.03
Closing Balance	1,300.28
Average balance during the Year	1,278.45

Particulars	FY 2016-17 As approved now by the Commission
Interest Rate	11.30%
Interest Expenses Total (in Rs Cr)	**144.46**

Interest on Security Deposits

Petitioner's submission

5.71 The Petitioner submitted that the Interest on consumer deposit for FY 2016-17 has been computed based on the actual interest on consumer deposit as per provisional annual accounts for FY 2016- 17.

5.72 The Petitioner further submitted that the provisional interest on consumer security deposit is lower than that approved in Tariff order dated 21st June 2017 due to low consumer additions in FY 2016-17 than that of approved, thus, resulting in less accumulation of security deposit. The Interest on security deposits as submitted by the Petitioner has been tabulated below:

Table 39: Interest on Consumer security deposits (in Rs Cr) as submitted by the Petitioner

Particulars	As approved in the earlier Order	As submitted now by the Petitioner
Consumer Deposit	598.99	452.9
Interest on Consumer Security Deposit	55.71	49.1

Commission's analysis

5.73 The Commission has approved the Consumer security deposits and interest on consumer security deposits thereon, based on the audited (statutory) accounts as submitted by the Petitioner for the FY 2016-17.

5.74 The Interest on consumer security deposits as approved by the Commission for the FY 2016-17 has been tabulated below:

Table 40: Interest on Consumer Security Deposits (in Rs Cr) as approved by the Commission

Particulars	FY 2016-17 As approved now by the Commission
Consumer Deposit	452.87
Interest on Consumer Security Deposit	**49.14**

Interest on Working Capital

Petitioner's submission

5.75 The Petitioner submitted that the Commission has not allowed any working capital requirement in the Tariff Order dated 21st June 2017. However, based on the submissions for true up, it has estimated the working capital requirement and interest thereof as provided in the table below

Table 41: Interest on working capital (in Rs Cr) as submitted by the Petitioner

Particulars	As approved in the earlier Order	As submitted now by the Petitioner
O&M expenses (1 month)	27.88	27.0
Maintenance Spares (1% of Opening GFA)	28.15	0.5
Receivables from sale of electricity at prevailing tariff (2 months)	874.14	1033.2
(Less) Amount held as security deposits	(397.56)	(452.9)
(Less) Power Purchase Cost (1 month)	(598.99)	(418.8)
Total WC	(66.38)	189.1
Interest Rate	12.80%	12.80%
Interest on Working Capital	**0.00**	**24.20**

Commission's analysis

5.76 The Commission has considered the interest on working capital as per the norms specified in the JSERC MYT Regulations 2015.

5.77 As per JSERC MYT Regulations 2015, the working capital requirements are to be determined as per the following norms:-

a) Operation & Maintenance expenses for one month; plus
b) Maintenance spares @ 1% of opening GFA; plus
c) Receivables equivalent to expected revenue of two months; minus
d) Amount held as security deposit; minus
a) One month equivalent of cost of power purchased, based on the annual power procurement plan

5.78 Rate of interest on working capital has been considered to be equal to the base rate of SBI as applicable on the 1st April of the FY 2016-17 plus 350 basis points as per Regulation 6.31 of the JSERC MYT Regulations 2015.

5.79 The interest on working capital as computed by the Commission for the FY 2016-17 is summarized in the following table:

Table 42: Interest on Working Capital (in Rs Cr) as approved by the Commission

Particulars	FY 2016-17 As approved now by the Commission
1 month O&M	27.01
Maintenance Spares @ 1% of Opening GFA	53.77
Receivables - 2 Months	984.40
Less: Security Deposit from Customers	452.87
Less: 1 month cost of power purchase	413.30
Total Working Capital requirement	199.01
Interest rate on WC	12.80%
Interest on Working Capital	**25.47**

Return on Equity

Petitioner's submission

5.80 The Petitioner, in order to estimate the equity balance, has considered the approach adopted by the Commission in its Tariff Order dated 21 June 2017, whereby normative equity is arrived at by assuming the equity to be 30% of the GFA created out of debt and equity.

5.81 The return on equity as submitted by the Petitioner for the FY 2016-17 has been summarized below:

Table 43: Return on Equity (in Rs Cr) as submitted by the Petitioner

Particulars	As approved in the earlier Order	As submitted now by the Petitioner
Opening balance of normative Equity	286.14	830.8
Deemed additions	281.76	194.5
Closing balance of normative Equity	567.90	1,025.4
Average Equity	427.02	928.1
Return on Equity (%)	15.50%	15.50%
Return on Equity	**66.19**	**143.9**

Commission's analysis

5.82 The Commission has approved the Return on Equity on the approved equity employed for the FY 2016-17 as per the Regulations specified in the JSERC Distribution Tariff Regulations, 2015:

6.17 The rate of return on equity shall be 15.5% (post-tax) for the period of these Regulations; Provided that in case of projects commissioned on or after 1st April, 2016 the rate of return shall be increased by 0.50%, if such projects are completed within the time line specified in the capital investment plan approved by the Commission;

6.18 Return on equity shall be allowed on equity employed in assets in use considering the following:

a) Equity employed in accordance with clause 6.15-6.16 of these Regulations on assets (in use) commissioned as on the beginning of the year; and

b) Average equity projected to be employed in accordance with clause 6.16 of these Regulations on assets (in use) commissioned during the year;

6.19 Return on equity invested in work in progress shall be allowed from the date of commercial operation of the assets;

5.83 The Commission has considered the opening balance of normative equity as per the closing balance for the FY 2015-16 as approved in the True up Order for FY 2015-16. Further, the rate of return on equity is considered to be 15.50%. Accordingly, the Commission computed normative return on equity as follows:

Table 44: Return on Equity (in Rs Cr) as approved by the Commission

Particulars	FY 2016-17 As approved now by the Commission
Opening Balance of Normative Equity	830.79
Deemed Additions	194.62
Closing Balance of Normative Equity	1,025.41
Average Equity	928.1
Return on Equity (%)	15.50%
Return on Equity	**143.86**

Non-Tariff Income

Petitioner's submission

5.84 The Petitioner submitted the Non-tariff income (Other Income) of JBVNL for FY 2016-17 based on the provisional accounts for the FY 2016-17.

5.85 The Petitioner submitted that while computing the Non-Tariff income for the FY 2016-17, financing cost for corresponding receivables, as accrued DPS is considered to be form of NTI in line with the judgement of Hon'ble APTEL dated 12.07.2011 in case No. 142 & 147 of 2009.

5.86 The Petitioner further submitted that the Hon'ble Commission in its Tariff order for Aggregate Revenue Requirement for MYT Period FY 2016-17 to FY 2020-21 for JBVNL has also considered the above approach in line with the judgement of Hon'ble APTEL in Appeal no.48 of 2016 and Appeal no.316 of 2016 & IA no.656 of 2016 dated 31st May, 2017, while approving the Non-Tariff income.

5.87 The Non-Tariff income (NTI) submitted by the Petitioner has been depicted in the table below:

Table 45: Non-Tariff income (in Rs Cr) as submitted by the Petitioner

Particulars	As approved in the earlier Order	As submitted now by the Petitioner
Interest on Staff Loan & Advance		
Income from Investment (F.D)		11.7
Interest on loans and advances to licensee		-
D.P.S from Consumer		321.3
Interest on advance to Supplier/Contractor		0
Interest from Bank (Other than F.D)		4.4
Income from trading		-
Income from staff Welfare Activities		0
Miscellaneous Receipt.		-
Meter Rent		-
Miscellaneous Charges from Consumers		3.5
Total		341
Interest rate for Receivables financing		12.80%
Corresponding Receivables against DPS		1,785.10
Interest on Receivables against DPS		228.5
Net NTI to be considered	**134.30**	**112.5**

Commission's analysis

5.88 The Commission has considered the Non-Tariff income for FY 2016-17 based on the audited (statutory) accounts as submitted by the Petitioner for the FY 2016-17.

5.89 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 31st May, 2017, while approving the Non-Tariff income.

5.90 Thus, Non-Tariff income as approved by the Commission for the FY 2016-17 is summarized in the following table:

Table 46: Non-Tariff Income (in Rs Cr) as approved by the Commission

Particulars	FY 2016-17 As approved now by the Commission
Income from Investment (F.D)	11.72
D.P.S from Consumer	321.33
Interest on advance to Supplier/Contractor	2.70
Interest from Bank (Other than F.D)	4.40
Income from staff Welfare Activities	0.02
Miscellaneous Receipt.	3.50
Meter Rent	13.46
Total	**357.12**
Interest rate for Receivables financing	12.80%
Corresponding Receivables against DPS	1,785.16
Interest on Receivables against DPS	228.50
Net NTI to be considered	**128.62**

Disallowance on account of excess AT&C Losses

Petitioner's submission

5.91 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.

5.92 The Petitioner 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 same. Further, the collection efficiency being approved under UDAY scheme is 93% in comparison to 100% set by Commission.

5.93 The Petitioner submitted that it has introduced several avenues for payment of bills by the consumers to enhance the collections and prayed the Commission to adjust the amount it has not been able to collect against RGF.

5.94 The Petitioner calculated the disallowance by considering the difference between the Commission's approved collection efficiency i.e. 100% and the collection efficiency of 93% (As envisaged under UDAY scheme) as tabulated below:

Table 47: Disallowance on account of collection efficiency (in Rs Cr) as submitted by the Petitioner

Particulars	As approved in the earlier Order	As submitted now by the Petitioner
Revenue from sale of power	-	2,813.50
Collection efficiency	100%	93%

Particulars	As approved in the earlier Order	As submitted now by the Petitioner
Uncollected revenue – to be adjusted against RGF	0.00	196.9

5.95 The Petitioner further submitted that the utility like JBVNL which has Universal Supply Obligation (USO) is prone to difficulties of T&D losses and collection inefficiencies due to difficult terrains and large rural consumers in overall consumer mix.

5.96 The Petitioner submitted that the Commission in its earlier Order had approved Distribution loss target of 24% for FY 2016-17 whereas, the distribution loss of JBVNL for the FY 2016-17 as per input energy at distribution system and sales in 26%. Based on the same, the Petitioner has estimated the disincentive for non-achievement of loss targets, considering the methodology adopted by Commission in its earlier Orders as tabulated below:

Table 48: Disincentive for the non-achievement of the excess T&D loss

Particulars	As submitted now by the Petitioner
Total Energy Sales to Intrastate consumers	8,721.1
Overall T&D loss (%) for intra-state consumers	24%
Total Energy requirement	11,475.1
Energy Available for Distribution	11,946.6
Disallowed Units due to Excess Loss	-471.5
Average Power Purchase Cost	4.2
Disallowed Cost due to Excess Loss	**197.1**

5.97 The Petitioner further submitted that the excess cost to be disallowed under 'Disincentive for non-achievement of T&D loss targets', needs to be adjusted against the Resource Gap Funding (RGF) as per the communication from the Energy Department, Govt. of Jharkhand.

Commission's analysis

5.98 The Commission had already set the targets for the Collection efficiency in Section *"Targets for Distribution Losses and Collection Efficiency"* of the JSERC Distribution 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.

5.99 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 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.

5.100 Accordingly, the power purchase cost incurred due to higher T&D losses, beyond the targeted level, has been disallowed and is treated as 'Disincentive for non-achievement of T&D loss targets' for the period FY 2016-17. The Commission has considered the similar approach as adopted by it in the Tariff Order dated December 14, 2015 in the computation of non-achievement of T&D loss reduction targets.

5.101 The non-achievement of T&D loss reduction targets for the FY 2016-17 as approved by the Commission has been summarized below:

Table 49: Disincentive for the achievement of T&D loss (in Rs Cr) as approved by the Commission

Particulars	FY 2016-17 As approved now by the Commission
Total Energy Sales to Intrastate consumers	8,721.07
Overall T&D loss (%) for intra-state consumers	24.20%
Overall T&D loss for intrastate consumers	
Total Energy requirement for intra- state consumers	11,505.37
Energy requirement for inter-state sale	
Total Energy requirement	
Energy Available for Distribution	12152.25
Disallowed Units due to Excess Loss	646.87
Average Power Purchase Cost	4.08
Disallowed Cost due to Excess Loss	**263.63**

Resource Gap Funding (RGF)

Petitioner's submission

5.102 The petitioner submitted that the resource gap funding is being provided by Government of Jharkhand to meet the disallowances and slashes made by the Hon'ble Commission during tariff determination process for various parameters such as higher T&D Loss, normative interest computation, normative generation cost etc.

5.103 The Petitioner further submitted that as per communication from the Energy department, Government of Jharkhand, amount released towards resource gap shall be utilized to meet the slashes/disallowances made by the Commission while fixing the tariff.

5.104 The Petitioner requested the Commission to consider adjusting the complete RGF towards disallowance/slashes in line with the communication by the GOJ and remaining amount of RGF may be considered to meet the revenue gap. The resource gap funding available to meet revenue gap as submitted by the Petitioner has been tabulated below:

Table 50: Adjustment of RGF (in Rs Cr) as submitted by the Petitioner

Particulars	As approved in the earlier Order	As submitted now by the Petitioner
Resource Gap Funding Received	1,200.00	1,200.00
Disallowances – on account of AT&C losses	-	394.1
Net Resource Gap Funding available to meet revenue gap	1,200.00	805.9

Commission's analysis

5.105 The Commission has approved the resource gap funding for the FY 2016-17 based on the board approved accounts as provided by the Petitioner.

5.106 Further, the Petitioner submitted a letter dated 14 July, 2014 from the Energy department, Government of Jharkhand which states 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".

5.107 In view of the above, the Commission has partially adjusted the RGF towards the disallowance of the power purchase cost (owing to higher T&D losses) as made in Table 49 of this Order and remaining resource gap funding available to the Petitioner after accounting for the aforesaid disallowance has considered for meeting the approved revenue gap.

5.108 Thus, the resource gap funding as approved by the Commission for the FY 2016-17 has been tabulated below

Table 51: Resource Gap Funding (in Rs Cr) budgeted to meet revenue gap for FY 2016-17

Particulars	FY 2016-17 As approved now by the Commission
RGF Received	1,200.00
Disallowances on account of excessive T&D Losses / Collection Efficiency	263.63
Net RGF to be considered towards ARR	**936.37**

Summary of ARR for the FY 2016-17

Petitioner's submission

5.109 The following table contains a summary of ARR for FY 2016-17 as submitted by the Petitioner:

Table 52: ARR (in Rs Cr) as submitted by the Petitioner for the FY 2016-17

Particulars	FY 2016-17	
	As approved in the earlier Order	As submitted now by the Petitioner
Power Purchase cost	4,629.51	5,025.5
Transmission charges	141.18	185.4
O&M expenses	334.53	324.1
Depreciation	93.67	203.0
Interest on Loan	58.36	159.3
Return on Equity	66.19	143.9
Interest on Working Capital	-	24.2
Interest on security deposit	55.71	49.1
Provision for doubtful debts		196.9
Less: Non-Tariff Income	134.30	112.5
Gross ARR	**5,244.85**	**6,199.0**

Commission's analysis

5.110 The following table summarizes the ARR for the FY 2016-17 as approved by the Commission.

Table 53: ARR (in Rs Cr) as approved by the Commission for the FY 2016-17

Particulars	FY 2016-17 As approved now by the Commission
Power Purchase cost	5,223.19
Transmission charges	185.40
Less: Disallowed cost due to excess T&D Loss	263.63
O&M expenses	324.08
Employee Expenses	213.21
A&G Expenses	56.83
R&M Expenses	54.04
Depreciation	203.03
Interest on Loan	144.46
Return on Equity	143.86
Interest on Working Capital	25.47
Interest on security deposit	49.14
Provision for doubtful debts	-
Less: Non-Tariff Income	128.62
Gross ARR	**5,906.38**

A6. REVISED ARR FOR FY 2017-18 & FY 2018-19

6.1 The Petitioner submitted that it has taken cognizance of the approved figures in Tariff Order for MYT control period from FY 2016-17 to FY 2020-21 and the principles adopted by the Commission in previous Tariff orders to arrive at most realistic projections for the FY 2017-18 and FY 2018-19.

6.2 The Commission has approved revised ARR for the FY 2017-18 and FY 2018-19 taking into consideration:

a) JSERC Distribution Tariff Regulations, 2015.

b) Methodology adopted by the Commission in its earlier Orders.

Energy Sales

Petitioner's submission

6.3 The Petitioner has projected the sales for FY 2017-18 and FY 2018-19 based on the addition of consumers, consumption pattern and past trend of growth rate. The Petitioner submitted that it has witnessed a significant growth in the total sales across all categories in the last few years due to increase in the availability of power, reduced load shedding, consumer addition across all category and uninterrupted supply of power. Further, JBVNL 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.

6.4 The projection of domestic consumers has been done taking into view the large scale electrification being planned under various ongoing schemes of Central and State Government. The Petitioner in its earlier Petition had projected an addition of 30 lacs new consumer by FY 2018-19. However, considering the current pace of electrification, the Petitioner has revised the figure to 14 lacs new consumers by FY 2018-19.

6.5 Further, the Petitioner in its earlier Petition had also planned to electrify 100,000 agriculture consumers every year over the next 3 years period under the "Tilka Manji" scheme. However, the Petitioner submitted that it has identified only 50,000 consumers so far to be electrified, spilled over in FY 2017-18 and FY 2018-19. The consumers in other category have been projected based on their previous growth trend for FY 2017-18 and FY 2018-19.

6.6 The category wise figures of consumers, sales and connected load of all categories for FY 2017-18 and FY 2018-19 as approved by the Commission in its Tariff order dated 21st June 2017 are detailed below:

Table 54: Sales, Consumers and Load as approved by the Commission in it earlier Order

Particulars	Sales (MUs)		Consumers		Connected Load (kW)	
	FY 2017-18	FY 2018-19	FY 2017-18	FY 2018-19	FY 2017-18	FY 2018-19
Domestic	7,204.50	10,078.50	40,55,121	56,16,621	47,15,756	65,96,962

Particulars	Sales (MUs)		Consumers		Connected Load (kW)	
	FY 2017-18	FY 2018-19	FY 2017-18	FY 2018-19	FY 2017-18	FY 2018-19
Commercial/Non Domestic	535.6	562.4	2,08,517	2,28,191	5,53,384	6,05,599
Public Lighting / SS	149.9	153.2	546	548	15,708	15,775
Irrigation / IAS	399	550.5	2,44,518	3,44,518	3,84,712	5,42,047
MES	15.9	16	8	8	5,680	5,680
Industrial LT / LTIS	185.5	189.2	14,245	14,468	2,95,779	3,03,522
Industrial HT / HTS / S/ EHT	2,398.40	2,429.10	1,694	1,721	9,52,467	9,71,021
Railway / RTS	222	222	3	3	1,142	1,142
Total	**11,110.70**	**14,200.80**	**45,24,652**	**62,06,079**	**69,24,628**	**90,41,747**

6.7 Category wise consumers as projected by the Petitioner for the FY 2017-18 and FY 2018-19 has been summarized below:

Table 55: Projection of Consumers* as submitted by the Petitioner

Particulars	FY 2017-18	FY 2018-19
Domestic	3,167,775	4,118,275
Commercial/Non Domestic	246,032	295,886
Irrigation / IAS	52,261	63,420
Industrial	16,823	17,340
Institutional Services	582	687
Total	**3,483,473**	**4,495,608**

**revised in the reply to discrepancy note-2*

6.8 Based on the above projection of consumers, the Petitioner has projected the energy sales based on the average energy consumption per consumer in past especially for domestic and irrigation consumer categories. The Petitioner has projected a nominal increase in energy sales for other consumer categories as tabulated below:

Table 56: Projection of Sales* (MU) as submitted by the Petitioner

Particulars	FY 2017-18	FY 2018-19
Domestic	5,590.21	6,459.03
Commercial/Non Domestic	792.71	991.48
Irrigation / IAS	153.95	261.67
Industrial	2,577.01	2,692.31
Institutional Services	384.92	392.43
Total	**9,498.80**	**10,796.93**

**revised in the reply to discrepancy note-2*

6.9 Based on the year on year growth of consumers and their energy sales, the Petitioner projected the connected load for the FY 2017-18 and FY 2018-19 as detailed in the table below:

Table 57: Projection of Connected Load* (kW) as submitted by the Petitioner

Particulars	FY 2017-18	FY 2018-19
Domestic	4,653,508.2	6,288,397.1
Commercial/Non Domestic	541,793.7	514,583.7
Irrigation / IAS	104,521.3	126,840.6

Particulars	FY 2017-18	FY 2018-19
Industrial	1,141,512.0	1,180,895.5
Institutional Services	77,819.6	68,385.0
Total	**6,519,154.8**	**8,179,102.0**

**revised in the reply to discrepancy note-2*

Commission's analysis

6.10 The Commission in its earlier Order dated June 21, 2017 had approved the sales by applying CAGR trends on the sales for the FY 2011-12 to FY 2015-16. Further, the Petitioner in its earlier Petition had submitted that around 30 lakh un-electrified households will be electrified during the first 3 years of the control period and 68,000 households in the next 2 years in the domestic category while 1 lakh consumers each for the first 3 years and 60,000 consumers in the next 2 years will be added in the IAS category. The Commission had considered the submissions made by the Petitioner and appropriately adjusted the sales in these categories, while issuing its last Order.

6.11 The Petitioner has now projected an addition of 14 lakh new consumers in domestic category by FY 2018-19 considering the pace of electrification. The Petitioner further submitted that nearly 50 lakh consumers have been identified to be electrified under "Tilka Manji" scheme in agriculture category.

6.12 The Commission in order to validate the claims made by the Petitioner, directed it to submit the details of category wise actual number of consumers, Connected Load, and Sales for the FY 2011-12 to FY 2015-16. The Petitioner vide its reply provided the details of the same.

6.13 The Commission has considered the submissions made by the Petitioner with respect to addition of consumers in domestic and agriculture category and appropriately adjusted the sales for the same based on the average per capita consumption per consumer. For other categories, the Commission projected the sales, connected load and consumers by applying CAGR trends based on the past data.

6.14 Accordingly, the sales (MU), connected load (KW) and number of consumers as approved by the Commission for the FY 2017-18 and FY 2018-19 has been tabulated below:

Table 58: Energy Sales (in MU) as approved by the Commission

Particulars	FY 2017-18 As approved now by the Commission	FY 2018-19 As approved now by the Commission
Domestic	5,501.49	6,304.26
Commercial/ Non domestic	647.61	737.03
Irrigation & Agricultural / IAS	149.35	181.24
Industrial Services		

Particulars	FY 2017-18 As approved now by the Commission	FY 2018-19 As approved now by the Commission
Industrial LT/LTIS	204.23	215.18
Industrial HTS/HTSS/EHT	2,357.49	2,391.14
Institutional services		
IS-I: Public Lighting / SS	243.62	248.74
IS-II: RTS, MES	118.98	118.98
Total Energy Sales (in MU)	**9,222.77**	**10,196.56**

Table 59: No of Consumers as approved by the Commission

Particulars	FY 2017-18 As approved now by the Commission	FY 2018-19 As approved now by the Commission
Domestic	3,100,026	3,850,029
Commercial/ Non domestic	215,581	237,536
Irrigation & Agricultural / IAS	52,261	63,420
Industrial Services		
Industrial LT/LTIS	15,194	15,684
Industrial HT/HTSS/EHT	1,610	1,625
Institutional services		
IS-I: Public Lighting / SS	536	530
IS-II: RTS, MES	8	8
Total No of Consumers	**3,385,216**	**4,168,833**

Table 60: Connected Load (in kW) as approved by the Commission

Particulars	FY 2017-18 As approved now by the Commission	FY 2018-19 As approved now by the Commission
Domestic	3,835,331.71	5,238,615.95
Commercial/ Non domestic	541,793.73	514,583.70
Irrigation & Agricultural / IAS	83,057.10	100,793.00
Industrial Services		
Industrial LT/LTIS	258,621.00	266,628.00
Industrial HT/HTS/S/EHT	812,388.18	828,635.94
Institutional services		
IS-I: Public Lighting / SS	38,220.00	38,560.00
IS-II: RTS, MES	35,959.58	25,795.00
Total Connected Load (in kW)	**5,605,371.30**	**7,013,611.59**

Power Purchase Cost

Petitioner's submission

6.15 The Petitioner has projected the power purchase for FY 2017-18 and FY 2018-19 based on the total energy requirement during the respective year. The projections of power purchase has been made considering the current status of upcoming stations and present sources. The Petitioner has considered the following points while projecting the Power purchase for FY 2017-18 and FY 2018-19:

(a) Delay of expected COD of upcoming stations like NTPC Darlipalli, NTPC, Nabinagar, NTPC North Karanpura, PTPS phase-I, etc.

(b) Additional Power Purchase from NTPC Korba (50 MW) and NTPC Farrakka (50 MW) through NVVNL in replacement to PUVNL existing plant allocation of 100 MW.

(c) Procurement of 200 MW of Wind Energy- JBVNL has entered into an PPA with PTC under the MNRE's scheme for setting up of 1000 MW ISTS- connected Wind Power projects (Tranche-II). The total Tariff at Jharkhand state periphery is discovered to Rs. 3.53 per Unit under competitive bidding process.

(d) The petitioner has further planned to sign a PPA with SECI to purchase 100 MW of wind power at Rs. 2.72 per unit in order to be 100% compliant in RPO.

(e) JREDA being the nodal agency for development of solar power plants in the state has invited bids for 1200 MW project of solar PV project. As a result and post negotiations, JREDA has been able to finalize revised allocation of 684.5 MW with tariff ranging from Rs. 4.95 per unit to Rs. 5.16 per unit. Considering the RPO obligations, JBVNL has planned to procure solar power from IPP's selected through JREDA.

(f) Letter sent to SECI for allocation of solar energy from solar parks at competitive price.

6.16 The station wise Power Purchase projected by JBVNL for FY 2017-18 & FY 2018-19 has been tabulated below:

Table 61: Power Purchase Quantum (in MU), Rate (Rs/kWh) and Cost (in Cr)* for the FY 2017-18 as submitted by the Petitioner

Particulars	FY 2017-18					
	Quantum in (MUs)		Per Unit Cost (in Rs/kWh)		Power Purchase Cost (in Rs Cr)	
	Approved in the earlier Order	As submitted now by the Petitioner	Approved in the earlier Order	As submitted now by the Petitioner	Approved in the earlier Order	As submitted now by the Petitioner
NTPC						
Farrakka	825.40	900.0	3.74	3.87	308.6	348.3
Farakka III	188.90	477.6	4.96	4.96	93.6	236.8
Khalagaon I	184.90	233.6	3.53	3.53	65.4	82.5
Talcher	498.20	646.9	2.23	2.54	111.2	164.0
Khalagaon II	190.10	302.7	3.33	3.39	63.3	102.6
Barh	237.10	560.1	6.09	6.09	144.3	340.9
NTPC Darlipalli STPS	585.00			-		-
NTPC Nabinagar	367.20		2.54		93.3	-
NTPC North Karanpura				-		-
KBUNL Kanti TPS	73.40		2.57		18.9	-
Korba		252.0		2.78		70.0
Total - NTPC	**3,150.20**	**3372.9**			**898.5**	**1,345.2**
NHPC						
Rangit	45.8	45.8	3.16	3.74	14.5	17.1
Teesta	329.7	329.7	2.48	2.48	81.8	81.8
Total - NHPC	**375.5**	**375.5**			**96.2**	**98.9**
PTC						
Chukha	203.8	203.8	1.87	2.29	38.10	46.7
Punatsangchhu-II HEP	488.1		3.31		161.60	-
Tala	405.6	405.6	2.12	2.16	86.10	87.6
Total - PTC	**1,097.5**	**609.4**			**285.8**	**134.3**
Total Central Sector	**4,623.2**	**4357.8**			**1,280.5**	**1,578.4**
Others (outside Boundaries)						
DVC	4,951.70	4,951.7	4.92	4.93	2,436.90	2,438.0
DVC STOA						
Total Others	**4,951.70**	**4,951.70**	**4.92**	**4.93**	**2,436.90**	**2,438.00**
State Sector						
PTPS / PUVNL	460.4		4.56	4.56	209.9	-
PTPS-NTPC Phase-1 / PUVNL Phase-1	478.0		2.54	2.54	121.4	-
SHPS	55.2	55.2	4.20	4.20	23.2	23.2
TVNL	2,266.8	1,563.0	3.60	3.82	816.2	597.7
Total State Sector	**3,260.3**	**1,618.2**			**1,170.7**	**620.9**
Private						

Particulars	FY 2017-18					
	Quantum in (MUs)		Per Unit Cost (in Rs/kWh)		Power Purchase Cost (in Rs Cr)	
	Approved in the earlier Order	As submitted now by the Petitioner	Approved in the earlier Order	As submitted now by the Petitioner	Approved in the earlier Order	As submitted now by the Petitioner
Inland Power	422.90	422.9	3.76	4.36	159.00	184.4
APNRL - 12% APNRL - 13%	954.00	954.00	3.67	3.82	349.70	364.40
APNRL- Additional 66 MW		330.2		3.39		112.0
Total Private Sector	**1,376.90**	**1,707.20**			**508.7**	**660.9**
-						
Other RE						
Solar IPP's	16.9	19.7	17.96	17.96	30.3	35.3
Solar REC's	13.1		3.50		4.6	-
JREDA	315.0		6.36	6.36	200.3	-
SECI (Solar)		19.1		5.97		11.4
RE Others / Wind	606.6	100.0		3.53	91.0	35.3
Total Other RE	**951.5**	**138.8**			**326.2**	**82.0**
PGCIL					118.90	118.9
Posoco (ERLDC)					1.50	1.5
UI Payable						
UI Receivable						
Rungta Mines		42.3		3.30		13.9
ABCIL		45.2		3.82		17.2
NVVNL(Korba III & Farrakka III)						
ERLDC(APNRL)						
GBI/ Rebate						
Additional REC purchase					78.30	
Less: Sale of Surplus Power					425.80	
Grand Total	**15,163.7**	**12,861.1**	**3.62**	**4.39**	**5,495.9**	**5,531.8**

**Revised submission by the Petiioner*

Table 62: Power Purchase Quantum (in MU), Rate (Rs/kWh) and Cost (in Cr)* for the FY 2018-19 as submitted by the Petitioner

Particulars	FY 2017-18					
	Quantum in (MUs)		Per Unit Cost (in Rs/kWh)		Power Purchase Cost (in Rs Cr)	
	Approved in the earlier Order	As submitted now by the Petitioner	Approved in the earlier Order	As submitted now by the Petitioner	Approved in the earlier Order	As submitted now by the Petitioner
NTPC						
Farrakka	825.38	825.4	3.8	4.1	310.7	335.4
Farakka III	188.88	477.6	5.0	5.0	94.7	239.4

Particulars	FY 2017-18					
	Quantum in (MUs)		Per Unit Cost (in Rs/kWh)		Power Purchase Cost (in Rs Cr)	
	Approved in the earlier Order	As submitted now by the Petitioner	Approved in the earlier Order	As submitted now by the Petitioner	Approved in the earlier Order	As submitted now by the Petitioner
Khalagaon I	184.93	184.9	3.6	3.6	65.9	65.9
Talcher	498.19	498.2	2.3	2.7	112.3	132.6
Khalagaon II	190.08	190.1	3.4	3.6	63.7	67.7
Barh	237.10	237.1	6.2	6.2	146.0	146.0
NTPC Darlipalli STPS	742.50	-	2.5	-	188.6	-
NTPC Nabinagar	367.20	-	2.6	-	94.5	-
NTPC North Karanpura	867.13	-	2.5	-	220.2	-
KBUNL Kanti TPS	73.44	-	2.6	-	19.2	-
Korba		252.0		2.8		70.0
Total - NTPC	**4,174.83**	**2,665.30**			**1,315.7**	**1,057.0**
NHPC						
Rangit	45.79	45.8	3.2	3.9	14.8	18.0
Teesta	329.69	329.7	2.5	2.5	83.8	83.8
Total - NHPC	**375.48**	**375.50**			**98.6**	**101.8**
PTC						
Chukha	203.79	203.8	1.9	2.4	39.1	49.0
Punatsangchhu-II HEP	533.44	-	3.4	-	181.0	-
Tala	405.61	405.6	2.2	2.2	88.2	88.2
Total - PTC	**1,142.84**	**609.40**		-	**308.3**	**137.2**
		-		-		-
Total Central Sector	**5,693.15**	**3,650.20**		-	**1,722.6**	**1,296.0**
Others (outside Boundaries)				-		
DVC	4,951.72	4,951.7	4.9	4.9	2,447.5	2,447.5
DVC STOA	-	-		-	-	-
Total Others	**4,951.72**	**4,951.70**		4.9	**2,447.5**	**2,447.5**
State Sector				-		
PTPS / PUVNL	460.37	-	4.6	-	211.3	-
PTPS-NTPC Phase-1 / PUVNL Phase-1	1,782.00	-	2.6	-	458.8	-
SHPS	55.19	55.2	4.3	4.3	23.8	23.8
TVNL	2,266.75	2,266.8	3.6	4.0	826.3	910.2
Total State Sector	**4,564.31**	**2,322.00**		-	**1,520.2**	**934.0**
Private						
Inland Power	422.94	422.9	3.8	4.4	160.1	184.4
APNRL - 12%	458.00	954.0	2.4	4.0	107.8	382.6
APNRL - 13%	496.00	-	4.9	-	245.1	-
APNRL- Additional 66 MW	-	330.2	-	3.4	-	112.0

Particulars	FY 2017-18					
	Quantum in (MUs)		Per Unit Cost (in Rs/kWh)		Power Purchase Cost (in Rs Cr)	
	Approved in the earlier Order	As submitted now by the Petitioner	Approved in the earlier Order	As submitted now by the Petitioner	Approved in the earlier Order	As submitted now by the Petitioner
Total Private Sector	**1,376.94**	**1,707.10**		-	**512.9**	**679.0**
-						
Other RE						
Solar IPP's	16.87	19.7	17.96	17.96	30.30	35.3
Solar REC's	13.14	-	3.50	-	4.60	-
JREDA	561.97	312.0	6.36	6.68	357.41	208.4
SECI (Solar)		19.1		5.97		11.4
RE Others / Wind	809.44	400.0	1.5	3.53	121.4	141.2
Total Other RE	**1,401.42**	**750.80**		-	**513.7**	**396.3**
				-		
PGCIL		-		-	121.9	121.9
Posoco (ERLDC)		-		-	1.5	1.5
UI Payable		-		-		-
UI Receivable		-		-		-
Rungta Mines		42.3		3.5		14.60
ABCIL		45.2		4.0		18.10
NVVNL(Korba III & Farrakka III)		-		-		-
ERLDC(APNRL)		-		-		-
GBI/ Rebate		-		-		-
Additional REC purchase		-		-	139.1	-
		-		-		-
Less: Sale of Surplus Power		-		-	331.3	-
Grand Total	**17,987.5**	**13,469.3**			**6,648.10**	**5,908.9**

**Revised submission by the Petitioner*

Commission's analysis

6.17 The Commission found that, although the Petitioner has provided details of power purchase quantum and cost, it had not submitted any methodology based on which such projections are made. The Commission vide its discrepancy note directed the Petitioner to provide a detailed methodology on how such projections were made. The Commission further directed the Petitioner to provide the details of month – wise actual power purchase cost (Rs Cr) duly segregated into fixed and energy charges and power purchase Quantum (MU) for the FY 2017-18 till December, 2017.

6.18 The Petitioner vide its reply submitted that it has considered the Station wise per unit cost (Rs./kWh) on the basis of either the rate approved by the Commission in its earlier Order or on the basis of actual cost of generation during FY 2016-17. Further, an escalation rate of 5% over the station-wise unit cost of FY 2017-18 has been considered by the Petitioner to arrive at the Station-wise unit cost for FY 2018-19.

6.19 The Petitioner also submitted that for FY 2017-18, the power purchase cost has been considered based on the extrapolation of actual power purchase cost during FY 2017-18, till the recent previous month upto the filing of the Tariff Petition.

6.20 The Commission after scrutinizing the submissions made by the Petitioner finds it prudent to approve the power purchase rate (Rs/kWh) for the FY 2017-18, as per the actuals, provided by the Petitioner for the FY 2017-18 (Apr 2017-Nov 2017), subject to True-up based on audited data.

6.21 Further, for the projection of power purchase rate for the FY 2018-19, the Commission considered a similar methodology as adopted by it in its earlier tariff Order dated June 21, 2017 which has been explained below:

- For thermal power stations, the Commission approved an escalation of 2.5% in the fixed charges of the power purchase rate while no escalation in the Energy charges has been considered.
- For hydro stations, 2.5% escalation has been approved for both fixed and energy charges.

6.22 Further, with respect to power purchase cost for DVC, the Petitioner has entered into a PPA with DVC where JBVNL procures power from DVC's Koderma plant directly (treated as a generation consumer), instead of procuring power from DVC as a HT consumer. The Commission has considered the same while approving the power purchase rate (Rs/kWh) for FY 2018-19 subject to True-up.

6.23 Any variation in power purchase cost from the approved cost may be claimed by the Petitioner through the FPPPA mechanism or during True-Up once the actual audited figures are available.

6.24 For projecting the power purchase from renewable energy sources to meet the RPO during FY 2017-18 to FY 2018-19, the Commission has considered the RPO trajectory as per JSERC (Renewable Energy Purchase Obligation and its compliance) Regulations, 2016 as amended from time to time.

6.25 The power purchase rate from SECI (Wind) has been considered at 2.72 Rs/kWh as per the submission made by the Petitioner in its instant petition and letter submitted subsequently to the Commission.

6.26 With respect to power purchase rate from solar through JREDA, the Petitioner had submitted a letter to the Commission that JREDA has agreed to supply power to JBVNL (through the competitive bidding route) with tariffs ranging from Rs. 4.95 per unit to Rs. 5.16 per unit. However, the Commission has rejected the Petitioners plea. In view of the same, the Commission has considered meeting RPO through purchase of RECs.

6.27 Accordingly, the renewable energy quantum to be purchased for the FY 2017-18 and FY 2018-19 has been worked out as follows:

Table 63: RPO (in MU) as per JSERC Regulations, 2016

Particulars	FY 2017-18		FY 2018- 19	
	Quantum (in MU's)	% of total quantum	Quantum (in MU's)	% of total quantum
Total Quantum	**12861.10**		**13469.30**	
Solar	482.29	3.75%	740.81	5.50%
Non-Solar	514.44	4.00%	606.12	4.50%
Total	**996.74**	7.75%	**1346.93**	10.00%

6.28 As per the Petitioner's submission, the quantum of purchase from renewables and percentage of total quantum thereof has been provided in the table below

Table 64: RPO (in MU) as submitted by the Petitioner

Particulars	FY 2017-18		FY 2018- 19	
	Quantum (in MU's)	% of total quantum	Quantum (in MU's)	% of total quantum
Total Quantum	**12861.1**		**13469.3**	
Solar	19.7	0.16%	331.7	2.66%
Non-Solar	119.1	0.95%	419.1	3.36%
Total	**138.8**	1.11%	**750.8**	6.01%

6.29 The Commission is of the view that the Petitioner can easily purchase RECs from the market to meet its solar and Non-solar RPO and therefore the Commission has allowed the cost for Solar and Non-Solar RECs based on the average market clearing price of RECs for April to December 2017 obtained from Indian Energy Exchange as tabulated below:

Table 65: Approved Cost (in Rs Cr) for the purchase of RECs

Particulars	FY 2017-18			FY 2018- 19		
	Difference in Quantum (in MUs)	REC Price (Rs/kWh)	Price of additional RECs (in Rs Cr)	Difference in Quantum (in MUs)	REC Price (Rs/kWh)	Price of additional RECs (in Rs Cr)
Solar	462.59	1.00	46.26	409.11	1.00	40.91
Non-Solar	395.34	1.43	56.49	187.02	1.43	26.72
Total	**857.94**		**102.75**	**596.13**		**67.64**

6.30 Further, the Commission approves the same charges for PGCIL and POSOCO as approved in the earlier Order dated June 21, 2017. Accordingly, the power purchase quantum (in MUs) and total power purchase rate (Rs/kWh) and cost (in Rs Cr) for the FY 2017-18, FY 2018-19 as approved by the Commission is summarized in the table below:

Table 66: Power purchase Quantum (in MU), Rate (Rs/kWh) and Cost (Rs Cr) for the FY 2017-18

Particulars	FY 2017-18		
	Quantum in (MUs)	Per unit Rate (Rs/kWh)	Power Purchase Cost (in Rs Cr)
NTPC			
Farrakka	900.0	3.63	326.40
Farakka III	477.6	4.48	213.91
Khalagaon I	233.6	3.34	77.96
Talcher	646.9	2.50	161.49
Khalagaon II	302.7	3.32	100.40
Barh	560.1	4.73	265.07
NTPC Darlipalli STPS	-	-	-
NTPC Nabinagar	-	-	-
NTPC North Karanpura	-	-	-
KBUNL Kanti TPS	-	-	-
Korba	252.0	2.64	66.55
Total - NTPC	**3,372.9**		**1,211.77**
NHPC			
Rangit	45.80	3.53	16.17
Teesta	329.70	2.14	70.64
Total - NHPC	**375.50**		**86.81**
PTC			
Chukha	203.8	2.29	46.67
Punatsangchhu-II HEP	-	-	-
Tala	405.6	2.16	87.61
Total - PTC	**609.40**		**134.28**
Total Central Sector	**4,357.8**		**1,432.86**
Others (outside Boundaries)			
DVC	4,951.7	4.93	2,438.98
DVC STOA	-		
Total Others	**4,951.70**		**2,438.98**
State Sector			
PTPS / PUVNL	-	3.67	-
PTPS-NTPC Phase-1 / PUVNL Phase-1	-	-	-
SHPS	55.2	1.13	6.21
TVNL	1,563.0	3.83	599.13
Total State Sector	**1,618.2**		**605.34**
Private			
Inland Power	422.9	3.71	156.90

Particulars	FY 2017-18		
	Quantum in (MUs)	Per unit Rate (Rs/kWh)	Power Purchase Cost (in Rs Cr)
APNRL - 12% APNRL - 13%	954.0	3.86	368.43
APNRL- Additional 66 MW	330.2	3.64	120.24
Total Private Sector	**1,707.1**		**645.56**
Other RE			
Solar IPP's	19.7	17.96	35.38
Solar REC's	-		
JREDA	-	6.36	
SECI	19.1	2.72	5.20
RE Others / Wind	100.0	3.53	35.30
Total Other RE	**138.8**		**75.88**
PGCIL	-		118.94
Posoco (ERLDC)	-		1.47
UI Payable	-		
UI Receivable	-		
Rungta Mines	42.3	3.30	13.96
ABCIL	45.2	3.82	17.27
NVVNL(Korba III & Farrakka III)	-		
ERLDC(APNRL)	-		
GBI/ Rebate	-		
Additional REC purchase	-		**102.75**
	-		
Grand Total	**12,861.1**		**5453.01**

Table 67: Power purchase Quantum (in MU), Rate (Rs/kWh and Cost (Rs Cr) for the FY 2018-19

Particulars	FY 2018-19		
	Quantum in (MUs)	Per unit Rate (Rs/kWh)	Power Purchase Cost (in Rs Cr)
NTPC			
Farrakka	825.4	3.65	301.42
Farakka III	477.6	4.53	216.15
Khalagaon I	184.9	3.36	62.17
Talcher	498.2	2.52	125.52
Khalagaon II	190.1	3.33	63.35
Barh	237.1	4.79	113.63
NTPC Darlipalli STPS	-	-	-
NTPC Nabinagar	-	-	-
NTPC North Karanpura	-	-	-
KBUNL Kanti TPS	-	-	-

Particulars	FY 2018-19		
	Quantum in (MUs)	Per unit Rate (Rs/kWh)	Power Purchase Cost (in Rs Cr)
Korba	252.0	2.68	67.44
Total - NTPC	**2,665.3**		**949.68**
NHPC			
Rangit	45.80	3.57	16.37
Teesta	329.70	2.17	71.45
Total - NHPC	**375.50**		**87.82**
PTC			
Chukha	203.8	2.35	47.84
Punatsangchhu-II HEP	-	-	-
Tala	405.6	2.21	89.80
Total - PTC	**609.40**	-	**137.64**
		-	
Total Central Sector	**3,650.2**	-	**1,175.14**
		-	
Others (outside Boundaries)		-	
DVC	4,951.7	4.00	1,980.68
DVC STOA	-	-	
Total Others	**4,951.70**	-	**1,980.68**
		-	
State Sector		-	
PTPS / PUVNL	-	-	-
PTPS-NTPC Phase-1 / PUVNL Phase-1	-	-	-
SHPS	55.2	1.15	6.37
TVNL	2,266.8	3.88	878.75
Total State Sector	**2,322.0**	-	**885.11**
		-	
Private		-	
Inland Power	422.9	3.80	160.82
APNRL - 12% **APNRL - 13%**	954	3.89	371.51
APNRL- Additional 66 MW	330.2	3.73	123.25
Total Private Sector	**1,707.1**	-	**655.58**
		-	
Other RE		-	
Solar IPP's	19.7	17.96	35.38
Solar REC's	-	-	
JREDA	312.0	4.72	147.16
SECI	19.1	2.72	5.20
RE Others / Wind	400.0	3.53	141.20
Total Other RE	**750.8**	-	**328.94**

Particulars	FY 2018-19		
	Quantum in (MUs)	Per unit Rate (Rs/kWh)	Power Purchase Cost (in Rs Cr)
		-	
PGCIL	-	-	121.91
Posoco (ERLDC)	-	-	1.51
UI Payable	-	-	
UI Receivable	-	-	
Rungta Mines	42.3	3.38	14.31
ABCIL	45.2	3.92	17.70
NVVNL(Korba III & Farrakka III)	-		
ERLDC(APNRL)	-		
GBI/ Rebate	-		
Additional REC purchase	-		67.64
	-		
Grand Total	**13,469.3**		**5247.24**

Energy Requirement and Energy Availability

Petitioner's submission

6.31 The Petitioner submitted that energy availability for FY 2017-18 & FY 2018-19 has been computed based on the estimated power purchase and sales.

6.32 The Petitioner further submitted that power purchase from various sources are segregated into different heads, while calculating the energy balance for the FY 2017-18 and FY 2018-19 as explained below:

- Power Purchase from Outside JSEB 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, Inland Power
- Direct Input of Energy to Distribution System- DVC and Solar IPPs.

6.33 Based on the above information, the Petitioner has submitted the Energy Balance for JBVNL for the FY 2017-18 & FY 2018-19 as shown below:

Table 68: Energy Balance* as Submitted by the Petitioner (in MU)

Particulars	FY 2017-18		FY 2018-19	
	As approved in the earlier Order	As submitted now by the Petitioner	As approved in the earlier Order	As submitted now by the Petitioner
Power Purchase from Outside JSEB Boundary	6,415.9	6,339.4	7,485.9	6,192.2
Loss in External System (%)	3.00%	3.00%	3.00%	3.00%
Loss in External System	192.5	190.2	224.6	185.8
Net Outside Power Available	6,223.4	6,149.3	7,261.3	6,006.4
Energy Input Directly to State Transmission System	1,428.1	984.7	1,428.1	1,428.1
State-owned Generation	1,416.5	565.6	2,720.5	565.6
Energy Input through Renewables sources	713.7		1,051.1	312.0
Payable	-	-	-	-
UI Sale / Receivable	-	-	-	-
Energy Available for Onward Transmission	9,781.6	7,699.5	12,460.9	8,312.0
Transmission Loss (%)	5%	5%	4.5%	4.5%
Transmission Loss	489.1	385.0	560.7	374.0
Net Energy Sent to Distribution System	9,292.6	7,314.5	11,900.1	7,938.0
Direct Input of Energy to Distribution System	5,189.6	4,971.4	5,302.1	4,971.4
Total Energy Available for Sales	**14,482.2**	**12,285.9**	**17,202.2**	**12,909.4**

**revised submission by the Petitioner*

Commission's analysis

6.34 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 the FY 2017-18 & FY 2018-19 for the computation of Energy Balance.

6.35 The energy requirement (in MU) as approved by the Commission for the FY 2017-18 & FY 2018-19 based on approved energy sales and distribution losses is summarized below:

Table 69: Energy Requirement as approved by the Commission (in MU)

Particulars	FY 2017-18	FY 2018-19
Energy Sales	9222.77	10196.56
Distribution Loss (%)	20.40%	15.00%
Distribution Loss	2363.62	1799.39
Energy Required for Distribution	11586.39	11995.96
Inter-State Sales	-	-
Total Energy Required (in MU)	11586.39	11995.96

6.36 The Commission has worked out energy availability for the FY 2017-18 & FY 2018-19 on the basis of actual generation from tied up power from central, state-owned and other stations including renewables. 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 24th February, 2018. The energy availability from various sources has been summarized below:

Table 70: Energy Balance as approved by the Commission for the MYT Period (in MU)

Particulars	FY 2017-18 As approved now by the Commission	FY 2018-19 As approved now by the Commission
Power Purchase from outside JSEB boundary	6,339.41	6,192.22
Loss in External System (%)	3.00%	3.00%
Loss in External System	190.18	185.77
Net Outside Power Available	6149.23	6006.45
Energy Input Directly to State Transmission System	984.69	1428.08
State-owned Generation	565.60	565.60
Energy Input through Renewable Sources	-	312.00
Payable		
UI Sale / Receivable		
Energy Available for Onward Transmission	7,699.52	8,312.13
Transmission Loss (%)	2.23%	2.23%
Transmission Loss	171.70	185.36
Net Energy Sent to Distribution System	7527.82	8126.77
Direct Input of Energy to Distribution System	4,971.40	4,971.40
Total Energy Available for Sales	**12,499.22**	**13,098.17**

6.37 As per Commission's analysis, the Petitioner is left with surplus power which can be sold at average power purchase cost to earn revenue subject to true-up.

6.38 Accordingly, the Commission calculated the Revenue at the sale of surplus power which is summarized in the table below:

Table 71: Revenue from the sale of surplus power (in Rs Cr)

Particulars	FY 2017-18	FY 2018-19
Total Energy Available for Distribution (MU)	12,499.2	13,098.2
Total Energy Required (MU)	11586.39	11995.96
Surplus units that can be sold (MU)	912.82	1102.21
Average Power Purchase Cost (Rs/kWh)	4.07	3.75
Revenue on selling surplus units	**371.19**	**413.76**

6.39 As per Regulation 6.40 of the JSERC Distribution Tariff Regulations 2015

> *"The estimated revenue from the sale of surplus power, if any, shall be reduced from the gross power purchase cost for estimating the net power purchase cost in the ARR."*

6.40 The Power purchase cost after netting off the revenue due to the sale of surplus power is shown below in the table:

Table 72: Net power purchase Cost (in Rs Cr) as approved by the Commission

Particulars	FY 2017-18	FY 2018-19
Total Power Purchase Cost	5453.01	5247.24
Minus: Revenue due to sale of Surplus Power	371.19	413.76
Net Power Purchase Cost	**5081.82**	**4833.48**

Intra-State Transmission Charges

Petitioner's submission

6.41 The Petitioner submitted that transmission charges payable to Jharkhand Urja Sanchar Nigam Limited been computed based on the approved rate in Tariff Order of JBVNL dated 21st June 2017.

6.42 The Petitioner further submitted that energy wheeled through transmission network in 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. The Intra-state transmission charges payable to JUSNL for FY 2017-18 and FY 2018-19 as projected by the Petitioner is provided in the table below.

Table 73: Intra-State Transmission Charges* for the FY 2017-18 & FY 2018-19 (in Rs Cr) as submitted by the Petitioner

Particulars	FY 2017-18		FY 2018-19	
	As approved in the earlier Order	As submitted now by the Petitioner	As approved in the earlier Order	As submitted now by the Petitioner
Energy Wheeled at Transmission Level (MU)	9,781.6	7,889.7	12,460.9	8,497.8
Transmission Rate (Rs/unit)	0.21	0.21	0.22	0.22
Transmission Charges (Rs Cr.)	185.5	165.7	243.5	187.0

* *Revised submission by the Petitioner.*

Commission's analysis

6.43 The Commission has considered the methodology adopted in the earlier Order for computation of transmission charges on energy wheeled through intra-state transmission network. The per unit transmission charge has been considered to be same as approved in the earlier Order dated June 21, 2017 till January'2018. The per unit charge has been considered at the rate approved as per JUSNL Tariff Order dated 24th February, 2018 which is 0.25 Rs/kWh wheeled for the period post January'2018. The impact of any variation on this account shall be considered during the True-up of the relevant year.

6.44 Further, the energy wheeled through transmission network has been considered as per approval granted in the previous section on energy requirement and no transmission charges are applicable on direct input of energy to distribution system which comprise power available from DVC and Solar IPPs.

6.45 The Intra-State Transmission charges approved by the Commission for the FY 2017-18 & FY 2018-19 as shown in the following table.

Table 74: Intra-state Transmission Charges (in Rs Cr) as approved by the Commission.

Particulars	FY 2017-18 As approved now by the Commission	FY 2018-19 As approved now by the Commission
Energy Wheeled at Transmission Level (MU)	7,699.52	8,312.13
Transmission Rate (Rs/unit)	0.21*	0.25
Transmission charges (in Rs Cr)	**160.16**	**207.80**

**effective rate for FY 2017-18*

Capital Expenditure and Capitalization

Petitioner's submission

6.46 The Petitioner submitted that capital expenditure schedule for FY 2017-18 and FY 2018-19 has been revised considering the provisional capital expenditure incurred in FY 2016-17 as submitted in the APR for the FY 2016-17. The Petitioner further submitted that capex of only Rs 636.9 Cr. has been done against Commission approved capex of Rs. 3528.2 Cr in FY 2016-17 and the remaining capex not incurred in FY 2016-17 has been spilled over in FY 2017-18 and FY 2018-19.

6.47 The Petitioner submitted that in scheme wise capital expenditure schedule, a new State Govt. scheme named Jharkhand Sampurna Bijli Achchadan Yojna (JASBAY) has been introduced. It is a state sponsored scheme, which aims to cover the several left over work required to ensure 24x7 power supply to all villages/ habitations and achievement of objectives of UDAY Yojana for reduction of AT&C losses. Under the JASBAY scheme, an approval of Rs. 5,127.56 Crore which is inclusive of Rs. 100.54 Crore for PMC has been accorded from Govt. of Jharkhand. The scheme wise capital expenditure schedule as submitted by the Petitioner for the FY 2017-18 and FY 2018-19 has been tabulated below:

Table 75: Scheme wise capital expenditure *(in Rs Cr) as approved by the Commission

Particulars	FY 2017-18		FY 2018-19	
	As approved in the earlier Order	As submitted now by the Petitioner	As approved in the earlier Order	As submitted now by the Petitioner
DDUGJY	1,500.0	1,960.8	1,196.0	965.6
IPDS	315.5	370.4	306.5	279.1
RAPDRP – A	40.3	104.3	20.0	-
RAPDRP – B	352.0	799.6	-	-
12th Plan RGGVY	720.9	990.9	-	-
ADP + Misc.	500.0	437.7	600.0	631.1
Tilka Manjhi & AGJY	100.0	147.6	57.4	33.6
RE State Plan	-	-		-
JSBAY	-	1,000.0		900.0
RGGVY (10th & 11th Plan)	-	196.9	-	-
Total	**3,528.7**	**6,008.3**	**2,179.9**	**2,809.4**

**revised submission by the Petitioner*

6.48 Based on the above capital expenditure schedule for FY 2017-18 and FY 2018-19, the Petitioner has projected revised CWIP and creation of GFA. The Petitioner 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.

6.49 The Capital expenditure schedule as submitted by the Petitioner for the FY 2016-17 has been tabulated below:

Table 76: Capital expenditure schedule for the FY 2017-18 & FY 2018-19 (in Rs Cr) as submitted by the Petitioner

Particulars	FY 2017-18		FY 2018-19	
	As approved in the earlier Order	As submitted now by the Petitioner	As approved in the earlier Order	As submitted now by the Petitioner
Opening CWIP	3,673.6	2,641.2	4,379.6	5,334.9
Capex during the year	3,528.7	6,008.3	2,179.9	2,809.4
Transfer to GFA	2,822.7	3,314.6	2,989.1	3,493.4
Closing CWIP	4,379.6	5,334.9	3,570.4	4,650.8

Commission's analysis

6.50 The Commission while scrutinising the capital expenditure schedule for the FY 2017-18 and FY 2018-19 directed the Petitioner to submit scheme wise details of capex of FY 2016-17 which have been proposed to be spilled over to FY 2017-18 and FY 2018-19.

6.51 The Commission further directed the Petitioner to provide scheme wise details of grants to be received under each scheme for the FY 2017-18 and FY 2018-19. Also, although the Petitioner had provided details regarding the JSBAY scheme, it had not provided any details regarding the financing of the same. The Commission directed the Petitioner to provide financing of the JSBAY scheme along with supporting documents.

6.52 Further, the Commission found that the financing details (Debt-Equity-Grant) of R-APDRP schemes as submitted by the Petitioner was not in line with the details as specified in Business plan for the second control period. The Commission directed the Petitioner to provide proper justification on the same.

6.53 The Petitioner vide its reply submitted the details of scheme wise grants to be received for the FY 2017-18 and FY 2018-19. With respect to JSBAY scheme, the Petitioner submitted that the GoJ, has sanctioned a total Rs.5,127 Crore under the Jharkhand Sampurna Bijli Achyadan Yojna (JSBAY) under which the electrification of all remaining tolas etc. shall be done. The Petitioner further submitted that the funds received under JSBAY are in form of grant and submitted a copy of letter of sanction in support of its claims.

6.54 Further with respect to funding of RAPDRP schemes, the Petitioner submitted that the central government provided 100% of total project outlay for RAPDRP Part A, which is provided in form of debt in the beginning. However, if the scheme targets are met, the entire funds are converted to grants, with the interest cost capitalized. In case of RAPDRP Part B scheme, the funds to the tune of 25% of total scheme layout are received from the Central Government, while the State Govt. has to contribute remaining 75%, which the Petitioner is receiving as debt. 50% of the Central Govt. share is convertible into grant in equal tranches, if the Petitioner is able to achieve the target of 15% AT&C loss on a sustained basis for a period of 5 years in the project area and the project is completed within the stipulated time schedule.

6.55 The Petitioner further submitted that there was an inadvertent error in the submissions of the Petitioner in the original tariff petition and the funds under R-APDRP Part B, may be considered to be 100% debt, till such time the R-APDRP Part B amount from the Central Govt. is converted to grant or the funds received from the State Govt. are converted to equity or grant.

6.56 The Commission also directed the Petitioner to submit detailed capital works to be undertaken under the head ADP + Misc. for the FY 2017-18 and FY 2018-19. The Petitioner vide its reply submitted the proposed works to be undertaken for the FY 2017-18. However, the Petitioner submitted that details of works under ADP+ Misc scheme has not been finalized for the FY 2018-19.

6.57 The Commission after scrutinizing the submissions made by the Petitioner finds it prudent to approve the Capital expenditure for central/state sponsored schemes as approved by the submitted by the Petitioner. Further, the Commission is of the view that the Petitioner has not been able to provide proper justification for the details of works to be undertaken under ADP+ Misc head. In view of the same, the Commission decides to approve 50% of the amount proposed by the Petitioner under ADP+ Misc Head. The scheme-wise capital expenditure as submitted by the Petitioner has been tabulated below:

Table 77: Scheme wise capital expenditure (in Rs Cr) as approved by the Commission

Particulars	FY 2017-18	FY 2018-19
DDUGJY	1960.8	965.6
IPDS	370.4	279.1
RAPDRP - A	104.3	-
RAPDRP - B	799.6	-
12th Plan RGGVY	990.9	-
ADP + Miscellaneous	218.85	315.55
Tilka Manjhi + AGJY	147.6	33.6
JSBAY	1000	900
RGGVY 10th & 11th Plan	196.9	-
Total	**5789.35**	**2493.85**

6.58 Further, as mentioned in paragraph 5.41 and 5.42 of this Order, the Commission notes with concern that the Petitioner is not able to comply with the timelines for capitalization as specified by the Commission in its earlier Order.

6.59 Based on the capitalization pace of the Petitioner, the Commission now approves the capitalization in the ratio of 20:30:50 for the first, second and third year. Further, the opening CWIP for the FY 2017-18 is to be capitalized in three years in the ratio of 30:30:40 in the first second and third year respectively.

6.60 The opening GFA & CWIP for the FY 2017-18 is considered to be equal to the closing GFA & CWIP respectively for the FY 2016-17 as approved in Table 25 & Table 26 of this Order. Accordingly the GFA and CWIP as approved by the Commission for the FY 2017-18 and FY 2018-19 is tabulated below:

Table 78: GFA (in Rs Cr) as approved by the Commission for the FY 18 & FY 19

Particulars	FY 2017-18	FY 2018-19
Opening GFA	5,450.60	7,400.83
Additions to GFA during the Year	1,950.23	3,027.94

Particulars	FY 2017-18	FY 2018-19
Deletions (if any)	-	
Closing GFA	**7,400.83**	**10,428.77**

Table 79: CWIP (in Rs Cr) as approved by the Commission for the FY 18 & FY 19

Particulars	FY 2017-18	FY 2018-19
Opening CWIP	2,641.21	6,480.33
Capex during the year	5,789.35	2,493.9
Transfer to GFA	1,950.23	3,027.94
Closing CWIP	**6,480.33**	**5,946.24**

Consumer Contribution, Grants and Subsidies

Petitioner's submission

6.61 The Consumer contribution and grants as projected by the Petitioner for the FY 2017-18 & FY 2018-19 has been tabulated below

Table 80: Consumer contribution and Grants* (in Rs Cr) as submitted by the Petitioner

Particulars	FY 2017-18		FY 2018-19	
	As approved in the earlier Order	As submitted now by the Petitioner	As approved in the earlier Order	As submitted now by the Petitioner
Opening	2,333.1	3,017.7	4,138.0	7,358.2
Addition	1,804.8	4,340.5	2,252.1	1,829.0
Closing	**4,138.0**	**7,358.2**	**6,390.0**	**9,187.3**

**Revised submission by the Petitioner*

Commission's analysis

6.62 The Commission while verifying the claims made by the Petitioner with respect to grants found discrepancy in the financing of certain capex schemes as discussed in paragraph 6.52 of this Order.

6.63 The Commission vide its discrepancy note directed the Petitioner to submit scheme wise details of funds to be received in the form of grants. Further, the Commission directed the Petitioner to explain the basis for the projection of consumer contribution for the FY 2017-18 & FY 2018-19.

6.64 The Petitioner vide its reply submitted the revised figures of scheme wise grants. Further, the Petitioner submitted that consumer contribution has been estimated based on the average percentage of consumer contribution of FY 2015-16 and FY 2016-17 to GFA addition i.e. 4.26%. The same percentage of GFA addition has been used to compute the consumer contribution for FY 2017-18 and FY 2018-19.

6.65 The Commission has approved the scheme wise grants for the capex schemes for the FY 2017-18 and FY 2018-19 as per the financing structure submitted by the Petitioner in its business plan for the second control period. Accordingly, the scheme wise grants as approved by the Commission for the FY 2017-18 & FY 2018-19 has been tabulated below:

Table 81: Scheme wise Grants (in Rs Cr) as approved by the Commission

Particulars	FY 2017-18	FY 2018-19
DDUGJY	1176.48	579.36
IPDS	222.24	167.46
RAPDRP-A	104.30	-
RAPDRP-B	-	-
12th plan RGGVY	891.81	-
10th and 11th plan RGGVY	177.21	-
ADP+misc	-	-
Tilkha manjhi	147.60	33.6.00
JSBAY	1000.00	900.00
Total	**3719.64**	**1680.42**

6.66 Further, for estimating the Consumer contribution, the Commission computed the average of the actual proportion of consumer contribution for the FY 2015-16 & FY 2016-17 which comes out to 5.95%. The same percentage has been applied on the capitalization for the FY 2017-18 & FY 2018-19 to arrive at the consumer contribution for the FY 2017-18 & FY 2018-19.

6.67 The Opening balance of grants and consumer contribution for the FY 2017-18 has been considered to be the closing balance for the FY 2016-17. Accordingly, the Grants and consumer contribution as approved by the Commission has been tabulated below:

Table 82: Consumer contribution and Grants (in Rs Cr) as submitted by the Petitioner

Particulars	FY 2017-18	FY 2018-19
Opening	3,017.47	6,853.13
Add: Grants during the year	3,719.64	1,680.42
Add: Consumer contribution	116.01	180.12
Closing	**6,853.13**	**8,713.67**

6.68 Further, for estimating the sources of finance required to fund the closing GFA, the Commission had reduced the GFA by the consumer contribution, grants & subsidies available with the Petitioner.

6.69 For funding of above mentioned GFA, the Commission has considered the normative debt-equity ratio of 70:30 as provided in Distribution Tariff Regulation, 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 as discussed in paragraph 5.50 of this Order.

6.70 Accordingly, the funding of GFA as approved by the Commission for the FY 2017-18 & FY 2018-19 has been tabulated below:

Table 83: Sources of funding of GFA (in Rs Cr) as approved by the Commission

Particulars	FY 2017-18	FY 2018-19
GFA	7400.83	10428.77
Cons Contribution & Grants	6853.13	8713.67
Consumer contribution, Grants towards GFA	3707.95	7803.09
Debt & Equity towards GFA	3747.04	4953.17
Equity @ 30%	1124.11	1485.95
Net accumulated Depreciation	1314.92	1609.14
Normative Loan	1308.01	1858.08

Operation & Maintenance Expenses

Petitioner's submission

6.71 The Petitioner submitted that it has projected the employee cost for FY 2017-18 and FY 2018-19 by escalating the employee cost of FY 2016-17 by the inflation factor of 4.36% and the methodology provided under Regulation 6.6 of JSERC MYT Regulations 2015.

6.72 The Petitioner further submitted that it has considered an additional escalation of 14.36% for FY 2018-19, owing to the expected impact of 7th Pay Commission.

6.73 The Petitioner has adopted a similar methodology for the projection of A&G expenses.

6.74 The Petitioner submitted that the R&M expense for FY 2017-18 and FY 2018-19 have been projected by escalating the R&M expense of FY 2016-17 by K-factor of 2.34% as approved by the Commission in Tariff Order dated June 21, 2017. The O&M expenses as submitted by the Petitioner for FY 2017-18 & FY 2018-19 has been tabulated below:

Table 84: O&M Cost (in Rs Cr) as submitted by the Petitioner

Particulars	FY 2017-18		FY 2018-19	
	As approved in the earlier Order	As submitted now by the Petitioner	As approved in the earlier Order	As submitted now by the Petitioner
Employee Cost	226.30	222.5	234.78	254.4
A&G Cost	52.68	59.3	54.97	61.9
R&M Cost	98.89	127.5	164.94	204.2
Total	**377.87**	**409.3**	**454.69**	**520.5**

Commission's analysis

6.75 As per Clause 6.3 of the JSERC Distribution Tariff Regulations, 2015, the O&M expenses shall include:

a) Salaries, wages, pension contribution and other employee costs;

b) Administrative and General expenses;

c) Repairs and Maintenance;

6.76 The Commission has determined the employee cost for FY 2017-18 & FY 2018-19 by increasing the employee cost for the FY 2016-17 as approved in this Order, (excluding the amount of terminal benefits) by the inflation factor of 4.36%.

6.77 The Commission has considered the cost towards terminal benefits during the FY 2017-18 & FY 2018-19 to be same as that for FY 2016-17 approved in this Order subject to true-up. Further, the Commission has not considered any impact of the 7th pay commission, as the same shall be considered at the time of True-up.

6.78 The Commission has adopted a similar methodology for the approval of A&G expenses wherein the A&G expenses for the FY 2016-17 approved in this Order have been escalated by 4.36%.

6.79 The Commission followed a similar methodology as adopted in the approval of R&M expenses in its earlier Tariff Order dated June 21, 2017, where the R&M expenses have been approved at 2.34% of the opening GFA for each year subject to true-up.

6.80 The O&M expenses as approved by the Commission for the FY 2017-18 & FY 2018-19 is summarised in the following table:

Table 85: O&M expenses (in Rs Cr) as approved by the Commission

Particulars	FY 2017-18	FY 2018-19
Employee cost	**221.46**	**230.07**
Employee expenses-Salaries	197.70	206.31
Terminal benefits	23.76	23.76
A&G Cost	**59.31**	**61.89**
Opening GFA	5,450.60	7,400.83
R&M Cost	**127.54**	**173.18**
Total	**408.31**	**465.14**

Depreciation

Petitioner's submission

6.81 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, it has followed the similar approach adopted by the Commission in its Tariff orders dated 21st June 2017 and 14th Dec 2015.

6.82 The Petitioner 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 86: Computation of Depreciation* as per Petitioner's submission (Rs Cr.)

Particulars	FY 2017-18		FY 2018-19	
	As approved in the earlier Order	As submitted now by the Petitioner	As approved in the earlier Order	As submitted now by the Petitioner
GFA Considered for Dep - Excl. GFA out of CC and Grants (Rs. Cr.)		4,191.0		5,598.30
Depreciation Rate (Rs. Cr.)	5.94%	5.94%	5.94%	5.94%
Depreciation Cost	**138.29**	**248.9**	**184.42**	**332.5**

**revised submission by the Petitioner*

Commission's analysis

6.83 According to provision of Regulation 6.32 of JSERC Distribution 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 Table 30 of this Order, the Commission has determined the depreciation on the GFA created out of debt and equity excluding the consumer contribution, grants for the FY 2017-18 & FY 2018-19. The rate of depreciation has been considered at 5.94% as approved in the earlier Order dated June 21, 2017.

6.84 Accordingly, the Commission approves the depreciation for the FY 2017-18 & FY 2018-19 as summarised in the following table:

Table 87: Depreciation as approved by the Commission (in Rs Cr) for the FY 2017-18 & FY 2018-19

Particulars	FY 2017-18	FY 2018-19
GFA Considered for Dep (Net of cons cont and Grants)	3747.04	4953.17
Rate of depreciation	5.94%	5.94%
Depreciation	**222.57**	**294.22**

Interest and finance charges

Petitioner's submission

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

6.86 The Petitioner submitted that the repayment of debt has been considered to be equal to the depreciation applicable to GFA created out of debt and equity and the rate of interest equal to SBI base rate, which is prevailing at 9.0% as on 1st April 2016, plus 200 basis points, thus totalling to 11.0% in line with the clause 6.31 of JSERC Tariff regulations 2015.

6.87 The Interest and finance charges as as submitted by the Petitioner is provided in the table below:

Table 88: Interest & finance charges* (in Rs Cr) as submitted by the Petitioner

Particulars	FY 2017-18		FY 2018-19	
	As approved in the earlier Order	As submitted now by the Petitioner	As approved in the earlier Order	As submitted now by the Petitioner
Opening Balance	738.29	1,562.2	1,358.35	2,098.8
Deemed Addition during the year	758.34	785.5	597.40	1,069.9
Deemed Repayments during the year	138.29	248.9	184.42	332.5
Closing Balance	1,358.35	2,098.8	1,771.32	2,836.2
Average balance during the Year	1,048.32	1,830.5	1,564.84	2,467.5
Interest Rate	11.30%	11.00%	11.30%	11.00%
Interest Expense	**118.46**	**201.4**	**176.83**	**271.4**

**revised submission by the Petitioner*

Commission's analysis

6.88 The Commission has calculated loans considering the debt-equity ratio in line with Regulation 6.15 and Regulation 6.16 of the JSERC MYT Regulations 2015 following the methodology as explained in paragraph 5.67 of this Order

6.89 The interest on normative loan as approved by the Commission for the FY 2017-18 & FY 2018-19 is summarized in the following table:

Table 89: Interest on Normative Loan (in Rs Cr) as approved by the Commission

Particulars	FY 2017-18	FY 2018-19
Opening Balance	1,300.28	1,308.01

Particulars	FY 2017-18	FY 2018-19
Deemed Addition during the year	230.30	844.29
Deemed Repayments during the year	222.57	294.22
Closing Balance	1,308.01	1,858.08
Average balance during the Year	1,304.15	1,583.04
Interest Rate	11.10%	10.70%
Interest Expenses Total (in Rs Cr)	**144.76**	**169.39**

Interest on Security Deposits

Petitioner's submission

6.90 The Petitioner submitted that the Interest on consumer deposit for FY 2017-18 & FY 2018-19 has been computed in line with the approach followed by the Commission in its Tariff order dated 21st June 2017. The Petitioner has considered the average security deposit per consumer at Rs. 1485 to arrive at the total security deposit of respective years, based on the actual number of consumers in FY 2016-17 and actual consumer security deposit as per the annual account.

6.91 The Petitioner further submitted that the interest rate has been considered at SBI Base rate prevailing on 1st April 2017 i.e. 9.0% p.a as per JSERC Supply code Regulations, 2015. The Interest on security deposits as submitted by the Petitioner has been tabulated below:

Table 90: Interest on Consumer security deposits (in Rs Cr) as submitted by the Petitioner

Particulars	FY 2017-18		FY 2018-19	
	As approved in the earlier Order	As submitted now by the Petitioner	As approved in the earlier Order	As submitted now by the Petitioner
Consumer Deposit	852.8	517.3	1,169.80	672.7
Interest Rate	9.00%	9.00%	9.00%	9.00%
Interest on Consumer Security Deposit	79.3	46.6	108.8	60.5

Commission's analysis

6.92 The Commission has considered the average security deposit per consumer as per the actuals for the FY 2016-17, which comes out at around Rs.1454 per consumer. .

6.93 The Commission has then multiplied the security deposit per consumer arrived as per methodology above with the number of consumers approved for the FY 2017-18 & FY 2018-19 in this Order to estimate the amount of security deposit for each year.

6.94 The applicable interest rate considered is as per JSERC Supply Code Regulations 2015 which states that the Petitioner is to pay interest to the consumer at the SBI Base rate prevailing on 1st April of the FY 2017-18 & FY 2018-19 i.e. 9.10% p.a. for FY 2017-18 & 8.70% for FY 2018-19 respectively.

6.95 The Interest on consumer security deposits as approved by the Commission for the FY 2017-18 & FY 2018-19 has been tabulated below:

Table 91: Interest on Consumer Security Deposits (in Rs Cr) as approved by the Commission

Particulars	FY 2017-18	FY 2018-19
Consumer security Deposit	492.25	606.20
Interest Rate	9.10%	8.70%
Interest on Consumer Security Deposit	**44.80**	**52.74**

Interest on Working Capital

Petitioner's submission

6.96 The Petitioner submitted that the Commission has not allowed any working capital requirement in the Tariff Order dated 21st June 2017, however, based on the submissions, it has estimated the working capital requirement and interest thereof as provided in the table below

Table 92: Interest on working capital (in Rs Cr) as submitted by the Petitioner

Particulars	FY 2017-18		FY 2018-19	
	Approved in the earlier Order	As submitted now by the Petitioner	Approved in the earlier Order	As submitted now by the Petitioner
1 month O&M	31.49	34.09	37.89	43.38
Maintenance Spares @ 1% of Opening GFA	42.26	1.3	70.49	2.0
Receivables - 2 Months	1,061.00	1,112.5	1,303.46	1,230.9
Less: Security Deposit from Customers	(852.82)	(517.30)	(1,169.75)	(672.7)
Less: 1 month cost of power purchase	(473.45)	(460.98)	(574.30)	(492.4)
Total Working Capital requirement	(191.52)	169.59	(332.21)	111.2
Interest rate on WC	12.80%	12.50%	12.80%	12.50%
Interest on Working Capital	**-**	**21.2**	**-**	**13.9**

Commission's analysis

6.97 The Commission has considered the interest on working capital as per the norms specified in the JSERC MYT Regulations 2015.

6.98 As per JSERC MYT Regulations 2015, the working capital requirements are to be determined as per the following norms:-

a) Operation & Maintenance expenses for one month; plus
b) Maintenance spares @ 1% of opening GFA; plus
c) Receivables equivalent to expected revenue of two months; minus
d) Amount held as security deposit; minus
b) One month equivalent of cost of power purchased, based on the annual power procurement plan

6.99 Rate of interest on working capital has been considered to be equal to the base rate of SBI as applicable on the 1st April of the FY 2017-18 & FY 2018-19 i.e 9.10% & 8.70 respectively plus 350 basis points as per Regulation 6.31 of the JSERC MYT Regulations 2015.

6.100 The interest on working capital as computed by the Commission for the FY 2017-18 & FY 2018-19 is summarized in the following table:

Table 93: Interest on Working Capital (in Rs Cr) as approved by the Commission

Particulars	FY 2017-18	FY 2018-19
1 month O&M	34.03	38.76
Maintenance Spares @ 1% of Opening GFA	54.51	74.01
Receivables - 2 Months	1019.70	995.58
Less: Security Deposit from Customers	(492.25)	(606.20)
Less: 1 month cost of power purchase	(423.97)	(402.79)
Total Working Capital requirement	192.49	99.35
Interest rate on WC	12.60%	12.50%
Interest on Working Capital	**24.25**	**12.12**

Return on Equity

Petitioner's submission

6.101 The Petitioner, in order to estimate the equity balance, has considered the approach adopted by the Commission, whereby normative equity is arrived at by assuming the equity to be 30% of the GFA created out of debt and equity.

6.102 The return on equity as submitted by the Petitioner for the FY 2017-18 & FY 2018-19 has been summarized below:

Table 94: Return on Equity (in Rs Cr)* as submitted by the Petitioner

Particulars	FY 2017-18		FY 2018-19	
	Approved in the earlier Order	As submitted now by the Petitioner	Approved in the earlier Order	As submitted now by the Petitioner
Opening Balance of Normative Equity	567.90	1,025.4	873.27	1,257.3
Deemed Additions	305.37	232.0	221.10	422.2
Closing Balance of Normative Equity	873.27	1,257.3	1,094.37	1,679.5
Average Equity	720.59	1,141.3	983.82	1,468.4
Return on Equity (%)	15.50%	15.5%	15.50%	15.5%
Return on Equity	**111.69**	**176.9**	**152.49**	**227.6**

**revised submission by the Petitioner*

Commission's analysis

6.103 The Commission has approved the Return on Equity on the approved equity employed for the FY 2017-18 & FY 2018-19 as per the Regulations specified in the JSERC Distribution Tariff Regulations, 2015:

> *6.17 The rate of return on equity shall be 15.5% (post-tax) for the period of these Regulations; Provided that in case of projects commissioned on or after 1st April, 2016 the rate of return shall be increased by 0.50%, if such projects are completed within the time line specified in the capital investment plan approved by the Commission;*
>
> *6.18 Return on equity shall be allowed on equity employed in assets in use considering the following:*
>
> > *a) Equity employed in accordance with clause 6.15-6.16 of these Regulations on assets (in use) commissioned as on the beginning of the year; and*
> >
> > *b) Average equity projected to be employed in accordance with clause 6.16 of these Regulations on assets (in use) commissioned during the year;*
>
> *6.19 Return on equity invested in work in progress shall be allowed from the date of commercial operation of the assets;*

6.104 The Commission has considered the opening balance of normative equity as per the closing balance for the FY 2016-17 as approved in this Order. Further, the rate of return on equity is considered to be 15.50%. Accordingly, the Commission computed normative return on equity as follows:

Table 95: Return on Equity (in Rs Cr) as approved by the Commission

Particulars	FY 2017-18	FY 2018-19
Opening Balance of Normative Equity	1,025.41	1,124.11
Deemed Additions	98.70	361.84
Closing Balance of Normative Equity	1,124.11	1485.95
Average Equity	1,074.76	1,305.03
Return on Equity (%)	15.50%	15.50%
Return on Equity	**166.59**	**202.28**

Non-Tariff Income

Petitioner's submission

6.105 The Petitioner submitted the Non-tariff income (Other Income) of JBVNL for FY 2017-18 & FY 2018-19 has been projected based on the growth trend of historical figures.

6.106 The Petitioner submitted that while computing the Non-Tariff income, financing cost for corresponding receivables, as accrued DPS is considered to be form of NTI in line with the judgement of Hon'ble APTEL dated 12.07.2011 in case No. 142 & 147 of 2009.

6.107 The Petitioner further submitted that the Hon'ble Commission in its Tariff order for Aggregate Revenue Requirement for MYT Period FY 2016-17 to FY 2020-21 for JBVNL has also considered the above approach in line with the judgement of Hon'ble APTEL in Appeal no.48 of 2016 and Appeal no.316 of 2016 & IA no.656 of 2016 dated 31st May, 2017, while approving the Non-Tariff income.

6.108 The Non-Tariff income (NTI) submitted by the Petitioner has been depicted in the table below:

Table 96: Non-Tariff income (in Rs Cr) as submitted by the Petitioner

Particulars	FY 2017-18		FY 2018-19	
	As approved in the earlier	As submitted now by the Petitioner	As approved in the earlier	As submitted now by the Petitioner
D.P.S from Consumer		350.0		370.0
Total NTI		370.0		395.0
Interest rate for Receivables		12.50%		12.50%
Corresponding Receivables against		1944.4		2055.6
Interest on Receivables against DPS		243.1		256.9
Net NTI to be considered	**141.01**	**126.90**	**148.07**	**138.1**

Commission's analysis

6.109 The Commission has projected the net Non-Tariff income for FY 2017-18 & FY 2018-19 by escalating the net Non-Tariff income for the FY 2016-17 as approved in this Order by 5% as per the methodology adopted in the earlier Order.

6.110 Accordingly, the Non-Tariff income as approved by the Commission for the FY 2017-18 & FY 2018-19 is summarized in the following table:

Table 97: Non-Tariff Income (in Rs Cr) as approved by the Commission

Particulars	FY 2017-18	FY 2018-19
Non Tariff Income	135.05	141.80

Disallowance on account of excess AT&C Losses

Petitioner's submission

6.111 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.

6.112 The Petitioner submitted that the target of 100% of collection efficiency set by the Commission is on a higher side and even the most efficient utilities in the Country are not able to achieve the same. Further, the collection efficiency being approved under UDAY scheme is 97% for FY 2017-18 in comparison to 100% set by Commission.

6.113 The Petitioner submitted that it is in the process of revision of UDAY targets for AT&C loss and a letter in this regard has been already been sent to Jharkhand Govt. and Ministry of Power.

6.114 The Petitioner calculated the disallowance by considering the difference between the Commission's approved collection efficiency i.e. 100% and the revised target of 95% as tabulated below:

Table 98: Disallowance on account of Collection efficiency (in Rs Cr) as submitted by the Petitioner

Particulars	FY 2017-18 As submitted now by the Petitioner	FY 2018-19 As submitted now by the Petitioner
Revenue from sale of power	3572.2	8040.1
Collection efficiency	95%	97%
Total disallowance	178.6	241.2

Commission's analysis

6.115 The Commission has already discussed this issue in paragraph 5.98 of this Order and hence has not allowed any relaxation in collection efficiency for the FY 2017-18 & FY 2018-19.

Resource Gap Funding (RGF)

Petitioner's submission

6.116 The petitioner submitted that the resource gap funding is being provided by Government of Jharkhand to meet the disallowances and slashes made by the Hon'ble Commission during tariff determination process for various parameters such as higher T&D Loss, normative interest computation, normative generation cost etc.

6.117 The Petitioner further submitted that as per communication from the Energy department, Government of Jharkhand, amount released towards resource gap shall be utilized to meet the slashes/disallowances made by the Commission while fixing the tariff.

6.118 The Petitioner submitted that resource gap funding proposed for FY 2017-18 by GoJ is Rs 2,500 Cr. However, it is pertinent to mention that the Petitioner has not proposed any resource Gap Funding for FY 2018-19:

Table 99: Adjustment of RGF (in Rs Cr) for FY 2017-18 as submitted by the Petitioner

Particulars	As approved in the earlier Order	As submitted now by the Petitioner
Resource Gap Funding Received		2500
Disallowances – on account of AT&C losses		178.6
Net Resource Gap Funding available to meet revenue gap	-	2321.4

Commission's analysis

6.119 The Commission has approved the resource gap funding for the FY 2017-18 as submitted by the Petitioner at Rs 2500 Cr subject to True up.

6.120 It is pertinent to mention that the Commission has not made any disallowances for the FY 2017-18 & FY 2018-19 and hence the entire RGF is adjusted against the ARR as per the communication from Energy Dept, GoJ and the methodology adopted by the Commission in its earlier Orders.

6.121 Thus, the resource gap funding as approved by the Commission for the FY 2017-18 has been tabulated below:

Table 100: Resource Gap Funding (in Rs Cr) budgeted to meet revenue gap for FY 2017-18

Particulars	FY 2017-18 As approved now by the Commission
RGF	2,500.00
Disallowances on account of excessive T&D Losses / Collection Efficiency	-
Net RGF to be considered towards ARR	2,500.00

Summary of ARR for the FY 2017-18 & FY 2018-19

Petitioner's submission

6.122 The following table contains a summary of ARR for FY 2016-17 as submitted by the Petitioner:

Table 101: ARR* (in Rs Cr) as submitted by the Petitioner for the FY 2017-18 & FY 2018-19

Particulars	FY 2017-18		FY 2018-19	
	As approved in the earlier Order	As submitted now by the Petitioner	As approved in the earlier Order	As submitted now by the Petitioner
Power Purchase cost	5,495.9	5,531.8	6,648.1	5,909.0
Transmission charges	185.5	165.7	243.5	187.0
O&M expenses	377.9	409.4	454.7	521.5
Depreciation	138.3	248.9	184.4	332.5
Interest on Loan	118.5	201.4	176.8	271.4
Return on Equity	111.7	176.9	152.5	227.6
Interest on Working Capital	-	21.2	-	13.9
Interest on security deposit	79.3	46.6	108.8	60.5
Provision for doubtful debts				
Less: Non-Tariff Income	-141.0	-126.9	-148.1	-138.1
Gross ARR	**6,366.1**	**6,674.9**	**7,820.8**	**7,385.4**

**revised submission by the Petitioner*

Commission's analysis

6.123 The following table summarizes the ARR for the FY 2017-18 & FY 2018-19 as approved by the Commission.

Table 102: ARR (in Rs Cr) as approved by the Commission for the FY 2017-18 & FY 2018-19

Particulars	FY 2017-18	FY 2018-19
Power Purchase cost	5,081.82	4,833.48
Transmission charges	160.16	207.80
O&M expenses	408.31	465.14
Employee Expenses	221.46	230.07
A&G Expenses	59.31	61.89
R&M Expenses	127.54	173.18
Depreciation	222.57	294.22
Interest on Loan	144.76	169.39

Particulars	FY 2017-18	FY 2018-19
Return on Equity	166.59	202.28
Interest on Working Capital	24.25	12.12
Interest on security deposit	44.80	52.74
Provision for doubtful debts	-	-
Less: Non-Tariff Income	135.05	141.80
Gross ARR	**6,118.22**	**6,097.90**

Penalty for Non-Compliance of Directives

6.124 The Commission in its earlier Orders dated December 14, 2015 and June 21, 2017 had expressed serious concern over the Petitioner's negligence with respect to meeting the RPO. Further, the Commission had mentioned that any non-compliance in the future may attract penalty. The relevant extracts of the Orders have been reproduced below:

Order dated December 14, 2015

" 6.21 Further with respect to the purchase from renewable sources to meet the Renewable Purchase Obligation (RPO), the Commission notes with concern that the Petitioner has not taken any steps till date to meet its targets. In the past also, the Commission had directed the Petitioner to ensure RPO obligations are met. The Commission takes serious note of its non-compliance. Any non-compliance in future may attract penalty."

Order dated June 21, 2017

"RPO Obligation

12.19 The Commission directs the Petitioner to ensure that they procure renewable energy both solar & non-solar in accordance with JSERC (Renewable Energy Purchase Obligation and its compliance) Regulations, 2016. Failure to comply with RPO may attract penal action."

6.125 However, the Petitioner has not complied with the RPO till date. Further, the Commission in its earlier Order dated August, 2012 had directed the Petitioner to comply with the Standard of performance regulations as notified by the Commission and submit a progress report on the implementation of the same which the Petitioner has failed to comply with in spirit.

6.126 Also, the Commission in its earlier Order dated June 21, 2017 had directed the Petitioner to:

(a) Conduct a detailed technical study to ascertain voltage wise losses of the system.

(b) To prepare a list of consumers who have not been paid "Interest on consumer security deposit" as per applicable Regulations and clear the dues pending on the Petitioner with immediate effect.

(c) Undertake extensive consumer awareness programmes with an aim to apprise the consumers on various facets of power distribution

(d) Submit a report on the Employee performance appraisal system adopted.

(e) Make separate accounting for wheeling & retail supply business.

6.127 However, the Commission is of the view that the Petitioner has not taken any initiative to comply with the directives of the Commission, in spirit. The Commission takes serious note of the non-compliance of the Petitioner in this regard. This shows that the Petitioner has taken the directives casually. In view of the same, the Commission has now decided to impose a penalty of 2% of the Aggregate Revenue Requirement (ARR) of the Petitioner for the FY 2018-19.

6.128 The Commission re-directs the Petitioner to comply with the directives issued. In case, the Petitioner complies with the directives issued by the Commission, the Commission may consider adjusting the penalty imposed on ARR at the time of true-up for the FY 2018-19.

Table 103: ARR for the FY 2018-19 (in Rs Cr) after imposing penalty as approved by the Commission

Particulars	Approved in True up
ARR for the FY 2018-19 - (1)	6,097.90
Penalty imposed (2% of the ARR for the FY 2018-19) - (2)	124.44
Net ARR for the FY 2018-19 (1-2)	**5,973.46**

Revenue from Existing Tariff

Petitioner's submission

6.1 The category wise calculation of revenue from existing tariff as submitted by the Petitioner for each year of the FY 2017-18 to FY 2018-19 is summarized in the following table:

Table 104: Revenue at the Existing Tariff* (in Rs Cr) as submitted by the Petitioner

Particulars	FY 2017-18			FY 2018-19		
	Fixed charge (Rs Cr)	Energy charge (Rs Cr)	Total Revenue (Rs Cr)	Fixed charge (Rs Cr)	Energy charge (Rs Cr)	Total Revenue (Rs Cr)
Domestic	246.8	813.2	1,060.03	197.0	1,172.5	1,369.46
Commercial/ Non domestic	137.2	406.7	543.94	125.0	532.2	657.16
Irrigation & Agricultural / IAS	9.5	2.7	12.22	6.2	11.0	17.16
Industrial Services						
Industrial LT/LTIS	66.6	120.7	187.30	60.2	123.0	183.23
Industrial HT/HTS/S/EHT	436.3	1,169.3	1,605.57	451.8	1,224.5	1,676.22

Particulars	FY 2017-18			FY 2018-19		
	Fixed charge (Rs Cr)	Energy charge (Rs Cr)	Total Revenue (Rs Cr)	Fixed charge (Rs Cr)	Energy charge (Rs Cr)	Total Revenue (Rs Cr)
Institutional services						
IS-I: Public Lighting / SS	7.4	79.5	86.89	5.2	104.5	109.67
IS-II: RTS, MES	13.2	54.7	67.93	9.5	54.7	64.20
IS-III: DS-HT	0.5	7.8	8.29	0.5	8.6	9.18
Total	**917.5**	**2,654.7**	**3,572.17**	**855.3**	**3,231.0**	**4,086.29****

**revised submission by the Petitioner, ** Computational error by the Petitioner*

Commission's analysis

6.2 The Commission has computed the category-wise revenue from sale of power for the FY 2017-18 & FY 2018-19 based on the approved sales, number of consumers and connected load for the relevant year as per this Order and the category-wise existing tariff's, categories and slabs as per the Tariff Order dated June 21, 2017.

6.3 The details of category wise revenue at existing tariff for the FY 2017-18 & FY 2018-19 as approved by the Commission is provided in the table below:

Table 105: Category wise Revenue at Existing Tariff (in Rs Cr) as approved by the Commission

Particulars	FY 2017-18			FY 2018-19		
	Fixed Charges (in Rs Cr)	Energy Charges (in Rs Cr)	Total Revenue (in Rs Cr)	Fixed Charges (in Rs Cr)	Energy Charges (in Rs Cr)	Total Revenue (in Rs Cr)
Domestic	331.86	874.67	1206.53	233.07	1336.76	1569.83
Non-Domestic	137.74	329.93	467.68	54.99	395.77	450.52
LTIS	100.41	112.33	212.73	103.51	118.35	221.86
IAS	13.51	0.00	13.51	8.76	5.91	14.67
HTS/HTSS	370.82	1334.11	1704.92	378.23	1353.15	1731.38
SS	48.34	63.36	111.70	25.03	95.80	120.83
RTS	9.63	65.27	74.91	6.91	65.27	72.18
MES	2.54	4.69	7.23	1.82	4.69	6.51
Total	**1014.85**	**2784.36**	**3799.21**	**812.32**	**3375.70**	**4187.78**

A7. REVENUE GAP AND ITS TREATMENT

Revenue gap till FY 2017-18

Petitioner's Submission

7.1 The Petitioner estimated the revenue gap for the FY 2016-17 & FY 2017-18 based on the estimated ARR and revenue at existing tariff after considering the impact of RGF as provided in the table below:

Table 106: Revenue Gap (in Rs Cr) for FY 2016-17 & FY 2017-18 as submitted by the Petitioner

Particulars	FY 2016-17	FY 2017-18
Gross ARR	6,199.0	6,674.9
Less: RGF Considered	805.9	2,321.4
Revenue Realized from sale	2,813.5	3,572.2
Gap	**2,579.5**	**781.24**

7.2 The Petitioner further submitted that it has also filed the True-up Petition for FY 2013-14 (6th Jan – 31st Mar) to FY 2015-16 where a cumulative revenue gap of Rs 3,479.79 has been submitted along with carrying cost. Based on the same, the Petitioner has now computed cumulative revenue gap till FY 2017-18 as tabulated below:

Table 107: Cumulative revenue gap (in Rs Cr) till FY 2017-18 as submitted by the Petitioner

Particulars	FY 2013-14 (6th Jan – 31st Mar)	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18
Opening Revenue Gap as on 1st April	-	657.12	1,468.39	3,479.8	6,669.8
Revenue Gap / (Surplus) created during the Year	612.84	665.28	1,671.53	2,579.5	781.2
Closing Gap at end of the Year	612.84	1,322.40	3,139.92	6,059.3	7,451.0
Rate of Interest (As per prevailing SBI PLR rate)	14.45%	14.75%	14.8%	12.8%	12.5%
Carrying Cost on Additional Gap Created	44.28	145.99	339.86	610.5	882.6
Total Gap including carrying cost	**657.12**	**1,468.39**	**3,479.79**	**6,669.8**	**8,333.6**

Commission's analysis

7.3 The Commission approved the revenue gap for the FY 2016-17 & FY 2017-18 based on the estimated ARR and revenue at existing tariff after considering the impact of RGF as provided in the table below:

Table 108: Revenue gap (in Rs Cr) as approved by the Commission

Particulars	FY 2016-17	FY 2017-18	FY 2018-19
Gross ARR	5,906.38	6,118.22	5,973.46
Less: RGF Considered	936.4	2,500.0	-
Revenue Realized from sale	2,813.5	3,799.2	4,187.78
Net Gap for the Year	**2,156.5**	**(181.0)**	**1,785.68**

7.4 The cumulative revenue gap till FY 2017-18 as approved by the Commission has been tabulated below:

Table 109: Cumulative revenue gap (in Rs Cr) till FY 2017-18 as approved by the Commission

Particulars	FY 2013-14 (6th Jan – 31st Mar)	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18
Opening Revenue Gap	-	65.32	724.41	2,349.20*	5,082.42
Revenue Gap / (Surplus) created during the Year	63.19	565.97	1,517.95	2,156.49	(181.00)
Closing Gap at end of the Year	63.19	631.29	2,242.35	4,505.70	4,901.43
Rate of Interest (As per prevailing SBI PLR rate)	14.45%	14.75%	14.75%	12.80%	12.50%
Carrying Cost on Opening Balance	-	9.63	106.85	300.70	635.30
Carrying cost on Additional Gap Created during the Year	2.13	83.48	-	276.03	(22.62)
Total Gap including carrying cost	**65.32**	**724.41**	**2,349.20***	**5,082.42**	**5,514.11**

**Considered provisionally, subject to resolution of the issues highlighted by the Commission in the True-up Order*

Treatment of Revenue gap for FY 2018-19 & creation of Regulatory Asset

Petitioner's Submission

7.5 The Petitioner submitted that considering the above cumulative revenue gap till FY 2017-18, the revenue from proposed tariff will only provide a partial relief in recovering the revenue gap. The Petitioner submitted that the whole impact of revenue gap may be not be plausible to be passed on to consumers, by way of revision in retail tariffs, as it may lead to an inexorable tariff shock. Hence, it has proposed for the creation of Regulatory Asset which is as per the clause 10 of JSERC (Terms and Conditions for Determination of Distribution Tariff) Regulations 2015.

7.6 The Petitioner requested the Commission to approve the estimated revenue gap as Regulatory assets worth Rs. 8,333.6 Cr. and also provide an appropriate recovery mechanism to recover the same as per the provisions of Tariff Regulations 2015 and guidelines of National Tariff Policy 2016.

7.7 Further, the Petitioner proposed a period of 5 years to amortize the regulatory assets and 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 weighted average cost of capital i.e. 12.5%. The Petitioner quoted that DERC, MERC had allowed for the creation of regulatory assets and requested the Commission to approve the same.

7.8 For estimating the revenue gap for the FY 2018-19.the Petitioner has computed the expected revenue for FY 2018-19 from sale of power by considering the fixed charges per unit and variable charges per unit. Further, to arrive at the final gap for FY 2018-19, the Petitioner has adjusted the impact of recovery of previous cumulative revenue gap till FY 2017-18. Further, the Petitioner has proposed to amortize the Regulatory Asset in 5 Year period starting from FY 2018-19, the effect of 1st year is considered in FY 2018-19 as detailed in the table below:

Table 110: Revenue Gap (in Rs Cr) * for the FY 2018-19

Particulars	FY 2018-19
Gross ARR	7,385.4
Add: Previous Gap treatment	2,340.5
Less: Revenue from proposed Tariff	8,045.2
Gap during the year	**1,680.6**

**revised submission by the Petitioner*

7.9 The Petitioner submitted that after adjusting the revenue and ARR for FY 2018-19, the Petitioner is still left with the revenue gap unrecovered to the tune of Rs 1,680.6 Cr and requested the Commission to approve the revenue gap for FY 2018-19 as proposed by the Petitioner.

Commission's analysis

7.10 The Commission observes that there is a cumulative gap of Rs 5,514.11 Cr till the end of FY 2017-18. It is pertinent to note that the Petitioner has entered into a tri-partite agreement with the Ministry of Power, Government of India and the State Government of Jharkhand (GoJ) under the UDAY scheme. As per clause 1.2 (b) of the MoU dated 05.01.2016 signed under the UDAY scheme, the GoJ had to take-over 75% of the outstanding debt and 100% of the outstanding CPSU dues as on 30.09.2015 during FY 2015-16 and FY 2016-17. Clause 1.2 (d) further states that the debt and CPSU dues taken-over by the State Government shall be transferred to the Discom in the form of grant, equity and state government loan. If transfer is received as state government loan, it shall be converted into grant by end of FY 2016-17.

7.11 As per the audited accounts of JBVNL for FY 2016-17, the State Government has taken over Rs 6136.37 Cr during FY 2015-16 which is presently being recognised as State Government loan. However, as per the UDAY MoU, the amount was required to be passed on as grant and/or as equity. The auditor has noted that conversion of such loan into grant and equity is under process for which all necessary steps are being taken.

7.12 The Commission is of the view that it will not be prudent to liquidate the cumulative gap of Rs 5514.11 Cr till FY 2017-18 as such gap shall be taken care of by the grant to be received from the State Government. The Commission directs the Petitioner to expedite the conversion of state government loan into grant/ equity as per the agreed UDAY MoU.

7.13 The Commission has estimated the revenue gap for FY 2018-19 as Rs.1,785.68 Cr. The Commission after taking into due consideration the above aspects and keeping in mind the capital investment as well as rural electrification to be undertaken by the Petitioner, has arrived at a conclusion to approve increase in tariffs so that the entire revenue gap for the FY 2018-19 is met. The Tariff approved by the Commission for various categories has been discussed in detail in further sections of this chapter.

A8. DETERMINATION OF WHEELING CHARGE, WHEELING LOSSES AND CROSS SUBSIDY SURCHARGE FOR FY 2018-19

8.1 As per Clause 3.1 of the JSERC Distribution 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;"

8.2 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 charges and additional surcharge apportioned voltage wise at 33 kV and above, 11kV and LT levels.

8.3 Also, the Commission in its earlier Order dated June 21, 2017 had directed the Petitioner to make separate accounting for the retail and wheeling supply business and propose capacity based Wheeling tariff, specify the voltage-wise distribution losses etc.

8.4 In line with the directions of the Commission, the Petitioner has submitted its proposal for the determination of wheeling charge, cross subsidy surcharge for the FY 2018-19.

8.5 The following sections summarize the Petitioner's submission and Commission's analysis thereof

Wheeling charges

Petitioner's Submission

8.6 The Petitioner submitted that Since the Jharkhand State Electricity Regulatory Commission (Terms and Conditions for Determination of Distribution Tariff) Regulations, 2015 does not specify a methodology for wheeling charge calculation, the Petitioner has proposed the methodology based on the review of methodologies followed by several other state regulators and their applicability in respect to the state of Jharkhand

8.7 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

8.8 In order to compute the wheeling charges, the Petitioner has apportioned the estimated sales for FY 2018-19 into 33 KV and above, 11 KV and LT voltage levels. The Petitioner has also computed the voltage wise distribution loss taking in reference the study performed in FY 2010-11 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.

8.9 The Petitioner submitted that the ARR proposed in the tariff Petition for FY 2018-19 has been segregated into wires and supply business based on the allocation ratios defined under sub-regulation 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 111: Segregation (in Rs Cr) into retail & wheeling business as submitted by the Petitioner

Particulars	Share of Supply Business	Share of Wires Business	ARR proposed for FY 2018-19	Supply Business ARR (Rs Cr)	Wires Business ARR (Rs Cr)
O&M Cost					
Employee cost	40%	60%	254.4	101.8	152.7
A&G Expense	50%	50%	61.9	31.0	31.0
R&M Cost	10%	90%	205.1	20.5	184.6
Power purchase (Inc. PGCIL & RLDC)	100%	0%	6,096*	6,096*	0.0
Interest on security deposit	100%	0%	60.5	60.5	0.0
Interest Cost	10%	90%	271.4	27.1	244.3
Interest on working capital	90%	10%	13.8	12.4	1.4
Depreciation	10%	90%	332.5	33.3	299.3
Return on Equity	10%	90%	227.6	22.8	204.8
Less: Other income	90%	10%	-138.1	-124.3	-13.8
Total ARR			**7,385.4***	**6,281.2***	**1,104.2**

**revised as per the submissions made by the Petitioner*

8.10 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.

8.11 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.

8.12 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 November, 2017 are used by 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 2017-18 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 submitted by the Petitioner, are detailed in the tables below:

Table 112: Estimated present cost of PSS as submitted by the Petitioner

PSS (capacity in MVA)	Voltage Level Classification	Quantity	Cost/ PSS (Rs. Lacs)	Total cost (Rs. Lacs)
10.00	33 kV	103	180.2	18,558.4
7.50	33 kV	1	160.0	160.0
7.15	33 kV	2	150.0	300.0
5.00	33 kV	509	113.7	57,876.5
3.15	33 kV	150	105.0	15,750.0
3.00	33 kV	3	90.0	270.0
1.60	33 kV	30	80.0	2,400.0

Table 113: Estimated present cost of 33kV, 11kV and LT lines as submitted by the Petitioner

Lines at Voltage level (in Kms.)	Voltage Level Classification	Quantity	cost/ Km (Rs. Lacs)	Total cost (Rs. Lacs)
33 kV Incoming	33 kV	5,420	20.6	1,11,931.5
33 kV Out going	33 kV	2,265	20.6	46,778.2
11 KV Length	11 kV	52,884	7.0	3,68,431.9
LT Length	LT	81,406	6.0	4,89,157.8

Table 114: Estimated present cost of DTRs as submitted by the Petitioner

DTR (capacity in KVA)	Voltage Level Classification	Quantity	cost/ DTR (Rs. Lacs)	Total cost (Rs. Lacs)
500	LT	206	7.65	1,575.7
250	LT	16	6.00	96.0
200	LT	6,064	4.39	26,605.8
150	LT	16	4.00	64.0
100	LT	18,220	3.31	60,301.1
63	LT	6,774	2.94	19,921.9
25	LT	10,424	2.20	22,958.8
16	LT	14,116	1.90	26,820.4
10	LT	19,265	1.70	32,750.5

8.13 The petitioner submitted that in the absence of asset register, the consideration of present cost of creating the distribution infrastructure is built on a 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.

8.14 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 115: Ratio of fixed assets at various voltage levels as submitted by the Petitioner

Voltage levels	Total cost (Rs. Lacs)	Fixed Asset Ratio
33 kV	2,54,024.5	19.5%
11 kV	3,68,431.9	28.3%
LT	6,80,251.97	52.2%

8.15 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 116: Allocation of wires business ARR into various voltage levels as submitted by the Petitioner

Voltage levels	Asset segregation	Wheeling ARR
		1,104.2
(LT)	52.2%	576.6
(11 kV)	28.3%	312.3
(33 kV and above)	19.5%	215.3

8.16 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.

8.17 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 33kV network, then 11kV network and finally onto LT network.

- The power wheeled to 11kV consumer would first pass through 33kV network and then onto 11kV 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.

8.18 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 117: Sales (in MU) as apportioned to different voltage levels

Consumer Category	Voltage Level	Sales (MUs)
Domestic	LT	6,459.0
Commercial	LT	991.5
Agriculture and Irrigation	LT	261.7
Industrial- LTIS	LT	223.6
Industrial- HTIS	11 kV	1,605.1
Industrial- HTIS	33 kV and above	863.6

Consumer Category	Voltage Level	Sales (MUs)
Institutional-I	LT	248.7
Institutional-II (MES)	11 kV	17.0
Institutional-II (RTS)	132 kV	102.0
Institutional-III	11 kV	24.7

8.19 Accordingly, the voltage wise energy sales ratio as submitted by the Petitioner is provided in the table below:

Table 118: Estimated voltage wise energy sales ratio as submitted by the Petitioner

Voltage level	Sales in Mus (FY 2018-19)	Sales Ratio
LT	8,184.5	76%
11 kV	1,646.8	15%
33 kV and Above	965.6	9%
Total	10,796.9	

8.20 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 119: Stacking of higher voltage costs into lower voltage levels (in Rs Cr) as submitted by the Petitioner

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	576.6	576.6		
11 kV	312.3	260.0	52.3	
33 kV and Above	215.3	163.2	32.8	19.3
Total	1,104.2	999.8	85.1	19.3

8.21 Based on the above, the voltage wise wheeling charges for the FY 2018-19 submitted by the Petitioner has been tabulated below:

Table 120: Voltage wise wheeling charges as submitted by the Petitioner

Voltage level	Wires Business ARR (Rs. Cr) (A)	Energy Sales (FY 2018-19) (MUs) (B)	Wheeling Charge (A/B) (Rs/kWh)
LT	999.8	8184.55	1.22
11 kV	85.1	1646.78	0.52
33 kV and Above	19.3	965.58	0.20

Commission's Analysis

8.22 According to Regulation 5.4 and Regulation 5.5 of JSERC Distribution Tariff Regulations, 2015, the Petitioner is required to segregate the accounts of the Licensed Business into Wheeling Business and Retail Supply Business. In 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."

8.23 The Petitioner has not submitted duly approved allocation statement. The Commission in its earlier Order dated June 21, 2017 had directed the Petitioner to make separate accounting for wheeling & retail supply business. The relevant excerpts of the Order has been 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."

8.24 The Petitioner has not complied with the directions of the Commission. Moreover, the Petitioner in its Original Petition has submitted a generic approach towards allocation of costs but has not provided appropriate basis and methodology used for segregation. The Commission vide its discrepancy note had directed the Petitioner to submit board allocation statement for the segregation into wheeling & retail business, in case the Petitioner has not started separate accounting for the same.

8.25 The Petitioner vide its reply submitted that the entire Petition, including its components such as allocation between retail and supply, have been duly approved by the Board of Directors. The Petitioner submitted that it is not maintaining separate accounts for Retail and Wheeling Business, due to practical difficulties as the asset register has not been prepared yet.

8.26 The Petitioner further submitted that 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.

8.27 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.

8.28 In absence of separate accounting for wheeling and retail supply business and board allocation statement, 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 is tabulated below:

Table 121: Allocation ratios considered as per JSERC Power Accounting Regulations 2016

S no	Cost Elements	Allocation to wheeling	Allocation to Retail Supply
1	Power Purchase Cost and Transmission Charges	0%	100%
2	Employee Expenses	60%	40%
3	A&G Expenses	50%	50%
4	R&M Expenses	90%	10%
5	Depreciation	90%	10%
6	Interest on Loan	90%	10%
7	Interest on Working Capital	10%	90%
9	Return on Equity	90%	10%
10	Interest on Security Deposit	0%	100%
11	Non Tariff Income	10%	90%
12	Income Tax	90%	10%

8.29 Based on the above allocation ratios, the Commission has computed the wheeling supply ARR as tabulated below:

Table 122: Segregation (in Rs Cr) into retail & wheeling business as approved by the Commission

Particulars	Share of Retail Supply Business	Share of Wires Business	ARR approved for FY 2018-19*	Supply Business ARR (Rs Cr)	Wires Business ARR (Rs Cr)
O&M Cost					
Employee cost	40%	60%	230.07	92.03	138.04
A&G Expense	50%	50%	61.89	30.94	30.94
R&M Cost	10%	90%	173.18	17.32	155.86
Power purchase (Inc. PGCIL & RLDC)	100%	0%	5041.29	5041.29	0.00
Interest on security deposit	100%	0%	52.74	52.74	0.00
Interest Cost	10%	90%	169.39	16.94	152.45
Interest on working capital	90%	10%	14.65	13.19	1.47
Depreciation	10%	90%	294.22	29.42	264.80
Return on Equity	10%	90%	202.28	20.23	182.05
Less: Other income	90%	10%	141.80	127.62	14.18
Total ARR			**6097.90**	**5186.47**	**911.43**

**ARR before imposing penalty*

8.30 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 as on November, 2017 on the consideration 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.

8.31 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 in considering that all the assets are created simultaneously.

8.32 Further, the number of assets is multiplied by the present purchase cost of assets as per Cost Data book of JBVNL as for FY 2017-18 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 123: Estimated present cost of PSS as approved by the Commission

PSS (capacity in MVA)	Voltage Level Classification	Quantity	Cost/ PSS (Rs. Lacs)	Total cost (Rs. Lacs)
10.00	33 kV	103	180.2	18,560.60
7.50	33 kV	1	160.0	160.00
7.15	33 kV	2	150.0	300.00
5.00	33 kV	509	113.7	57,873.30
3.15	33 kV	150	105.0	15,750.00
3.00	33 kV	3	90.0	270.00
1.60	33 kV	30	80.0	2,400.00

Table 124: Estimated present cost of 33kV, 11kV and LT lines as approved by the Commission

Lines at Voltage level (in Kms.)	Voltage Level Classification	Quantity	cost/ Km (Rs. Lacs)	Total cost (Rs. Lacs)
33 kV Incoming	33 kV	5,420	20.6	111652
33 kV Out going	33 kV	2,265	20.6	46659
11 KV Length	11 kV	52,884	7.0	370188
LT Length	LT	81,406	6.0	488436

Table 125: Estimated present cost of DTRs as approved by the Commission

DTR (capacity in KVA)	Voltage Level Classification	Quantity	cost/ DTR (Rs. Lacs)	Total cost (Rs. Lacs)
500	LT	206	7.65	1,575.90
250	LT	16	6.00	96.00
200	LT	6,064	4.39	26,620.96
150	LT	16	4.00	64.00
100	LT	18,220	3.31	60,308.20
63	LT	6,774	2.94	19,915.56
25	LT	10,424	2.20	22,932.80
16	LT	14,116	1.90	26,820.40
10	LT	19,265	1.70	32,750.50

8.33 Based on the above, the estimated present cost of assets, apportioned into different voltage levels is depicted in the table below:

Table 126: Ratio of fixed assets at various voltage levels as approved by the Commission

Voltage levels	Total cost (Rs. Lacs)	Fixed Asset Ratio
33 kV	253,624.90	19.46%
11 kV	370,188.00	28.40%
LT	679,520.32	52.14%

8.34 Based on the voltage wise asset bifurcation, the Wires Business ARR at respective voltage levels is depicted in the table below:

Table 127: Allocation of wires business ARR into various voltage levels as approved by the Commission

Voltage levels	Asset segregation	Wheeling ARR
		911.43
(LT)	52.14%	475.19
(11 kV)	28.40%	258.87
(33 kV and above)	19.46%	177.36

8.35 The Wires Business ARR for different village 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 in paragraph 8.17 of 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 128: Sales (in MU) as apportioned to different voltage levels

Consumer Category	Voltage Level	Sales (MUs)
Domestic	LT	6,279.55
Commercial	LT	737.03
Agriculture and Irrigation	LT	181.24
Industrial- LTIS	LT	215.18
Industrial- HTIS	11 kV	1,554.67
Industrial- HTIS	33 kV and above	836.47
Institutional-I	LT	248.74
Institutional-II (MES)	11 kV	17.00
Institutional-II (RTS)	132 kV	101.98
Institutional-III	11 kV	24.71
Total		**10,196.56**

8.36 Accordingly, the voltage wise energy sales ratio as approved by the Commission is provided in the table below:

Table 129: Estimated voltage wise energy sales ratio as approved by the Commission

Voltage level	Sales in Mus (FY 2018-19)	Sales Ratio
LT	7,661.74	75.14%
11 kV	1,596.38	15.66%
33 kV and Above	938.45	9.20%
Total	10,196.56	

8.37 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 130: Stacking of higher voltage costs into lower voltage levels (in Rs Cr) as approved by the Commission

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	475.19	475.19		
11 kV	258.87	214.24	44.64	
33 kV and Above	177.36	133.27	27.77	16.32
Total	**911.43**	**822.70**	**72.41**	**16.32**

8.38 Based on the above, the Voltage wise wheeling charges for the FY 2018-19 as approved by the Commission has been tabulated below:

Table 131: Voltage wise wheeling charges as approved by the Commission

Voltage level	Wires Business ARR (Rs. Cr) (A)	Energy Sales (FY 2018-19) (MUs) (B)	Wheeling Charge (A/B) (Rs/kWh)
LT	822.70	7,661.74	1.07
11 kV	72.41	1,596.38	0.45
33 kV and Above	16.32	938.45	0.17

Voltage-wise cost of supply

8.39 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.

8.40 The cost of supply is an essential parameter to arrive at the cross-subsidy levels. Further, clause 61(g) of the Electricity Act, 2003 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)[1] that the tariff progressively reflects the cost of supply of electricity and also, reduces cross-subsidies in the manner specified by the Appropriate Commission;

…."

[1] Subs. by Act 26 of 2007, Sec. 10 [w.e.f. 15th June 2007].

8.41 Also, clause 8.3 of the National 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 has 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.

....."

8.42 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.

8.43 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 , for greater extent would reflect the actual voltage wise cost of supply.

8.44 In view of the same, the Commission decided to follow the methodology proposed by Hon'ble APTEL's 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.

8.45 The Commission based on the methodology proposed by Hon'ble APTEL has computed the voltage wise cost of supply as detailed below.

8.46 **Apportionment of Sales:** The approved sales for the FY 2018-19 have been apportioned to different voltage levels as tabulated below:

Table 132: Voltage wise sales (in MU) for the FY 2018-19.

Consumer Category	Voltage Level	Sales (MUs)
Domestic	LT	6,279.55
Commercial	LT	737.03
Agriculture and Irrigation	LT	181.24
Industrial- LTIS	LT	215.18
Industrial- HTIS	11 kV	1,554.67
Industrial- HTIS	33 kV and above	836.47
Institutional	LT	248.74
Institutional (MES)	11 kV	17.00
Institutional (RTS)	33 kV & above	101.98
Institutional	11 kV	24.71
Total		**10,196.56**

8.47 **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.

…."

8.48 The Commission in its earlier Order dated June 21, 2017 had directed the Petitioner to conduct a detailed technical study on the voltage wise losses on the distribution network. However, the Petitioner has not submitted any such report till date.

8.49 The Petitioner vide its additional data requirement for the determination of wheeling charges, wheeling losses and cross-subsidy surcharge has submitted that a study for calculating voltage wise losses had been performed in the past for calculation of voltage-wise cost of supply (VCoS) in FY 2010-11 and the same has now been considered as the basis for estimating voltage-wise losses.

8.50 Further, it is pertinent to mention that the study was conducted on Load based approach on a simulation software where for 132 kV and above levels, the entire network has been modelled in the simulation software to calculate the losses. For 33 kV and below, the modelling was done on sample basis.

8.51 The Petitioner submitted that the voltage wise losses estimated in the VCoS study FY 2010-11, are reduced by a common factor so as to get an overall loss figure which matches with AT&C loss of FY 2018-19. The Petitioner further submitted that significant time and efforts are required to estimate voltage wise losses accurately.

8.52 The Commission is of the view that the Petitioner's assumption that the losses at all the levels would reduce at a common factor is ill-conceived as losses would have come down at a greater level than the LT level. However, as detailed in paragraph 8.43 the

Commission decided to compute voltage wise cost of supply with the data made available by the Petitioner.

8.53 The Commission considered the technical loss levels at 15% for the FY 2018-19 as approved in the relevant sections of this Order and accordingly computed the voltage wise losses at different levels as tabulated below:

Table 133: Voltage wise losses for FY 2018-19.

Voltage level	Loss in FY 2010-11 as submitted	Ratio	Loss in FY 2018-19 as submitted	Ratio	Loss in FY 2018-19 as approved	Ratio
33 kV & above	6.4%	0.19	3.61%	0.19	3.43%	0.19
11 kV	15.5%	0.47	8.75%	0.47	8.31%	0.47
LT	32.87%	1	18.55%	1	17.61%	1
Aggregate			15.80%		15.00%	

8.54 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.

….."

8.55 Accordingly, the Commission has computed the power purchase quantum at different voltage levels as tabulated below:

Table 134: Power purchase quantum at different voltage levels for FY 2018-19.

Voltage level	voltage wise sales (MU)	Voltage wise losses	voltage wise power req incl tech loss (in MU)	Commercial Losses* (in MU)	Total Units to be purchased (in MU)
33 kV & above	938.45	3.43%	971.75	17.75	989.51
11 kV	1596.38	8.31%	1802.79	30.20	1833.99
LT	7,661.74	17.61%	10501.85	144.96	10646.80
Total	**10,196.56**	**15.00%**	**13276.39**	**192.91**	**13469.30**

**Note: The commercial losses are obtained by reducing the sales + technical losses from the energy procured*

8.56 **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 135: Power purchase Cost (in Rs Cr) at different voltage levels for FY 2018-19.

Voltage level	voltage wise sales (MU) – (1)	Total Units to be purchased (in MU) –(2)	Net Power purchase rate as approved by the Commission (Rs/kWh) – (3)	Voltage wise Power purchase Cost(in Rs Cr) –(4)	Voltage wise Power purchase Cost (Rs/kWh) – (5) = (4 / 1)
33 kV & above	938.45	989.51	3.59	355.09	3.78
11 kV	1596.38	1833.99	3.59	657.77	4.12
LT	7,661.74	10646.80	3.59	3820.62	4.99
Total	**10,196.56**	**13469.30**	3.59	**4833.48**	

8.57 **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.

…."

8.58 As per the above methodology, the Commission has calculated an uniform network cost for all the categories as tabulated below:

Particulars	FY 2018-19
Transmission charges	207.80
O&M expenses	465.1
Employee Expenses	230.1
A&G Expenses	61.9
R&M Expenses	173.2
Depreciation	294.2
Interest on Loan	174.1
Return on Equity	202.3
Interest on Working Capital	-
Interest on security deposit	54.6
Provision for doubtful debts	-
Less: Non-Tariff Income	141.8
Total (in Rs Cr)	**1264.42**
Sales approved for FY 2018-19 (in MU)	**10196.56**
Network Cost (Rs/kWh)	**1.24**

8.59 The Voltage wise cost of supply for the FY 2018-19 as approved by the Commission has been tabulated below:

Table 136: Voltage wise cost of supply for the FY 2018-19 as approved by the Commission

Voltage level	Voltage wise Power purchase Cost (Rs/kWh) – (1)	Network Cost (Rs/kWh) –(2)	Total Cost – (1+2)
33 kV & above	3.78	1.24	5.02
11 kV	4.12	1.24	5.36
LT	4.99	1.24	6.23
ACOS			**5.98***

** before imposing penalty non-compliance of RPO, SOP and other directives*

Cross Subsidy Surcharge

Petitioner's Submission

8.60 The Petitioner submitted that a study had been performed in the past for calculation of voltage-wise cost of supply (VCoS) in FY 2010-11, which has been now considered as the basis for estimating voltage-wise losses.

8.61 The voltage wise losses estimated in the VCoS study 2010-11, are reduced by a common factor so as to get an overall loss figure which matches with AT&C loss of FY 2018-19, thus the ratio of loss between different voltage levels to remain same as tabulated below:

Table 137: Voltage wise losses for the FY 2018-19 as submitted by the Petitioner

Voltage	Cumulative Loss % in FY 2010-11	Ratio	Cumulative Loss % in FY 2018-19	Ratio
33 kV	6.4%	0.19	3.61%	0.19
11 kV	15.5%	0.47	8.75%	0.47
LT	32.87%	1	18.55%	1
Aggregate			15.80%	

8.62 The Petitioner submitted that estimating voltage wise losses accurately, would require a detailed VCOS study, for which significant time and efforts would be required.

8.63 For the calculation of top 5% weighted average power purchase cost, the Petitioner considered the power purchase cost of NTPC Barh and NTPC Farraka III based on the power procurement plan submitted under tariff petition for FY 2017-18 and FY 2018-19, which comes out to be Rs. 5.42 per unit.

8.64 Based on the voltage wise loss levels and voltage wise wheeling charges, the Petitioner estimated the cross-subsidy surcharge as per regulation 6.57 of the Jharkhand State Electricity Regulatory Commission (Terms and Condition for Determination of Distribution Tariff), Regulations, 2015 for various consumer categories as detailed in the table below:

Table 138: Cross subsidy surcharge (Rs/kWh) as submitted by the Petitioner

Consumer categories	Voltage level	T- Tariff payable (ABR)	C- Power Purchase cost	L- System losses for the applicable voltage	D- Wheeling charge (Including transmission charges)	S- Cross subsidy surcharge
Domestic	LT	7.03	5.42	0.19	1.43	0.16
Commercial	LT	7.72	5.42	0.19	1.43	0.85
Industrial-LTIS	LT	11.10	5.42	0.19	1.43	4.23
Industrial-HTIS	11 kV	8.63	5.42	0.09	0.73	2.47
Industrial-HTIS	33 kV	8.63	5.42	0.04	0.41	2.79
Institutional-II (MES)	11 kV	7.30	5.42	0.09	0.73	1.15
Institutional-II (RTS)	132 kV	6.80	5.42	0.04	0.41	0.97

8.65 The Petitioner prayed the Commission to approve Cross subsidy surcharge for the FY 2018-19 as proposed.

Commission's Analysis

8.66 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."

8.67 The National Tariff Policy, 2016 has stipulated the following formula for computation of Cross Subsidy Surcharge:

$S = T - [C/(1 - (L/100)) + D]$

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 weighted average cost of power purchase by 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;"

Provided that the surcharge shall not exceed 20% of the tariff applicable to the category of the consumers seeking open access.

8.68 The Commission has considered the report on VCOS study for the FY 2010-11 as submitted by the Petitioner earlier, as the base for the estimation of voltage wise losses for the FY 2018-19.

8.69 The weighted average power purchase cost at the Discom for CSS computation works out to Rs 4.16 per unit as summarized in the following table:

Table 139: Computation of average power purchase cost for CSS determination

S. No.	Particular	Amount
1.	Total Power Purchase (Net energy sent to distribution system + direct input of energy into distribution system) (MU)	13098.17
2.	Total Gross Power Purchase Cost (excluding revenue from sale of power including inter-state and intra-state transmission charges) (Rs Cr)	5455.04
3.	**Average Power Purchase Cost (Rs/unit)**	**4.16**

8.70 As per the above regulations and the losses approved by the Commission for the FY 2018-19 in the above sections, the Commission has computed the Cross subsidy surcharge for various consumer categories as detailed below:

a) **Domestic LT:**

S= 4.94-[4.16/(1-17.61%)*(1-8.31%)*(1-3.43%)*(1-2.23%) + (1.07+ 0.45 + 0.17+ 0.25)] = -2.85

b) **Commercial LT:**

S= 6.54-[4.16/(1-17.61%)*(1-8.31%)*(1-3.43%)*(1-2.23%) + (1.07+ 0.45 + 0.17+ 0.25)] = -1.25

c) **LTIS- LT:**

S= 8.30-[4.16/(1-17.61%)*(1-8.31%)*(1-3.43)*(1-2.23%) + (1.07+ 0.45 + 0.17+ 0.25)] = 0.51

d) **HTS- 11 KV:**

S= 8.33-[4.16/(1-8.31%)*(1-3.43%)*(1-2.23%) + (0.45 + 0.17+ 0.25)] = 2.64

e) **HTS- 33 KV:**

S= 8.08-[4.16/(1-3.43%)*(1-2.23%) + (0.17+ 0.25)] = 3.25

f) **HTSS- 11 KV:**

S= 6.40-[4.16/(1-8.31%)*(1-3.43%)*(1-2.23%) + (0.45 + 0.17+ 0.25)] = 0.71

g) **HTSS- 33 KV:**

S= 6.21-[4.16/(1-3.43%)*(1-2.23%) + (0.17+ 0.25)] = 1.37

h) **MES, RTS and Other licensees- 11 KV:**

S= 6.48-[4.16/(1-8.31%)*(1-3.43%)*(1-2.23%) + (0.45+0.17+ 0.25)] = 0.80

i) **MES, RTS and Other licensees- 33 KV:**

S= 6.29-[4.16/(1-3.43%)*(1-2.23%) + (0.17+ 0.25)] = 1.45

j) **MES, RTS and Other licensees- 132 KV:**

S= 6.16-[4.16/(1-2.23%) + (0.25)] = 1.65

8.71 The Tariff Policy suggests that the surcharge shall not exceed 20% of the tariff applicable to the category of the consumers seeking open access. Accordingly the cross subsidy surcharge approved by the Commission for FY 2018-19 is as follows:

Table 140: Cross-subsidy surcharge as computed by the Commission for the FY 2018-19

Consumer categories	Voltage level	Cross subsidy surcharge (Rs/kWh)
Domestic	LT	0.00
Commercial	LT	0.00
Industrial- LTIS	LT	0.51
Industrial- HTS	11 kV	1.67
Industrial- HTS	33 kV	1.62
Industrial - HTSS	11 kV	0.71
Industrial - HTSS	33 kV	1.24
MES, RTS and Other licensees	11 kV	0.80
MES, RTS and Other licensees	33 kV	1.26
MES, RTS and Other licensees	132 kV	1.23

8.72 All consumers who wish to avail open access will be levied no charge for the use of distribution network other than Wheeling & Cross subsidy surcharge.

A9. TARIFF RATIONALIZATION AND DIRECT SUBSIDY TO CONSUMERS

Tariff Rationalization & Removal of Cross-Subsidy

Petitioner's Submission

9.1 The Petitioner submitted that the Commission in its Tariff Order for MYT control Period for JBVNL dated 21st June 2017 has stated that existing tariff structure in Jharkhand is not based on the consumer category-wise cost of supply and the commercial and industrial consumers have been cross subsidizing other consumers like domestic and agricultural to a great extent.

9.2 The Petitioner further submitted that JBVNL has one the lowest Tariff across country as compared with its neighbouring state especially in domestic categories. The Petitioner submitted ABR of Jharkhand with different states in support to his claims.

9.3 The Petitioner submitted that irrational tariff across all consumer categories, especially domestic and Agriculture which account for nearly 55% of total energy sales (FY 2015-16), has deteriorated the financial situation of JBVNL.

9.4 The Petitioner submitted that the only way out for reducing cross subsidy is introduction of "cost reflective tariff" wherein tariff should be set in such a manner that it reflects the cost of supply or falls nearby.

9.5 The Petitioner submitted that in order to reduce the burden of cross subsidy on the high value consumers, it has proposed the cost reflective tariff for each consumer category as a percentage of average cost of service in the band of ± 20% of average cost of service for all categories.

Commission's Analysis

9.6 The Commission strongly believes that a cost based tariff structure promotes efficiency, economic investment and rational consumption. Section 61 (g) of the Electricity Act, 2003 also states that tariffs should progressively reflect the cost of supply of electricity and the Commission should reduce cross subsidies gradually within a specified period. Section 61 (d) of the Act provides for safeguarding of the consumers' interest and at the same time recovery of the cost of electricity in a reasonable manner.

9.7 The Commission in its earlier Order dated June 21, 2017 expressed concern over the existing tariff structure in Jharkhand. The relevant excerpts of the Order has been tabulated below:

"7.12 The existing tariff structure in Jharkhand is not based on the consumer category-wise cost of supply and the commercial and industrial consumers have been cross subsidizing other consumers like domestic and agricultural to a great extent. The Commission intends to move in the direction of removing this distortion in a phased manner."

9.8 Further, the Commission in the same Order had directed the Petitioner to submit a roadmap for the reduction in cross subsidy, in compliance with the National Tariff Policy, 2016.

9.9 Also, as per section 8.3 *"Tariff design: Linkage of tariffs to cost of service",* National tariff Policy, 2016

- BPL consumers having consumption below a specified level may receive special support through cross subsidy with Tariff at least 50% of the Average cost of supply.
- Appropriate Commission to notify a roadmap such that tariffs are brought within ±20% of the average cost of supply by gradual reduction of cross subsidy.

9.10 The Commission has taken due cognizance of the National tariff Policy, 2016 and Indian Electricity Act, 2003 and the submissions of the Petitioner while determining the Tariff for various categories as discussed in the subsequent sections of this Order.

Removal of Resource Gap Funding (RGF)

Petitioner's Submission

9.11 The Petitioner submitted that the Govt. of Jharkhand provides resource gap grants to JBVNL to meet the disallowances/ slashes. The RGF provided to JBVNL is considered as Grant while computing the overall Revenue Gap requirement and Tariff fixation.

9.12 The Petitioner submitted that as per communication from Energy Dept., Govt of Jharkhand, vide letter no 8743 dated 23.10.17, RGF shall not be provided to JBVNL and upcoming Tariff fixation shall be done without considering the impact of Resource Gap funding.

9.13 The Petitioner further submitted that the non-consideration of RGF during tariff fixation and adoption of cost reflective tariff will give significant tariff hike to some consumer categories. Thus, in order to compensate the inexorable tariff shock to consumer, the petitioner has requested the State Government to give Resource Gap funding as a direct subsidy to particular tariff categories.

Commission's Analysis

9.14 As per the communication from Energy Dept., Govt of Jharkhand, vide letter no 8743 dated 23.10.17, the Commission has approved the tariff without considering the RGF.

Proposed Changes in Tariff Structure/ Schedule

Petitioner's Submission

9.15 The Petitioner has proposed multiple changes in the Tariff Structure/ Schedule apart from hike in fixed charges, demand charges and energy charges. These are summarized below:

a) **Simplification of Tariff:** The Petitioner proposed a simplified structure with total of 5 consumer categories having maximum of 3 slabs/ sub-categories from the existing structure which has 9 consumer categories, which is further divided into 22 sub-categories and further distributed into total 31 slabs. The proposed consumer categories include, Domestic, Commercial, Industrial, Agricultural and Institutional consumers.

b) **Introduction of new consumer sub-categories:** The Petitioner has proposed DS-Primitive (PTG) sub-category for Primitive Tribal Groups inhabiting the State of Jharkhand to ensure that the PTGs are provided free of cost connections under various ongoing schemes and avail electricity at nominal rates, thus to bring uplift their standard of living and provide them more economic opportunities.

c) **Merging of consumer categories**: The Petitioner has proposed to merge the HTS and HTSS sub-categories into HTS sub-category in order to achieve simplification of tariff structure and rationalization of tariff for HT consumers.

d) **Migration from kWh based billing to kVAh based billing:** The Petitioner has proposed to migrate to kVAh based billing from existing kWh based billing for LTIS, HTIS (including induction furnace/ arc), RTS, MES consumer sub-categories in order to get the full recovery the all components of Power Generation, Transmission and Distribution like capital cost, fuel cost, system losses etc. and to ensure grid discipline and stability.

e) **Removal of Installation based tariff for LTIS consumer:** The Petitioner has proposed to remove the installation based tariff for all LTIS consumers and to completely migrate the LTIS consumers to Demand Based Tariff.

f) **Abolishment of unmetered category:** The Petitioner proposed significantly higher tariff for un-metered consumers. The Petitioner submitted that the tariff or unmetered consumers should be applicable till December 2018, which has been set as target by the Petitioner to achieve 100% metering of all un-metered consumers. Beyond December 2018, the higher tariff of un-metered consumer may cease to exist, which shall bound JBVNL to essentially convert the un-metered consumers to metered categories.

g) The Petitioner proposed to **increase the Delayed payment surcharge** from the existing 1.5% per month to 2.0% per month.

h) **Load Factor Penalty**: The Petitioner has proposed that the consumers having load factor less than 30%, shall not be allowed to draw electricity during peak periods. In the event such consumers are found using energy in peak hours their line will be disconnected immediately.

i) **Voltage Rebate:** The Petitioner proposed that the voltage rebate is to be applicable only on the energy charges and not on both demand and energy charges.

j) **Power Factor Penalty:** The Petitioner has proposed that in case kVAh based billing is not approved by the Commission the power factor penalty is applicable as follows:

- In case the average power factor in a month for a consumer (i.e upto 33 KV consumers) falls below 0.90, a penalty @ 2% for every 0.01 fall in power factor from 0.85 to 0.60; plus 5% for every 0.01 fall below 0.60 to 0.30 (up to and including 0.30) shall be levied only on energy charges.

- Further for 132 KV consumers and above, in case average power factor in a month for a consumer falls below 0.95, a penalty @ 1% for every 0.01 fall in power factor from 0.95 to 0.85; plus a penalty @ 1% for every 0.01 fall in power factor from 0.85 to 0.60; plus 7% for every 0.01 fall below 0.60 to 0.30 (up to and including 0.30) shall be levied on energy charges. Consumer with power factor of less than 0.30 must install shunt capacitors immediately, failing which their line will be disconnected with 15 days clear notice.

k) **Power Factor Rebate:** The Petitioner has proposed that rebate shall be offered to consumers (i.e upto 33 KV consumers) maintaining power factor above 0.90. A rebate equivalent to 1% would be applicable for power factor above 90% and 2% (cumulative) for power factor above 95% on energy charges.

- Further, for 132 KV consumers and above, in case average power factor as maintained by the consumer is more than 95%, a rebate of 2% on energy charges shall be applicable.

l) **Distinct Categorization of Rolling Mills and other associated operation with Induction Furnace under HTS:** The Petitioner has proposed that Rolling mills and other associated operations should be considered exclusively under HTS category. In case there are any combined operation where rolling mills/other associated operations occur with induction furnace under the same premise, then separate metering arrangements as well as boundary separation of the operations must be done to segregate the units consumed exclusively for induction furnace and rolling mills/other associated operations.

m) **Tariff approval for temporary supply**: The Petitioner requested the Commission to approve tariff for temporary supply in the order. The submissions of the Petitioner with respect to temporary supply are summarized below:

- Temporary tariff is proposed to 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.

- Temporary connections shall be given prepaid meters with prepaid balance equivalent to 45 days of sale of power which shall be based on the assessment formula (LDHF) prescribed by the Commission.

- Temporary connections shall initially be provided for a period of up to 45 days which can be extended on month to month basis up to six months.

n) **Separate category for Seasonal Supply:** The Petitioner has proposed to introduce tariff for seasonal supply.

o) **Penalty for exceeding Contract Demand:** The Petitioner has proposed certain changes in the penalty for exceeding contract demand.

p) **Metering Facility:** The Petitioner has proposed that all HTS consumers should have demand recording facility @ 15 minutes time integration. This will enable utility to manage its load profile during power restrictions. This will also enable Petitioner to match the profile/ scheduling with the SLDC/ ERLDC and assist in energy accounting. It may be noted that Regional Energy Accounting (REA) and other power drawal & scheduling are done on 15 minutes time block.

q) **NOC for switchover to other licensee:** It is proposed by the Petitioner that any consumers switching over to the other licensee shall have to compulsorily clear off all the dues and obtain ‘No Objection Certificate’ (NOC) mandatorily, failing which energy bills shall be generated based on the contract demand or maximum demand during last six months, whichever is higher despite power supply being disrupted. Penalty for exceeding contract demand shall also be applicable.

r) **Removal of Clause 13 from HT Agreement**: The Petitioner had earlier submitted a review Petition to the Commission regarding removal of clause 13 from HT Agreement. However, no decision has been arrived at so far. Therefore, the Petitioner would like to resubmit its request for removal of Clause 13 from the HT agreement. The Petitioner requests the Commission to notice that the minimum guaranteed charges are presently not applicable to the consumers and as such the requirement to adjust or proportionately reduce such charges based on the ability of the consumer to take or the Board to supply energy doesn’t reasonably fit into the agreement. The Petitioner has requested the Commission to remove the said Clause.

s) **Rebate for specially abled Consumers in Domestic category:** The Petitioner proposed a rebate of 10% in the energy charges for consumers having any 'specially-abled' member in the family. The energy charges payable by consumers shall be reduced by 10% for all such DS consumers, except for those consumers having consumption above 300 units. The necessary documents related to this needs to be submitted by the consumer, including Govt. certificate issued for disability for claiming Income Tax related benefits under Section 80U which covers the individuals suffering from disability himself or Section 80DDB which covers the individuals having any dependant family member who is suffering from disability.

t) The Petitioner submitted that **tariff applicable for the CPP** category is not reflected in the Tariff Order.

u) The Petitioner proposed changes in clauses related to related to **billing demand in the LTIS, HTS, RTS and MES categories**. The changes proposed has been listed below:

Category	Existing (Maximum demand or percentage (Specified below) of Contract Demand)	Proposed (Maximum demand or percentage (Specified below) of Contract Demand)
LTIS	50%	75%
HTIS	75%	85%
RTS	75%	85%
MES	75%	85%

Commission's View

9.16 The Petitioner has proposed multiple changes in the Tariff Structure/ Schedule. Any proposal to be accepted has to be first evaluated on the basis of its implication to both the Petitioner as well as the stakeholders. Although, in order to ensure that the Petitioner or the stakeholders are not penalized for it, the Commission has evaluated the merits of the proposed changes.

a) **Tariff Simplification:** The Commission appreciates the steps taken by the Petitioner in simplifying the tariff categories and slabs. The prevailing tariff structure in the state is extremely elaborate with tariff categories and slabs defined for various segments of consumers. These have been developed over the years taking into account the socio-economic profile of the state, consumption patterns, etc. Multiple sub-categories and slabs in each tariff category make the tariff structure highly complex and difficult for the consumer to understand.

The Economic Survey of India, 2015-16 also observes some of the above issues and views that simplification of tariffs with no more than 4-5 categories, will improve transparency in setting tariffs and may well yield benefits including enhanced consumption, collection efficiency, along with bringing in governance and other administrative benefits.

The Ministry of Power, Government of India also constituted a committee under the Chairmanship of Ms. Jyoti Arora, Joint Secretary, Ministry of Power, for developing a design framework for creation of tariff categories across India, to enable uniform and homogenous electricity tariff categorization. PricewaterhouseCoopers assisted the Committee to carry out a study for reviewing of the existing scenario of electricity tariffs in India, identifying national/international best practices and developing a framework as well as a roadmap for implementation of the new simplified tariff categories.

In this background, the Commission approves the new simplified tariff schedule as discussed in section A12 of this Order. This simplified tariff schedule shall also eliminate manual/ human intervention in recording of load through inspection.

b) **Introduction of Primitive Tribal Group (PTG) as a separate category:** The Petitioner submitted that around 1 Lakh PTG households are identified to be electrified by FY 2018-19. The Commission appreciates the efforts and concern of the Petitioner in providing the tribal groups free of cost connections and electricity at nominal rates. However, as per section 62(3) of the Electricity Act, 2003

"Section 62. (Determination of tariff):

……

*(3) The **Appropriate Commission shall not, while determining the tariff under this Act**, **show undue preference to any consumer of electricity** but may differentiate according to the consumer's load factor, power factor, voltage, total consumption of electricity during any specified period or the time at which the supply is required or the geographical position of any area, the nature of supply and the purpose for which the supply is required.*

[Emphasis added]

….."

In view of the same, the Commission has not approved for the creation of category for Primitive & Tribal group. However, the Petitioner may consider approaching the state government to provide subsidy to such category of consumers.

c) **Merging of HTS and HTSS consumer categories**: The Commission, at the moment, finds it prudent to continue with the existing provisions and has determined separate tariff for HTS & HTSS as merging of these two categories shall bring inexorable tariff shock to the HTSS category. However, it may be noted that the prevailing tariff of HTSS category is very low vis-à-vis the average cost of supply of the Utility and such consumers were getting cross-subsidized by other consumers such as HTS category, which is against prudent economic principles. Accordingly, in line with the provisos of the Electricity Act and the National Tariff Policy to design cost reflective tariffs and enable the Utility to function of prudent economic principles, the tariffs of the HTSS category have been increased in order to gradually move the tariffs towards the average cost of supplying such consumers and to reduce the cross-subsidy burden on other category of consumers.

d) **Migration from kWh based billing to kVAh based billing:** The Commission in its earlier Order had directed the Petitioner to carry out impact assessment study on transition from kWh billing to kVAh billing, for a sample set of consumers in the HTS and HTSS categories. The Petitioner has proposed migration from kWh based billing to kVAh based billing for LTIS, HTS,HTSS, RTS and MES categories. The Petitioner in its Petition has provided details on how such tariff structure has been designed along with the reasons for migration of the same.

The Commission in its discrepancy note had directed the Petitioner to submit the status of installation of Tri-vector meters in the proposed categories which are required to capture kVAh consumption. The Petitioner in its reply has submitted that

"It is submitted that Tri-Vector meters are being used for high value consumers like HTS, HTSS, LTIS, RTS and MES. Out of these consumer categories all the consumers covered under the HTS, HTSS, RTS and MES categories have been installed with Tri-Vector meters. Under the LTIS category also, almost 75% consumers have been installed with Tri-vector meters which are capable of capturing the required parameters for kVAh based billing. For the remaining 25% of consumers, the Petitioner has already started the meter replacement under ADP and other Misc. schemes which is expected to be completed within 3-6 months of approval of such tariff."

The Commission after due scrutiny of the submissions made by the Petitioner is of the view that kVAh based tariff would ensure complete recovery of costs of the utility for both active & reactive power and would ensure grid discipline and stability. In view of the same, the Commission approves kVAh based billing in the HTS, HTSS, RTS & MES categories as Tri-vector meters for capturing the kVAh consumption are already in place.

With respect to LTIS category, since the necessary infrastructure is not completely installed, the Commission finds it prudent to continue with the existing provisions. The Commission may consider migrating from kWh based billing to kVAh based billing once the Petitioner submits a report that all the consumers of LTIS category have been installed with Tri-Vector meters.

e) **Removal of Installation based tariff for LTIS consumer:** The Petitioner submitted that the removal of installation based tariff would ensure judicial usage of energy and prevent the need for inspecting officer to regularly inspect the consumers premise for regularization of excess load. The Commission agrees with the views of the Petitioner. However, all the consumers need to be equipped with MDI meters for recording maximum demand and consequently removing of Installation based tariff. The Petitioner has mentioned in the Petition that MDI meters for all LTIS consumers are yet to be installed. Although, the Petitioner submitted that the meters shall be replaced in a phased manner, it has not mentioned any timelines by which such meters will be installed. The Commission directs the Petitioner to replace all the existing meters with MDI meters before December-2018, till such time the billing for consumers under installation based tariff shall be done at the rates specified for LTIS (Installation based) category in the Tariff schedule.

f) **Abolishment of unmetered category:** With respect to abolishment of unmetered category, the Commission agrees with the views of the Petitioner that all the consumers should be metered. Further, as per the directions of the Commission, the petitioner has provided a metering plan for the replacement of burnt, defective meters. The Commission directs the Petitioner to strictly adhere to the timelines committed by it so that no consumer is left unmetered by December 2018.

g) The Commission finds it appropriate to continue with the existing provisions with respect to **Delayed payment surcharge** as the Petitioner is unable to provide detailed impact analysis of the same on different categories of consumers.

h) In case of proposal for change in **Load Factor Penalty**, **Load Factor Rebate & Voltage Rebate, Power factor Penalty & Rebate** the Commission finds it appropriate to continue with the existing provisions without any changes.

i) With regards to **distinct categorisation of Rolling Mills and other associated operations with Induction Furnace under HTS**, the Commission had already provided justification in the earlier Order that it has still not received adequate justification with respect to both financial and practical implications of effecting the proposed changes. As the cost and revenue implication, timelines of transition, impact on consumer etc. have not been provided by the Petitioner, the Commission is unable to evaluate the merits of the proposal of the Petitioner and accordingly the same has not been allowed at this stage.

j) The Commission has approved **the tariff for providing Temporary supply** and the Tariff Schedule for the same has been provided in the Chapter A12 of this Tariff Order.

k) The Commission has not approved the creation of a separate category of supply for consumers seeking **seasonal tariff.** The Petitioner in the earlier Order dated June 21, 2017 had directed the Petitioner to submit a detailed proposal with information on anticipated number of consumers, connected load, sales and category of such consumers applying for such connections. Also, the Commission is of the view that the Petitioner has not made any clear differentiation between temporary & Seasonal supply. The methodology used to propose the tariff for each sub category should also be justified by linking the same to the increase in costs to supply such consumers (if any). The Petitioner is also directed to classify different seasonal industries in its license area. Accordingly, this matter shall be taken up once the required proposal complete in all aspects is submitted by the Petitioner.

l) For the proposal of **penalty for exceeding contract demand,** the Commission has already amended in its earlier Tariff Order dated June 21, 2017 to the effect that in case the maximum demand of the consumer exceeds 110% of the contract demand then the excess demand over the contract demand shall be billed at 1.5 times the normal charges. In view of the same, the Commission finds no reason in reviewing the same clause again. The terms and conditions with respect to penalty for exceeding billing/ contract demand shall remain unchanged.

m) The Commission, as explained in the earlier Order dated June 21, 2017 is of the view that the proposal for **all HTS consumers to have demand recording facility @ 15 minutes time integration** for better management of load profile during power restriction needs to be elaborated in detail and an action plan for modification of the set facility should be submitted to the Commission along with the time required to carry out the replacement of meters and its financial implications so that the proposal may be evaluated on its merits.

n) **NOC for switchover to other licensee:** The proposal of the Petitioner to make it compulsory for consumers switching over to other licensees to obtain NOC and the related penalties has not been considered as part of this Tariff Order. The procedure with respect to termination of agreement forms part of JSERC Supply Code Regulations, 2015. Further, the Commission is in the process of preparing the guidelines for switching over of consumers from one licensee to another, which shall be put in public domain for inviting comments from all stakeholders. The Petitioner may submit its comments/ suggestions/ objections with respect to the same.

o) **Removal of Clause 13 from HT Agreement:** The Commission has dealt with the proposal to remove clause 13 from HT agreement in detail in the Order dated August 2, 2012 and May 6, 2014 and June 21, 2017. The relevant extract has been reproduced below:

"During the course of public hearings, the Petitioner made a presentation of their ARR & Tariff Petition including additional terms and conditions of supply. In their presentation, they requested that Clause 13 of the HT Agreement to which the consumers have referred to above, be deleted. The consumers vehemently objected to it and said that the HT agreement, after consultation with all stakeholders, have been approved by the Commission and there is no reason to delete the said clause now through this Tariff Order. The Commission agrees with the views of the consumers and do not see any reason to delete the said Clause 13 of HT agreement, which basically protects the interest of the consumers".

Thus, for the same reasons, already recorded, the Commission does not accept the said proposed of removing Clause 13 of the HT Agreement. The Commission is also of the view that such facility should be extended to other category of consumers as well. Accordingly, the Commission has now introduced this clause as an integral part of the Tariff Order, as stated in the chapter on Terms and Conditions of Supply.

p) With Regards to **Rebate for specially abled Consumers in the domestic category**, the Commission appreciates the steps taken by the Petitioner towards social welfare and inclusive growth. However, as stated above, section 62 (3) of the Act, 2003 does not permit any Commission to show undue preference to any specific consumer. Hence, the Commission does not approve said clause, as proposed by the Petitioner.

q) The Commission is of the view that the **charges applicable to for Captive Power Plant** have already been defined in JSERC (Utilization of surplus capacity of captive power plants based on conventional fuel) Regulations, 2010. The Petitioner may submit a petition before the Commission for any amendment in the aforementioned regulations.

r) With respect to changes related to clauses in **billing demand in LTIS, HTIS, MES and RTS** categories, the Commission finds it appropriate to continue with the existing provisions without any changes as the Petitioner has not provided detailed analysis depicting financial impact on the consumers.

s) JUSCO, a distribution licensee in the State of Jharkhand, had requested for tariff provisions in case such a licensee procures power from JBVNL. Accordingly, the Commission has stipulated the tariff for procurement of power by another distribution licensee from JBVNL, in the tariff for Institutional category.

t) The Commission has also introduced tariff for Electric Vehicles (EV) charging infrastructure. If a public EV charging infrastructure is setup for charging on payment basis, then the Commercial category tariff shall be applicable. If the EV is charged by a consumer himself, then the tariff for the particular consumer category shall be applicable.

A10. APPROVED RETAIL TARIFF FOR FY 2018-19

10.1 The Commission has approved an overall hike in energy charges, fixed /demand charges in different categories to meet the revenue gap for the FY 2018-19. The Commission has determined category wise retail tariff for the FY 2018-19, as depicted in the following table:

Table 141: Approved Tariff for FY 2018-19

Category	Sub-Category		Approved Tariff (FY 19)	
			Energy Charges (Rs.)	Fixed Charges (Rs.)
Domestic	Kutir Jyothi		4.40 / kWh	20 / Conn./ Month
	Rural	Metered	4.75 / kWh	35 / Conn./ Month
		Unmetered		250 / Conn./ Month
	Urban		5.50 / kWh	75 / Conn./ Month
	HT		5.25 / kWh	200 / kVA / Month
Irrigation and Agriculture		Metered	5.00 / kWh	20.00 / HP / Month
		Unmetered		400.00 / HP / Month
Commercial	Rural	Metered	5.25 / kWh	60 / Conn./ Month
		Unmetered		300 / kW / Month
	Urban		6.00 / kWh	225 / Conn./ Month
Industrial	Low Tension Industrial Supply	Demand based	5.50 / kWh	160 / kVA / Month
		Installation based*	6.50 / kWh	160.00 / HP / Month
	High Tension Industrial Supply		5.75 / kvah	300 / kVA / Month
	High Tension Special Service		4.00 / kvah	500 / kVA / Month
Institutional	Streetlight Service	Metered	6.00 / kWh	100 / Conn./ Month
		Un-metered		Rs 500 per 100 watt/ month
	Railway Traction, Military Engineering Services and Other Distribution Licensees/ Deemed Licensee		4.60 / kvah	350 / kVA / Month

***Note:** *Installation based tariff is applicable only till six months from the date of issuance of the Order;*

A11. SCHEDULE OF CHARGES

Background

Petitioner's Submission

11.1 The Petitioner submitted that the miscellaneous charges of JBVNL have been slightly revised by the Commission in its Order dated 21st June 2017. The Petitioner submitted that the revision of miscellaneous charges have been done almost after a decade and these charges are not in line with current inflation and labor rates. The petitioner further submitted that the miscellaneous charges of JBVNL are still one of the lowest in the country and requires certain revision.

11.2 The Petitioner submitted that inflation in the last four years (FY 2012-13 to FY 2015-16) has been increased with an annual rate of 4.94% considering both CPI and WPI index as per JSERC Distribution Tariff Regualtions,2015. The current miscellaneous charges are not complying with the industry standards and need to be revised to bring them to a realistic level.

11.3 The Petitioner further submitted that JBVNL is the distribution utility with one of the lowest miscellaneous charges in the country. Even neighboring States like Bihar, Odisha, Chhattisgarh and West Bengal have significantly higher charges. This is primarily due to non-revision of charges in the last 10 years.

11.4 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.

11.5 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). It is pertinent to mention that free of cost/ installment 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.

11.6 The Petitioner has also revised the charges for 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 & 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 which is in line with the temporary disconnection charges.

11.7 The Petitioner has 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).

11.8 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.

11.9 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.

11.10 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 for opting 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.

11.11 The Petitioner further submitted that the revised schedule of charges shall roughly fetch an additional Rs 2 Cr to the Non-Tariff Income of the Petitioner.

11.12 The summary of miscellaneous charges proposed by the Petitioner is detailed in the table below.

Table 142: Schedule of miscellaneous charges (in Rs) as proposed by the Petitioner for FY 18 & FY 19

<table>
<tr><th colspan="2">Types of Charges</th><th>Single phase</th><th>3 Phase (whole-current)</th><th>3 Phase (CT operated)</th><th>Meter at 11kV</th><th>Meter at 33kV</th><th>132/220 kV</th></tr>
<tr><td colspan="2">New Connection application fees[1]</td><td>50</td><td>100</td><td>100</td><td>500</td><td>1000</td><td>1500</td></tr>
<tr><td rowspan="2">Dis-connection charges (on consumer request)</td><td>Temporary</td><td>100</td><td>200</td><td>500</td><td>1000</td><td>1500</td><td>1500</td></tr>
<tr><td>Permanent[2]</td><td>200</td><td>400</td><td>1000</td><td>2000</td><td>5000</td><td>5000</td></tr>
</table>

Types of Charges	Single phase	3 Phase (whole-current)	3 Phase (CT operated)	Meter at 11kV	Meter at 33kV	132/220 kV
Re-connection charges	100	200	500	1000	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[3])	100	500	700	1,000	2,000	5,000
Meter Testing (including combined metering unit)[4]	100	200	1,800	6,800	6,800	9,800
Meter Rent/ meter/ month	20	50	250	400	2500	15,000
Transformer Rent- if provided by JBVNL on request of consumer	NA		Rs. 100/kVA/month of transformer capacity			

1. *Other charges related to new connection shall be applicable as per the cost estimate prepared and for consumers covered under any Central or State Government sponsored scheme, the charges will be applicable as per the scheme*
2. *Charges are inclusive of meter removal and other allied materials.*
3. *The charges shall not be applicable if the meter gets defective after 5 years from the date of installation and in case of burnt meters the penalty (to the tune of actual cost of meter) shall be applicable in addition to above*
4. *In case 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 charges*

Commission's Analysis

11.13 The Commission in its earlier Order for the second control period FY 2016-17 to FY 2020-21 had already dealt with this matter. The Commission after carrying out detailed analysis on the existing charges and the charges proposed by the Petitioner and having compared the same with the neighboring as well as other states gave an inflationary increase considering the past 10 years before the control period i.e (FY 2005-06 to FY 2014-15).

11.14 In view of the same, the Commission finds no merit in the claims made by the Petitioner and the existing charges shall continue until the next revision is made by the Commission.

11.15 Transformer rent has been introduced by the Commission in case a consumer requests for the same from the Petitioner.

A12. TARIFF SCHEDULE FOR FY 2018-19

APPLICABLE FROM 01.05.2018[2]

I. DOMESTIC SERVICE

Applicability:

Kutir Jyothi, Domestic Service–Rural, Domestic Service–Urban, Domestic Service-HT

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 Motors 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 and other recognised charitable institutions, where no rental or fees are charged whatsoever. If any fee or rentals are charged, such institution will be charged under Commercial category.

Rural drinking water schemes are also included under this Category.

Category of Services:

Domestic Service –Kutir Jyothi: This Schedule shall apply to Kutir Jyoti Connections for Rural Areas.

Domestic Service – Rural: For rural areas (including rural drinking water schemes) not covered by area indicated under DS-Urban.

Domestic Service – Urban: For Urban areas covered by Nagar Nigam, Nagar Parishad, Nagar Panchayat.

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 33 kV or 11 KV voltage level. Individual households in the housing colonies/ multi-storeyed buildings/ housing complexes would pay the same tariff as applicable for this category.

[2] This schedule shall remain in force till the next tariff schedule is issued by the Commission.

Service Character:

(i) For Kutir Jyothi: AC, 50 Cycles, Single phase at 230 volts.

(ii) For Rural: AC, 50 Cycles, Single Phase at 230 Volts.

(iii) For Urban: AC, 50 Cycles, Single Phase at 230 Volts, Three Phase at 400 Volts.

(iv) For HT: AC, 50 Cycles, at 11 KV or 33 kV

Tariff:

Table 143: Approved Tariff for Domestic Category for FY 2018-19

Consumer Category Domestic	Fixed Charges Unit	Rate	Energy Charges Rate (Rs./kWh)
Kutir Jyothi	Rs./Conn/Month	20	4.40
Rural (metered)	Rs/Conn/Month	35	4.75
Rural (unmetered)	Rs./Conn/Month	250	-
Urban	Rs./Conn/Month	75	5.50
HT*	Rs/KVA/month	200	5.25

Delayed Payment Surcharge: In accordance with Clause IV of Terms & Conditions of Supply as provided in Section A13 of this Tariff Order.

II. 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, Rice-Hauler or expellers.

Service Character:

AC 50 Cycles, Single Phase at 230 volts / 3 Phase at 400 volts

Tariff:

Table 144: Approved Tariff for IAS for FY 2018-19

Consumer Category IAS	Fixed Charges		Energy Charges
	Unit	Rate	Rate (Rs./kWh)
Metered	Rs./HP/Month	20	5.00
Unmetered	Rs./HP/Month	400	-

Delayed Payment Surcharge: In accordance with Clause IV of Terms & Conditions of Supply as provided in SectionA13 of this Tariff Order.

Power Factor Penalty/Rebate: In accordance with Clause II of Terms & Conditions of Supply as provided in Section A13 of this Tariff Order.

III. COMMERCIAL SERVICES (CS)

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

This schedule shall also 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.

Service Category:

Commercial Service Rural: For Rural Areas not covered by area indicated for CS- Urban.

Commercial Service Urban: For Urban areas covered by Nagar Nigam, Nagar Parishad, Nagar Panchayat.

Service Character:

Rural: AC 50 Cycles, Single phase at 230 Volts.

Urban: AC 50 Cycles, Single phase at 230 Volts or Three Phase at 400 Volts.

Tariff:

Table 145: Approved Tariff for Commercial Category for FY 2018-19

Consumer Category	Fixed Charges		Energy Charges
Commercial	Unit	Rate	Rate (Rs./kWh)
Rural (metered)	Rs./ConnMonth	60	5.25
Rural (unmetered)	Rs./kW/Month	300	-
Urban	Rs./Conn/Month	225	6.00

Delayed Payment Surcharge: In accordance with Clause IV of Terms & Conditions of Supply as provided in Section A13 of this Tariff Order.

Installation of Shunt Capacitors: In accordance with Clause VII of Terms & Conditions of Supply as provided in Section A13 of this Tariff Order.

IV. INDUSTRIAL SERVICES

Applicability:

- Low Tension Industrial Service (LTIS)
- High Tension Voltage Supply Service (HTS)
- High Tension Special Service (HTSS)

Low Tension Industrial Service (LTIS): This schedule shall apply to all industrial units applying for a load of 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 85.044 kW.

High Tension Voltage supply Service (HTS): The schedule shall apply for consumers having contract demand above 100 kVA.

High Tension Special Service (HTSS): This tariff schedule shall apply to all consumers who have a contracted demand of 300 KVA and more for induction/arc Furnace. In case of induction/arc furnace consumers (applicable for existing and new consumers), the contract demand shall be based on the total capacity of the induction/arc furnace and the equipment as per manufacturer technical specification and not on the basis of measurement. This tariff schedule will not apply to casting units having induction furnace of melting capacity of 500 Kg or below.

Service Character:

Low Tension Industrial Service (LTIS): AC, 50 Cycles, Single Phase supply at 230 Volts or 3 Phase Supply at 400 volts. Demand Based tariff / Installation based tariff for sanctioned load upto 85.044 kW.

High Tension Industrial Service (HTS): 50 Cycles, 3 Phase at 6.6 kV / 11 kV / 33 kV / 132 kV / 220 kV / 400 kV

High Tension Special Service (HTSS): 50 Cycles, 3 Phase at 11 kV / 33 kV / 132 kV / 220 kV / 400 kV.

Tariff:

Table 146: Approved Tariff for Industrial services for FY 2018-19

Consumer Category	Fixed Charges		Energy Charges
Industrial services	Unit	Rate	Rate
LTIS – Demand based	Rs./kVA/Month	160	5.50/ kWh
LTIS – Installation based*	Rs/HP/Month	160	6.50/ kWh
HTS	Rs./kVA/Month	300	5.75 / kVAh
HTSS	Rs./kVA/Month	500	4 .00/ kVAh

Note: *Installation based tariff is applicable only till six months from the date of issuance of the Order;*

LTIS – Demand Based: The billing demand shall be the maximum demand recorded during the month or 50% of contract demand whichever is higher. In case actual demand is recorded at more than 100 kVA in any month, the same 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 for the revised contracted demand with the Petitioner as per the terms and conditions of HT supply.

HTS and HTSS: 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 of Terms & Conditions of Supply as provided in Section A13 of this Tariff Order.

Load Factor Rebate for HTS, HTSS: In accordance with Clause VI of Terms & Conditions of Supply as provided in Section A13 of this Tariff Order.

Voltage Rebate for HTS, HTSS: In accordance with Clause V of Terms & Conditions of Supply as provided in Section A13 of this Tariff Order.

Delayed Payment Surcharge:

LTIS: In accordance with Clause IV of Terms & Conditions of Supply as provided in Section A13 of this Tariff Order.

HTS, HTSS: The Delayed Payment Surcharge will be charged on a weekly basis at the rate of 0.4% per week and other conditions in accordance with Clause IV of Terms & Conditions of Supply as provided in Section A13 of this Tariff Order.

Power Factor Penalty/Rebate for LTIS: In accordance with Clause II of Terms & Conditions of Supply as provided in Section A13 of this Tariff Order.

Installation of Shunt Capacitors for LTIS: In accordance with Clause VII of Terms & Conditions of Supply as provided in Section A13 of this Tariff Order.

TOD Tariff for HTS Consumers: In accordance with Clause VIII of Terms & Conditions of Supply as provided in Section A13 of this Tariff Order.

Load factor rebate and power factor rebate shall not be allowed to consumers with outstanding arrears.

V. INSTITUTIONAL SERVICES

This tariff schedule shall apply for use of Street Lighting system, Railway Traction, Military Engineering Services and Other Distribution Licensees.

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.

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 defense cantonment and related area.

Other distribution licensees: This tariff schedule shall apply to other distribution licensees procuring power from JBVNL.

Service Character:

Street Light Service (SS): AC, 50 cycles, Single phase at 230 Volts or three phase at 400 Volts.

Railway Traction Service (RTS): AC, 50 cycles, Single phase at 132 kV.

Military Engineering Services (MES): AC, 50 cycles, three phase at 11 KV/ 33 KV/ 132 kV

Other Distribution Licensees: AC, 50 cycles, three phase at 11 KV/ 33 KV/ 132 kV

Tariff:

Table 147: Approved Tariff for Institutional Service for FY 2018-19

Consumer Category Institutional services	Fixed Charges Unit	Fixed Charges Rate	Energy Charges Rate (Rs./kWh)
Street Light (Metered)	Rs./Conn/Month	100	6.00
Street Light (Un metered)	Rs/kW/Month	Rs 500 per 100 watt per month	-
Railway Traction Services, Military Engineering Services and Other Distribution Licensees*	Rs./kVA/Month	350	4.60

*Note: 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 of Terms & Conditions of Supply as provided in Section A13 of this Tariff Order.

Maximum Demand for Railway Traction Services:

The demand charge shall be applied on maximum demand recorded or 75% of the contract-demand whichever is higher at any fifteen minutes time block for which the meter installed should have 15 minutes integration time.

Delayed Payment Surcharge:

In accordance with Clause IV of Terms & Conditions of Supply as provided in Section A13 of this Tariff Order

Load factor rebate shall not be allowed to consumers with outstanding arrears.

VI. TEMPORARY CONNECTIONS

Applicability:

The Temporary tariff shall be applicable as per the following conditions:

(a) Temporary tariff is proposed to 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 shall be given prepaid meters with prepaid balance equivalent to 45 days of sale of power which shall be based on the assessment formula (LDHF) prescribed by the Commission.

(c) Temporary connections shall initially be provided for a period of up to 30 days which can be extended on month to month basis upto six months.

Tariff:

Table 148: Approved Tariff for Temporary supply for the FY 2018-19

Consumer Category Temporary	Fixed Charges Rate	Energy Charges Rate (Rs./kWh)
All Units	1.5 times of the applicable fixed charges	1.5 times of the applicable energy charges

SCHEDULE FOR MISCELLANEOUS CHARGES

Table 149: Schedule for Miscellaneous Charges

S.No.	Purpose	Scale of Charges	Manner in which Payment will be realised
1	**Application fee**		
	Domestic	Rs 30 (Kutir Jyoti) Rs 40 (Others)	Payable with energy bill
	Street Light	1 ph- Rs. 40, (L.T) 3 Ph- Rs. 75	
	Agriculture	1 ph- Rs. 40, (L.T) 3 Ph-Rs. 75	
	Commercial	1 ph- Rs. 40, (L.T) 3 Ph-Rs. 75	
	Other LT Categories	Rs 100	
	HTS	Rs 200	
	HTSS, EHTS, RTS	Rs 200	
2	**Revision of estimate when a consumer intimates changes in his requirement subsequent to the preparation of service connection estimate based on his original application**		
	Agriculture	Rs 40	Payable with energy bill
	Domestic	Rs 35	
	Commercial	Rs 40	
	Other LT Categories	Rs 100	
	HT Supply	Rs 285	
3	**Testing of consumers Installation**		
	First test and 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	Single ph- Rs 100 Three ph -Rs 200 HT Supply- Rs 500	Payable with energy bill
4	**Meter test when accuracy disputed by consumer**		
	Single Phase	Rs. 75	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.
	Three Phase	Rs. 200	
	Trivector/ special type meter, HT,EHT metering equipment	Rs. 1250	
5	**Removing/ Refixing of meter**		
	Single Phase	Rs. 100	Payable with energy bill
	Three Phase	Rs. 200	
	Trivector/special type, Three phase with CT/HT metering equipment	Rs. 550	
6	**Changing of meter/meter equipment/fixing of sub meter on the request of the consumer/fixing of sub meter**		
	Single Phase	Rs. 75	Payable with energy bill
	Three Phase	Rs. 180	
	Trivector/special type meter	Rs. 530	

S.No.	Purpose	Scale of Charges	Manner in which Payment will be realised
7	**Resealing of meter when seals are found broken**		
	Single Phase	Rs. 50	Payable with energy bill
	Three Phase	Rs. 80	
	Trivector/ special type meter	Rs. 200	
8	**Fuse call – Replacement**		
	Board fuse due to fault of consumers	Rs. 30	Payable with energy bill
	Consumer fuse	Rs. 30	
9	**Disconnection/ Reconnection**		
	Single Phase	Dis-con: Rs. 75, Re-con- Rs. 75	Payable in advance along with the request by the consumer. If the same consumer is reconnected / disconnected within 12 months of last disconnection/ reconnection, 50% will be added to the charges
	Three Phase	Dis-con: Rs. 150, Re-con- Rs. 150	
	LT Industrial Supply	Dis-con: Rs. 300, Re-con- Rs. 600	
	HT Connection upto 5 MVA	Dis-con: Rs. 750, Re-con- Rs. 1200	
	HT Connection above 5 MVA	Dis-con: Rs. 750, Re-con- Rs. 1500	
10	**Replacement of meter card, if lost or damaged by consumer**	Rs. 20	Payable with energy bill
11	**Security Deposit**		As per JSERC (Electricity Supply Code) Regulations, 2015
12	**Meter Rent/Month**		
	DS Category except DS I- Single Phase/ Three phase	Rs. 20/50	Payable with energy bill
	LT meter with CT	Rs. 250	
	11 kV at low Voltage	Rs. 400	
	11 kV at 6.6/ 11 kV	Rs. 600	
	33 kV HT side	Rs 2,500	
	132 kV	Rs 15,000	
	RTS or 220 kV	Rs 15,000	
13	**Replacement of Burnt Meter**	Cost of Meter	Payable with energy bill
14	**Transformer Rent***		
	Upto 200 KVA	Rs 5500/month	Payable with energy bill
	Above 200 KVA	Rs 7500/month	Payable with energy bill

Applicable for a 6 month duration from the date of taking the transformer on rent, thereafter monthly escalation of 10% would be applicable

A13. TERMS AND CONDITIONS OF SUPPLY

Besides the Terms and Conditions provided in the JSERC (Electricity Supply Code), Regulations, 2015, the Commission approves the following additional terms & conditions of supply.

Clause I: Penalty for exceeding Billing/ Contract Demand

In case of the actual demand exceeding 110% of the contract demand, the consumer shall pay penal charges for the exceeded demand. 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 @ 1.5 times the normal tariff rate.

In case actual demand is higher than the contract demand for three continuous months, the same 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 for the revised contract demand with the licensee.

Once the actual demand is recorded to be higher than contract demand for two continuous months, the licensee would serve notice to the consumer after the end of the second month for enhancement of the contract demand. The consumer would be liable to respond within 15 days of receipt of such notice and submit application for enhancement of contract demand to the licensee. The licensee would, within 15 days of receipt of response from the consumer, finalise the new agreement after making necessary changes at consumer’s installations.

In case the consumer fails to respond within 15 days, the licensee would have the right to initiate enhancement of load as per the last recorded contract demand. While, in case the consumer provides an undertaking that the actual demand shall not exceed the contract demand again for a period of atleast six months from the last billing, the licensee shall continue to bill the consumer as per the existing contract demand and billing demand.

Provided that if the consumer fails to adhere to the undertaking and the actual demand exceeds the contract demand within the subsequent six months of the undertaking, the consumer shall have to pay a penal charge of 2 times the normal tariff for a period of three consecutive months and the licensee shall, after serving 7 days notice to the consumer, enhance the contract demand of the consumer as per the last recorded actual demand.

Clause II: Power factor Penalty/ Rebate

Power Factor Penalty

Power Factor Penalty will be applicable in case of maximum demand meters.

In case average power factor in a month for a consumer falls below 0.85, a penalty @ 1% for every 0.01 fall in power factor from 0.85 to 0.60; plus 2% for every 0.01 fall below 0.60 to 0.30 (up to and including 0.30) shall be levied on both demand and energy charges; plus 3% for every 0.01 fall below 0.30.

Power Factor Rebate

Power Factor rebate will be applicable in case of maximum demand meters.

In case average power factor as maintained by the consumer is more than 90%, a rebate of 1% and if power factor is more than 95%, a rebate of 2% on both demand and energy charges shall be applicable.

Clause III: Jharkhand Electricity Duty

The charges in this tariff schedule do not include charges on account of Electricity Duty/Surcharge to the consumers under the Jharkhand Electricity Duty Act, 1948 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 after making corrections for the loss in the distribution system.

Clause IV: Delayed Payment Surcharge

The delayed payment surcharge will be at the rate of 1.5% per month and part thereof. The due date for making payment of energy bills or other charges shall be fifteen days from the date of serving 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, DPS will not be charged for the period of default by licensee.

Clause V: Voltage Rebate

Voltage rebate will be applicable on both demand and energy charges as given below:

Table 150: Voltage Rebate

Consumer Category	Voltage Rebate
HTIS – 33 kV	3.00%
HTIS – 132 kV	5.00%
HTIS – 220 kV	5.50%
HTIS – 440 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 authority/Courts.

Clause VI: Load Factor Rebate

Load Factor rebate will be applicable on energy charges only as given below:

Table 151: Load Factor Rebate

Load Factor	Load Factor Rebate
40-60%	Nil
60-70%	7.50%
70-100%	10.00%

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 authority/Courts.

Clause VII: Installation of Shunt Capacitors

All consumers having aggregate inductive load greater than 3 HP (2.2 kW) and above (except domestic and street lights), shall install capacitors of required KVAR rating provided in the following table:

Table 152: Required kVAR Rating of LT Capacitors

Rating of Individual Inductive Load in HP	kVAR rating of LT capacitors
3 to 5	1
5 to 7.5	2
7.5 to 10	3
10 to 15	4
15 to 20	6
20 to 30	7
30 to 40	10
40 to 50	10-15
50 to 100	20-30

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 does 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.

No new connection shall be released for any consumer having aggregate inductive load greater than 3 HP (2.2 kW) unless the capacitors of suitable rating are installed.

Clause VIII: TOD Tariff

TOD tariff proposed shall be applicable 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 6:00 PM
- Peak Hours: 06:00 AM to 10:00 AM & 06:00 PM to 10:00 PM: 120% of normal rate of energy charge

Clause IX: Rebate for prompt payment

The due date for making payment of energy bills or other charges shall be 15 days from the date of issue of the bill. Rebate of 0.5% on the billed amount for timely payment of the bills for all the category of consumers shall be allowed.

Clause X: Rebate for online payment

To motivate the consumers to make online payment of the bills through online web portal or digital methods, a rebate of 1% of the billed amount in addition to rebate @ 1.5% shall be allowed, subject to a maximum of Rs 250. However, online payment rebate shall be applicable if the consumer makes full payment of the bill within due date.

Clause XI: Other Terms and Conditions

Reduction in Fixed Charges

If at any time any consumer is prevented from receiving or using the electric energy to be supplied by JBVNL either in whole or in part due to strike, riots, fire, floods, explosion, act of God or any other case reasonable beyond control or if JBVNL is prevented from supplying or unable to supply such electric energy owing to any or all of the causes mentioned above, then the fixed charges/ demand charges set out in the Tariff Schedule for that particular category of consumer shall be reduced in proportion to the ability of the consumer to take or JBVNL to supply such power.

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 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. The DPS shall be levied extra as per the applicable terms and conditions of DPS for the respective category.

Stopped/ defective meters

In case of existing consumers with previous consumption pattern, the provisional average bill shall be issued on the basis of average of previous three months consumption.

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, as shown below:

Consumer Category	Load Factor
Domestic & Religious Institutions	0.10
Non Domestic	0.20
LTIS/PHED LT	0.15
DS-HT	0.15
HTS	
11 kV	0.25
33 kV	0.30
132/220/440 kV	0.50
HTSS	0.50
RTS	0.25

Sale of Energy

No consumer shall be allowed to sell the electricity purchased from the Licensee to any other person/ entity.

Release of New Connections

No new connections shall be provided without appropriate meter. The tariff for un-metered connections shall be applicable only to the existing un-metered connections, until they are metered which should latest be by December 2018.

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 'Distribution Tariff Regulations, 2015' and as amended by the Commission from time to time.

A14. STATUS OF EARLIER DIRECTIVES

14.1 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 directs the Petitioner to comply with the directives with utmost sincerity failing which penal action may be taken.

Directives	Status	Views of the Commission
Strengthening of Transmission and Distribution Network		
The Commission directs the Petitioner to take appropriate steps in order to strengthen the Transmission & Distribution network. The Petitioner is directed to submit a detailed plan with expected benefits with the next tariff petition. In addition, the Commission directs the Petitioner to implement safety measures in its network to avoid accidents which not only disrupt supply but also lead to loss of human life. The Commission also directs the Petitioner to update and implement its Safety Manual in line with the Provisions of Indian Electricity Rules to avoid such disruptions.	The Petitioner submitted that it has embarked on a mission to address the impending issues in power sector including low electricity access and providing 24X7 reliable power. In this regard, a considerable sub-transmission and distribution infrastructure is being created and the existing infrastructure is also being augmented. The Petitioner submitted details of the infrastructure created under the various schemes, Scope of Work covered under the various schemes of Urban Electrification, Rural Electrification. The Petitioner submitted that JBVNL is committed to ensure 100% safety for its employees at all levels and avoid any unfortunate events. The Petitioner has already started the procurement and distribution of safety kits towards the compliance of order of Hon'ble Commissions. Also the Petitioner is under process of finalization of its safety manual which would create the awareness among the field staff and officers regarding the safety provisions covered under Indian Electricity Rules.	The Commission has taken a note on the various steps taken by the Petitioner in strengthing its tranmsision and distribution network. The Petitioner should expedite implementation of the various initiatives taken by the Petitioner to ensure the end result of quality and reliable power is achieved. The Commission directs the Petitioner to submit safety manual within 3 months of issuance of this Order.

Energy Audit and T&D Loss Reduction		
The Commission directs the Petitioner to conduct its division wise Energy Audit & prepare circle wise T&D loss reduction plan and submit the same to Commission within six months of issue of tariff order (Dated: 21st June, 2017 & 2nd August, 2012).	The petitioner submitted that it has already completed 100% Feeder Metering and is in process of ensuring 100% metering of DTs and Consumers to cover the entire distribution value chain and enable energy auditing. To begin with, energy audit of 311 rural feeders where lower level metering is complete, is being done out of 761 rural feeders. Also 689 no. of 11 kV and 33 kV urban feeders are audited out of total 799 no. of 11 kV and 33 kV urban feeders. Town-wise Energy Accounting has been initiated to ensure the Energy Audit at division level. The Petitioner has also submitted that it has been undertaking several steps in order to achieve the AT&C Loss reduction trajectory under UDAY Scheme like Name and Shame Campaign, preparation of MIS for performance monitoring and management etc. Also the Circle wise loss reduction plan, including the details of planned interventions, are being prepared by the Petitioner and shall be submitted to the Hon'ble Commission in due course.	The Commission finds that Petitioner was not able to contain its T&D losses as per the targets set by the Commission. The Level of T&D losses of the Petitioner is a matter of concern and immediate measures should be taken to curb the same. The first step in that direction is energy audit and preparing loss reduction plan. Although, the Petitioner has started the process of energy audit and energy accounting, it has not been able to comply with the timelines as specified by the Commission. **The Commission re-directs the Petitioner to submit the report on energy audit along with the next Tariff Petition and to ensure that compliance to directives and timelines is taken in serious manner. Failure to do so would invite penal consequences.**
SoP Implementation		
The Commission directs the Petitioner to submit progress reports on the implementation of Standards of Performance as per the JSERC (Standard of Performance) Regulations, 2005.	The Petitioner submitted that it has already implemented the measure and the SOP reports are available on JBVNL website under Reliability Section. The payment of compensation is mandated in case of any default in the Guaranteed Standards stipulated under the JSERC SOP Regulations. In order to ensure 100% compliance of the regulation, an online web-based tool is being created whereby the consumer shall be able to register the compensation claim against JBVNL.	The Commission notes the compliance of the Petitioner and directs the Petitioner to continue implementing SoP as per Standards of Performance as per the JSERC (Standard of Performance) Regulations, 2015 failure of which may attract penalty.

Power Procurement Plan		
The Commission views that the short-term and long-term Power Purchase planning needs to be ratified by the Commission before implementation by the Petitioner, hence it directs the Petitioner to submit to the Commission a detailed Power Procurement Plan before the start of every financial year so that the Commission can review the need for purchasing and selling power and approve accordingly.	The Petitioner submitted that Power Procurement Plan for FY 2017-18 and FY 2018-19 is being submitted by JBVNL herewith under this petition for FY 2017-18 and FY 2018-19.	The Commission notes the compliance of the Petitioner in this regard.
Interest on Consumer Security Deposit		
The Commission directs the Petitioner to submit the action taken along with report on actual interest paid to consumers on security deposits along with details of rate of interest considered to the Commission with the next tariff Petition, failure to do so will invite penal action. The Commission also directs the Petitioner to prepare a list of consumers who have not been paid at the prevailing bank rate and clear the dues pending on the Petitioner with immediate effect.	The Petitioner submitted that JBVNL has recently migrated to new billing agencies and billing system, for which the data migration of existing ~31 Lac consumer has been done. The initial issues pertaining to data quality are being addressed and in parallel the details of consumer security deposits are being updated. However, for a considerable number of consumers security details are not available. Therefore, JBVNL has is in process of finalizing an online portal for the estimation and settlement of the Interest on Consumer Security Deposit. The Petitioner submitted that JBVNL is committed to clearing such unpaid security deposit interest dues, however, due to practical constraints it has not been done in case of certain consumers. Going forward, the security deposit interest payment shall be regularized and will be appropriately reflected in the energy bills of the consumers, once the web based tool is operational.	The Commission takes serious note of the casual attitude shown towards directive issued by the Commission. Even after specifically mentioning that penal action may be invoked for non-compliance, the Petitioner has still not submitted the required details. Moreover, it has also been pointed out in public hearings that the consumers are not being paid interest on security deposit. **The Commission gives one more opportunity for submission of the action taken and report on actual interest paid to consumers on security deposits. The Petitioner shall also submit a list of consumers who have not been paid at prevailing bank rate and clear the dues pending of the consumers by within six months of issuance of this Order. Failure to comply with the directive would attract appropriate penal consequences wherein the fixed charges payable by the consumer shall be reduced by 5% every month until such date payment has been made by JBVNL.**

<table>
<tr><th colspan="3">Metering Plan</th></tr>
<tr><td>The Commission directs the Petitioner to provide status update to the Commission regarding category-wise defective/ burnt/ non-performing meters and action plan on replacement of these with the next tariff petition. The Commission also directs to prepare a metering plan to provide meters to all the unmetered consumers and also ensure that no new connection is released without a meter.</td><td>The Petitioner submitted that it has already prepared the Metering Plan and category-wise details on replacement of defective/ burnt/ non-operational meters and provided along with the Petition.</td><td>The Commission observes that even though the Petitioner has provided a metering plan, it lacks the phase-wise timelines for implementation. The Commission directs the Petitioner to submit within one month of issuance of this Order a revised metering plan indicating total consumers, metered (working), metered (defective), unmetered consumers as on date, along with month-wise plan of procurement, installation and replacement of new meters. Consequent to submission of the report, the Petitioner should update the progress to the Commission on bi-monthly basis in order to achieve 100% metered status till December 2018.</td></tr>
<tr><th colspan="3">Reduction in Overtime Expenses</th></tr>
<tr><td>The Commission directs the Petitioner to take necessary steps to reduce the overtime expenses and submit action taken report with the next tariff petition, failing which the Commission will not allow any cost under overtime expenses.</td><td>The Petitioner submitted that the overtime expenses incurred during the 3 years were 41.6 lakhs, 46.07 lakhs and 12.39 lakhs during FY 13-14, FY 14-15 and FY 15-16 respectively. The Petitioner has already started taking necessary steps for reduction of overtime expense and has completed the below mentioned recruitment (JUVNL Employment Notice No.02/2015) to optimize the Overtime Expense –
• Junior Lineman – 184 Nos.
• Switchboard Operator – 168 Nos.
• Assistant Operator – 19 Nos.
• Fitter – 1 No.
Also the recruitment of the below mentioned staff (JUVNL Employment Notice No. 03/2016) is at the final stage of selection
• Junior Lineman – 215 Nos.</td><td>The Commission takes note of the measures undertaken.</td></tr>
</table>

	• Switchboard Operator – 228 Nos. • Assistant Operator – 41 Nos. • Fitter – 9 Nos. Once the selection of the above mentioned staff is completed, the cost of overtime expenses would be curtailed to a greater extent.	
True-up Petitions		
The Commission directed the Petitioner to submit True-up Petitions for FY 2011-12, FY 2012-13, FY 2013-14 (pre-unbundling) for the distribution function of erstwhile JSEB and FY 2013-14 (post unbundling) & FY 2014-15 and FY 2015-16 for JBVNL.	The Petitioner submitted that True-up petitions FY 2011-12, FY 2012-13, FY 2013-14 (pre-unbundling) for the distribution function of erstwhile JSEB and FY 2013-14 (post unbundling) & FY 2014-15 and FY 2015-16 for JBVNL have been already been filled in Sep'17	The Commission takes note of the compliance of the directive.
Approval of PPAs		
The Commission directs JBVNL to submit, for approval, all the PPAs which have not yet been approved by the Commission within three months of the date of issuance of this Tariff Order.	It is submitted that PPAs for various stations has been submitted to Hon'ble Commission vide letter no-1532 dated 28.11.2017.	The Commission takes note of the compliance of the directive.
Delayed Payment Surcharge		
The Commission directs the Petitioner to prepare a plan for the purpose of payment of such dues with changes in the methodology used for calculation of delayed payment surcharge as one time measure or so. The Petitioner may consider the methodology adopted in other States like Odisha where delayed payment surcharge is applied as a fixed amount instead of on percentage basis. The Petitioner shall submit its proposal for change in methodology for computation of delayed payment surcharge as one time measure or as may be found suitable for enabling more and more persons with arrears to pay the electricity dues.	The Petitioner submitted that the existing Delayed Payment Surcharge mechanism followed by JBVNL is as per the Principles and Regulations given by the Hon'ble Commission. The Petitioner submitted that in other states also like Bihar, Delhi, Maharashtra etc., the Delayed Payment Surcharge calculation mechanism is based on the percentage of outstanding amount and not on the fixed amount basis. Therefore, for the current Tariff Period, JBVNL proposes to continue with the existing practice of levying DPS as percentage of outstanding amount.	The Commission takes note of the compliance of the directive.

System Loading Charges		
The Commission directs the Petitioner to submit Zone wise, Category wise estimates of System loading charges for sample five new consumers of different connected load in each category.	The Petitioner submitted that no such System Loading Charges for upgradation of system are being taken by JBVNL on account of new connection or enhancement of load by the consumers. JBVNL collects the Service Line Charges and the Development Charges (for un-electrified areas) on account upgradation of system for new connection and enhancement of load. These charges are calculated based upon the cost data book of JBVNL which shall be submitted to the Hon'ble Commission.	As per Clause 5.2.3 of the JSERC Electricity supply code regulations, 2015, the cost of extension and up-gradation of the system for meeting demand of new consumers shall be recovered from the new consumers through system loading charges. In view of the same, the Commission affords one more opportunity for submission of the required data, failure of which may attract penalty.
Quality of power/ Reliability Indices		
The Commission directs the Petitioner to submit monthly report on Reliability Indices in MS-Excel format in course of achieving 24x7 quality & reliable power.	The Petitioner submitted that it has already implemented the measure and the reports are available on JBVNL website under Reliability Section.	The Commission takes note of the compliance of the directive.
Status of Revenue realization per unit sold		
The Commission directs the Petitioner to take immediate steps to frame a time bound programme for realization of pending arrears/dues and submit a report on the action taken for realization of arrears, amount of arrears, arrears remaining outstanding and reasons for non-realization of these arrears/dues should be submitted to the Commission	The Petitioner submitted that it is having specific focus on HT and other high value consumers for the realization of arrears/ dues. The details of arrears are being prepared at the field level for reconciliation with the data available in the billing database. A detailed report is being prepared and shall be submitted subsequently. JBVNL is also planning to utilize expertise of professionals for the process of arrear data cleansing, analysis and strategizing the recovery of such arrears.	The Commission directs the Petitioner to submit a detailed report in this regard within 3 months of issuance of this Tariff Order failing which penal action may be taken.

Outstanding arrears		
The Commission directs the Petitioner to make sincere efforts in mobilizing its resources to continuously make efforts throughout the year for collection of arrears under a structured receivable management programme besides taking corrective actions against the habitual defaulters.	The Petitioner submitted that it has already taken various steps to maximize collection and identify the habitual defaulters. The monitoring of outstanding arrears and accumulation is being done at the Highest level and sincere efforts are being made by JBVNL to take stricter actions against the regular defaulters. The availability of billing database has not enabled JBVNL to identify and nab the defaulters who do not pay within time. The mechanism to identify and report such defaulters at the lowest (Sub-division/ section level) is being prepared and institutionalized and from December 2017 onwards, JBVNL shall launch the mass disconnection drive every month against non-paying consumers.	The Commission notes compliance of the Petitioner. Further, the Commission directs the Petitioner to continue its efforts for collection of arrears as it would affect the financial health of the utility.
Temporary Connections		
The Commission directs the Petitioner to issue instructions to its field/distribution division officers to release temporary connections after assessing the overall load of such new temporary connections in the locality vis-a-vis the capacity of the existing transformer in the locality which would be feeding the enhanced load. In case the existing capacity of the transformer is not capable to meet the enhanced load, transformation capacity should be increased first for release of temporary connection in the locality and submit a compliance report within one month of the issuance of the Order.	The Petitioner submitted that it has already issued office order for the directions regarding the release of new temporary connections vide letter no.1486 dated 10.11.17	The Commission takes note of the compliance of the directive.

RPO Obligation		
The Commission directs the Petitioner to ensure that they procure renewable energy both solar & non-solar in accordance with JSERC (Renewable Energy Purchase Obligation and its compliance) Regulations, 2016. Failure to comply with RPO may attract penal action.	The Petitioner submitted that it is committed towards the fulfillment of its RPO compliance. In order to meet the same, the Petitioner submitted several steps in detail towards the procurement of renewable energy both in Solar and Wind power.	The Commission in its earlier Order had strictly directed the Petitioner to make efforts to ensure that the compliance to RPO is met. The Commission notes with concern that the Petitioner is still not able to comply with the RPO targets as set by the Commission. The Commission strictly directs the Petitioner to comply with the RPO Norms set by the Commission and accordingly submit a detailed action plan in order to comply with the same within three months from the date of issuance of this Tariff Order. The Commission, in this Order has imposed a penalty for non-fulfillment of RPO. The Commission may be constrained to continue to do so in future, if the Petitioner pays no heed in this regard. A monetary penalty may also be imposed on the Managing Director and/ or senior management of the Discoms, if the Commission deems so.
Reduction in Cross-Subsidy		
The Commission directs the Petitioner to prepare and submit a roadmap for the reduction in cross subsidy, in compliance with the National Tariff Policy.	The Petitioner submitted that this has already been dealt in the current Tariff Petition for FY 17-18 and FY 18-19, whereby JBVNL has proposed a rational tariff for reducing the cross subsidy.	The Commission takes note of the compliance of the directive.
Wheeling Tariff		
The Commission directs the Petitioner to propose capacity based Wheeling tariff and specify the voltage-wise distribution losses as per clause 7.9 of the JSERC MYT Regulations, 2015.	The Petitioner submitted that it is under process for appointment of an agency for carrying out the desired study for calculating the Voltage-wise distribution losses.	The Petitioner has submitted a proposal for the approval of voltage wise wheeling tariff for the FY 2018-19. The Commission finds that the Petitioner, instead of segregating its accounts into wheeling and retail supply business, had followed the methodology adopted by the Commission in its earlier Order. The Commission is of the view that the Petitioner has not taken proper

		cognizance of the directives of the Commission. **The Commission directs the Petitioner to maintain separate accounting for wheeling & retail supply business, failure of which may attract penalty.** Meanwhile, even though the Commission has approved wheeling charges based on the current submission of the Petitioner, failure to comply with the Commission's directive may force the Commission to withdraw levying of any wheeling charge for use of Petitioner's network.
Separate record for increase in consumer-wise sales		
The Commission directs the Petitioners to keep a separate record of increase in consumer-category wise sales and submit the same for FY 2016-17 to the Commission with the next tariff petition filing.	The Petitioner submitted that it has already complied with this directive of the Hon'ble Commission and the increase in consumer-wise sales for FY 2016-17 has been submitted in the current Tariff Petition for FY 17-18 and FY 18-19.	The Commission takes note of the compliance of the directive.
Rooftop Solar Installations		
The Commission directs the Petitioner to conduct a detailed technical study on the feasibility of Rooftop Solar installation and submit a report within six months from the date of issuance of this Order.	The Petitioner submitted that the desired steps towards the implementation of the same are being taken by another State Govt. agency Jharkhand Renewable Energy Development Agency (JREDA) which is responsible for promoting the renewable energy sources in the State. JREDA is already working on the preparation of a policy for solar rooftop installation which would be notified shortly and numerous other steps for promoting Solar Rooftop installation in the State. Once such step has been development and launch of mobile application "AHAA Solar" by JREDA for carrying out the techno-commercial feasibility study for Rooftop Solar installations.	The Commission takes note of the compliance of the directive.

Theft of Electricity		
The Commission directs the Petitioner to strengthen the vigilance wing and take up frequent checking of theft prone areas and also take appropriate steps to improve revenue collection in relation to revenue assessed in cases of theft.	The Petitioner submitted that JBVNL has been committed to ensure that the incidence of theft and pilferages are contained. Massive raids are being conducted regularly (26,318 upto Mar'17) and FIRs are being lodged (8,826 upto Mar'17) against theft of electricity leading to realization of INR 11 Crs in FY 2016-17.	The Commission notes with concern that the Petitioner is not able to comply with the AT&C loss levels set by the Commission in its earlier. 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.
Effectiveness of the Investments made		
The Commission directs the Petitioner to carry out prudence check on five to ten schemes/ works under each head of plan being carried out during the year and furnish a report to the Commission, indicating cost benefit analysis and effectiveness of the investment, within six months from the date of issuance of the order. The Petitioner directs the Petitioner to submit a report, within 3 months of issuance of this Order, the steps taken by the Petitioner in maintaining quality in undertaking various construction works as well as procurement of maintenance spares.	The Petitioner submitted that there has been a significant impact by the investments made under various schemes and works being undertaken by JBVNL, the Socio-Economic impact being larger than the Commercial gains. The Petitioner submitted that rural electrification has been taking place at a larger pace which has decreased the violence in latehar, palamu areas, increase in agricultural activities, educational activities etc. JBVNL follows the 3 stage quality inspection mechanism for quality monitoring of material and works being carried out at the site. These stages are as follows: • Stage 1: Material Inspection at the factory/inventory of the vendor • Stage 2: Stage inspection of material and works at the time of installation at site • Stage 3: Third Party inspection for workmanship in order to maintain REC standards of quality	The Commission takes note of the steps undertaken by the Petitioner. Further, it is to be noted that the Petitioner has proposed capex to the tune of ~Rs 8800 Cr for the FY 2017-18 & FY 2018-19 for which the Commission granted an approval of ~Rs 8300 Cr. , most of which is towards rural electrification which further contributes to achieving 100% electrification in the state of Jharkhand. The Commission directs the Petitioner to continue carrying prudence checks for indicating cost benefit analysis and effectiveness of the investments made and submit report to the commission every six months.

Employee Performance Appraisal		
The Commission directs the Petitioner to submit a report, within six months of issuance of this Order, on the Employee Performance Appraisal system adopted by the Petitioner. The report should explicitly mention the parameters / KPIs taken into consideration for the formulation of the same and whether there are any parameters for monitoring the performance of the employees in respect of service quality besides AT&C loss reduction and revenue enhancement.	The Petitioner submitted that KPIs have been developed for the employees of JBVNL with the support of professional agency and the World Bank. At present, JBVNL is under process of cascading these KPIs down to the lowest level of employees. Also MIS database strengthening for the same is being carried out by JBVNL. It is expected that by the end of current FY, the KPI based performance appraisal system shall be put in place.	The Commission observes that as per the Petitioner, the KPI based performance appraisal system shall be put in place by end of FY 2017-18. Even though the financial year has completed, the Petitioner is yet to submit any report in this regard to the Commission. The Commission directs the Petitioner to submit the report within one month of issuance of this Order.
Rebate for timely payment of bills including payment through digital mode		
The Commission directs the Petitioner to conduct an impact analysis and propose a roadmap for the implementation of the rebate for timely payment of bills including payment through digital mode along with the next ARR/ Tariff filing.	The Petitioner submitted that the rebate for timely payment of bills have been implemented by various States like West Bengal, Chhattisgarh, Odisha etc. The Petitioner further submitted that it has already approached the Hon'ble Commission for providing rebate to consumers paying through digital modes and as per the directions of Hon'ble Commission, the Petitioner has already prepared a roadmap for implementation of the rebate.	The Commission observes that rebate for timely payment of bills is beneficial for all stakeholders. One one hand, it will lead to reduction in consumer tariffs if a consumer pays within the stipulated timeline. On the other hand, the early receipt of cash improves the cash flow position of the Utility which in turn helps in improving the financial position in the long run. Accordingly, the Commission has introduced rebate for prompt payment including payment through digital mode in this Order.
Segregation into Retail & wheeling supply of business		
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.	The Petitioner submitted that JBVNL is under process to streamline the Accounting processes. Also hiring of Agency is being done in order to achieve the segregation of Retail and Wheeling supply of business. However, JBVNL has followed the principles adopted by the Hon'ble Commission in its previous tariff orders to segregate the accounts, for the current Petition.	The Commission takes serious note of the casual attitude shown towards directive issued by the Commission. The Petitioner has still not submitted the required details. The Commission affords one last opportunity to the Petitioner to segregate accounts into wheeling and retail supply business within six months from the date of issue of tariff Order failing which the Commission shall consider taking penal action.

Consumer Awareness Programmes		
The Commission directs the Petitioner to undertake extensive consumer awareness programmes with an aim to apprise the consumers on various facets of power distribution. For the same, the Petitioner should distribute the booklet issued by the Commission - "Vidyut Upbhogta Sambandhit Jaanne Yogya Baatein"- annually, latest by the month of August, along with the consumer bill and the same is to be uploaded on the Petitioner's website. The booklet should be accompanied by an additional leaflet comprising information on the contact details of the customer call centre as well as the nodal officers of the concerned units, for e.g. circle/division/subdivision/section, responsible for handling of consumer grievances. The Petitioner is also directed to publish every quarter, in one English and one Hindi newspaper, the contact details of the customer call centre as well as the nodal officers of the concerned units, for e.g. circle circle/division/sub-division/section, responsible for handling of consumer grievances. The Petitioner should submit the copy of such newspapers to the Commission as and when the Petitioner issues a publication.	The Petitioner submitted that content and printing of the booklet is under process by JBVNL in line with Hon'ble Commission's booklet and that once the booklets are finalized, these would be distributed to consumers at the earliest along with their energy bills	The Commission is of the view that the Petitioner has not taken proper cognizance of the directions of the Hon'ble Commission. The Commission had also directed the Petitioner to publish every quarter, in one English and one Hindi newspaper, the contact details of the customer call centre and submit a copy of newspaper to the Commission. However, the Commission observes that no such action has been taken by the Petitioner in this regard till date. The Commission takes serious note of the casual attitude shown towards directive issued by the Commission. The Commission re-directs the Petitioner to start consumer awareness programs as issued in the earlier Tariff Order failing which penal action may be taken.
Capacity Building of Employees		
The Commission observes that Discom officials are not conversant with the Regulations notified by the Commission, especially those dealing with various aspects of power distribution. Moreover, the Tariff Orders as well as the directives issued by the Commission in those tariff orders for JBVNL, are not read by the concerned officials of the Discoms.	The Petitioner submitted that the World Bank has been providing the Institutional Development and capacity building support to JBVNL, whereby study of the existing organizational setup of JBVNL has been conducted and a revamped structure and manpower requirements are being finalized. A dedicated training setup has also been identified which will focus on	The Commission notes with concern that the Petitioner has still not started capacity building of its employees. It is a matter of serious concern that the Discom officials are not well versed with the relevant regulations and the Orders of the Commission. The Commission strictly directs the Petitioner to start the capacity

The Commission directs the Petitioner to undertake capacity building workshops for its employees so that Discom officials are apprised of the key Regulations notified by the Commission. The Petitioner should submit details of such workshops undertaken along with the next Tariff Petition.	capacity building & skill development of distribution employees. Additionally, a training need assessment study has been conducted to understand the training requirements for both executive & non-executive manpower of the utility. The findings from the assessment study will be used to develop training calendar & onboard training agencies for imparting technical & behavioral training.	building of employees, failure of which may attract penalty.
Impact assessment study for switching from kWh billing to kVAh billing		
The Commission directs the Petitioners to carry out impact assessment study on transition from kWh billing to kVAh billing, for a sample set of consumers in the HTS and HTSS categories, and submit a report within six months of issuance of this Order.	The Petitioner submitted that a brief analysis for the transition from kWh billing to kVAh has been covered in the Tariff petition for FY 2017-18 and FY 2018-19 along with the possible advantages for JBVNL and consumers. It is submitted that JBVNL is keen to shift towards kVAh based tariff for certain consumer categories which has been adopted by majority of the States (including Bihar, Delhi, and Chhattisgarh). A shift towards kVAh based billing shall ensure grid stability and improve the power reliability in the State, the ultimate beneficiary of which shall be the consumers of the State.	The Commission agrees with the view of the Petitioner that a shift towards kVAh based billing shall ensure grid stability and improve the power reliability in the State, the ultimate beneficiary of which shall be the consumers of the State. Accordingly, the Commission has approved kVAh based billing for HTS, HTSS, RTS and MES categories of consumers. Since, the required infrastructure for kVAh billing is only partially available for the consumers in LTIS category, the Commission has not approved kVAh based billing for LTIS category at the moment. The Commission directs the Petitioner to install the necessary infrastructure for LTIS category and also carry out a detailed study (considering all set of consumers instead of a sample data) for arriving at revenue neutral power factor. Such study should be submitted along with the next tariff petition.

Exceptions raised by the Auditor on Annual Accounts		
As per Para 2 of the Basis for the disclaimer of opinion, the Commission finds that the compliance of the independent auditor's report for the year ended 31st March 2015 & 31st March 2014 were not received. The Commission also observes that the Auditors have pointed out that AS6 "Depreciation Accounting" & AS 10 "Accounting for Fixed Assets" have not been complied with. The Auditors have also noted that the guidelines of Revenue recognition as per Accounting Principle no '12' and AS9 "Revenue Recognition" differ in respect of revenue revised on assumption basis where certainty of collection is not established and also Assets acquired out of consumer contribution are not identified and amortization as per AS'12' "Accounting for Government grants" is not done as per company's significant accounting policy No. 2.3. The Commission finds sufficient reason not to consider the opening balances for the FY 2016-17 (closing balances of the FY 2015-16) as per the Audited accounts submitted by the Petitioner. Accordingly, the Commission directs the Petitioner to address the exceptions raised by the Auditor in an appropriate manner so that reliable data is available.	The independent Auditor's report for FY 13-14 and 14-15, Compliance of AG Report and CAG report is annexed as required by the Hon'ble Commission. Also the Petitioner submitted that the audit issues highlighted by auditors are accounted for in the concerned annual accounts itself, by taking necessary corrective measures. However, in case of certain exceptions, which have not been incorporated in the concerned year, the observation of audit reports are incorporated in the annual accounts of subsequent years.	The Commission observes that the Petitioner has not addressed the eceptions raised by the Auditor in an appropriate manner. 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, exceptions of the Auditor still persist. Accordingly, the Commission once again directs the Petitioner to address the exceptions raised by the Auditor in an appropriate manner so that reliable data is available.

A15. DIRECTIVES

Abolishment of unmetered category

15.1 The Commission directs the Petitioner to strictly adhere to the timelines as specified by it in the Petition in providing meters to all the consumers by December, 2018. The tariff approved by the Commission for the unmetered category shall be applicable till December 2018 only. Failure to comply with the timeline may invite penal action.

15.2 The Commission directs the Petitioner to submit within one month of issuance of this Order a revised metering plan indicating total consumers, metered (working), metered (defective), unmetered consumers as on date, along with month-wise plan of procurement, installation and replacement of new meters. Consequent to submission of the report, the Petitioner should update the progress to the Commission on bi-monthly basis in order to achieve 100% metered status till December 2018.

Power purchase cell

15.3 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 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's Board shall review every three months, the analysis of the power procurement quantum and cost, prepared by the Cell and take necessary action to optimize the power purchase cost.

15.4 The Petitioner should submit a report in this regard along with the next Tariff Petition.

RPO Obligation

15.5 The Commission strictly directs the Petitioner to comply with the RPO Norms set by the Commission and accordingly submit a detailed action plan in order to comply with the same within three months from the date of issuance of this Tariff Order. The Commission, in this Order has imposed a penalty for non-fulfillment of RPO. The Commission may be constrained to continue to do so in future, if the Petitioner pays no heed in this regard. 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)

15.6 The Commission directs the Petitioner to continue submitting monthly report on Reliability Indices in MS-Excel format along with compliance to SOPs in true spirit, in course of achieving 24x7 quality & reliable power.

Strengthening of Distribution Network

15.7 The Commission directs the Petitioner to implement safety measures in its network to avoid accidents which not only disrupts supply but also leads to loss of human life. **The Commission also directs the Petitioner to update and implement its Safety Manual in line with the Provisions of Indian Electricity Rules to avoid such disruptions and mishaps. The same should be submitted to the Commission within 3 months of issuance of this Order.**

Energy Audit & T&D Loss Reduction Plan

15.8 The Commission directs 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.

15.9 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 months from the date of issuance of the order.

Interest on Consumer Security Deposit

15.10 The Commission directs the Petitioner submit a list of consumers who have not been paid at prevailing bank rate and clear the dues pending of the consumers by within six months of issuance of this Order. Failure to comply with the directive would attract appropriate penal consequences wherein the fixed charges payable by the consumer shall be reduced by 5% every month (from sixth month onwards) until such date payment has been made by JBVNL.

System Loading Charges

15.11 The Commission directs the Petitioner to submit Zone wise, Category wise estimates of System loading charges for sample five new consumers of different connected load in each category.

Segregation into Retail & wheeling supply of business

15.1 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.

15.2 The Commission strictly directs the Petitioner to make separate accounting for both the businesses and submit the allocation statement duly approved by the Board of Directors within 3 months of the date of issue of the Tariff Order.

Actual supply hours in rural areas

15.3 The Commission directs the Petitioner to submit a report detailing the area-wise actual number of supply hours provided to rural areas for the FY 2016-17 as most of the Capex for the MYT Control period is towards rural electrification.

15.4 The Petitioner is also directed to provide the status of electrification in un-electrified areas for the last two financial years within one month from the date of issuance of the order.

Voltage wise- Cost of Supply

15.5 **The Commission directs the Petitioner to carry out a detailed technical study on voltage wise losses on Distribution network and furnish a report within 6 months from the date of issuance of the order.**

Wheeling Charges

15.6 The Petitioner has submitted a proposal for the approval of voltage wise wheeling tariff for the FY 2018-19. The Commission finds that the Petitioner, instead of segregating its accounts into wheeling and retail supply business, had followed the methodology adopted by the Commission in its earlier Order. The Commission is of the view that the Petitioner has not taken proper cognizance of the directives of the Commission. The Commission directs the Petitioner to maintain separate accounting for wheeling & retail supply business, failure of which may attract penalty.

15.7 Meanwhile, even though the Commission has approved wheeling charges based on the current submission of the Petitioner, failure to comply with the Commission's directive may force the Commission to withdraw levying of any wheeling charge for use of Petitioner's network.

Theft of Electricity

15.8 The Commission directs the Petitioner to strengthen the vigilance wing and take up frequent checking of theft prone areas and also take appropriate steps to improve revenue collection in relation to revenue assessed in cases of theft.

15.9 JBVNL should also create an online portal (or a dedicated section on its existing website) in which any consumer can report theft through uploading of photographs along with other details such as location etc. so that necessary action can be taken expeditiously. Awareness about such portal should be disseminated through consumer bills, SMS and print/ electronic media.

Employee Performance Appraisal

15.10 The Commission directs the Petitioner to submit a report, within one month of issuance of this Order, on the Employee Performance Appraisal system adopted by the Petitioner. The report should explicitly mention the parameters / KPIs taken into consideration for the formulation of the same and whether there are any parameters for monitoring the performance of the employees in respect of service quality besides AT&C loss reduction and revenue enhancement.

Capacity Building of Employees

15.11 The Commission observes that Discom officials are not conversant with the Regulations notified by the Commission, especially those dealing with various aspects of power distribution. Moreover, the Tariff Orders as well as the directives issued by the Commission in those tariff orders for JBVNL, are not read by the concerned officials of the Discoms. **The Commission directs the Petitioner to undertake capacity building workshops for its employees so that Discom officials are apprised of the key Regulations notified by the Commission.** The Petitioner should submit details of such workshops undertaken along with the next Tariff Petition.

Monitoring of compliance to directives

15.12 The Commission has observed that the Petitioner has repeatedly failed to comply with the directives of the Commission in letter as well as spirit. This shows lackadaisical attitude of the Petitioner which has also resulted in imposition of a penalty in the form of reduction in ARR. In order to avoid repetition of the same, the Petitioner's Board should monitor/ review the compliance of the Directives periodically.

Involvement of private sector in distribution

15.13 The Petitioner may explore options for involvement of private sector in state distribution sector through franchisee arrangements or any other mode of private participation.

Investment in Cyber Security solutions

15.14 Owing to widespread cases of compromise of various Government websites in the country, the Commission is of the view that deployment of cyber security solutions needs to be looked into. Moreover, with increasing focus on digital mode of payment coupled with the rebate on payment of electricity bills online/ through digital mode, it becomes even more important to invest in cyber security solutions. In this regards, the Petitioner may look into the possibilities of investing in such cyber security solutions. The cost incurred on such investment shall be allowed to be recovered through the ARR, subject to prudence check.

Strengthening/ Increasing effectiveness of consumer grievance redressal mechanism

15.15 During the course of the public hearings, various stakeholders expressed displeasure on the grievance redressal mechanism of the Petitioner. The complaints of the consumers ae not being resolved in a timely and appropriate manner, as stated by the stakeholders. The Commission directs the Petitioner to strengthen and increase effectiveness of its consumer grievance handling mechanism and submit a report to the Commission along with the next Tariff Order indicating- total number of complaints received, nature of complaint, complaints resolved, average resolution time, complaints pending etc.

This Order is signed and issued by the Jharkhand State Electricity Regulatory Commission on this the 27.04.2018.

It is made clear that the Order regarding revision of tariff shall come into effect from 01.05.2018 and shall remain in force till the next order of the Commission to that regard.

Let the order be placed on website of the Commission and a copy thereof be sent each to the JBVNL, Department of Energy, Government of Jharkhand, Central Electricity Regulatory Commission, Central Electricity Authority and Electricity Regulatory Commission of all States and Joint Electricity Regulatory Commission.

Date: 27.04.2018
Place: Ranchi

Sd/-
(Shri R. N. Singh)
MEMBER (T)

Sd/-
(Dr. Arbind Prasad)
CHAIRPERSON

ANNEXURES

Annexure 1: List of participating members of public in the public hearing

Sl. No.	Name	Address / Organization if any
Chaibasa		
1.	Gautam Rana	AEE/S/Chaibasa
2.	Indrajeet Singh	Geetraj Engg. Pvt. Ltd.
3.	Ganendra Toppo	JEE/CBSA (U)
4.	Nepal Mahto	Contactor (JVVNL)
5.	Sudhansu Kumar	Chaibasa
6.	Subhas Kondu (Bapi)	Geetraj Engg. Pvt. Ltd.
7.	Sunil Kumar Thakur	CE (C&R) JBVNL
8.	Rishi Singh	Deloitee
9.	Ishan Srivastava	Deloitee
10.	A. K. Prasad	GM (T) JSR
11.	Ajay Kumar	B.S. City
12.	Manmohan Kumar	ESE, JSR, JBVNL
13.	Saleem Khan	EEE/Tech/Chaibasa
14.	Lakshman Choudhary	EEE/C&R/Chaibasa
15.	Ravi Shankar	EEE/Ckp
16.	D. Mahapatra	Sr. Mgr. (F&A) JBVNL
17.	Sanjay Narayan Prasad	C.A. (RVBSE Co.)
18.	Anoop Kumar Gupta	Madhu Bazar, Chaibasa
19.	Santosh Kinnsoo	JLMCapsul
20.	Manish Kumar	LMN
21.	Madhu Mishra	Secretary CCCLI
22.	Nitin Prakash	President CCCI
23.	Babu Lal Vijaywargia	CCCI
24.	Pintu Agarwal	CCCI
25.	Lakhbir Singh	Nimdih Chaibasa
26.	Santosh Kumar Khetan	Chaibasa
27.	S.P. Singh	Sentolla Chaibasa
28.	LN Mundhre	Eurpeon Quasori
29.	Ampos	CCCI
30.	Sanjay Kumar Mundhra	Individual
31.	MM Daripa	President Bar Association Chaibasa
32.	A.K. Bihany	ASIA, SCCI
33.	U.N. Mishra	GMCumCE JBVNL, JSR
34.	Rahul Purwar	MD JBVNL
35.	Ratan Kumar Dey	Chaibasa
36.	Dashrath Gagrai	MLA, Kharswan
37.	M. Singh	Chaibasa
38.	A. K. Sulte	Foundr. CCCI

Sl. No.	Name	Address / Organization if any
39.	Pawan Agarwal	PSCCI
40.	Prabhat Upadhayay	PSCCI
41.	Rahul Tiwari	Town President , JMM
42.	Kamal Lath	PSCCI
43.	Y Prasad	JUSCO
44.	A.N. Choudhary	JUSCO
45.	S.S. Kujur	Chaibasa
46.	A. K.Sinha	Shyamlal Iron & Steel Co.
47.	Piyush Goyel	CP & CO.
48.	Niraj Sawa	CP & CO.
49.	Anil	CCCI
50.	Umesh Kumar Singh	Chaibasa
51.	Deepak Biruwa	MLA, Chaibasa
52.	Devendra Singh	Dainik Bhaskar
53.	Upendra Prasad	JRPSS
54.	S.K. Sullani	Uditvain
55.	Anand V. Prasad	Advocate
56.	S.M. Sharnia	Maa Bhawani Metal
57.	Sashi Poddar	Gajanan Ferro
58.	Goutam Kumar Dutta	Jagdamb E tech Steel
59.	Subodh	Srishakti Alum. (P) Co.
60.	S. C Sharma	Chaibasa
61.	Sanjay Sharma	amba Tata Siva
62.	Ajay Kumar Shaw	Chaibasa
63.	Vinod Kumar	Hemadri Steel P Ltd.
64.	Shyamal Sinha	Gandhi Tola, CBSA
65.	Ajay Vishvakarma	Tungri Chaibasa
66.	M. Lakra	S.P.G. Mission Com.
67.	Anup Kumar Thakur	Gharikhana, Chaibasa
68.	Pankaj Kumar	Chaibasa
Dhanbad		
1.	Harsha Singh	Jai Prabhu Ji Iron & Steels, Dhanbad
2.	Rishav Manasawi	Renuka Steel, Dhanbad
3.	Raju Shrma	Hirapur Hatia Dhanbad
4.	Kailash Chandra Goyal	Chattatand Bazar, Dhanbad
5.	Sushil Singh	Kumardhubi Steels (P) Ltd., Kumardhubi
6.	Sunil Agarwal	DZFM As Karkend Dhanbad
7.	Tapeshwar Kumar Gupta	Jharkhand Small Tiny Service Bussiness Enterprises Association
8.	Ram Sewak Singh	JSEB (Reted.)
9.	Saurabh Kumar	Ridhi Sidhi Iron (P) Ltd.
10.	Nabdip Khetan	Renuka Ispat (P) Ltd.
11.	Shivashish Panday	Dhanbad

Sl. No.	Name	Address / Organization if any
12.	Kirit Chauhan	Bekan Bandh, Dhanbad
13.	Ramesh Raj	Govindpur, Dhanbad
14.	Dipu Gorai	Dhanbad
15.	Mohan Pradas Saw	Sri Langta Baba Steel
16.	Madhu Singh	Dhanbad
17.	A. K. Lal	AEE/S/Nayasazan
18.	Ratnesh Kumar	Steno, JBVNL, Dhanbad
19.	Abhijit Mukharji	Dumania Tand, Dhanbad
20.	Shiva Shish Panday	Saraidhela, Dhanbad
21.	Prabhat Sunolia	Bank More, Dhanbad.
22.	Sushil Singh	Vice President, BMCC, Dhanbad
23.	Rishi Singh	Deloitte
24.	Ishan Srivastava	Deloitte
25.	Surya Narayan Prasad	RUBS & Co.
26.	D. Mahapatra	JBVNL HQ
27.	T. K. Das Gupta	Housing Colony, Mahendra Nagar, 226
28.	S. P. Chakarborty	Housing Colony, Mahendra Nagar, 226
29.	Amitabh B. Soren	AEE/S/Kirkend
30.	Vicky	Dainik Bhaskar
31.	Girjesh	Prabhat Khabar
32.	Manoj Kumar	Awaz News Paper
33.	Shailendra	Dhanbad
34.	Podo Marandi	Ohatna Mahavidyalaya
35.	Sunil Kumar Thakur	CE (C&R) JBVNL
36.	Subhash Kumar Singh	CE/Dhanbad
37.	Ajay Narayan Lal	Purana Bazar Chamber
38.	Sahrab Khan	Purana Bazar
39.	Aangsh Kumar	EEE (C&R)
40.	B. Labh	Staff (C&R)
41.	K.C. Marandi	JME D. Kl&s, Mech. Div., Dhanbad
42.	Md. Rizwan	JME, Maithon, Dhanbad
43.	Madan Mohan Prasad	EEE/JBVNL/Dhanbad
44.	Sunil Kumar	EEE/JBVNL/Dhanbad
45.	Shiv Charan Sharma	Dhanbad zila Laghu Udyog Association
46.	Ashok Kumar Keshri	Dhanbad zila Laghu Udyog Association
47.	Pappu Singh	Dhanbad
48.	Pramod	Dhanbad
49.	Jitu Paswan	AJSU
50.	Sadanan Mahto	AJSU, Baliapur
51.	Prameshwar Mahto	AJSU, Barmasia
52.	Banti Paswan	AJSU, Dhanbad
53.	Jalal Uddin Ansari	Loyabad
54.	Punit Singh	Bansjora Basti

Sl. No.	Name	Address / Organization if any
55.	Rameshwar Mahto	Layabad
56.	Binod Paswan	Baslor
57.	Subhash Kumar Mahto	Loyabad
58.	Dilip Kumar	Dhanbad
59.	Dilip Kumar Manjhi	Suvyavihar Colony
60.	Rajesh Gupta	Zila Chansu
61.	Birendra Kumar Nishad	Jharia AJSU Party
62.	Raj Kumar	AJSU
63.	Guddu Ansari	AJSU Party
64.	Rajiv Sharma	Secretary, Gu. J.I & Trade Association, Dhanbad
65.	Mozahik	Dhanbad
66.	Vinay Kumar Burman	Digmadih No. 12
67.	Rajesh Gupta	RG
68.	Suresh Kumar Singh	Dhanbad
69.	Vinod Kumar Gupta	B. Chamber
70.	Manth Mahat	AJSU
71.	H. Pandey	AJSU
72.	Kullu Choudhary	AJSU
73.	S.K. Das	AJSU
74.	Bijay	AJSU
75.	Rupes Gupta	Gomo Chamber
76.	Md. Juned Alam	Gomoh
77.	A.Anwar Khan	Dhanbad
78.	Er. A. K. Singh	Dhanbad
Dhumka		
1.	S. S. Kumar	NCC Ltd. Dumka
2.	Samleet Kumar	NCC Ltd. Dumka
3.	A. Y. Reddy	NCC Ltd. Dumka
4.	V. M. Reddy	NCC Ltd. Dumka
5.	Dileep Singh	NCC Ltd. Dumka
6.	Sunil Kumar Thakur	CE (C&R) JBVNL
7.	Rishi Singh	Deloitte
8.	Satya N. Prasad	RUBS & Co.
9.	Ishan Srivastava	Deloitte
10.	D. Mahapatra	Sr. Mgr. (F&) HQ JBVNL
11.	Binay Kumar Sinku	Director MFB Dumka
12.	Sunileshwar Prasad	Dumka
13.	G.C. Shir	JBVNL
14.	Subodh Kumar	Dumka
15.	Nipes	JBVNL
16.	Mukkdar Ansari	Dumka
17.	J. Mahto	JBVNL
18.	Ravi Pal	Computer operator, Circle office Dumka

Sl. No.	Name	Address / Organization if any
19.	Md. Islam	Consumer
20.	Manoj Singh	Consumer
21.	Bijay Sah	Consumer
22.	Suman Kumar Dubey	AEE/S/DMK(U)
23.	Kamla Soren	Dumka
24.	Subhankar J S	ESE/B/Deoghar
25.	A. Kachhap	AEE/M&T/Deoghar
26.	Aanand Jaiswal	Prabhat Khabar
27.	Manoj	ETV Bharat
28.	Jaikan	CCC
29.	Hemant Kumar Mahto	MDL
30.	Ravi Ram	MDL
31.	Budhdev Gorai	MDL
32.	Rubidhan Hembram	MDL
33.	Sunil Kumar	JBVNL, Dumka
34.	Md. Shan	President Chamber of Commerce, Dumka
35.	Rajhav Kumar	Consumer
36.	Vikash Kumar	Consumer
37.	R. N. Sharma	Deoghar, SPSIA
38.	Pankaj Choudhary	B. Deoghar Cold Storage Deoghar
39.	A. K. Sinha	Deoghar, SPSIA
40.	Mukesh Kumar	Dumka
41.	Bhawesh Ray	Dumka
42.	Mantu Prasad Bhagat	Aharichma
43.	R. V. Mishra	GM cum (E) Dumka
44.	Indrajeet Hembram	EEE/S/Dumka
45.	Deepak Kumar Singh	JEE/S/DMK (E)
46.	Manoj Kumar Ghosh	Sec. Chamber of Commerce
47.	Sumit Kumar	Supervisor, Dumka
48.	Rakesh Roshan	Consumer
49.	Dashrath Prasad Saw	Bijli Mistri JBVNL
50.	pawan Kumar Mahto	Mandage Staff
51.	Aanad Kumar	Dumka
52.	Adhunik Akshat Udyog P. Ltd.	Dumka
53.	Dhiraj Kumar	Dumka
54.	Bhup Narayan Jha	Industries Association
55.	Manoj	Jharia
56.	Basant Kumar	Circle office
57.	Suresh Murmu	Amatpur
58.	Timothi Hansdak	Amarpur
59.	Prem Indu	Amarpur
60.	Vishal Chandra Toppo	EEE/Ranchi, HQ
61.	Saurabh Raj	ESA, Dumka

Sl. No.	Name	Address / Organization if any
62.	Santosh Kumar	ESA Dumka
63.	Prem Singh	Mahica Dangal
64.	Md. Anwar	Dumka
65.	Siya Ram Gheria	Exe- President Dumka Chamber
66.	Ram S. Paswan	Dumka
Medininagar		
1.	Diwakar Prasad Singh C.C.	ESC, Daltonganj
2.	Nagina Prasad Singh H.C	ESC, Daltonganj
3.	Sukhlal Paswan JLM	Daltonganj
4.	Raj Kumar JLM	Daltonganj Sh -I
5.	Prashant Prateek (AEE)	Daltonganj
6.	Himanshu Verma (AEE)	Japla
7.	Srishi Singh	Deloitte
8.	Santosh Kumar Mandal (JEE)	Daltonganj Rural
9.	S.C. Mishra	EEE, DLT
10.	Umashankar Kumar Prakash	H.C. ESA
11.	Bipin Kumar Sinha	Circle, Daltonganj
12.	Rajesh Kumar	Daltonganj
13.	Omprakash	Area Board Daltonganj
14.	Manoj Kumar Mandal	Area Board Daltonganj
15.	Ranjveer Kumar Singh	Patan
16.	Navneet	Daltonganj
17.	R. K. Sharma	Daltonganj
18.	Sunil Kumar Thakur	CE (C&R) JBVNL
19.	Rajeev Nandan	Electrician, Daltonganj
20.	Raj Kishor	AEE/S/Chh
21.	U.S. Kerari	AEE/Daltonganj (U)
22.	Bablu Ojha	Daltonganj
23.	Krishna Nandan Sah	Daltonganj
24.	Govind Kumar Singh	Sudna Daltonganj
25.	Gopal Chandra Bhagat	ESD, Daltonganj
26.	Suresh Lohara	ESA, Daltonganj
27.	Krishna Kumar	ESSD
28.	Dipal Gupta	JEE (U)
29.	Anil Kumar Verma	SGV Samiti Garhwa
30.	Sanjay Kumar Ray	Garhwa
31.	Vinod Soni	SGVS, Garhwa
32.	Vilash Kumar	Garhwa
33.	Dharmendra Prasad	Garhwa
34.	Umesh Kumar	Garhwa
35.	Rekha Gupta	Daltonganj
36.	Meena	ESE/D. Ganj
37.	Rinki Devi	ESE/D. Ganj

Sl. No.	Name	Address / Organization if any
38.	S.N. Jha	SE
39.	Gupteshwar Verma	Daltonganj
40.	Prem Kumar Singh	Area Board Daltonganj
41.	Gupteshwar	Garhwa
42.	Santosh Choudhary	Garhwa
43.	C. Minz	ESA, Medininagar
44.	Hemant Kumar	ESA, Medininagar
45.	M.P. Singh	Accountant, ESA, Medininagar
46.	Vchit Ram	PSS Redha
47.	Damodar Pandey	Electric Colony Redma
48.	D. Mahapatra	Sr. Mgr. (F&A) HQ
49.	Deepak Kumar Das, AE Civil	ESA Medininagar
50.	CA Satya Prasad	RUBS & Co.
51.	M. Singh	AO ESA Medininagar
52.	Manoj Kumar Mahto	OS ESA Medininagar
53.	Sajid Mia	HO ESC Daltonganj
54.	Satish Mahi	JE (C) ESC Daltonganj
55.	Ajay Kumar	AEE JBVNL
56.	Sarswati Devi	ESA D. Ganj
57.	Aasha Kumari	ESC/D. Ganj
58.	Rita Devi	ESC/D. Ganj
59.	Uttam Prakash	Garhwa
60.	Rajesh Kumar	Garhwa
61.	Jitendra Kumar	Garhwa
62.	Raju Ram	Garhwa
63.	Om Prakash Lal	Baralota
64.	Rajiv Prasad	JLM
65.	Satish Kumar	Daltonganj
66.	Ram Suresh Singh	Daltonganj
67.	Bablu Singh	Medininagar
68.	Karmdev Yadav	Medininagar
69.	Ram Niwas Singh	Sudna Daltonganj
70.	Sunil Hansda	Sudna Daltonganj
71.	Vijaymal Sahu	Meral Garhwa
72.	Devendra Goswami	Meral Garhwa
73.	Radheshyam Prasad	Daltonganj
74.	Sudha Devi	Daltonganj
75.	Birendra Prasad Singh	Daltonganj
76.	Pinki Kumari	Meral Garhwa
77.	Binod Ram	Meral Garhwa
78.	Rakesh Kumar	Meral Garhwa
79.	Pappu Kumar Chandravanshi	Meral Garhwa
80.	Goutam Sahay JAC	ESD, Daltonganj

Sl. No.	Name	Address / Organization if any
81.	Chitranjan	ESD, Daltonganj
82.	A. Haque	Daltonganj
83.	Shyam Narayan Mishra	Sudna Daltonganj
84.	Rahul Mishra	Nawalok Daltonganj
85.	D. K. Mishra	Nawalok Daltonganj
86.	Chhotelal Rajak	Meral Garhwa
87.	Ashok Paswan	Patan
88.	Bijay Bahadur	Daltonganj
89.	Sanjay Kumar Ravi	ESA, Medininagar
90.	Sanjay Kumar	Bharalota
91.	Ravi Kumar	Himidganj
92.	Gunwant Kumar	Daltonganj
93.	Niranjan Kumar	Daltonganj
94.	Md. Aslam	Daltonganj
95.	Rahul Kumar Singh	Patan
96.	A. K. Thakur	Garhwa
97.	Naresh Kumar Agrawal	Jr. Lineman
98.	B. K. Choudhary	Eletric Office Patan
99.	Ravishankar Prasad	Barwadih
100.	Kiran Devi	Daltonganj
101.	Satyendra Kumar Tiwary	Garhwa
102.	Krishna Kumar Arya	Redma
103.	Suresh Mahto	Redma
104.	Kamlesh Singh	Chainpur
105.	Nikhi Electrical	Chainpur
106.	Sujit Kumar	Redma
107.	Baijnath Pandey	Janakpuri Redma
108.	D. P. Singh	Chainpur
109.	Pankaj Kumar	P.A to Chairman, VUSNF
110.	Sanjay Kumar	Baralota
111.	Shiv Kumar Singh (JLM)	Daltonganj
112.	Kushal Kindo (JLM)	Daltonganj
113.	Aashish Kumar (Mandays)	Daltonganj
114.	Naveen Kumar Singh	Daltonganj
115.	Bablu Ram	Daltonganj
116.	Santosh Lohri	Daltonganj
117.	Pankaj Kumar Gupta	Daltonganj
118.	Sudhir Ram	Daltonganj
119.	Ashok Prajapati	Chainpur
120.	Ashok Kumar	Chainpur
121.	Kapil Dev Pandey	Lesliganj
122.	Sujit Kumar	Lesliganj
123.	S.D. Bhove	Lesliganj (Tata Phojed)

Sl. No.	Name	Address / Organization if any
124.	S. Das	Lesliganj (Tata Phojed)
125.	Gaurav Kumar	Lesliganj (Tata Phojed)
126.	Anil Singh	Lesliganj (Tata Phojed)
127.	S. Raa	Lesliganj (Tata Phojed)
128.	Pankaj Kumar Sharma	Daltonganj
129.	Ravindra Singh	Daltonganj
130.	Randhir Raj Chouhan	Daltonganj
131.	Jay Prakash Singh	Daltonganj
132.	Ranjeet Kumar Singh	Daltonganj
133.	Satyendra	Daltonganj
134.	Om Prakash Tiwari	Daltonganj
135.	Saryu Ram	Daltonganj
136.	Kundan Sinha	Rastriya Navin Mail
137.	Santosh Tiwari	Chiyanki
138.	Mukesh Kumar Tiwari	Jor
139.	Dhirendra Kumar	Bairiya, Daltonganj
140.	Suryanarayan Uraon	Daltonganj
141.	Punam Devi	ESD, Daltonganj
142.	Bechni Devi	ESD, Daltonganj
143.	Subhan Shahjada	Chainpur
144.	Kailash Bihari Singh	Chainpur
145.	Gulam Sarwar	Daltonganj
146.	Ram Prakash Ram	Daltonganj
147.	Md. Sharphurin Ansari	Daltonganj
148.	Rajeshwar Sharma	Daltonganj
149.	Sanjay Kumar	Daltonganj
150.	Sanjay Kumar	Daltonganj
151.	Chhattu Mahto	Redma
152.	Dinesh Kumar Verma	Daltonganj
153.	Bhai Govind Singh	Pandui
154.	Ramchandra Singh	Chainpur
155.	M. Kumar	Chainpur
156.	Anil Vishwakarma	Chainpur
157.	Vikash Kumar Paswan	Daltonganj
158.	Santosh Kumar	Daltonganj
159.	Dipak Kumar	Latehar
160.	Vikash Chandra	Latehar
161.	Niraj Kumar	Latehar
162.	Pankaj Kumar	Medininagar
163.	Santosh Kumar Tiwari	Medininagar
164.	Amlesh Chandra Dubey	Chainpur
165.	Virendra Kumar Singh	Chainpur
166.	A. N. Soi	Dainik Bhaskar

Sl. No.	Name	Address / Organization if any
167.	N. Shankar	New Area, Hamidganj
168.	Upendra Kumar	Daltonganj
169.	Rajesh Linde	Garhwa (EEE/S/Garhwa)
170.	Ashok Kumar	Nagaruntari
171.	Praveen Kumar Agrawal	Daltonganj
Ranchi		
1.	Rishav Manaswi	Kumardubhi, Dhanbad
2.	Harsha Singh	Kumardubhi, Dhanbad
3.	Navdeep Gupta	Smart Power India
4.	Disha Banerjee	Smart Power India
5.	Rishi Singh	Deloitte
6.	Ishan Srivastava	Delitte
7.	K.N.L. Das	Sirdo, Mesra
8.	Satya Prasad	RUBS & Co.
9.	Sunil Kumar Thakur	CE (C&R), JBVNL
10.	D. Mahapatra	Sr. Mgr. (F&A) HQ
11.	Ashok Mahto	JIFA
12.	H.K. Budhia	JIFA
13.	Saurabh Srivastava	JIFA
14.	Subhash Prasad Singh	Kantatoli, Ranchi
15.	Subasis Chatterjee	Kantatoli, Ranchi
16.	Dhanesh Jha	GM cum CE/Ranchi
17.	Ajay Bhandhari	FJCCI
18.	Saket Upadhayay	Advocate, Jharkhand High Court
19.	Sweta Rani	Advocate JHC
20.	Praveen Lohia	Social activities
21.	B.K. Tulsyan	Tupudana Industries Association
22.	Rajesh Prasad	Congress Party
23.	S.P. Singh	President, Tupudana Industries Association
24.	H. K. Jain	General Secretary, Laghu Udyog Bharti, Jharkhand State
25.	S.Ghosh	State Vice President, Laghu Udyog Bharti
26.	Vijay Chhaparia	Laghu Udyog Bharti
27.	Anjay Pacheriwala	JSIA, Ranchi
28.	Philip Mathau	JSIA, Ranchi
29.	A.K. Singh	ESE (S&D) JBVNL
30.	Yogendra Kumar Ojha	JSIA, Ranchi
31.	H.K.Jha	JBVNL, CE/SPD
32.	Thoumas Mathau	Manglam Imtitih
33.	Deepak Kumar Maroo	Personal
34.	Vimal Kumar Fogla	Cirwlar RD, RNC
35.	Harendra Singh	Jaganathpur
36.	Manoj Kumar	Paharitolla
37.	Ranjit Choudhary	Ranchi
38.	Sidheswar Singh	B-III, 580, Dhurwa
39.	S. K. Bose	H.No. 816, Rivevview Colony Hatia, Ranchi - 3
40.	Mintu Paswan	Shiv Mandir, Jaganathpur
41.	Praveen Mahato	Chutia
42.	K. K. Poddar	Bariatu Road, Ranchi
43.	Sanjay Kumar	EEE/RESA

Sl. No.	Name	Address / Organization if any
44.	Ranjeet Garodia	UpperBazar, Ranchi
45.	Gopal Prajapati	Lichi Bagan Se II HEC
46.	Sanjay Kumar Gerari	Hatia, Ranchi
47.	Soni Devi	Lichi Bagan Se II HEC
48.	Ganga	Jaganathpur
49.	Pawanjay Kumar	Radhe Casting & Metalic Pvt. Ltd., Ramgarh
50.	B. K. Shrivastava	Radhe Casting & Metalic Pvt. Ltd., Ramgarh
51.	Vimal Pandey	Dhurwa
52.	Suresh Prasad	Ranchi
53.	Sulekha Kumari	Jaganathpur
54.	Rupan Devi	Jaganathpur
55.	Somasi Devi	Jaganathpur
56.	Munni Devi	Jaganathpur
57.	Etwari Devi	Jaganathpur
58.	Guria Devi	Jaganathpur
59.	Lal Munda	Jaganathpur
60.	Umesh Baraik	Jaganathpur
61.	Nitin	Karamtoli
62.	Arun Kumar	Morabadi
63.	Subhash Prasad Singh	News wig.com
64.	G. Minz	EEE/Doranda
65.	Sanjay Johar	NOP, Doranda
66.	Anupam Aujahi	JBVNL
67.	Ujjwala Kumar Gunia	JBVNL
68.	A.K. Bihany	ASIA, Adityapur
69.	Piyush Goyal	CP&Co., Jamshedpur
70.	Sushil Kumar Choudhary	RMDA, Ramgarh
71.	Soni Mehta	Vice President , FJCCI
72.	Bipin Singh	Khabar Mantra
73.	Tarun Mumar	Doranda
74.	Sushil Sing	Ranchi
75.	Madhu Singh	Ranchi
76.	R. K. Prasad	Bank Colony, Booty More, Ranchi
77.	B. Yadav	Bank Colony, Booty More, Ranchi
78.	B. Sharma	Bank Colony, Booty More, Ranchi
79.	Dr. A. K. Varma	Bank Colony, Booty More, Ranchi
80.	P. K. Mukherjee	Bank Colony, Booty More, Ranchi
81.	Agan	Bank Colony, Booty More, Ranchi
82.	Arun Kumar Khemka	JSIA
83.	Kunal Ajmani	FJCCI
84.	Manish Ramsisara	JSIA
85.	Rajendra Kant Mahto	HEC Colony Dhurwa, Ranchi
86.	Sunil Prasad	Harmu Ranchi
87.	Alka Raj	JEE (Elec), Electric Office
88.	S.S. Kujur	Electric Office
89.	Bhageerath Mhato	Bokaro
90.	P. Kumar	Ranchi
91.	Raj Kumar Gupta	Ranchi
92.	Mehul Sarant	Ranchi

Sl. No.	Name	Address / Organization if any
93.	Deepak Raj	Globe Steel (P) Ltd.
94.	Nadeem Khan	Karbala Xhowk, Lower Bazar, Ranchi
95.	Jamil Akhtar	Hind Piri, Ranchi
96.	A.S. Das	JBVNL
97.	Anita Prasad	JBVNL
98.	C. Bhushan	JBVNL
99.	A. K. Rungta	Main Road, Ranchi
100.	Ajay	UpperBazar, Ranchi
101.	Mahesh Sonthahy	Jamshedpur
102.	J. K. Agarwal	GFPL
103.	Manoj Sharma	Kamsa Steel (P) Ltd.
104.	Rahul Purwar	Managing Director, JBVNL, Ranchi
105.	J.M.K. Singh	AEE/R.Rd
106.	Chitransen Gupta	Focus
107.	Manoj Singh	Morabadi
108.	Sunil	

Annexure 2: Minutes of the SAC meeting

दिनांक 21.03.2018 को संपन्न हुए राज्य सलाहकार समिति की बैठक की कार्यवृत्ति

राज्य सलाहकार समिति की बैठक **माननीय डॉ0 अरविंद प्रसाद, अध्यक्ष, झारखण्ड राज्य विद्युत** नियामक आयोग, **राँची की** अध्यक्षता में दिनांक 21 मार्च को **"होटल कैपिटल हील"** में संपन्न हुई । इस बैठक में राज्य सलाहकार समिति के निम्नांकित सदस्यों/सदस्यों के प्रतिनिधि उपस्थित हुए :–

क0 सं0	सदस्यों का नाम	सदस्य/ प्रतिनिधि
1	श्री रबीन्द्र नारायण सिंह, सदस्य (अभियंत्रिकी), झारखण्ड राज्य विद्युत नियामक आयोग, राँची।	सदस्य
2	श्री संजय कुमार सिंह, अवर सचिव, परिवहन विभाग, झारखण्ड सरकार, राँची ।	प्रतिनिधि
3	श्री राहूल कुमार पूरवार, प्रबंध निदेशक, झारखण्ड बिजली वितरण निगम लिमिटेड, राँची	सदस्य
4	श्री राजीव गोस्वामी, मुख्य अभियंता (वाणिज्य), डी0भी0सी0, कोलकाता	प्रतिनिधि
5	श्री वी0पी0सिंह, महाप्रबंधक (पी0एस0डी0), जूस्को, जमशेदपुर ।	प्रतिनिधि
6	श्री विश्वजीत कुमार, हेड पावर मैनेजमेंट, टाटा पावर, जमशेदपुर ।	प्रतिनिधि
7	श्री संजय कुमार, डी0जी0एम0, टी0ई0–ई0, बी0एस0एल0, बोकारो ।	प्रतिनिधि
8	श्री एस0के0 चौधरी, विद्युत अधीक्षण अभियंता, टी0वी0एन0एल0, राँची।	प्रतिनिधि
9	श्री आर0पी0 सिंह, मुख्य प्रबंधक, सी0सी0एल0, राँची ।	प्रतिनिधि
10	श्री दीपक कुमार, ए0जी0एम0, मेकन लिमिटेड, राँची ।	प्रतिनिधि
11	श्री सुनील कुमार, सीनीयर डी0जी0एम0, एच0ई0सी0, राँची ।	प्रतिनिधि

Page **1** of **10**

12	डॉ0 परसुराम ठाकुर, प्रोफेसर, बी0आई0टी0, मेसरा, राँची ।	प्रतिनिधि
13	श्री अजय भंडारी, अध्यक्ष, इनर्जी सब कमिटी, एफ0जे0सी0सी0आई0, राँची । श्री एन0के0 पटोदिया, एफ0जे0सी0सी0आई0, राँची	सदस्य
14	श्री बी0के0 तुलस्यान, अध्यक्ष, लघु उद्योग भारती, राँची	सदस्य
15	श्री अशोक कुमार बिहानी, अध्यक्ष, आदित्यपुर स्मॉल इंडस्ट्रीज एसोसिएशन, सरायकेला–खरसावाँ	सदस्य
16	श्री कुन्दन कुमार उपाध्याय, झारखण्ड स्मॉल टिनी सर्विसेज एण्ड बिजनेस इन्टरप्राजेज एसोसिएशन, चास, बोकारो।	सदस्य
17	श्री अंजय पचेरीवाला, अध्यक्ष, झारखण्ड स्मॉल इंडस्ट्रीज एसोसिएशन, कोकर, राँची ।	सदस्य
18	श्री के0 सी0 गोयल, महासचिव, धनबाद फ्लावर मिल्स एसोसिएशन, धनबाद।	सदस्य
19	श्री आर0एन0 शर्मा, महासचिव, संथाल परगना स्मॉल इंडस्ट्रीज एसोसिएशन, देवघर ।	सदस्य
20	डॉ0 एस0के0 समदर्शी, प्रोफेसर, केन्द्रीय विश्वविद्यालय झारखण्ड, ब्राम्बे, राँची	सदस्य

सर्वप्रथम आयोग के सचिव द्वारा राज्य सलाहकार समिति के सभी सदस्यों का स्वागत किया गया।

तत्पश्चात सचिव महोदय ने माननीय अध्यक्ष महोदय की अनुमति से बैठक की कार्यवाही प्रारंभ करते हुए बताया गया कि आज की विशेष बैठक में झारखण्ड बिजली वितरण निगम लिमिटेट के द्वारा आयोग के समक्ष जो Tariff revision का प्रस्ताव आया है उसके संबंध में चर्चा की जायगी ।

माननीय अध्यक्ष महोदय ने सदस्यों को संबोधित करते हुए कहा कि JBVNL ने Resource gap को पाटने के लिए जो टैरिफ का प्रस्ताव दिया है

उसमें आपसबों की सलाह उपयोगी होगी । टैरिफ निर्धारण पर सुझाव देते समय यह भी ध्यान रखना है कि JBVNL के लिए Resource का जो Requirement है उसकी कैसे भरपाई होगी ।

तत्पश्चात JBVNL के पदाधिकारी द्वारा टैरिफ निर्धारण पर संक्षिप्त विवरणी PPT के माध्यम से दिया गया ।

श्री अजय भंडारी, अध्यक्ष, FJCCI, Energy Sub Committee, ने अपनी प्रतिक्रिया व्यक्त करते हुए कहा कि हमलोग भी इस बात से सहमत हैं कि Tariff revision होते रहना चाहिए, लेकिन इसके लिए यह आवश्यक है कि टैरिफ प्रस्ताव विधि सम्मत हो ; Audited Accounts, CAG Reports आदि आवश्यक कागजात उपलब्ध हो । आयोग द्वारा बनाये गये नियमों के तहत Licensee को अपना Business plan वर्ष के शुरूआत में ही दायर करना होता है, जिसका अनुमोदन आयोग को करना होता है । जिस अवधि का True up का अनुमोदन इनके द्वारा मांगा जा रहा है उसका सारा Power purchase बिना आयोग की अनुमति के ही हुआ है । आज अगर उसका True up किया जाता है तो यह Post facto approval माना जायगा जो कि विधि सम्मत नहीं है ।

श्री ए0के0 बिहानी, अध्यक्ष, आदित्यपुर स्मॉल इंडस्ट्रीज एसोसिएशन, ने कहा कि JBVNL ने आयोग के निर्देश पर जो Audited Account और CAG report upload किया है, उस True up petition में इन्होंने पूरे JSEB का Account upload किया है । जबकि उस समय जब JSEB के Account का True up होता था तो उस समय चार सेगमेंट एक साथ होते थे ।

JBVNL ने सभी का Acount एक साथ Upload कर दिया है जबकि चारो का अलग–अलग True up होना चाहिए था । इसके अलावे True up में Audited account के साथ भी बदलाव किया गया है । Non tariff income के साथ भी परिवर्त्तन किया गया है । Audited account में Financing of DPS को जोड़ा गया है जबकि Audited account में कोई चेंज नहीं कर सकते हैं । इसके अलावे Audited account के Balance और True up petition के Balance में भिन्नता है । उन्होंने कहा कि इन खामियों को समाप्त करने के लिए Management क्या कदम उठा रहा है इसकी जानकारी नहीं दी गयी है । Licensee की inefficiency का बोझ Resource gap के रूप में आम आदमी पर नहीं आना चाहिए । उन्होंने कहा कि जहाँ तक सब्सिडी देने की बात है और जैसा कि JBVNL ने बताया है कि Agriculture sector में मीटर के हिसाब से सब्सिडी दिया जायगा । जैसा कि इनका मानना है कि टोटल Agriculture consumer को मीटर ही नहीं है, तो सभी किसानों को सब्सिडी कहाँ से मिल पायगी ।

<u>श्री बी0 के0 तुल्स्यान</u>, अध्यक्ष, लघु उद्योग भारती, ने कहा कि इन्होंने जो LTIS tariff के लिए जो Applicability clause दिया है ***"This schedule shall apply to all industrial units for a load or less than or equal to 100 kva (or equivalent in terms of HP or KW")***. जो कि विवादास्पद हो सकता है । इसके स्थान पर पूर्व के Tariff order में लिखित की भांति ये लिखा होना चाहिए था ***"The restriction of connected load will not apply to consumers opting for Demand Based Tariff. A demand based consumer***

having Contract Demand of 50 KVA may have actual installation of more than 100 HP" उन्होंने कहा कि मेरा सुझाव है कि LTIS का Tariff Schedule जैसा पहले था वैसा ही दिया जाय ।

श्री अंजय पचेरीवाला, अध्यक्ष, झारखण्ड स्मॉल इंडस्ट्रीज एसोसिएशन, ने कहा कि वर्तमान टैरिफ प्रस्ताव विनियमों पर आधारित नहीं है और Audited account भी पूर्ण नहीं है ऐसी स्थिति में आयोग इन्हें तत्काल एक Suo-motu टैरिफ देने पर विचार कर सकता है और बाद में जब इनका Record सही हो जायगा तब इनको Final tariff दे सकता है।

श्री एन0के0 पटौदिया, अध्यक्ष, एफ0जे0सी0सी0आई0, कॉर्पोरेट अफेयर्स, ने कहा कि KWH के स्थान पर KVAH के बिलींग सिस्टम में Migrate करना उचित नहीं है । इस बिलींग सिस्टम से उपभोक्ताओं पर अतिरिक्त भाड़ पड़ेगा । उन्होंने कहा कि प्रस्तावित टैरिफ में Domestic consumer के लिए जो Fixed charge है वह प्रति किलोवाट के हिसाब से दिया गया है जो नहीं होना चाहिए । उन्होंने कहा कि Cross subsidy अगर खत्म होगा तो उस स्थिति में Industrial tariff कम होना चाहिए, क्योंकि पहले Domestic और Agriculture का खर्च का भरपाई उद्योग वर्ग करता था । इन सब बातों को ध्यान में रखकर ही टैरिफ का निर्धारण होना चाहिए ।

श्री आर0एन0 शर्मा, महासचिव, संथाल परगना स्मॉल इंडस्ट्रीज एसोसिएशन, ने कहा कि 2001 से आज तक के T&D loss में कोई परिवर्तन नहीं दिख रहा है और जो इनके Bonafide उपभोक्ता हैं उनपर

दिनों दिन बोझ बढ़ाते जा रहे हैं । श्री शर्मा ने यह भी कहा कि ग्रामीण इलाके में जो पावर सप्लाई दिया जा रहा है इसको Measure करने का कोई Mechanism नहीं है कि इन्होंने कितना पावर दिया है और उससे कितना राजस्व आया है । उन्होंने सुझाव दिया कि ग्रामीण क्षेत्र के पावर सप्लाई के Mechanism को सुधारें और उसको अद्यतन करें । इससे AT & C loss को कम करने में सहायता मिलेगी ।

<u>**श्री के0सी0 गोयल,**</u> महासचिव, धनबाद फ्लावर मिल्स एसोसिएशन, ने कहा कि इससे पूर्व भी टैरिफ बढ़ने से पहले यह आश्वासन दिया गया था कि दर बढ़ने के बाद हम विकास करेंगे । लेकिन अभी तक कोई विकास नहीं हो सका । इस बात की क्या गारंटी है कि वर्तमान में घाटे में चल रही JBVNL इस बार दर बढ़ने के बाद मुनाफे में आ जायगी । JBVNL टैरिफ बढ़ाने के अलावे अपने संशाधनों के खर्च को कम करे ताकि यह सारा बोझ उपभोक्ता पर नहीं आये ।

इन सबके जवाब में <u>श्री राहुल कुमार पूरवार,</u> प्रबंध निदेशक, झारखण्ड बिजली वितरण निगम लिमिटेड ने कहा कि आयोग ने जो भी दिशा निर्देश दिया था उसका अनुशरण किया गया है । उन्होंने JSIA के प्रतिनिधि द्वारा उठाये गये सवाल के जवाब में कहा कि True up के लिए जो कहना है कि वर्ष 11-12, 12-13 और 13-14 में जो JSEB के पूरे Expenditure को शामिल कर लिया गया है । उसमें Fuction wise Distribution, Transmission, Generation इत्यादि का अलग-अलग Expenditure आदि से संबंधित कागजात टैरिफ प्रस्ताव में भी है और True up में भी File किया गया है । उन्होंने कहा कि 2010 में आयोग ने

Page **6** of **10**

जो ARR अनुमोदित किया था और उसमें आयोग द्वारा जो मानदण्ड निर्धारित किया गया था उसी को आधार बनाकर वर्ष 11-12, 12-13 का प्रस्ताव दिया गया है । उन्होंने Account के आंकड़े में बदलाव के संबंध में कहा कि Account के आंकड़े में जो चेंज किया है उसमें APTEL का ऑर्डर है उसको दर्शाते हुए आकड़े को बदला गया है । उन्होंने यह भी कह कि आयोग के निर्देश के अनुरूप Power Purchase Agreements आयोग के समक्ष अनुमोदन के लिए कुछ भेजे गए हैं और शेष भी शीघ्र भेजे जाएँगे । टैरिफ प्रस्ताव में Power Purchase पर हुए व्यय का प्रस्ताव है । इससे किसी Purchase विशेष का अनुमोदन नहीं है । नियमानुकुल जो भी अनुमोदन आयोग से अपेक्षित है, उसे JBVNL आयोग से लेगा । KWH से KVAH तथा टैरिफ प्रस्ताव के संबंध में अन्य विंदु जो सदस्यों द्वारा उठाए गए हैं, वह टैरिफ को rationalize करने तथा JBVNL के लिए संशाधनों की आवश्यकता के अनुरूप किया गया है । इन सभी पर आयोग को अंतिम निर्णय लेना है ।

MD, JBVNL, ने यह भी कहा कि JBVNL में भी उन्होंने सलाहकार समिति का गठन किया है, जिसकी बैठक भी शुरू कर दी है । बिजली आपूर्त्ति में सुधार के संबंध में जो भी सुझाव मिलते हैं, उसे वे गंभीरता से लागू करने का प्रयास करते हैं ।

श्री राजीव गोस्वामी, मुख्य अभियंता (वाणिज्य), डी०भी०सी०, ने कहा कि JBVNL द्वारा डी०भी०सी० के बिजली खरीद के दर को मंजूर किया जाय।

इस पर माननीय सदस्य (तकनीकि), श्री आर0एन0 सिंह, महोदय ने कहा कि डी0भी0सी0 से महंगी बिजली खरीदने के बजाय Open bidding के माध्यम से JBVNL को उचित दर पर बिजली खरीदने का प्रयास करना चाहिए ।

<u>श्री एन0के0 पटोदिया,</u> अध्यक्ष, एफ0जे0सी0सी0आई0, कॉर्पोरेट अफेयर्स, ने बताया कि डी0भी0सी0 अभी तक JBVNL को आम उपभोक्ता के दर पर बिजली उपलब्ध कराता था । अभी इनका अनुबंध हुआ है कि अब डी0भी0सी0 JBVNL को एक Generator के दर पर बिजली उपलब्ध कराएगा । Power Generator और Power consumer के दर में जमीन–आसमान का फर्क है । इससे JBVNL को साल में करीब–करीब रू0 600/– करोड़ का अतिरिक्त लाभ होने जा रहा है । उस लाभ को Purchase cost में शामिल नहीं किया गया है । 600 करोड़ Purchase cost कम होगा तो हमारा टैरिफ अपने–आप कम हो जायेगा ।

समिति के कुछ सदस्यों ने इस बात पर आपत्ति जताई कि जब JBVNL का 2018–19 का MYT business plan मंजूर है तो उसमें Revision की कोई आवश्यकता नहीं है ।

<u>श्री वी0पी0 सिंह,</u> महाप्रबंधक, जुस्को, ने सुझाव दिया कि टैरिफ प्रस्ताव में जो दर Railway and MES जैसे Licensee के लिए किया गया है, उसे उन्हीं दोनों तक सीमित नहीं कर अन्य Licensee के लिए भी होना चाहिए ।

<u>प्रो0 परसुराम ठाकुर,</u> प्रोफेसर, BIT, Mesra ने कहा कि Transmission line के जर्जर तारों को बदलने से बिजली की आपूर्ति सुचारु रूप से होगी जिससे T&D loss को कम किया जा सकता है । उन्होंने कहा कि झारखण्ड प्रचूर संसाधनों से भरा राज्य होने के बावजूद इस राज्य में बिजली दर अधिक है ।

माननीय अध्यक्ष महोदय ने प्रो0 ठाकुर से अनुरोध किया कि वे अपने यहाँ एक कोषांग बनाकर Power purchase cost का विभिन्न राज्यों से तुलनात्मक अध्ययन करके सुझाव देते हैं तो वह आयोग के लिए बहुत उपयोगी होगा ।

प्रो0 ठाकुर ने कहा कि इस प्रोजेक्ट पर कार्य करने के लिए वे गंभीरता से विचार करेंगे ।

अंत में अध्यक्ष महोदय ने सभी सदस्यों को बैठक में भाग लेने के लिए धन्यवाद दिया और कहा कि अयोग को JBVNL के प्रस्ताव पर निर्णय लेने में सदस्यों से प्राप्त सुझाव सहायक होंगे । उन्होंने यह भी कहा कि चूँकि बिजली खरीदने में किया गया व्यय JBVNL के लिए आवश्यक Resource का सबसे बड़ा हिस्सा है, इसलिए JBVNL विद्युत क्रय दर की लगातार समीक्षा के लिए एक सेल का गठन करे । JBVNL को राष्ट्रीय स्तर पर उपलब्ध बिजली के दर की लगातार समीक्षा करनी चाहिए तथा प्रयास करना चाहिए कि उचित दर पर बिजली का क्रय हो । उन्होंने यह स्पष्ट किया कि Annual Resource Requirement में दिए गए प्रस्ताव के आंकड़े के आधार पर आयोग के द्वारा टैरिफ निर्धारण करने से आयोग से अपेक्षित अन्य अनुमोदन स्वतः नहीं हो जाता है । JBVNL को जहाँ भी

ऐसे अनुमोदन की आवश्यकता है, उसे अलग से आयोग के पास नियमानुकुल भेजना चाहिए ।

(अरविंद कुमार मेहता)
सचिव

ज्ञाप सं0:झा0रा0वि0नि0आ0/27(Vol.-VI)/59 दिनांकः 26.04.2018

प्रतिलिपिः-

राज्य सलाहकार समिति के सभी सदस्यों को सूचनार्थ एवं आवश्यक कार्य हेतु प्रेषित।