

# **Jharkhand State Electricity Regulatory Commission**



Order on  
True-up for FY 2016-17,  
Annual Performance Review for FY 2017-18 & FY 2018-19 and  
ARR & Tariff for FY 2019-20  
for

**Damodar Valley Corporation (DVC)**

Ranchi  
May 28, 2019



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### List of Abbreviations

Abbreviation	Description
<b>ABR</b>	Average Billing Rate
<b>ACS/ACoS</b>	Average Cost of Supply
<b>AFC</b>	Annual Fixed Charges
<b>APR</b>	Annual Performance Review
<b>APTEL</b>	Appellate Tribunal for Electricity
<b>ARR</b>	Aggregate Revenue Requirement
<b>BCCL</b>	Bharat Coking Coalfields Limited
<b>BG</b>	Bank Guarantee
<b>BTPS</b>	Bokaro Thermal Power Station
<b>CAGR</b>	Compound Average Growth Rate
<b>CCL</b>	Central Coalfields Limited
<b>CERC</b>	Central Electricity Regulatory Commission
<b>CGRF</b>	Consumer Grievance Redressal Forum
<b>CSGS</b>	Central Sector Generating Stations
<b>CSS</b>	Cross Subsidy Surcharge
<b>CTPS</b>	Chandrapura Thermal Power Station
<b>DPS</b>	Delayed Payment Surcharge
<b>DVC</b>	Damodar Valley Corporation
<b>DSTPS</b>	Durgapur Steel Thermal Power Station
<b>DTPS</b>	Durgapur Thermal Power Station
<b>EA</b>	Electricity Act, 2003
<b>ECR</b>	Energy Charge Rate
<b>EHT</b>	Extra High Tension
<b>ERPC</b>	Eastern Region Power Committee
<b>FPA</b>	Fuel Purchase Adjustment
<b>FSTPS</b>	Farakka Super Thermal Power Station
<b>FY</b>	Financial Year
<b>GFA</b>	Gross Fixed Assets
<b>GoI</b>	Government of India
<b>GoJ</b>	Government of Jharkhand
<b>GOMD</b>	Grid Operation and Maintenance Division
<b>HP</b>	Horse Power
<b>HT</b>	High Tension
<b>IAS</b>	Irrigation and Agriculture Services
<b>IEX</b>	Indian Energy Exchange
<b>IoWC</b>	Interest on Working Capital
<b>IPP</b>	Independent Power Producer
<b>JBVNL</b>	Jharkhand Bijli Vitran Nigam Limited
<b>JSEB</b>	Jharkhand State Electricity Board
<b>JSERC</b>	Jharkhand State Electricity Regulatory Commission
<b>JUSCO</b>	Jamshedpur Utilities & Services Company



<b>KBUNL</b>	Kanti Bijlee Utpadan Nigam Limited- Muzaffarpur Thermal Power Station
<b>MTPS</b>	
<b>KHTPS</b>	Kahalgaoon Thermal Power Station
<b>KTPS</b>	Koderma Thermal Power Station
<b>kVA(h)</b>	kilo Volt-Ampere (hour)
<b>kW(h)</b>	kilo Watt (hour)
<b>LF</b>	Load Factor
<b>LT</b>	Low Tension
<b>LTIS</b>	Low Tension Industrial Services
<b>MD</b>	Maximum Demand
<b>MDI</b>	Maximum Demand Indicator
<b>MES</b>	Military and Engineering Services
<b>MHS</b>	Maithon Hydropower Station
<b>MOD</b>	Merit Order Despatch
<b>MoP</b>	Ministry of Power
<b>MPL</b>	Maithon Power Limited
<b>MTPS</b>	Mejia Thermal Power Station
<b>MU</b>	Million Units
<b>MVA</b>	Mega Volt Ampere
<b>MW</b>	Megawatt
<b>MYT</b>	Multi Year Tariff
<b>NTI</b>	Non-Tariff Income
<b>O&amp;M</b>	Operation & Maintenance
<b>P&amp;G</b>	Pension & Gratuity
<b>PAF</b>	Plant Availability Factor
<b>PF</b>	Power Factor
<b>PHS</b>	Panchet Hydropower Station
<b>PPA</b>	Power Purchase Agreement
<b>PSU</b>	Public Sector Undertaking
<b>RE</b>	Renewable Energy
<b>REC</b>	Renewable Energy Certificates
<b>RPO</b>	Renewable Purchase Obligation
<b>RTPS</b>	Raghunathpur Thermal Power Station
<b>RTS</b>	Railway Traction Services
<b>SAIDI</b>	System Average Interruption Duration Index
<b>SAIFI</b>	System Average Interruption Frequency Index
<b>SAIL</b>	Steel Authority of India Limited
<b>SBI</b>	State Bank of India
<b>SD</b>	Security Deposit
<b>SERC</b>	State Electricity Regulatory Commission
<b>SS</b>	Streetlight Services
<b>T&amp;D</b>	Transmission & Distribution
<b>THS</b>	Tilaiya Hydropower Station
<b>TOD</b>	Time of Day





<b>TSL</b>	Tata Steel Limited
<b>TSTPS</b>	Talcher Super Thermal Power Station
<b>TVS</b>	Technical Validation Session
<b>UDAY</b>	Ujwal Discom Assurance Yojana
<b>UI</b>	Unscheduled Interchange
<b>USO</b>	Universal Supply Obligation
<b>WB</b>	West Bengal
<b>WBERC</b>	West Bengal Electricity Regulatory Commission
<b>WBSEB</b>	West Bengal State Electricity Board
<b>WBSEDCL</b>	West Bengal State Electricity Distribution Company Limited



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**BEFORE**

**Jharkhand State Electricity Regulatory Commission, Ranchi**

**Case (Tariff) No.: 07 of 2018 and 02 of 2019**

**In the matter of:**

**Petition for  
True-up for FY 2016-17  
And  
Annual Performance Review for FY 2017-18 & FY 2018-19  
And  
ARR and Tariff for FY 2019-20**

**In the matter:**

Damodar Valley Corporation (DVC)

DVC Towers, V.I.P. Road, Kolkata- 700 054..... **Petitioner**

**PRESENT**

Hon'ble Dr. Arbind Prasad

Chairperson

Hon'ble Mr. R.N. Singh

Member (Engg.)

**Order dated May 28, 2019**

In these Petitions, Damodar Valley Corporation (hereinafter referred to as DVC or the Petitioner) has prayed for Truing up for FY 2016-17 in Petition No. 07 of 2018 and for Annual Performance Review for FY 2018-19 and ARR & Tariff for FY 2019-20 in Petition No. 02 of 2019.



## **A 1: INTRODUCTION**

### **Jharkhand State Electricity Regulatory Commission**

- 1.1 The Jharkhand State Electricity Regulatory Commission (hereinafter referred to as the JSERC or the Commission) was established by the Government of Jharkhand under Section 17 of the Electricity Regulatory Commission Act, 1998 on August 22, 2002. The Commission became operational with effect from April 24, 2003.
- 1.2 The Government of Jharkhand vide its notification dated August 22, 2002 had defined the functions of JSERC as per Section 22 of the Electricity Regulatory Commission Act, 1998 to be the following, namely:
  - (a) to determine the tariff for electricity, wholesale, bulk, grid or retail, as the case may be, in the manner provided in section 29;
  - (b) to determine the tariff payable for the use of the transmission facilities in the manner provided in section 29;
  - (c) to regulate power purchase and procurement process of the transmission utilities and distribution utilities including the price at which the power shall be procured from the generating companies, generating stations or from other sources for transmission, sale, distribution and supply in the State;
  - (d) to promote competition, efficiency and economy in the activities of the electricity industry to achieve the objects and purposes of this Act.
- 1.3 After the Electricity Act, 2003 came into force, the earlier Electricity Regulatory Commission Act of 1998 stands repealed and the functions of State Electricity Regulatory Commissions (SERCs) are now defined under Section 86 of the Act.
- 1.4 In accordance with Section 86 (1) of the Act, the JSERC discharges the following functions:
  - (a) determine the tariff for generation, supply, transmission and wheeling of electricity, wholesale, bulk or retail, as the case may be, within the State:  
Provided that where open access has been permitted to a category of consumers under section 42, the State Commission shall determine only the wheeling charges and surcharge thereon, if any, for the said category of consumers;
  - (b) regulate electricity purchase and procurement process of distribution licensees including the price at which electricity shall be procured from the generating companies



- or licensees or from other sources through agreements for purchase of power for distribution and supply within the State;
- (c) facilitate intra-state transmission and wheeling of electricity;
  - (d) issue licences to persons seeking to act as transmission licensees, distribution licensees and electricity traders with respect to their operations within the State;
  - (e) promote cogeneration and generation of electricity from renewable sources of energy by providing suitable measures for connectivity with the grid and sale of electricity to any person, and also specify, for purchase of electricity from such sources, a percentage of the total consumption of electricity in the area of a distribution licensee;
  - (f) adjudicate upon the disputes between the licensees and generating companies; and to refer any dispute for arbitration;
  - (g) levy fee for the purposes of this Act;
  - (h) specify State Grid Code consistent with the Grid Code specified under Clause (h) of sub-section (1) of Section 79;
  - (i) specify or enforce standards with respect to quality, continuity and reliability of service by licensees;
  - (j) fix the trading margin in the intra-state trading of electricity, if considered, necessary;
  - (k) discharge such other functions as may be assigned to it under this Act.
- 1.5 The Commission has to also advise the State Government as per sub section 2 of Section 86 of the Act, on all or any of the following matters, namely:
- (a) promotion of competition, efficiency and economy in activities of the electricity industry;
  - (b) promotion of investment in electricity industry;
  - (c) reorganisation and restructuring of electricity industry in the State;
  - (d) matters concerning generation, transmission, distribution and trading of electricity or any other matter referred to the State Commission by that Government.
- 1.6 The State Commission ensures transparency while exercising its powers and discharging its functions.
- 1.7 In discharge of its functions, the State Commission is also guided by the National Tariff Policy as brought out by GoI in compliance to Section 3 of the Act. The objectives of the 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.

### **Damodar Valley Corporation (DVC)**

- 1.8 Damodar Valley Corporation (hereinafter referred to as DVC or the Petitioner), is a statutory body incorporated under the Damodar Valley Corporation Act, 1948, having multifarious functions. Regarding the electricity, DVC undertakes generation of electricity and is therefore a generating company within the meaning of Section 2 (28) of the Electricity Act, 2003. DVC also undertakes transmission of electricity in the Damodar valley area which falls within the territorial limits of the two states namely, West Bengal and Jharkhand. It, therefore, undertakes inter-state transmission of electricity and operates inter-state transmission system within the meaning of Section 2 (36) of the Electricity Act, 2003. DVC also undertakes the sale of electricity to West Bengal State Electricity Distribution Company Limited (WBSEDCL) and Jharkhand Bijli Vitran Nigam Limited (JBVNL) in its capacity generally as a generating company. This is bulk sale of electricity by a generating company to a distribution licensee within the meaning of Section 62 (1) (a) of the Electricity Act, 2003. In addition to the above, DVC undertakes the retail sale and supply of electricity to the consumers in the Damodar Valley area under the provisions of Section 62 (d) read with Section 86 (1) of the Electricity Act, 2003.
- 1.9 DVC, being a statutory body constituted under the DVC Act, 1948, is a Public Sector Undertaking (PSU). As envisaged under Section 79 (1) (a) of the Electricity Act, 2003, the tariff for generation of electricity is to be decided by the Central Electricity Regulatory Commission (CERC). Similarly, with regards to the inter-state transmission, DVC again is regulated by CERC and tariff for composite (inter-state) generation & transmission is to be determined by the CERC in terms of Section 79 (1) (c) and (d) of the Electricity Act, 2003.
- 1.10 With regards to the retail sale and supply of electricity, DVC covers the entire Damodar Valley area which falls in two contiguous States, namely, the State of West Bengal and the State of Jharkhand. Thus, tariff for retail sale and supply of electricity in the Damodar Valley area is governed by the provisions of Section 62 (d) read with Section 86 (1) of the Electricity Act, 2003 and has to be determined by the respective Electricity Regulatory Commissions in the states of West Bengal and Jharkhand. The Petitioner is a Distribution Licensee under the provisions of the Electricity Act, 2003 (EA, 2003) having licence to supply electricity in the State of Jharkhand.





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## **The Petitioner's Prayers**

- 1.11 The Petitioner in Petition No. 07 of 2018 for Annual Performance Review (APR) for FY 2016-17 has prayed before the Commission as below:
- To re-determine the ARR and Tariff based on submission in the Annual Performance Review for the year 2016-17 and pass the direction for adjustment of revenue gap/surplus as deemed proper
  - To settle other commercial issues based on submissions made by DVC
  - To pass such order(s) as the Hon'ble Commission may deem fit and proper keeping in view the facts and circumstances of the case.
- 1.12 However, the Petitioner vide its letter no. Coml./Tariff/JSERC/True-up 16-17- 548 dated February 11, 2019, requested the Commission to perform True-up for FY 2016-17.
- 1.13 The Petitioner in Petition No. 02 of 2019 for APR for FY 2018-19 and ARR & Tariff for FY 2019-20 has prayed before the Commission as below:
- To admit the present petition and determine the Aggregate Revenue Requirement and Distribution & Retail Tariff for the year 2019-20 based on the submissions herein made by DVC,
  - To determine the tariff schedule for applicable category of consumers/licensees based on the submissions made in the present petition,
  - To settle other commercial issues as mentioned in the present submission,
  - To pass such other order(s) as the Hon'ble Commission may deem fit and proper keeping in view the facts and circumstances of the case.

## **Scope of the Present Order**

- 1.14 As stated above, the Petitioner has filed two Petitions seeking truing up for FY 2016-17, Annual Performance Review for FY 2018-19 and determination of Tariff for FY 2019-20. The Commission has considered the submissions made by the Petitioner and Stakeholders on the two Petitions and has decided to deal with both the Petitions together through this Order.
- 1.15 The Commission also notes that during the pendency of the Petition, the audited account of DVC for FY 2017-18 got finalised. Further, during the Public Hearing many stakeholders requested the Commission to suo-motu carry out truing up of FY 2017-18. The Commission has considered the submissions of the Stakeholders and has carried out



APR of FY 2017-18 on the basis of audited accounts of FY 2017-18. However, the same shall be subject to final truing up that shall be carried out once the Petitioner files Petition for truing up for FY 2017-18.

- 1.16 Accordingly, the Commission in this Order has approved the True-up for FY 2016-17, Annual Performance Review for FY 2017-18 & FY 2018-19 and ARR & Tariff for FY 2019-20.
- 1.17 While approving this Order, the Commission has taken into consideration:
- a) Material placed on record by the Petitioner
  - b) Provisions of the Electricity Act, 2003;
  - c) Principles laid down in the National Electricity Policy;
  - d) Principles laid down in the National Tariff Policy;
  - e) Provisions of the JSERC (Terms and Conditions for Determination of Distribution Tariff) Regulations, 2015 (hereinafter referred to as JSERC Distribution Tariff Regulations, 2015 or the Regulations);
- 1.18 Accordingly, the Commission has scrutinized the Petition in detail and hereby issues the Order on Truing-up for FY 2016-17, Annual Performance Review for FY 2017-18 & FY 2018-19 and ARR & Tariff for FY 2019-20 for DVC.



## **A 2: PROCEDURAL HISTORY**

### **Background**

- 2.1 The Commission issued Order on Truing-up for FY 2015-16 and determination of ARR for the MYT Control Period from FY 2016-17 to FY 2020-21 and tariff for FY 2016-17 dated May 18, 2018.
- 2.2 The Petitioner has now filed the Petition for True-up for FY 2016-17 on December 26, 2018 and the Petition for Annual Performance Review for FY 2018-19 and ARR & Tariff for FY 2019-20 on February 07, 2019.

### **DVC Case History**

- 2.3 Central Electricity Regulatory Commission (CERC) by Order dated October 3, 2006, decided the tariff for DVC for its functions of inter-state generation and transmission of electricity and directed that the tariff so determined should be made effective for the period April 1, 2006 to March 31, 2009.
- 2.4 DVC, aggrieved by the order dated October 3, 2006 passed by CERC, had filed an appeal against the said Order before the Hon'ble APTEL. Hon'ble APTEL, before passing its final Judgment in the appeal filed by DVC against the aforementioned Order by CERC, issued several interim orders dated December 6, 2006, January 15, 2007 and February 26, 2007, restraining the State Commissions of West Bengal and Jharkhand from passing orders for determination of distribution and retail tariffs for DVC till its final judgment. Hon'ble APTEL, by Judgment and Order dated November 23, 2007, allowed the appeal filed by DVC and directed CERC to determine the revenue requirements and inter-state generation and transmission tariff for DVC for the period FY 2006-07 to FY 2008-09, de-novo, in the terms laid down in its Order. Subsequently, the CERC in accordance with the directions of the Hon'ble APTEL revised the ARR and tariff for inter-state generation and transmission of electricity for the period FY 2006-07 to FY 2008-09 by its Order dated August 6, 2009.
- 2.5 Aggrieved by the Order passed by the CERC on August 6, 2009, DVC again filed an appeal against the said Order before Hon'ble APTEL. Hon'ble APTEL vide Interim Order dated September 16, 2009 allowed WBERC and JSERC to fix the retail supply tariff for FY 2010-11 after considering the generation tariff as fixed by CERC in its Order dated August 6, 2009 as the input cost but not any final orders in this regard. Consequently, DVC filed the Petition for determination of ARR and retail tariffs for the period FY 2006-07 to FY



2010-11 to the Commission on October 31, 2009. Since the matter was subjudice before the Hon'ble APTEL and there was a direction for not passing any final retail tariff Order, the Commission kept the Petition pending awaiting final order of the Hon'ble APTEL.

- 2.6 The Hon'ble APTEL, vide its Order dated May 10, 2010, directed DVC to implement the generation tariff as determined by the CERC in its Order dated August 6, 2009 and to give effect to any refund to its consumers arising out of implementation of the said Order. The relevant extract of the said Order is reproduced below:

*“107. Since we do not find any substance in the grounds raised in the Appeal, we deem it fit to dismiss the Appeal as devoid of merits. Consequently, we **direct the Appellant (DVC) to implement the Tariff as determined by the Central Commission vide its Order dated, 6th August, 2009.** DVC is also directed to revise the electricity bills raised by it for electricity consumption during April, 2006 onwards of its licensees and HT consumers and **refund the excess amount billed and collected along with the interest at the rate of 6 per cent per annum in line with Section 62 (6) of The Electricity Act, 2003...**” (Emphasis added)*

- 2.7 Aggrieved by the said Order of the Hon'ble APTEL, DVC filed an appeal before the Hon'ble Supreme Court of India, being No. C.A. No. 4881/ 2010. The Hon'ble Supreme Court in its Order dated July 9, 2010, stayed refund. The matter is still subjudice. The relevant part of the said Order is reproduced below:

*“In the meantime, parties will submit before us the various disputed items to be taken into account in Tariff Fixation as well as the relevant documents on which Damodar Valley Corporation would be relying upon at the final hearing...**Until further orders, there shall be stay on refund.**” (Emphasis added)*

- 2.8 From the said Order, it is clear that the entire Order of the Hon'ble APTEL has not been stayed by the Hon'ble Supreme Court and the stay is related to only refund.
- 2.9 Hon'ble APTEL, by its Order dated May 10, 2010, directed the Petitioner to approach the concerned SERCs for finalizing the retail tariffs, the relevant extract is being reproduced below:

*“107. Thereafter, the DVC is directed to approach the concerned State Electricity Commissions for getting the final Order relating to the Retail Tariff who in turn will fix the retail Tariff according to law.”*



- 2.10 The Commission, in line with the directions of the Hon'ble APTEL in its aforementioned Order, initiated the process of review of the Tariff Petitions submitted by the Petitioner and issued the provisional Order on ARR for FY 2006-07 to FY 2012-13 on 22nd November, 2012.
- 2.11 The Petitioner subsequently submitted the final True-up Petition for FY 2006-07 to FY 2012-13 along with the MYT Petition for the Control Period from FY 2013-14 to FY 2015-16 on February 28, 2014. The Commission while issuing the MYT Order for the Control Period FY 2013-14 to FY 2015-16 on September 04, 2014 did not undertake the final True-up for FY 2006-07 to FY 2012-13 as the matter was subjudice. The Commission, in the said Order, had noted that:

*“5.7 In the Tariff Order dated 22nd November 2012, the Commission had approved a cumulative revenue surplus of Rs.424.38 Cr for the period FY 2006-07 to FY 2008-09. However, as the true up for the above-mentioned years was provisional subject to the final decision of the Hon'ble Supreme Court in its appeal C.A. No. 4881/2010, the Commission had not allowed any pass through of this surplus along with the revenue gap approved for FY 2010-11 and FY 2011-12 to be adjusted once the final decision is made in this regard.*

*5.8 In view of above, the Commission is of the opinion that as the True up for period FY 2006-07 to FY 2008-09 is still subject to final judgement of the Hon'ble Supreme Court with respect to the appeal No. C.A. No. 4881/2010 filed by DVC against the Order of ATE dated 10th May 2010; the Commission has not made any adjustment in revenue surplus approved for this period. This would be a pass through once the final judgement is issued in this matter.*

*5.9 With respect to True up for FY 2009-10 to FY 2012-13 in accordance with the Final Tariff orders issued by CERC, the Commission is of the view that detailed analysis should be carried out to assess the impact of the orders. In this regard, several consumers have represented in front of the Commission for approval of compensation as per the CERC regulations due to them for refund of excess capacity charges recovered by DVC. M/s Bihar Foundry & Castings Ltd being a HT consumer within the command area of DVC has preferred an appeal before the Hon'ble Supreme Court vide appeal No. SLP (Civil) No 10945 of 2012 for refund of excess of capacity charges realised by DVC.*

....



*5.14 In view of above, the Commission is of the opinion that final true up for the period FY 2009-10 to FY 2012-13 shall be undertaken on finalisation of compensation as per the CGRF and final judgement of Supreme Court in appeal no. SLP (Civil) No 10945 of 2012 for refund of excess of capacity charges realised by DVC.*

*5.15 Accordingly, the Commission has not considered any true up for previous years revenue gap/surplus in this order.”*

2.12 One of the HT consumer of DVC, Anjaney Ferro Alloys, filed an Appeal before the Hon’ble APTEL, against the Commission’s Order dated September 04, 2014 submitting that the Commission ought to have undertaken final True-up of the of ARR for FY 2006-07 to FY 2012-13. The Hon’ble APTEL, agreeing with the view of the Commission that the matter of True-up was subjudice, upheld the Order of the Commission. Anjaney Ferro Alloys preferred an appeal before the Hon’ble Supreme Court of India (CA No. 7383/2016) against the Order dated March 23, 2016 passed by the Hon’ble APTEL.

2.13 The Hon’ble Supreme Court of India, vide its Judgment dated October 26, 2016, directed the Commission to take-up the issue of True-up of previous years and make the decision subject to the result of Civil Appeal No. 4881 of 2010. The apex court ruled:

*“.. Therefore, this appeal is disposed of with a direction to Respondent No.1- Jharkhand State Electricity Regulatory Commission to take up the true-up issue and pass the required Orders within a period of six months from today.*

*However, the Commission is free to make the decision subject to the result of Civil Appeal No. 4881 of 2010 in case the said civil appeal is not disposed of before the said period.”*

2.14 In accordance with the above, the Commission issued an Order on True-up from FY 2006-07 to FY 2013-14 and Annual Performance Review for FY 2014-15 on April 19, 2017 and the Order on True-up for FY 2015-16 and ARR for FY 2016-17 to FY 2020-21 on May 18, 2018.

2.15 The Commission in its MYT Order dated May 18, 2018 has not considered the surplus till FY 2014-15 to be passed on to the consumers considering the following Judgment in Order dated 19.01.2018 in Case No 07 of 2017:

*“In view of the said admitted position and the facts and circumstances appearing on record, we are of the view that during the pendency of Appeal No. 198 of 2017*



*filed by the petitioner in this case and Appeal No. 163 of 2017 filed by the respondent, DVC, before the Hon'ble Appellate Tribunal for Electricity, the order dated 19.4.2017 passed in Case (T) No. 02 of 2016 cannot be said to have attained its finality and it would not be proper to pass any order in the instant case for refund of excess charges claimed by the petitioners at this stage."*

- 2.16 As the above matter is still sub-judice the Commission has therefore not considered refund of the surplus amount worked out by the Commission till FY 2014-15 in this Order.

### **Information Gaps in the Petitions**

- 2.17 As part of the Tariff determination exercise, several deficiencies/information gaps were observed in the Petitions submitted by the Petitioner that were communicated to the Petitioner vide Letter Nos. JSERC/Case (Tariff) No. 7 of 2018/496 dated December 26, 2018 and JSERC/Case (Tariff) No. 2 of 2019/566 dated February 7, 2019.
- 2.18 The Petitioner submitted its response to the aforesaid letter and furnished additional data/information to the Commission vide letter no Coml./Tariff/JSERC/True-up 16-17- 548 dated February 11, 2019 and letter no. Coml./JSER(Addl. Info. 19-20)/939 dated March 05, 2019.
- 2.19 Further, a Technical Validation Session (TVS) was held by the Commission with the Petitioner on April 29, 2019. The Petitioner vide its letter dated May 9, 2019 submitted its response to the points raised by the Commission during TVS. The Petitioner also submitted additional information on expenses and revenue during FY 2017-18 vide letter no. Coml./Tariff/JSERC/Addl Info 19-20/1977 dated May 23, 2019.
- 2.20 The Commission has scrutinized the additional data/ information supporting documents as supplied by the Petitioner and has considered the same while passing this Order.
- 2.21 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 2 locations in State of Jharkhand i.e., Hazaribagh and Maithon.

### **Inviting Public Comments/Suggestions**

- 2.22 After the initial scrutiny of Petition filed by the Petitioner, the Commission directed the Petitioner to issue a public notice inviting comments/ suggestions on the Petition from



public and to make available copies of the Petitions to the members of general public on request.

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

**Table 1: List of newspapers and dates of publication of public notice by the Petitioner**

<b>Newspaper</b>	<b>Date of Publication</b>
The Telegraph	08.03.2019 & 09.03.2019
The Times of India	08.03.2019 & 09.03.2019
Dainik Jagran	08.03.2019 & 09.03.2019
Prabhat Khabar	08.03.2019 & 09.03.2019

- 2.24 Subsequently, the Commission also issued advertisement on its website [www.jserc.org](http://www.jserc.org) and various newspapers for conducting the public hearing on the Petitions filed by DVC. The details of the newspapers publishing the advertisement by the Commission are as under:

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

<b>Newspaper</b>	<b>Date of Publication</b>
Hindustan	25.04.2019
Dainik Jagran	25.04.2019
Morning India	25.04.2019
The Pioneer	25.04.2019
Dainik Bhaskar	15.05.2019
Prabhat Khabar	15.05.2019
The Times of India	15.05.2019
The Hindustan Times	15.05.2019

### **Submission of Comments/Suggestions and Conduct of Public Hearing**

- 2.25 The public hearings were held across the State of Jharkhand on May 16, 2019 and May 17, 2019 in the locations as detailed under:

**Table 3: Locations and Dates for Public Hearing**

<b>Location</b>	<b>Date</b>
Hazaribagh	16.05.2019
Maithon	17.05.2019

- 2.26 Written objections/ comments/ suggestions on the Petitions were received from various stakeholders. In addition to the written suggestions, various stakeholders also gave their comments/suggestions on the Petitions filed during the hearings. The objections/





comments/ suggestions of the Public, Petitioner's responses and Commission's views thereon are detailed in **Section A4** of this Order.



### A 3: BRIEF FACTS OF THE PETITION

#### Relief Sought for FY 2013-14 to FY 2015-16

- 3.1 The Petitioner submitted the actual T&D losses for FY 2013-14 to FY 2015-16 vis-à-vis the approved losses and revised the energy requirement as per Clause 5.23 of the Distribution Tariff Regulations, 2015, to be considered by the Commission for FY 2013-14 to FY 2015-16 as reproduced below:

*“5.23 The Licensee shall file the distribution loss trajectory for the entire Control Period in the Business Plan commensurate with the capital investment plan for each year of the control period for approval of the Commission after verification and evaluation of the same.*

*The Licensee shall be allowed to operate at below 5% audited distribution loss without any incentive/ penalty mechanism.”*

**Table 4: Energy Balance submitted by the Petitioner for FY 2013-14 to FY 2015-16 (MU)**

<b>Energy Requirement</b>	<b>FY 2013-14</b>	<b>FY 2014-15</b>	<b>FY 2015-16</b>
Energy Sales within the State of Jharkhand	9610.55	9815.15	10237.62
Energy Sales within the State of West Bengal	7212.76	6983.15	7248.80
Total Energy Sales in DVC Area	16823.31	16798.30	17486.42
Energy Wheeled	228.36	279.03	206.28
Overall Utilization	17051.67	17077.33	17692.70
T&D loss (MU)	871.28	634.11	664.39
T&D loss (%)	4.86%	3.58%	3.62%
<b>Total Energy Requirement for DVC</b>	<b>17922.95</b>	<b>17711.44</b>	<b>18357.09</b>
<b>Energy Availability</b>	<b>FY 2013-14</b>	<b>FY 2014-15</b>	<b>FY 2015-16</b>
<b><i>Own Generation-Firm sources</i></b>			
Thermal	25049.32	23026.75	25326.11
Hydel	228.63	274.28	185.60
Sub Total	25277.95	23301.03	25511.71
<b><i>Own Generation-Infirm sources</i></b>	384.52	62.13	354.69
<b>Total Own Generation</b>	<b>25662.47</b>	<b>23363.16</b>	<b>25866.40</b>
Net Power Purchase (Excluding UI)	2181.00	2532.00	2709.97
Net Unscheduled Interchange (UI)	113.00	172.54	-155.26
Net Power Purchase (Including UI)	2294.00	2704.54	2554.71
Energy received for Wheeling	226.48	296.33	260.49
Less: Energy sold to other licensees	10260.00	8652.59	10324.51
<b>Total Energy Available for DVC</b>	<b>17922.95</b>	<b>17711.44</b>	<b>18357.09</b>



3.2 The Petitioner also requested the Commission to approve the additional cost power purchase cost already incurred by the Petitioner during the period from FY 2013-14 to FY 2015-16.

### Aggregate Revenue Requirement

3.3 The summary of Aggregate Revenue Requirement for FY 2016-17, FY 2018-19 and FY 2019-20 as approved in the MYT Order vis-a-vis that claimed by the Petitioner is tabulated below:

**Table 5: ARR as submitted by the Petitioner for FY 2016-17, FY 2018-19 and FY 2019-20 (Rs. Crore)**

Particulars	FY 2016-17		FY 2018-19		FY 2019-20	
	Approved	Actual	Approved	Projected	Approved	Projected
Own Generation Cost	7836.59	7289.09	9291.16	8698.09	10147.27	7396.60
Power Purchase cost	678.16	832.85	490.71	919.90	287.79	763.89
Tariff Filing & Publication Expense (CERC)	4.93	5.11	5.11	5.11	5.22	5.22
Water Cess	2.48	1.79	3.55	0.20	3.84	0.25
Non Tariff Income	47.68	198.25	55.16	27.00	58.90	25.00
Interest on Temporary Financial Accommodation		251.65				
Total ARR	8474.48	8269.91	9735.37	9596.30	10385.22	8140.96
Percentage Share of Sale in Jharkhand	56.12%	57.17%	54.24%	58.25%	53.28%	43.91%
ARR Before IoWC, IoSD, Tariff Filing Fees for Jharkhand	4755.66	4728.30	5280.64	5589.58	5533.63	3574.76
Cost of RECs Purchased	80.82	75.74	155.70	154.62	185.01	192.02
Interest on Working Capital	6.42	96.95	7.59	111.17	8.02	73.90
Interest on Consumer Security Deposit	1.84	1.05	2.16	0.44	2.38	0.45
Tariff Filing and Publication Fees for Jharkhand	0.97	0.89	0.46	0.73	0.47	0.76
Total ARR for Jharkhand	4845.71	4902.93	5446.55	5856.54	5729.52	3841.90
Revenue at Existing Tariff	5017.09	5017.09	5930.42	5811.81	6267.64	2871.53
Revenue Gap/(Surplus) at Existing Tariff	(171.38)	(114.16)	(483.87)	44.73	(538.12)	970.37

### Proposed Tariff Rationalisation Measures

#### a) Introduction of ToD based Tariff

3.4 DVC has proposed time periods in respect of time of the day (TOD) from 06:00 hrs. to 17:00 hrs. for Normal Period, from 17:00 hrs. to 23:00 hrs. for Peak Period and from 23:00 hrs. to 06:00 hrs. for Off Peak Period.

**b) Power Factor (PF) Rebate**

3.5 DVC has proposed the power factor rebate structured on the basis of consumption profile during the first quarter of FY 2018-19 and is to be made applicable for PF > 92% in different steps. Rate of power factor rebate and surcharge has been proposed to be same for all category of consumers at and above 33kV level for TOD and NON-TOD category. Proposed rates of rebate are same as that applicable for the consumers of DVC in the State of West Bengal.

**c) Load Factor (LF) Rebate**

3.6 DVC has proposed the Load Factor (LF) rebate to be applicable above LF of 65% in different steps based on load profile of consumers of DVC in the state of Jharkhand during the first quarter of FY 2018-19 but the rate of such rebate is proposed different at different voltage levels. Load Factor surcharge is proposed to be levied if the load factor falls below 30%. Proposed rates of rebate are same as that applicable for the consumers of DVC in the State of West Bengal.

**d) Voltage Rebate**

3.7 DVC has proposed voltage rebate of 2% of energy charge at 132 kV and 5% of energy charge at 220 kV consumers.

3.8 The rebates proposed by DVC for FY 2019-20 are summarized as below:

**Table 6: Revised Rebates/Surcharges proposed by Petitioner for FY 2019-20**

Schedule of Power factor Rebate & Surcharge (% of Energy Charge)									Load Factor Rebate in (p/kWh)			
NON TOD			TOD						LF	< 33 kV	33 kV	>33 kV
			Normal Period		Peak Period		Off-Peak Period		65-70	1	2	3
Power factor	Rebate	Surcharge	Rebate	Surcharge	Rebate	Surcharge	Rebate	Surcharge	70-75	3	4	5
PF > 99%	5.00	0.00	8.00	0.00	9.00	0.00	7.00	0.00	75-80	5	6	7
PF > 98% & PF ≤ 99%	4.00	0.00	7.00	0.00	8.00	0.00	6.00	0.00	80-85	7	8	9
PF > 97% & PF ≤ 98%	3.00	0.00	5.00	0.00	6.00	0.00	4.00	0.00	85-90	10	12	14
PF > 96% & PF ≤ 97%	2.50	0.00	4.00	0.00	5.00	0.00	3.00	0.00	>90	13	16	19
PF > 95% & PF ≤ 96%	2.00	0.00	3.00	0.00	4.00	0.00	2.00	0.00	Schedule of Voltage Rebate			
PF > 94% & PF ≤ 95%	1.50	0.00	2.25	0.00	3.00	0.00	1.50	0.00	33 kV		No Rebate	



Schedule of Power factor Rebate & Surcharge (% of Energy Charge)									Load Factor Rebate in (p/kWh)	
PF > 93% & PF ≤ 94%	1.00	0.00	1.50	0.00	2.00	0.00	1.00	0.00	132 kV	2% of energy charge
PF > 92% & PF ≤ 93%	0.50	0.00	0.75	0.00	1.00	0.00	0.50	0.00	132 kV Traction	2% of energy charge
PF ≥ 86% & PF ≤ 92%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	220 kV	5 % of energy charge
PF ≥ 85% & PF < 86%	0.00	0.50	0.00	0.75	0.00	1.00	0.00	0.50	Schedule of Prompt Payment Rebate	
PF ≥ 84% & PF < 85%	0.00	1.00	0.00	1.50	0.00	2.00	0.00	1.00		
PF ≥ 83% & PF < 84%	0.00	1.50	0.00	2.25	0.00	3.00	0.00	1.50		
PF ≥ 82% & PF < 83%	0.00	2.00	0.00	3.00	0.00	4.00	0.00	2.00		
PF ≥ 81% & PF < 82%	0.00	2.50	0.00	4.00	0.00	5.00	0.00	3.00		
PF ≥ 80% & PF < 81%	0.00	3.00	0.00	5.00	0.00	6.00	0.00	4.00		
PF < 80%	0.00	3.50	0.00	6.00	0.00	7.00	0.00	5.00		
									Number of days from presentation of the bill	% Rebate
									Within 2 days	2.00
									3 days to 5 days	1.67
									6 days to 12 days	1.2
									13 days to 30 days	0
									Additional E-Rebate (1% on total Bill)	1%

#### d) Revision in Miscellaneous Charges

3.9 The Petitioner has proposed revision in miscellaneous charges to include the penal charges for over-drawal during load restriction periods as follows:

**Table 7: Revised schedule of miscellaneous charges proposed by Petitioner for FY 2019-20**

S No.	Purpose	Scale of charges	Manner in which payment will be realised
1	<b>Penal Charges</b>		
	penal charges payable by the consumers or licensees in case of over-drawal during the period under load restriction	If in a 15 minutes time block a consumer/licensee draws power more than the restricted drawal, if any, imposed by the utility then the consumer/licensee will pay additional energy charge at a rate twice the applicable rate for that consumer/licensee at that time block. Such additional energy charge shall be payable in addition to the amount that is payable as energy charge for consumption of energy in that particular time block	Payable with energy bill
2	<b>Application Fees</b>		
	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	



S No.	Purpose	Scale of charges	Manner in which payment will be realised
	Other LT Categories	Rs. 100	
	HT Supply	Rs. 200	
	HTSS, EHTS, RTS	Rs. 200	
<b>3</b>	<b>Testing of Consumer Installation</b>		
	First test and inspection free, subsequent test and inspection charges	Single Ph-Rs 100 Three Ph- Rs 200 HT Supply Rs-500	Payable with energy bill
<b>4</b>	<b>Meter test when accuracy disputed by consumer</b>		
	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	
<b>5</b>	<b>Removing/ Refixing of meter</b>		
	Single phase	Rs. 100	Payable with energy bill
	Three phase	Rs. 200	
	Trivector/special type meter, Three phase with CT/HT metering equipment	Rs. 550	
<b>6</b>	<b>Changing of meter/meter equipment/fixing of sub meter on the request of consumer</b>		
	Single phase	Rs. 75	Payable with energy bill
	Three phase	Rs. 180	
	Trivector/special type meter	Rs. 530	
<b>7</b>	<b>Resealing of meter when seals are found broken</b>		
	Single phase	Rs. 50	Payable with energy bill
	Three phase	Rs. 80	
	Trivector/special type meter	Rs. 200	
<b>8</b>	<b>Fuse call- Replacement</b>		
	Board fuse due to fault of consumers	Rs. 30	Payable with energy bill
	Consumers fuse	Rs. 30	
<b>9</b>	<b>Disconnection/ Reconnection</b>		
	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/
	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	



S No.	Purpose	Scale of charges	Manner in which payment will be realised
			reconnection, 50% will be added to the charges
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		
	Domestic category 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. 2500	
	132 kV	Rs. 15000	
	RTS or 220 kV	Rs. 15000	
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	
*Applicable for a 6 month duration from the date of taking the transformer on rent, thereafter monthly escalation of 10% would be applicable			
Dishonored Cheques			
In the event of dishonored 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			

### e) Penal Charges on over-drawal during Load Restriction

3.10 The Petitioner has submitted that under some compelling situations DVC imposes restriction on real time load of the consumers, instead of total load shedding, in order to maintain balance between demand and supply. Such compelling situations may arise due to system constraints, shortage of primary fuel supply etc. During the period of restrictions, the consumers are requested to maintain their respective demand within the restrictions imposed. Any violation by consumers lead to unscheduled interchanges or contingent purchase of power from exchange. The Petitioner has thus proposed for provision for penal charges payable by the consumers or licensees in case of over-drawal during the period under load restriction as reproduced below:

*“If in a 15 minutes time block a consumer/licensee draws power more than the restricted drawal, if any, imposed by the utility then the consumer/licensee will pay additional energy charge at a rate twice the applicable rate for that consumer/licensee at that time block. Such additional energy charge shall be payable in addition to the amount that is payable as energy charge for consumption of energy in that particular time block.”*

### Tariff Proposed for FY 2019-20

**Table 8: Revised Tariff Proposed for FY 2019-20 by the Petitioner**

Consumer Category	Name of Tariff Scheme	Consumption slab	Existing Tariff (FY 2018-19)		Proposed Tariff (FY 2019-20)	
			Energy Charges	Fixed/Demand Charges	Energy Charges	Fixed/Demand Charges
			(p/kWh)	(Rs./ Month)	(p/kWh)	(Rs./ Month)
LT (Domestic)	NON TOD	All units	450.00	43.00/ conn.	461.00	44.00/ conn.
LT (Commercial)	NON TOD	All units	500.00	190.00/ kW	513.00	195.00/ kW
Industries (33KV)	NON TOD	All units	334.65	380.00/ kVA	375.00	928.60/ kVA
	TOD	Normal (06:00 to 17:00)	334.65	380.00/ kVA	367.00	928.60/ kVA
		Peak (17:00 to 23:00)	334.65		438.00	
		Off Peak (23:00 to 6:00)	334.65		311.00	
Industries (132KV)	NON TOD	All units	327.75	380.00/ kVA	363.00	928.60/ kVA
	TOD	Normal (06:00 to 17:00)	327.75	380.00/ kVA	352.00	928.60/ kVA
		Peak (17:00 to 23:00)	327.75		423.00	
		Off Peak (23:00 to 6:00)	327.75		299.00	
Traction (132KV)	NON TOD	All units	340.00	380.00/ kVA	363.00	928.60/ kVA
Industries (220KV)	NON TOD	All units	326.03	380.00/ kVA	348.00	928.60/ kVA
	TOD	Normal (06:00 to 17:00)	326.03	380.00/ kVA	341.00	928.60/ kVA
		Peak (17:00 to 23:00)	326.03		408.00	
		Off Peak (23:00 to 6:00)	326.03		288.00	





## A 4: PUBLIC CONSULTATION PROCESS

- 4.1 The Petition filed by the Petitioner evoked responses from several stakeholders. The Public Hearings were held at two locations across the State of Jharkhand to ensure the maximum public participation and transparency wherein stakeholders put forth their comments and suggestions before the Commission in the presence of the Petitioner. The list of the attendees is attached as **Annexure-1** to this Order.
- 4.2 In course of public hearings, the Commission also allowed persons/representatives of entities who had not submitted prior written representations but attended the public hearings to express their views, in person, regarding the Petition filed by the Petitioner and also about ways and means to improve the services rendered by the Petitioner.
- 4.3 The written as well as comments and suggestion of the members of the public expressed during the Public Hearings along with the response thereon of the Petitioner and the views of the Commission are detailed hereunder:

### **Own Generation**

#### ***Public Comments/ Suggestions***

- 4.4 The Stakeholder submitted that the projection of own power generation is not consistent with the Plant Availability Factor proposed by the Petitioner for FY 2019-20.
- 4.5 The Stakeholder also submitted that no justification has been provided by DVC for projecting NIL generation from CTPS Unit #3 as it is not retired till date. If the unit is available for generation, the same must be utilised to supply low cost power to the consumers.
- 4.6 The Stakeholder submitted that more generation from own units will be available for DVC Distribution business during FY 2019-20 when worked out strictly in terms of the norms notified by CERC in its new Tariff Regulations for the period FY 2019-20 to FY 2023-24, thereby generating surplus revenue from sale of excess energy.

#### ***Petitioner's Response***

- 4.7 The Petitioner in its reply said that the procedure for projecting generation based on Plant Availability Factor (PAF) is not correct. The Petitioner also stated that the generation projected for FY 2019-20 is based on the past trend, present technical condition of the



machines, availability of fuel, maintenance/overhauling schedules of the generating units, etc., and based on the demand-supply profile in the past.

- 4.8 The Petitioner also stated that in order to meet the dynamic demand and supply in its supply area, the Petitioner purchases power from Central Sector Generating Stations (CSGS) and contingency power from power exchanges. Hence, the issue for surplus power sale does not stand on merit.
- 4.9 The Petitioner stated that CTPS Unit #3 is under reserve shut down due to age, high operating cost and poor efficiency. Since clearance from MoP, GoI, is awaited for decommissioning of the Unit, generation is not projected for FY 2019-20.

### ***Views of the Commission***

- 4.10 The Commission has gone through the submissions of the Stakeholder and the Petitioner. The Commission has projected generation for FY 2019-20 from DVC's own generating stations as discussed in detail in Section A7 of this Order.

### **Loss Level**

### ***Public Comments/ Suggestions***

- 4.11 The Stakeholder submitted that the Clause 5.30 of the Distribution Tariff Regulations, 2015, classifies the distribution loss as a controllable parameter. The retail tariff has to be framed strictly in line with the Tariff Regulations framed by the State Commission. Thus, the tariff for the Petitioner has to be determined based on the reducing loss level trajectory prescribed by the State Commission in its previous orders.
- 4.12 The Stakeholder submitted that the loss levels for earlier years which have already been finalised by the Commission need not be re-visited since all the submissions in this regard had already been factored in by the Commission while conducting the truing up.

### ***Petitioner's Response***

- 4.13 The Petitioner in its reply said that the present Petition is prepared on the Distribution Tariff Regulations, 2015, which clearly states as below:

*"5.23 The Licensee shall file the distribution loss trajectory for the entire Control Period in the Business Plan commensurate with the capital investment plan for each year of the control period for approval of the Commission after verification and evaluation of the same."*



*The Licensee shall be allowed to operate at below 5% audited distribution loss without any incentive/ penalty mechanism.”*

- 4.14 The Petitioner stated that it has been able to reduce the T&D losses from 4.86% in FY 2013-14 to 3.62% in FY 2015-16. The Petitioner also submitted that losses mentioned are inclusive of the Transmission Losses. Hence, the objection raised is without any merit.

#### ***Views of the Commission***

- 4.15 The Commission in Section A5 of this Order has discussed the issue in detail. With regards to re-visiting the earlier approved loss levels, the Commission is of the view that it has already reasoned out the rationale while approving the losses till FY 2015-16 and therefore is not re-visiting the same in this Order.

#### **Own Generation Cost**

#### ***Public Comments/ Suggestions***

- 4.16 The Stakeholder submitted that the latest available AFC that has been approved by CERC should be considered for generating stations/transmission system where tariff has not been determined for FY 2014-19. Similarly, the AFC approved for FY 2018-19 be considered for FY 2019-20.
- 4.17 The Stakeholder also submitted that contribution to P&G and Sinking Fund should be adjusted based on the actual availability.

#### ***Petitioner's Response***

- 4.18 The Petitioner in its reply said that the Commission has considered the annual escalation of 2.5% on AFC for FY 2019-20 and FY 2020-21 in its MYT Order dated May 18, 2018.
- 4.19 The Petitioner also submitted that as per the Hon'ble Supreme Court judgment dated July 23, 2018, in Civil Appeal Nos. 971-973 of 2008, 4289 of 2008 and 4504-4508 of 2008 upholding the Judgment passed by Hon'ble APTEL on November 23, 2007, the entire contribution towards P&G and sinking fund should be recovered through Tariff.

#### ***Views of the Commission***

- 4.20 The Commission has considered the submissions made by the Stakeholder and the Petitioner. The Commission is continuing with the methodology used for calculation of Fixed Cost of own generation in its previous Order dated May 18, 2018. The Commission



has approved recovery of P&G and sinking fund based on the availability of the Generating Station/T&D System. The methodology is discussed in detail in the subsequent sections of this Order.

### **Power Purchase Cost from External Sources**

#### ***Public Comments/ Suggestions***

- 4.21 The Stakeholder submitted that the power purchased from external sources should be allowed only to the extent of economic dispatch of energy considering the understated energy availability from own generating stations.
- 4.22 The Stakeholder also submitted that for FY 2018-19 and FY 2019-20, DVC has replaced power purchase from the less expensive CGS stations with those from KBUNL MTPS-II having an average power purchase rate of Rs.5.03 and Rs.5.16 per unit respectively. The Stakeholder also pointed out that contingency power was purchased during FY 2018-19 and is projected for FY 2019-20 at Rs. 4.50- Rs. 5.00 per unit despite excess generation available from its own generating stations.
- 4.23 The Stakeholder further submitted that solar REC is purchased at Rs. 3.50 per unit instead of the ongoing rate of Rs. 1 per unit.

#### ***Petitioner's Response***

- 4.24 The Petitioner submitted that there is a requirement of power purchase from external sources as the Stakeholder's assessment of surplus from own generation does not stand on merit.
- 4.25 The Petitioner submitted that it purchases power from external sources including CSGS to meet the consumer demand and in order to maintain the stringent grid discipline norms to avoid unscheduled interchange. Power from Central Generating Stations (viz. NTPC, NHPC etc.) is purchased as per the allocations made by MoP, GoI. Based on the load assessment done time-to-time, DVC also surrenders the power allocated from CSGS subject to reallocation of the quantum to other licensees by MoP, GoI. In this process DVC has already surrendered 40MW bundled power from different stations of NTPC in the Eastern Region and 33 MW power from FSTPS-III & TSPS-I in the year 2018.
- 4.26 The Petitioner submitted that the tariff of CSGS power are determined by the Central Commission after prudence check. Accordingly, rate of power purchased from KBUNL



Muzaffarpur Thermal Power Station-phase II has been proposed in line with the tariff as approve by Hon'ble CERC.

- 4.27 The Petitioner as regards, the Stakeholder's comment on contingency power, submitted that due to some unforeseen circumstances it becomes essential to purchase power mainly from power exchanges or any other available sources in order to avoid load shedding / load restriction etc. and to maintain balance between demand and supply. Accordingly, a provision of contingency power purchase has been made in the ARR. Average rate of such power has been arrived at based on the prevailing trend in the market during different periods in a year.
- 4.28 As regards the issue of REC rates raised by the Stakeholder, the Petitioner submitted that it has proposed the rate of solar REC as per the rate approved by the Commission in the Tariff Order of DVC dated May 18, 2018.

#### ***Views of the Commission***

- 4.29 The Commission has considered the submissions made by the Stakeholder and the Petitioner. The Commission has discussed this issue in detail in the subsequent sections of this Order.

#### **Non-Tariff Income**

##### ***Public Comments/ Suggestions***

- 4.30 The Stakeholder submitted that the Petitioner has not claimed the Non-Tariff Income (NTI) in accordance with the provisions of the Tariff Regulations and prayed for allowing Non Tariff Income strictly in accordance with the Tariff Regulations and based on the Audited Accounts.
- 4.31 The Stakeholder submitted that NTI is understated by Rs. 412 Crore in FY 2016-17.

##### ***Petitioner's Response***

- 4.32 The Petitioner submitted that the Commission has already settled in different tariff orders of DVC that only the delay payment surcharge accounts for Non-Tariff Income (NTI) so far as the distribution activity of DVC is concerned. The Commission has consistently decided that so far as the distribution activity of DVC is concerned it is only the Delay Payment Surcharge which qualifies as NTI as per the prevailing rules and regulations in case of DVC.



- 4.33 The Petitioner also submitted that the Stakeholder has consistently misconstrued Other Income of DVC as per the Audited books of Accounts as Non-Tariff Income. Actually, the part of Other Income which falls under the definition of Non-Tariff Income should only qualify for this purpose. Most of other income are related to either generation or transmission business of DVC. Only the income in respect of Delay Payment Surcharge billed by DVC as a part of its distribution activity qualifies as Non-Tariff Income for the present Petition. Objections made herein are not only misleading but also against the applicable Regulations of the State Commission as well as the Central Commission.
- 4.34 The Petitioner further submitted that CERC has not included the income from DPS from Generation or Transmission business under the head “Non-Tariff Income”. It is therefore a matter of simple conclusion that the income from DPS related to generation and transmission activity of DVC is required to be excluded from the scope of Non-Tariff Income. As per the above definition DVC will adjust the net income under the specifically defined heads of Non-Tariff Income. For the tariff periods prior to 2019-24, there was no concept of Non-Tariff Income defined in the “CERC Terms and Conditions of Tariff” Regulations.
- 4.35 The Petitioner also submitted the requisite justification for each head in the Audited Accounts stating that each of the head under which revenue were booked are attributed to the Transmission/Generation businesses.

### ***Views of the Commission***

- 4.36 The Commission has considered the submissions made by the Stakeholder and the Petitioner. The Commission, in line with its earlier approach and for reasons brought out in its tariff Order dated April 19, 2017, has at present considered non tariff income to the extent of those booked on account of DPS of the firm consumers of DVC Distribution business. The detailed computation in this regard is dealt with in subsequent sections of this Order.

### **Interest on Working Capital**

#### ***Public Comments/ Suggestions***

- 4.37 The Stakeholder submitted that the Petitioner has adopted an incorrect methodology for determining the working capital requirements and for computation of interest on working capital. The Stakeholder has worked out the correct requirements in line with the



methodology adopted by Commission in earlier orders and requested the Commission to approve the same.

### ***Petitioner's Response***

- 4.38 The Petitioner submitted that requirement of Interest on Working Capital (IoWC) for its distribution activity in general is as per the applicable Clause 6.30 & 6.31 of the Distribution Tariff Regulations, 2015. The Petitioner also submitted since CERC allows IoWC on account of Generation and Transmission activity, DVC is entitled IoWC for distribution activity as per the applicable SERC Regulations.
- 4.39 The Petitioner submitted that IoWC for its Distribution Business is required for the following:
- a) Separate manpower consisting of executives, supervisors and other working personnel at different category to deal various technical and non-technical issues, security requirement, safety requirement etc. related to consumer power supply,
  - b) Arrangement to carryout repair & maintenance work related to consumer power supply,
  - c) Arrangement for Data communication, meter reading, billing & collection related to consumer power supply including necessary infrastructure,
  - d) Information Technology (IT) based monitoring system and data acquisition arrangements, etc.

### ***Views of the Commission***

- 4.40 The Commission has considered the submissions made by the Stakeholder and the Petitioner. The Commission for approving IoWC has considered its earlier approach for reasons brought out in its earlier tariff orders. The detailed computation in this regard is dealt with in subsequent sections of this Order.

### **Revenue from Sale of Power**

#### ***Public Comments/ Suggestions***

- 4.41 The Stakeholder submitted that the JSERC Distribution Tariff Regulations 2015 stipulate collection efficiency target of 100% for all the distribution licensees operating in the State of Jharkhand and based on the Audited Accounts of the Petitioner, the Revenue of Rs. 5017.09 Crore (Billed Revenue) should be considered for FY 2016-17 and the average





ABR of Rs. 4.84/kWh and Rs. 4.37/kWh for FY 2018-19 and FY 2019-20 for arriving at the revenue deficit/surplus for the Petitioner.

- 4.42 The Stakeholder also submitted that the consideration of above revenue assessment for the Petitioner shall negate any revenue gap, whatsoever, proposed by the Petitioner.

#### ***Petitioner's Response***

- 4.43 The Petitioner submitted that due to irregular payment made by some consumers and licensees there remains a gap between billed amount and realized amount. So far as the computation of Revenue Gap / Surplus is concerned, DVC in its submissions before the Commission has requested not to consider the billed amount of JBVNL while ascertaining the total revenue from sale of power for FY 2016-17 since it has not made full payment and not settled the dues till date. Hence DVC has prayed before the Commission to consider the payment realized from JBVNL instead of amount billed to arrive at the Actual Revenue from Sale to finalise the Revenue Gap or Surplus as the case may be.

#### ***Views of the Commission***

- 4.44 The Commission has considered the submissions made by the Stakeholder and the Petitioner. The Commission has adopted the methodology used in the previous Tariff Orders for calculation of Gap/(Surplus) based on the Billed Revenue as the Collection Efficiency approved by the Commission in the Distribution Tariff Regulations, 2015, for the Second Control Period from FY 2016-17 to FY 2020-21 is 100%.

#### **ARR for FY 2017-18**

#### ***Public Comments/ Suggestions***

- 4.45 The Stakeholder submitted that the Petitioner has not submitted any details for FY 2017-18 in complete contravention to the directions of this Commission as also against the timelines of Tariff Regulations. The Stakeholder also submitted that the Petitioner should have submitted the Petition for True-up for FY 2017-18 as the audited accounts for FY 2017-18 is available on its web portal.
- 4.46 The Stakeholder further submitted that the act of non-filing of Petition for FY 2017-18 is misleading the Commission as a surplus of ~ Rs. 966 Crore is suppressed by the Petitioner to claim a significant hike in Tariffs. The Stakeholder also estimated a total surplus amount of ~Rs. 1562.38 Crore till FY 2019-20 inclusive of carrying cost.





### ***Petitioner's Response***

- 4.47 The Petitioner submitted that it has already submitted the relevant details in respect of generation, power purchase and power sale to consumers in firm mode during FY 2017-18 as directed by the Commission.
- 4.48 The Petitioner further submitted that due to some procedural delay and time required to collect data the auditing of Energy Charge Rates in respect of different thermal power stations got delayed. Moreover, after issuance of the order in Civil Appeal No. 4881 of 2010 by the Hon'ble Supreme Court it took some time to assess its impact on tariff. However, the relevant issues have been settled to the extent possible and DVC will shortly submit its True-up Petition before the Commission for the period FY 2017-18.
- 4.49 The Petitioner objected the computation of surplus by the Stakeholder stating that it is not at all based on accepted methodology in terms of subsisting rules and regulations. Similarly, the revenue gap/surplus to the tune of Rs. 967.25 Crore is completely hypothetical and cannot be accepted. The Petitioner further stated that the Stakeholder's assessment of Revenue Surplus for FY 2015-16 to FY 2019-20 to the tune of Rs. 1562.38 Crore is also hypothetical and baseless.

### ***Views of the Commission***

- 4.50 The Commission has considered the submissions made by the Stakeholder and the Petitioner. The Commission is of the view that since considerable time has lapsed post FY 2017-18, DVC is directed to file its True-Up Petition for FY 2017-18 within one month from the date of issuance of this Order.

### **High Demand Charges**

#### ***Public Comments/ Suggestions***

- 4.51 The Stakeholder submitted that the Petitioner has proposed a steep hike of more than 100% in the Demand Charges along with increase in the Energy Charges thereby, intending to recover a substantial portion through Fixed Charges. The Stakeholder pointed out that such high levy of Fixed Charges in the garb of 'Demand Charges' belies the concept of recovery of ARR through a balanced framework of Fixed and Energy Charges. A higher fixed charge burden, to recover the complete ARR as proposed by the Licensee, on the consumers would rule out the possibility and opportunity of implementation of any energy



efficiency/conservation measures since the reduction in energy consumption will not result in any financial gain to the consumers.

- 4.52 The Stakeholder further submitted that there will not be any need to increase the tariff for the forthcoming years due to the Revenue Surplus available. Hence, the proposal of the Licensee has no merit and ought to be rejected.

### ***Petitioner's Response***

- 4.53 The Petitioner submitted that since it sources power for the major part of its retail sale to consumers from its own generation (around 90%) and supplies upto the consumer premises through its own T&D network. Rest of the energy (around 10%) is purchased from CSGS, MPL, PTC etc. In case of contingency, power is purchased from energy exchanges. Tariff in respect of own generating stations and T&D system is determined by CERC. Fixed cost in the retail tariff is claimed in respect of T&D system and generating stations to the extent of power being sourced for distribution purpose. Accordingly, DVC is required to utilize capacity from its running generators on day to day basis. Load factor of all the consumers are not same. As a result, maximum demand varies widely rendering proper appreciation of Fixed Cost in jeopardy if a part of it is merged with energy charge. Therefore, entire fixed cost of its generating stations (proportionate to utilization) and T&D system has been proposed to be recovered through demand charge without merging any part of it in the energy charge. As a result, though the proposed rate of demand charge appears to be high the energy charge rate has been proposed at a proportionately low rate.
- 4.54 The Petitioner also submitted that if Demand Charge is set at a lower level, it acts as a deterrent to improvement in load factor thereby causing reduced recovery. Incorrect load assessment and improper load management by the consumer's results into unnecessary blocking of the capacity of the licensee at different sub-stations by means of hike in Contract Demand. This is evident from low load factor. Accordingly, only 75% of Demand Charge can be recovered and recovery of energy charge is low. This results in inefficient use of electrical energy and causes wastage. Such practice also restricts the Licensee from extending electricity supply to other deserving new consumers.
- 4.55 Demand charge as proposed by DVC will restrict the consumers from contracting demand in excess of their actual requirement. It will also help to improve the overall load factor of DVC in Jharkhand and result into efficient use of electricity and development by way of supply to more industries.



### ***Views of the Commission***

4.56 The Commission has considered the submissions made by the Stakeholder and the Petitioner. The Commission has observed that the weighted average load factor (considering the units sold) for all HT consumers for FY 2018-19 (till December 31, 2018) is ~62.85%. In addition, the Petitioner also recovers at least 75% of the monthly Fixed Charges of HT Industrial Consumers. Hence, the Commission does not find any rationale for the suggested increase in Fixed Charges at this stage. Further, the Commission is of the view that the recovery from Fixed Charges (including Demand Charges) needs to be rationalised. In order to meet the accumulated gap/(surplus) the Commission has approved the Fixed Charges as detailed in the subsequent sections of this Order.

### **Load Factor Rebate**

#### ***Public Comments/ Suggestions***

4.57 The Stakeholder submitted that the rebates for the power supplied by DVC ought to be same for the State of Jharkhand and West Bengal and the same was also averred by the Commission in the last tariff proceedings. The Stakeholder requested the Commission to approve rebate/surcharge as proposed by the Petitioner in line with the latest tariff order issued by the Hon'ble WBERC.

#### ***Petitioner's Response***

4.58 The Petitioner submitted that the Stakeholder has considered the proposal of DVC towards uniform tariff in its Jharkhand and West Bengal part and has no comment in this regard.

### ***Views of the Commission***

4.59 The Commission has considered the submissions made by the Stakeholder and the Petitioner. The Commission has discussed this issue in detail in the Section A13 of this Order.

### **ToD Tariff**

#### ***Public Comments/ Suggestions***

4.60 The Stakeholder suggested that the Commission may approve the ToD Tariff Structure as proposed by the Petitioner.



### ***Petitioner's Response***

- 4.61 The Petitioner submitted that the Stakeholder has also requested the Commission to kindly approve tariff based on ToD structure based on 3 slabs (Peak period -17.00 hrs to 23.00 hrs, Off-Peak period – 23.00 hrs to 06.00 hrs, Normal period – 06.00 hrs to 17.00 hrs) as proposed by DVC to maintain tariff uniformity in the states of West Bengal and Jharkhand.

### ***Views of the Commission***

- 4.62 The Commission has considered the submissions made by the Stakeholder and the Petitioner. The Commission has not approved ToD tariff from FY 2019-20 considering the proposal of the Petitioner to allow ToD based tariff as an option. The detailed reason for rejecting ToD tariff is discussed in detail in Section A9 of this Order.

### **Power Factor Rebate**

#### ***Public Comments/ Suggestions***

- 4.63 The Stakeholder suggested that the Commission may approve the Power Factor Rebate as proposed by the Petitioner.

### ***Petitioner's Response***

- 4.64 The Petitioner submitted that the Stakeholder has agreed to the proposal of DVC towards uniform tariff in its Jharkhand and West Bengal part of DVC.

### ***Views of the Commission***

- 4.65 The Commission has considered the submissions made by the Stakeholder and the Petitioner. The Commission has proposed implementation of kVAh based metering, which has an in-built incentive/penalty mechanism. Hence, as such, no separate penalties/rebates have been provided for Power Factor

### **Treatment of Past Years' Revenue Surplus**

#### ***Public Comments/ Suggestions***

- 4.66 The Stakeholder submitted that the proposal for considering the one-time settlement of all outstanding dues with JBVNL upto September 2015, under UDAY Scheme as revenue from sale of power for previous years is flawed and is made with an intent to burden the paying consumers with the defaulting cost of JBVNL



- 4.67 The Stakeholder strongly objected the proposal of DVC seeking retrospective revision of tariff due to its own inefficiency and to evade the carrying cost burden.

***Petitioner's Response***

- 4.68 The Petitioner submitted that it never proposed that the waiver given to JBVNL in one time settlement under UDAY scheme will be passed on to other consumers. The Petitioner on the other hand has prayed before the Commission that as DVC has already waived off a substantial amount of revenue in One Time Settlement done under the UDAY scheme (for the period up to September 2015), there remains no further claim of JBVNL on the revenue gap or surplus for the period FY 2006-07 to FY 2014-15 up to September 2015.
- 4.69 The Petitioner further submitted that in the Petition, it had only proposed before the Commission that the ARR corresponding to the sale to JBVNL and its billed amount need not require any further adjustment as both the parties (DVC & JBVNL) has already signed the full and final one time settlement under UDAY scheme. Though the settled amount is less than the billed amount DVC is not supposed to refund the balance in the form of adjustment of revenue surplus since the settlement is full and final as agreed to by DVC as well as JBVNL. Anything otherwise will lead to double deduction and cause immense financial injury to DVC.
- 4.70 The Petitioner also submitted that from January 2019 onwards power supply mode to JBVNL has been changed from consumer mode to generator specific schedule mode as per new agreement. In this context even if the Commission allows the entire revenue surplus (disputed by DVC in Appeal No. 163 of 2017 and 281 of 2018 pending before Hon'ble APTEL) to be adjusted by DVC through prospective tariff then entire benefit will be passed to the consumers other than JBVNL in an unjustified manner since JBVNL at present purchases most of its power from DVC under schedule mode and applicable tariff is that determined by the Central Commission and not the retail tariff determined by this Hon'ble Commission. As a consequence, undue benefit at the cost of DVC's exchequer (i.e. public exchequer) will get passed on to the consumers who do not at all deserve it.
- 4.71 As regards the comment made by the Stakeholder on retrospective tariff revision, the Petitioner submitted that the Stakeholder has admitted that they never acknowledged the bills raised by DVC in full during FY 2009-10 and other years and there were such orders of judicial forums. However, the Commission has determined the revenue surplus of DVC from FY 2006-07 to FY 2014-15 on the basis of Revenue from Sale of Power as per Audited Annual Accounts of DVC in accordance with the accounting principle of accrual



basis. This computation of Revenue Surplus based on billed amount will be erroneous and again will penalize DVC twice. Thus, if the Commission allows the entire revenue surplus determined based on billed amount (which could not be realized due to Court Orders) to be adjusted while determining prospective tariff will lead to double deduction from DVC's exchequer i.e., public money.

- 4.72 The Petitioner further submitted that the prayer for retrospective Tariff revision would enable the refund of entire extra amount arises due to tariff revision with applicable carrying cost (at simple interest rate) for consumers viz. Indian Railways, BCCL, CCL etc. and enable DVC to recover dues of such consumers who had disputed the bills raised by DVC and were making short payment/non- payment.

#### ***Views of the Commission***

- 4.73 The Commission has considered the submissions made by the Stakeholder and the Petitioner. As the appeal on the MYT Order dated May 18, 2018 is still sub-judice, the Commission has not considered treatment of the past years' gaps in this Order while approving the tariff for FY 2019-20.

#### **Recovery of T&D Charges from JBVNL**

##### ***Public Comments/ Suggestions***

- 4.74 The Stakeholder stated that JBVNL has around 940 MVA of total contract demand with DVC, out of which, in large number of off-take points (36 out of 40), JBVNL has switched its mode of receiving power from consumer mode to radial mode. The Stakeholder asked if the PPA between JBVNL and DVC has been approved by the Commission.
- 4.75 The Stakeholder further asked whether JBVNL is paying open access charges for availing such power from DVC's generation plant and how does DVC plan to recover the fixed cost of its T&D assets (corresponding to capex done in the past to meet JBVNL's demand), if not through Open access charges. The Stakeholder was of the opinion that the entire T&D Cost should not be recovered from the firm consumers of DVC.

#### ***Petitioner's Response***

- 4.76 The Petitioner did not submit any response.



### ***Views of the Commission***

- 4.77 The Commission has considered the submissions made by the Stakeholder and the Petitioner. The Commission is of the view that the issue pertains to the PPA executed by DVC and JBVNL, which as of today has not been approved by the Commission as JBVNL is yet to file a petition in this regard.

### **Penalty During Restriction Period**

#### ***Public Comments/ Suggestions***

- 4.78 The Stakeholder highlighted that DVC has proposed penalty equivalent to two times the Demand Charge during the restriction period in case of drawing the power more than restricted quantum. Such restriction and penalty should not be allowed. However, penalty may be imposed on DVC for such restriction.

#### ***Petitioner's Response***

- 4.79 The Petitioner submitted that during maintenance of power transformer or maintenance work, it is required to shutdown main bus of sub-station due to which it becomes difficult to cater the entire demand. Further, in case of sudden shortfall in own generation, DVC imposes restriction on drawal to maintain the grid discipline. DVC also highlighted that as per CERC (DSM and Related Matters) (Fourth Amendment) Regulations, 2018, heavy penalty is imposed on it for deviation from the schedule. DVC also quoted the Clause 13.3 of JSERC Supply Code Regulations, 2015, which has the provision to restrict the use of electricity in terms of his maximum demand and/or stagger energy consumption for the period as may be specified in any order to maintain orderly grid operation.

### ***Views of the Commission***

- 4.80 The Commission has considered the submissions made by the Stakeholder and the Petitioner. The Commission does not find the necessity for the abovementioned clause at this stage. The Petitioner should explore alternative means to supply power while maintaining Grid Discipline. Hence, the Commission has not approved any additional clause in this regard at this stage.





## **Prompt Payment Period**

### ***Public Comments/ Suggestions***

- 4.81 The Stakeholder suggested that the period of prompt payment should be changed from 2 days to 2 working days as it is unable to claim the prompt payment rebate on bills delivered on Fridays.

### ***Petitioner's Response***

- 4.82 The Petitioner did not submit any response.

### ***Views of the Commission***

- 4.83 The Commission has considered the submission made by the Stakeholder. The Commission has approved rebate on prompt online payment as detailed in Section A13 of this Order.



## A 5: TRUE-UP FOR FY 2016-17

- 5.1 The Commission through its previous Orders has already carried out trueing up till FY 2015-16.
- 5.2 The Petitioner submitted that the Petition for True-up for FY 2016-17 has been prepared based on the Audited Accounts taking into consideration the provisions of the Tariff Regulations, 2015 and the methodology adopted by the Commission in its earlier Orders.
- 5.3 The Commission based on the provisions of the Tariff Regulations, 2015 has now carried out True-up for the FY 2016-17 taking into following;
- Audited (Statutory) accounts for the FY 2016-17.
  - JSERC Distribution Tariff Regulations, 2015.
  - Methodology adopted by the Commission in its earlier Orders.
- 5.4 The component-wise description of the Petitioner's submission and the Commission's analysis on the same is provided in the foregoing paragraphs.

### Consumers, Connected Load and Energy Sales

#### *Petitioner's Submission*

- 5.5 The Petitioner submitted the actual category-wise number of consumers/connection points, connected load and energy sales in the Damodar Valley area falling within the State of Jharkhand for FY 2016-17.

#### *Commission's Analysis*

- 5.6 The Commission after scrutinizing the latest information submitted by the Petitioner, the Audited Accounts made available for the aforementioned year and prudence check, approves the actual number of consumers, connected load and energy sales as submitted by the Petitioner for FY 2016-17 which is as summarised below:

**Table 9: Consumers, Connected Load and Sales in Jharkhand as submitted by the Petitioner and Approved by the Commission for FY 2016-17**

Consumer Category	FY 2016-17					
	Petition			Approved		
	Supply Points	Connected Load (MVA)	Consumption (MU)	Supply Points	Connected Load (MVA)	Consumption (MU)
LT (Domestic)	4	-	44.01	4	-	44.01
LT (Commercial)						



Consumer Category	FY 2016-17					
	Petition			Approved		
	Supply Points	Connected Load (MVA)	Consumption (MU)	Supply Points	Connected Load (MVA)	Consumption (MU)
33 kV	132	1,370.35	7,426.69	132	1,370.35	7,426.69
132 kV	9	316.50	1,339.54	9	316.50	1,339.54
132 kV (Traction)	13	249.00	704.31	13	249.00	704.31
220 kV	2	245.00	846.60	2	245.00	846.60
<b>Total</b>	<b>160</b>	<b>2180.85</b>	<b>10361.15</b>	<b>160</b>	<b>2180.85</b>	<b>10361.15</b>

## Transmission & Distribution Losses and Energy Requirement

### Petitioner's Submission

- 5.7 The Petitioner submitted that as it is supplying power in bulk to the WBSEDCL and JSEB and since majority of HT consumers falling in the Damodar valley area are at 33 kV and above voltage, it incurs very low Transmission & Distribution (T&D) losses. The Petitioner submitted a T&D loss of 3.23% for FY 2016-17 as against the approved loss of 3.52%.
- 5.8 Further, in addition to the energy sold in the Jharkhand area, the Petitioner also submitted the actual sales in the West Bengal area and the energy wheeled from its inter-state transmission system for the purposes of computation of the energy requirement for the entire Damodar Valley area.
- 5.9 Based on the total energy sales in the Damodar Valley area, the T&D losses and the energy wheeled from the system, the Petitioner submitted the actual energy requirement for FY 2016-17.
- 5.10 The Petitioner also submitted the actual T&D losses for FY 2013-14 to FY 2015-16 vis-à-vis the approved losses and revised the energy requirement as per Clause 5.23 of the Distribution Tariff Regulations, 2015, to be considered by the Commission for FY 2013-14 to FY 2015-16 as reproduced below:

*“5.23 The Licensee shall file the distribution loss trajectory for the entire Control Period in the Business Plan commensurate with the capital investment plan for each year of the control period for approval of the Commission after verification and evaluation of the same.*

*The Licensee shall be allowed to operate at below 5% audited distribution loss without any incentive/ penalty mechanism.”*

**Table 10: Energy Balance submitted by the Petitioner for FY 2013-14 to FY 2015-16 (MU)**

<b>Energy Requirement</b>	<b>FY 2013-14</b>	<b>FY 2014-15</b>	<b>FY 2015-16</b>
Energy Sales within the State of Jharkhand	9610.55	9815.15	10237.62
Energy Sales within the State of West Bengal	7212.76	6983.15	7248.80
Total Energy Sales in DVC Area	16823.31	16798.30	17486.42
Energy Wheeled	228.36	279.03	206.28
Overall Utilization	17051.67	17077.33	17692.70
T&D loss (MU)	871.28	634.11	664.39
T&D loss (%)	4.86%	3.58%	3.62%
<b>Total Energy Requirement for DVC</b>	<b>17922.95</b>	<b>17711.44</b>	<b>18357.09</b>
<b>Energy Availability</b>	<b>FY 2013-14</b>	<b>FY 2014-15</b>	<b>FY 2015-16</b>
<i><b>Own Generation-Firm sources</b></i>			
Thermal	25049.32	23026.75	25326.11
Hydel	228.63	274.28	185.60
Sub Total	25277.95	23301.03	25511.71
<i><b>Own Generation-Infirm sources</b></i>	384.52	62.13	354.69
<i><b>Total Own Generation</b></i>	25662.47	23363.16	25866.40
Net Power Purchase (Excluding UI)	2181.00	2532.00	2709.97
Net Unscheduled Interchange (UI)	113.00	172.54	-155.26
Net Power Purchase (Including UI)	2294.00	2704.54	2554.71
Energy received for Wheeling	226.48	296.33	260.49
Less: Energy sold to other licensees	10260.00	8652.59	10324.51
<b>Total Energy Available for DVC</b>	<b>17922.95</b>	<b>17711.44</b>	<b>18357.09</b>

5.11 The Petitioner also requested the Commission to approve the additional cost power purchase cost already incurred by the Petitioner during the period from FY 2013-14 to FY 2015-16.

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

5.12 With regard to T&D Losses approved for FY 2013-14 to FY 2015-16, the Commission, in the MYT Order for the Control Period from FY 2013-14 to FY 2015-16 dated September 4, 2014, had set a T&D loss target of 3.00% for the Period from FY 2012-13 to FY 2015-16. The Commission in its Order dated May 18, 2018 observed that the Petitioner has failed to achieve the loss target for the said years. The Commission in the said Order did not allow the inefficiency to be passed on to the consumers and therefore disallowed excess T&D Losses over and above 3.00%. The Petitioner has again raised the issue in the present Petition which is devoid of any merit as the Commission has already reasoned out its view in the previous orders.

5.13 With regard to T&D Losses for Control Period from FY 2016-17 to FY 2020-21, Regulation 5.23 of the Distribution Tariff Regulations, 2015, provides for approval of

actual loss below 5% without any profit/loss to the Licensee. The Commission has therefore approved actual T&D Losses as submitted by the Petitioner.

- 5.14 Based on the approved energy sales for Jharkhand area, approved T&D losses, the projected energy sales within West Bengal area and energy wheeled through DVC system, the energy requirement for the FY 2016-17 has been summarized in the following table.

**Table 11: Energy Requirement as submitted by the Petitioner and as approved by the Commission for FY 2016-17 (MU)**

Particulars	FY 2016-17	
	Petition	Approved
Energy sales within the state of Jharkhand	10361.15	10361.15
Energy sales within the state of West Bengal	7760.77	7760.77
Total energy sales in DVC Area	18121.92	18121.92
Energy wheeled	272.42	272.42
Overall Utilization	18394.34	18394.34
T&D loss (MU)	613.41	613.41
T&D loss (%)	3.23%	3.23%
<b>Total Energy Requirement for DVC</b>	<b>19007.75</b>	<b>19007.75</b>

### Energy Availability from Own Generating Stations for Distribution Function

#### *Petitioner's Submission*

- 5.15 The Petitioner submitted that it generates power from its own stations to meet part of the power requirements for its consumers in the Jharkhand and West Bengal. The generating stations include both thermal and hydel stations.
- 5.16 The Petitioner also submitted the actual generation available from own generating stations during the period FY 2016-17.

#### *Commission's Analysis*

- 5.17 The Commission has considered the submission made by the Petitioner on energy availability from its own generating stations. Based on the availability certificate and the power purchase submitted, the Commission approves the energy availability from own generation. The energy availability from own generation as per the submission of the Petitioner and approved by the Commission is summarised below:



**Table 12: Energy Availability from Own Generating Stations as submitted by the Petitioner and as approved by the Commission for FY 2016-17 (MU)**

Particulars	FY 2016-17	
	Petition	Approved
BTPS 'B'	1272.53	1272.53
CTPS U#1 to 3	1705.26	1705.26
DTPS U# 4	518.24	518.24
MTPS U#1 to 3	2078.56	2078.56
MTPS U#4	306.80	306.80
HYDEL	267.81	267.81
<b>Sub Total</b>	<b>6149.19</b>	<b>6149.19</b>
MTPS U#5 & 6	1594.06	1594.06
MTPS U#7&8	1925.04	1925.04
CTPS U# 7&8	379.59	379.59
DSTPS U # 1 & 2	4147.16	4147.16
KTPS U# 1 & 2	1293.83	1293.83
RTPS U # 1 & 2	951.98	951.98
BTPS 'A'	314.33	314.33
<b>Total Own Generation</b>	<b>16755.19</b>	<b>16755.19</b>

### **Power Purchase from Central Sector Generating Stations (CSGSs) and Other Sources**

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

- 5.18 The Petitioner submitted that it is also purchasing power from CSGS and other sources viz. NTPC, NHPC, PTC & other sources (excluding net power purchased under Unscheduled Interchange mechanism) to meet the energy requirements in the DVC area.
- 5.19 Further, during the period FY 2016-17, the Petitioner also purchased and sold power through the Unscheduled Interchange (UI) mechanism.

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

- 5.20 The Commission has determined the balance energy requirement to be met through purchase of power from CSGS and other sources after meeting the energy requirement from own generation.
- 5.21 The following table summarizes the station-wise net power purchase as submitted by the Petitioner and as approved by the Commission for FY 2016-17.

**Table 13: Station-wise Net Power Purchase as submitted by the Petitioner and as approved by the Commission for FY 2016-17 (MU)**

Particulars	FY 2016-17	
	Petition	Approved
<b>NHPC</b>		
Rangit	32.64	32.64
Teesta- V	231.41	231.41
<b>NTPC</b>		
FSTPS I & II	67.02	67.02
FSTPS III	249.08	249.08
KHTPS I	30.46	30.46
KHTPS II	61.80	61.80
TSTPS I	49.44	49.44
<b>PTC</b>		
Chukha	213.11	213.11
Kurichu	38.21	38.21
Tala	183.24	183.24
<b>MPL</b>	915.45	915.45
<b>Solar</b>	62.57	62.57
<b>Net UI</b>	-131.89	-131.89
<b>Total</b>	<b>2134.42</b>	<b>2134.42</b>

**Energy Balance**

5.22 Based on the energy requirement and energy availability from own generation, T&D losses and power purchase from CSGS and other sources, the energy balance for FY 2016-17 as submitted by the Petitioner and as per Commission's analysis is summarized in the following table:

**Table 14: Energy Balance as submitted by the Petitioner and as approved by the Commission for FY 2016-17 (MU)**

Particulars	FY 2016-17	
	Petition	Approved
<b>A. Energy Requirement</b>		
Energy sales within the state of Jharkhand	10361.15	10361.15
Energy sales within the state of West Bengal	7760.77	7760.77
Total energy sales in DVC Area	18121.92	18121.92
Energy wheeled	272.42	272.42
Overall Utilization	18394.34	18394.34
T&D loss (MU)	613.41	613.41
T&D loss (%)	3.23%	3.23%
<b>Total Energy Requirement for DVC</b>	<b>19007.75</b>	<b>19007.75</b>
<b>B. Energy Availability</b>		
<i>Own Generation-Firm sources</i>		
Thermal	30733.05	30733.05
Hydel	267.81	267.81





Particulars	FY 2016-17	
	Petition	Approved
<b>Sub Total</b>	<b>31000.86</b>	<b>31000.86</b>
Own Generation-Infirm sources	122.77	122.77
Net Power Purchase (including UI)	1958.47	1958.47
Energy received for Wheeling	294.09	294.09
Less: Energy sold to other licensees & exchange	14368.44	14368.44
<b>Total Energy Available for DVC</b>	<b>19007.75</b>	<b>19007.75</b>

### Cost of Own Generation

#### Petitioner's Submission

- 5.23 DVC constituted under the DVC Act, 1948, is a PSU as envisaged under Section 79 (1) (a) of the Electricity Act, 2003, and the tariff for generation of electricity is to be decided by the CERC. Accordingly, cost of generation for DVC as a whole from own stations has been taken as approved by the CERC in its relevant Orders.
- 5.24 Further, the effect of variation in Fuel Price Adjustment (FPA) in energy charges has also been built in the own cost of generation in accordance with the formula prescribed by the CERC.

#### Commission's Analysis

- 5.25 The Commission has taken note that the CERC has issued final Tariff Orders for the following stations:

**Table 15: CERC Orders considered for approval of Fixed Charges of Own Generating Stations**

Station	Date of CERC Order
BTPS 'B'	19.05.2017
CTPS U# 1,2,3	23.09.2016
DTPS U # 3,4	20.07.2017
MTPS U#1 to 3	31.08.2016
MTPS U#4	20.09.2016
MHS	20.09.2016
PHS	20.09.2016
THS	23.09.2016
T&D System	29.09.2017 (True-up order of CERC for 2009-14)
MTPS U#5 & 6	16.03.2017
MTPS U# 7 & 8	03.10.2016
CTPS U# 7&8	17.02.2017
DSTPS U # 1 & 2	17.03.2017
KTPS U # 1 & 2	28.02.2017
RTPS U # 1 & 2	28.09.2017
BTPS 'A' U # 1	30.05.2018

5.26 The Commission after scrutinizing the information made available by the Petitioner and after perusal of the above CERC Orders has adopted the fixed charges for own power generation from thermal & hydel stations for DVC for FY 2016-17 as approved by CERC in its relevant Tariff Orders. The Commission has verified the ECR Computation and approves the Energy Charge Rate as submitted by the Petitioner.

5.27 The Commission shall take into consideration any changes in the cost of own generation/T&D business and revise the ARR to the extent of changes in the input cost, due to issuance of Final/ True-up Orders of Petitioner's generating stations and the T&D business by the CERC for FY 2016-17.

5.28 The AFC of own power generating stations as adopted by the Commission from the aforementioned CERC Orders for the period FY 2016-17 has been summarized in the following table. The Commission has adopted the methodology used in its previous Order dated May 18, 2019 for calculation of Fixed Charges for own generating stations.

**Table 16: Fixed Charges approved by the Commission for FY 2016-17 (Rs. Crore)**

Station	Normative Availability (NAPAF)	Actual Yearly Plant Availability Factor (PAFY)	Annual Fixed Charge (AFC) (Rs. Crore)	Recoverable fixed charges as per CERC formula (Rs. Crore)	Share of firm consumer	Recoverable Fixed charge from Firm Consumers (Rs. Crore)
	A	B	C	$D = \min(C, C * B/A)$	E	$F = D * E$
BTPS 'B'	75%	78.09%	273.38	273.38	100.00%	273.38
CTPS U # 1,2,3	75%	78.08%	208.36	208.36	100.00%	208.36
DTPS U # 4	74%	52.86%	110.58	79.00	100.00%	79.00
MTPS U#1 to 3	83%	90.08%	333.54	333.54	100.00%	333.54
MTPS U#4	85%	96.46%	162.89	162.89	100.00%	162.89
MHS	80%	80.00%	31.74	15.87	100.00%	15.87*
PHS	80%	80.00%	26.84	13.42	100.00%	13.42*
THS	80%	80.00%	8.70	4.35	100.00%	4.35*
T & D System	98.50%	99.15%	524.79	528.25	100.00%	528.25
<b>SUB-TOTAL</b>			<b>1647.20</b>	<b>1619.06</b>		<b>1619.06</b>
MTPS U#5 & 6	85%	94.16%	463.68	463.68	47.86%	221.90
MTPS U# 7 & 8	83%	86.46%	1062.36	1062.36	31.10%	330.43
CTPS U # 7 & 8	85%	91.87%	544.68	544.68	11.16%	60.79
DSTPS U # 1 & 2	83%	90.60%	1161.05	1161.05	65.54%	761.00
KTPS U # 1 & 2	83%	49.91%	1176.69	707.51	36.14%	255.71
RTPS U # 1 & 2	83%	21.87%	1384.44	364.80	51.97%	189.58
BTPS 'A'	83%	64.32%	71.93	55.74	100.00%	55.74
<b>SUB-TOTAL</b>			<b>5864.82</b>	<b>4359.81</b>		<b>1875.15</b>
<b>GRAND TOTAL</b>			<b>7512.01</b>	<b>5978.88</b>		<b>3494.21</b>

\*The Petitioner has proposed to recover the total AFC charges through capacity charges, while the Commission has approved the recovery as per the CERC Tariff Regulations, 2014.



5.29 The Commission has approved the Energy Charge Rate for own generating stations for FY 2016-17 as submitted by the Petitioner after performing due-diligence of the relevant documentary evidence submitted. The Energy Charges approved by the Commission for FY 2016-17 for own generating stations is summarised below:

**Table 17: Energy Charges as submitted by the Petitioner and as approved by the Commission for FY 2016-17 (Rs. Crore)**

Particulars	FY 2016-17	
	Petition	Approved
BTPS	307.78	307.78
CTPS	434.18	434.18
DTPS	134.91	134.91
MTPS U# 1 to 3	486.38	486.38
MTPS U# 4	71.61	71.61
MTPS U# 5 & 6	353.70	353.70
MTPS U# 7 & 8	411.52	411.52
CTPS U # 7 & 8	70.97	70.97
DSTPS U # 1 & 2	929.84	929.84
KTPS U # 1 & 2	273.00	273.00
RTPS U # 1 & 2	201.77	201.77
BTPS 'A'	62.40	62.40
MHS*	0.00	14.08
PHS*	0.00	7.49
THS*	0.00	4.85
<b>Total Energy Charges</b>	<b>3738.07</b>	<b>3764.49</b>

\*The Petitioner has proposed to recover the total AFC charges through capacity charges, while the Commission has approved the recovery as per the CERC Tariff Regulations, 2014.

## **Power Purchase Cost from Central Sector Generating Stations (CSGSs) and Other Sources**

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

5.30 The Petitioner submitted the actual power purchase cost from CSGS and other sources (including RE sources) during FY 2016-17 has been based on the actual power purchase bills received from the generators.

5.31 The Petitioner also claimed Rs 127.97 Crore and Rs 0.16 Crore towards transmission charges and towards ERPC fund respectively.

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

5.32 Based on the total energy requirement and quantum of energy to be purchased from CSGS and other sources (other than own sources), the Commission has allowed the purchase of energy from own generating stations as proposed by the Petitioner.

5.33 Besides, the Petitioner has segregated the cost of RPO into West Bengal and Jharkhand based on the RPO requirements stipulated by the respective State Regulatory Commissions for FY 2016-17. Accordingly, the Commission also finds it prudent to segregate the cost of RPO for FY 2016-17 as per the RPO requirements stipulated by the respective Commissions and actual RPO compliance by the Petitioner.

5.34 Based on the RPO Compliance submitted by the Petitioner, the Commission has approved the expenses below for purchase of Renewable Energy Certifications (RECs) towards RPO Compliance for Sales in Jharkhand.

**Table 18: Expenses towards RECs for Jharkhand as submitted by the Petitioner and as approved by the Commission for FY 2016-17 (Rs. Crore)**

Particulars	FY 2016-17	
	Petition	Approved
Solar (REC)	6.92	6.92
Non-Solar (REC)	15.93	15.93

5.35 Thus, the net Power Purchase Cost from Central Sector Generating Stations (CSGSs) and Other Sources (including RE sources and excluding purchase from own generating stations) approved is summarised below:

**Table 19: Source-wise Power Purchase Cost as submitted by Petitioner and as approved by the Commission for FY 2016-17 (Rs. Crore)**

Particulars	FY 2016-17							
	Petition				Approved			
	Quantum (MU)	Fixed Cost	Energy Cost	Total Cost	Quantum (MU)	Fixed Cost	Energy Cost	Total Cost
<b>NHPC</b>								
Rangit	32.64	6.43	6.20	12.64	32.64	6.43	6.20	12.64
Teesta- V	231.41	28.51	24.99	53.50	231.41	28.51	24.99	53.50
<b>NTPC</b>								
FSTPS I & II	67.02	6.30	17.80	24.09	67.02	6.30	17.80	24.09
FSTPS III	249.08	35.85	58.34	94.20	249.08	35.85	58.34	94.20
KHTPS I	30.46	3.73	6.93	10.67	30.46	3.73	6.93	10.67
KHTPS II	61.80	6.78	13.27	20.05	61.80	6.78	13.27	20.05
TSTPS I	49.44	6.69	9.83	16.52	49.44	6.69	9.83	16.52
<b>PTC</b>								
Chukha	213.11	0.00	44.54	44.54	213.11	0.00	44.54	44.54
Kurichu	38.21	0.00	7.76	7.76	38.21	0.00	7.76	7.76
Tala	183.24	0.00	37.12	37.12	183.24	0.00	37.12	37.12
<b>MPL</b>	915.45	204.83	178.79	383.63	915.45	204.83	178.79	383.63
<b>Solar</b>	62.57	0.00	66.65	66.65	62.57	0.00	66.65	66.65
<b>Contingency</b>	-131.89	0.00	0.00	0.00	-131.89	0.00	0.00	0.00
<b>Total</b>	<b>2134.42</b>	<b>299.13</b>	<b>472.23</b>	<b>771.36</b>	<b>2134.42</b>	<b>299.13</b>	<b>472.23</b>	<b>771.36</b>



5.36 The Commission also approves Rs 127.97 Crore and Rs 0.16 Crore towards transmission charges and towards ERPC fund respectively.

5.37 The Commission has also noted that the Petitioner has not submitted the rolling quarterly forecast of the quantum of short term power to be purchased by the Petitioner for the Commission's Approval. Hence, **the Commission directs the Petitioner to submit the rolling quarterly forecast of the quantum of short term power to be purchased as per Regulation 5.20 of the Distribution Tariff Regulations, 2015 on regular basis.**

#### **Tariff Filing and Publication Expenses (CERC)**

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

5.38 The Petitioner has claimed Rs. 5.11 Crore, towards Tariff Filing and Publication Expenses (CERC) for FY 2016-17.

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

5.39 The Commission has approved the amount claimed by the Petitioner towards Tariff Filing and Publication Expenses (CERC) for FY 2016-17 based on the Audited Accounts and the requisite bills submitted.

#### **Water Cess and Pollution Cess**

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

5.40 The Petitioner has claimed Rs. 1.79 Crore towards Water Cess and Pollution Cess for FY 2016-17.

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

5.41 The Commission has approved the amount claimed by the Petitioner towards Water Cess and Pollution Cess for FY 2016-17 based on the Audited Accounts.

#### **Rebate on Sale of Power**

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

5.42 The Petitioner has claimed Rs 87.67 Crore towards Rebate on Sale of Power for FY 2016-17.



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

- 5.43 The Commission has approved the amount as submitted by the Petitioner for Jharkhand vide its reply dated May 23, 2019.

### **Interest on Temporary Financial Accommodation**

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

- 5.44 The Petitioner has claimed Rs 251.65 Crore towards Interest on Temporary Financial Accommodation for FY 2016-17 stating that the cost of temporary financial accommodation was required to avoid any financial injury to the utility due to delayed payment by the purchaser of electricity in retail mode needs to be compensated in the interest of the consumers as well. Such safeguard of the utility has been considered by the West Bengal Electricity Regulatory Commission (WBERC) while formulating the tariff regulations. Regulation 5.6.5.4 of the "Terms and Conditions of Tariff" Regulations 2011 is reproduced below;

*"5.6.5.4 The Commission may allow, if considered necessary, interest on temporary financial accommodation taken by the generating company / licensee from any source to a reasonable extent of unrealized arrears from the consumers / beneficiaries."*

- 5.45 The Petitioner also referred to Appeal No. 153 of 2009 and Appeal No. 177 & 178 of 2012 to substantiate the same.

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

- 5.46 The Commission is of the view that the Petitioner be allowed the Interest on Temporary Financial Accommodation on the principal amount of the Delayed Payment Surcharge. It is observed that the DPS amount is charged at 18% p.a. whereas the interest rates for accommodating such shortfall is 12.80%. However, as per the submissions made by Petitioner, it is observed that the amount claimed for Interest on Temporary Financial Accommodation is higher than the Delayed Payment Surcharge claimed. The Commission has approved the interest of 12.80% on the principal amount outstanding on which DPS was charged for improving the liquidity of the Petitioner.



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## **Non-Tariff Income**

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

5.47 The Petitioner has claimed Rs. 198.25 Crore towards Non-Tariff Income for FY 2016-17.

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

5.48 The Commission has observed that the value claimed by the Petitioner is the Delayed Payment Surcharge (DPS) by the firm consumers of DVC distribution licensee. The Commission directed the Petitioner to submit the justification for considering the DPS alone during TVS. The Petitioner submitted the break-up of the claim submitted in the Petition along with the justification that all the other components available in the Audited Accounts are incidental to the Generation and Transmission businesses. The Commission in line with its earlier approach has approved the Non-Tariff Income as proposed by the Petitioner.

## **Allocation of Costs for DVC as a whole to Jharkhand Area**

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

5.49 The Petitioner has submitted that the input costs including own generation cost, Power Purchase Cost, Other Input Cost, etc. cannot be segregated into the cost pertaining to Jharkhand and West Bengal area as DVC operates as a single entity. Thus, the Petitioner has submitted that, for the purpose of computing retail tariffs pertaining to Jharkhand area, the input cost of DVC be bifurcated in the ratio of the energy sales in Jharkhand area to the total sales in the Damodar Valley area.

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

5.50 The Commission has allocated the expenses of DVC as a whole to Jharkhand area by following the methodology approved in the previous Order dated May 18, 2018. The following table summarizes the input cost allocated to the Jharkhand area for the period FY 2016-17 as submitted by the Petitioner and as approved by the Commission.





**Table 20: Cost Allocation for Jharkhand as submitted by the Petitioner and as approved by the Commission for FY 2016-17 (Rs. Crore)**

Particulars	FY 2016-17		
	MYT Order	Petition	Approved
Cost of Own Generation	7,836.59	7,289.09	7,258.71
Power Purchase Cost (Including Transmission Charges and Excluding Renewable Energy Purchase/REC Expenses)	678.16	832.85	832.85
CERC Tariff filing fees & publication expenses	4.93	5.11	5.11
Water Cess & other State Cesses	2.48	1.79	1.79
Rebate on Sale of Power		87.67	
Less: Non Tariff Income (NTI)	47.68	198.25	198.25
Interest on Temporary Financial Accommodation		251.65	140.98
<b>Total ARR of DVC (Distribution)</b>	<b>8,474.48</b>	<b>8,269.91</b>	<b>8,041.19</b>
Ratio of Sales in Jharkhand	56.12%	57.17%	57.17%
<b>ARR Apportioned to Jharkhand</b>	<b>4,755.66</b>	<b>4,728.30</b>	<b>4,597.52</b>

### Interest on Working Capital (IoWC)

#### *Petitioner's Submission*

5.51 The Petitioner has submitted that the Interest on Working Capital has been determined in accordance with the applicable provisions of Distribution Tariff Regulations, 2015, according to which, the Interest on Working Capital shall be as given below:

*“6.30 Working capital for the Retail Supply of Electricity for the Control Period shall consist of:*

- a) One-twelfth of the amount of Operation and Maintenance expenses for retail supply business for such financial year; plus*
- b) Maintenance spares at 1% of Opening GFA for retail supply business; plus*
- c) Two months equivalent of the expected revenue from sale of electricity at the prevailing tariffs; minus*
- d) Amount held as security deposits under clause (a) and clause (b) of subsection(1) of Section 47 of the Act from consumers and Distribution System Users net of any security held for wheeling business; minus*
- e) One month equivalent of cost of power purchased, based on the annual power procurement plan.*



*6.31 Rate of interest on working capital shall be equal to the base rate of SBI plus 350 bps as applicable on the 1st April of the relevant financial year.”*

- 5.52 Accordingly, the Petitioner has claimed the Interest on Working Capital required for DVC for Jharkhand Area to be Rs. 96.95 Crore for FY 2016-17.

***Commission’s Analysis***

- 5.53 As per the Distribution Tariff Regulations, 2015, Interest on Working Capital shall be calculated on the basis of the following:

*“Working capital for the Retail Supply of Electricity for the Control Period shall consist of:*

*a) One-twelfth of the amount of Operation and Maintenance expenses for retail supply business for such financial year; plus*

*b) Maintenance spares at 1% of Opening GFA for retail supply business; plus*

*c) Two months equivalent of the expected revenue from sale of electricity at the prevailing tariffs; minus*

*d) Amount held as security deposits under clause (a) and clause (b) of subsection (1) of Section 47 of the Act from consumers and Distribution System Users net of any security held for wheeling business; minus*

*e) One month equivalent of cost of power purchased, based on the annual power procurement plan.”*

- 5.54 However, since the O&M cost and other expenses of the Petitioner are included in the cost of generation of power from its own stations, applying the aforementioned methodology as per the Distribution Tariff Regulations, 2015 is not possible. Hence, the Commission has approved Interest on Working Capital as per the methodology adopted by the Commission for calculation of Interest on Working capital in its previous Order dated May 18, 2018.



**Table 21: Interest on Working Capital as submitted by the Petitioner and as approved by the Commission for FY 2016-17 (Rs. Crore)**

Particulars	FY 2016-17	
	Petition	Approved
Revenue from Sales in Jharkhand		4705.79
Working Capital Requirement in Jharkhand Area (at 1% of Revenue from sale of power)		47.06
Interest Rate (%)		12.80%
<b>Interest on Working Capital for Jharkhand Area</b>	<b>96.95</b>	<b>6.02</b>

### Interest on Consumer Security Deposit

#### *Petitioner's Submission*

5.55 The Petitioner submitted an amount of Rs. 1.05 Crore towards Interest on Consumer Security Deposit.

#### *Commission's Analysis*

5.56 The Regulation 6.28 of the Distribution Tariff Regulations, 2015, allows the Petitioner to recover the interest on security deposits through the ARR. The Commission has approved the Interest on Consumer Security Deposit as submitted by the Petitioner based on scrutiny of the Audited Accounts for FY 2016-17.

### Tariff Filing and Publication Expenses (JSERC)

#### *Petitioner's Submission*

5.57 The Petitioner submitted an amount of Rs. 0.89 Crore towards Tariff Filing and Publication Expenses in JSERC.

#### *Commission's Analysis*

5.58 The Commission has approved the Tariff Filing and Publication Expenses in JSERC as submitted by the Petitioner after considering the Bills submitted by the Petitioner.

### Summary of ARR approved by the Commission

5.59 Based on the above, the Commission has approved ARR for FY 2016-17 vis-à-vis that approved in the MYT Order and the ARR claimed by the Petitioner which is as summarised below:



**Table 22: Summary of ARR as submitted by the Petitioner and as approved by the Commission for FY 2016-17 (Rs. Crore)**

Station/item	2016-17					
	MYT Order		Petition		Approved	
	Energy Cost (Rs. Crore)	Fixed Cost (Rs. Crore)	Energy Cost (Rs. Crore)	Fixed Cost (Rs. Crore)	Energy Cost (Rs. Crore)	Fixed Cost (Rs. Crore)
Cost of Own Generation	4,422.86	3,413.73	3,738.07	3,551.03	3,764.49	3,494.21
Power Purchase Cost (Incl. Trans. Charges & Excl. RE/REC Expense)	678.16		832.85		405.58	427.27
Tariff filling fees & publication expenses in CERC		4.93		5.11		5.11
Water cess		2.48		1.79		1.79
Rebate on Sale of Power			87.67*			
Less Non Tariff Income (NTI)		47.68	198.25			198.25
Interest on Temporary Financial Accommodation			251.65*			140.98
<b>Total</b>	<b>5,101.02</b>	<b>3,373.45</b>	<b>4,711.99</b>	<b>3,557.92</b>	<b>4,170.08</b>	<b>3,871.11</b>
Ratio of sales in Jharkhand part to total firm sale in entire DVC	56.12%	56.12%	57.17%	57.17%	57.17%	57.17%
<b>ARR before IWC, Interest on SD &amp; tariff filling fees in the licensed area of Jharkhand</b>	<b>2,862.56</b>	<b>1,893.10</b>	<b>2,694.06</b>	<b>2,034.23</b>	<b>2,384.23</b>	<b>2,213.29</b>
Cost of Solar & Non Solar Power and REC Purchased to meet the solar & non solar RPO in the state of Jharkhand	80.82		75.74		75.74	
Rebate on Sale of Power						24.56
Interest on Working Capital		6.42		96.95*		6.02
Interest on security deposit		1.84		1.05		1.05
Tariff Filing Fees & Publication Expenses in JSERC		0.97		0.89		0.89
<b>Net ARR for Jharkhand</b>	<b>2,943.38</b>	<b>1,902.32</b>	<b>2,769.80</b>	<b>2,133.13</b>	<b>2,459.96</b>	<b>2,245.83</b>
<b>TOTAL ARR</b>	<b>4,845.71</b>		<b>4,902.93</b>		<b>4,705.79</b>	
<b>Particulars</b>	<b>Quantum</b>		<b>Quantum</b>		<b>Quantum</b>	
Total ARR	<b>4845.71</b>		<b>4902.93</b>		<b>4705.79</b>	
Sale in Jharkhand (MU)	<b>11031.79</b>		<b>10361.15</b>		<b>10361.15</b>	
Avg Cost of Supply (Rs. / kWh)	<b>4.39</b>		<b>4.73</b>		<b>4.54</b>	

\*Submitted by the Petitioner vide reply dated February 11, 2019.

## Revenue from Sale of Power in Jharkhand Area

### Petitioner's Submission

5.60 The Petitioner submitted that the revenue billed from sale of power in Jharkhand is Rs. 5017.09 Crore for FY 2016-17.

### Commission's Analysis

- 5.61 The Commission asked the Petitioner to submit the break-up of the revenue (category-wise) along with the basis as per the Audited Accounts in the TVS held on April 29, 2019. Based on the documentary evidence provided by the Petitioner, the Commission approves the revenue as submitted by the Petitioner for FY 2016-17.

### Revenue Gap/(Surplus) and its Treatment

- 5.62 The Commission has approved the revenue gap/(surplus) based on the Audited Accounts and scrutiny of the Petition as summarised below:

**Table 23: Revenue Gap/(Surplus) approved by the Commission for FY 2016-17 (Rs. Crore)**

Particulars	FY 2016-17
ARR Approved	4705.79
Revenue Realised	5017.09
Gap/(Surplus) Created	(311.30)
Opening Gap/(Surplus)	0.00
Gap/(Surplus) Addition	(311.30)
Interest Rate (%)	12.80%
Carrying/Holding Cost on Opening Gap/(Surplus)	0.00
Carrying/Holding Cost on Gap/(Surplus) Addition	(19.92)
Closing Gap/(Surplus)	(331.22)
Closing Gap/(Surplus) till date considering carrying/holding cost at 12.60% for FY 2017-18 and 12.20% for FY 2018-19	(444.72)

- 5.63 The Petitioner has not proposed any adjustment of the surplus for FY 2016-17. However, the Commission has approved the treatment of the surplus approved in the subsequent Chapter A8 of this Order.



## A 6: ANNUAL PERFORMANCE REVIEW FOR FY 2017-18 & 2018-19

6.1 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;”*

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

a) JSERC Distribution Tariff Regulations, 2015.

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

6.3 The Commission has observed that the Petitioner has not submitted the True-up for FY 2017-18 as per the Distribution Tariff Regulations, 2015. During the Public Hearings, the Stakeholders stated that the Petitioner has not submitted the Petition for True-up for FY 2017-18 in spite of availability of the Audited Accounts for FY 2017-18 in order to show a deficit in FY 2019-20 for increase in Tariff, while there is no need to hike Tariff considering the surplus created during FY 2017-18. Hence, the Commission has approved the provisional ARR and Revenue for FY 2017-18 on ad-hoc basis to get a clear picture of the cumulative revenue gap/(surplus) of the Petitioner.

### APR for FY 2017-18

#### Energy Sales

#### Commission's Analysis

6.4 The Commission has approved the Sales for FY 2017-18 as submitted by the Petitioner in its reply dated March 05, 2019. The sales approved for Jharkhand and WB for FY 2017-18 is summarised as below:

**Table 24: Sales as Approved by the Commission for FY 2017-18 (MU)**

Particulars	Jharkhand	West Bengal
LT (Domestic)	43.08	0.48
LT (Commercial)		
33 kV	7813.74	5195.49
132 kV	1401.73	1525.49



Particulars	Jharkhand	West Bengal
132 kV Traction	336.38	79.23
220 kV	1389.18	1249.99
<b>Total</b>	<b>10984.10</b>	<b>8050.68</b>

## Transmission & Distribution Losses and Energy Requirement

### Commission's Analysis

- 6.5 The Commission approves the T&D losses of 3.23% as approved for FY 2016-17 as against 3.35% claimed by the Petitioner in its submission dated May 23, 2019 since the actual value for FY 2017-18 is still not finalised. The Commission approves the Energy Requirement as below:

**Table 25: Energy Requirement as approved by the Commission for FY 2017-18 (MU)**

Particulars	FY 2017-18
	Approved
Energy sales within the state of Jharkhand	10984.10
Energy sales within the state of West Bengal	8050.68
Total energy sales in DVC Area	19034.78
Energy wheeled	272.42
Overall Utilization	19307.20
T&D loss (MU)	643.85
T&D loss (%)	3.23%
<b>Total Energy Requirement for DVC</b>	<b>19951.05</b>

## Power Purchase FY 2017-18

### Merit Order Despatch

- 6.6 The Commission has considered the PAF as per CERC Tariff Regulations for CSGSs and PAF as submitted by the Petitioner for own generating stations for FY 2017-18 vide its reply dated May 23, 2019 for projecting the availability. Based on the approach, the Commission observes that there is an energy surplus and has hence applied MOD on the available generation.

## Energy Availability from Own Generating Stations for Distribution Function

### Commission's Analysis

- 6.7 The Commission has not considered any generation from CTPS and BTPS Unit #1&2 during calculation of energy availability for FY 2017-18 due to decommissioning of the





plants in FY 2017-18. The plant availability of own generating stations has been approved on the basis of Petitioner's submission dated May 23, 2019 which is as shown below:

**Table 26: Energy Availability from Own Generating Stations for Distribution as approved by the Commission for FY 2017-18 (MU)**

Particulars	FY 2017-18
	Approved
BTPS 'B'	991.78
CTPS U#1 to 3	0.00
DTPS U# 4	1003.67
MTPS U#1 to 3	3801.74
MTPS U#4	1205.14
HYDEL	386.50
<b>Sub Total</b>	<b>7388.83</b>
MTPS U#5 & 6	2635.41
MTPS U#7&8	5642.41
CTPS U# 7&8	3517.87
DSTPS U # 1 & 2	6909.83
KTPS U# 1 & 2	6113.02
RTPS U # 1 & 2	2506.96
BTPS 'A'	3074.36
<b>Sub Total</b>	<b>30399.86</b>
<b>Total Own Generation</b>	<b>37788.69</b>

## Energy Availability from Central Sector Generating Stations (CSGSs) and Other Sources

### Commission's Analysis

- 6.8 The Commission has approved the energy availability from external sources based on the contracted capacity, NAPA and Normative Auxiliary Consumption for the Thermal Power Plants and based on the Design Energy for NHPC power plants. The Commission has approved the availability as proposed by the Petitioner for power purchase from Tala, Chuka and Kurichu HPS for FY 2016-17.

## Energy Balance

### Commission's Analysis

- 6.9 Based on the energy requirement and energy availability from own generation, T&D losses and power purchase from CSGS and other sources, the energy balance for FY 2017-18 as per Commission's analysis (based on Merit Order Despatch) is summarized in the following table. The Commission has observed that the Petitioner has surplus generation and has approved the surplus power available from internal generation.

Table 27: Energy Balance as approved by the Commission for FY 2017-18 (MU)

Particulars	FY 2017-18
	Approved
<b>A. Energy Requirement</b>	
Energy sales within the state of Jharkhand	10984.10
Energy sales within the state of West Bengal	8050.68
<b>Total energy sales in DVC Area</b>	<b>19034.78</b>
Energy wheeled	272.42
<b>Overall Utilization</b>	<b>19307.20</b>
T&D loss (MU)	643.85
T&D loss (%)	3.23%
<b>Total Energy Requirement for DVC</b>	<b>19951.05</b>
<b>B. Energy Availability</b>	
<b>Own Generation-Firm sources</b>	
Thermal	37402.19
Hydel	386.50
<b>Sub Total</b>	<b>37788.69</b>
Own Generation-Infirm sources	
Net Power Purchase (including UI)	1904.45
Energy received for Wheeling	294.09
Less: Energy sold to other licensees & exchange	20036.18
<b>Total Energy Available for DVC</b>	<b>19951.05</b>

### Power Purchase- Own Generation

#### Commission's Analysis

6.10 The Commission has approved the power purchase from own generating stations based on Merit Order Despatch as summarised below:

Table 28: Power Purchase from Own Generating Stations as approved by the Commission for FY 2017-18 (MU)

Particulars	FY 2017-18
	Approved
BTPS 'B'	991.78
DTPS U# 4	0.00
MTPS U#1 to 3	597.51
MTPS U#4	0.00
HYDEL	386.50
<b>Sub Total</b>	<b>1975.79</b>
MTPS U#5 & 6	1844.79
MTPS U#7&8	2194.22
CTPS U# 7&8	1355.17
DSTPS U # 1 & 2	4836.88
KTPS U# 1 & 2	3973.47
RTPS U # 1 & 2	0.00
BTPS 'A'	1844.61



Particulars	FY 2017-18
	Approved
<i>Sub Total</i>	<i>16049.14</i>
<b>Total Own Generation</b>	<b>18024.93</b>

## Power Purchase- Other Sources

### Commission's Analysis

6.11 The Commission has approved power purchase from other sources viz., NTPC, NHPC, PTC, etc. for meeting its consumer demands in addition to the internal generation considering Merit Order Despatch as summarised below:

**Table 29: Power Purchase from Other Sources as approved by the Commission for FY 2017-18 (MU)**

Particulars	FY 2017-18
	Approved
<b>NHPC</b>	
Rangit	32.90
Teesta- V	233.63
<b>NTPC</b>	
FSTPS I & II	0.00
FSTPS III	0.00
KHTPS I	21.90
KHTPS II	47.17
TSTPS I	45.39
<b>PTC</b>	
Chukha	213.11
Kurichu	38.21
Tala	183.24
<b>MPL</b>	1052.68
<b>Solar</b>	64.38
<b>Total</b>	<b>1932.61</b>

## Cost of Own Generation

### Commission's Analysis

6.12 The Commission has taken note that the CERC has issued final Tariff Orders for the following stations:

**Table 30: CERC Orders considered for approval of Fixed Charges of Own Generating Stations**

Station	Date of CERC Order
BTPS 'B'	19.05.2017
CTPS U# 1,2,3	23.09.2016
DTPS U # 3,4	20.07.2017

Station	Date of CERC Order
MTPS U#1 to 3	31.08.2016
MTPS U#4	20.09.2016
MHS	20.09.2016
PHS	20.09.2016
THS	23.09.2016
T&D System	29.09.2017 (True-up order of CERC for 2009-14)
MTPS U#5 & 6	16.03.2017
MTPS U# 7 & 8	03.10.2016
CTPS U# 7&8	17.02.2017
DSTPS U # 1 & 2	17.03.2017
KTPS U # 1 & 2	28.02.2017
RTPS U # 1 & 2	28.09.2017
BTPS 'A' U # 1	30.05.2018

6.13 The Commission after scrutinizing the information made available by the Petitioner and after perusal of the above CERC Orders has adopted the fixed charges for own power generation from thermal and hydel stations for DVC for FY 2017-18 as approved by CERC in its relevant Tariff Orders. The Commission approves the Energy Charge Rate by as submitted by the Petitioner for FY 2017-18 vide its reply dated May 23, 2019.

6.14 The cost of own power generating stations as adopted by the Commission from the aforementioned CERC Orders for the period FY 2017-18 has been summarized in the following table. The Commission has adopted the methodology used in its previous Order dated May 18, 2018 for calculation of Fixed Charges for own generating stations. The Commission has however approved the purchase of power from the newer generating plants and the Other Sources based on Merit Order Despatch, except for Renewable and Hydro generations.

**Table 31: Fixed Charges approved by the Commission for FY 2017-18 (Rs. Crore)**

Station	Normative Availability (NAPAF)	Actual Yearly Plant Availability Factor (PAFY)	Annual Fixed Charge (AFC) (Rs. Crore)	Recoverable fixed charges as per CERC formula (Rs. Crore)	Share of firm consumer	Recoverable Fixed charge from Firm Consumers (Rs. Crore)
	A	B	C	$D = \text{Min} (C, C*B/A)$	E	$F = D*E$
BTPS 'B'	75%	60.07%	155.15	124.26	100.00%	124.26
CTPS U# 3	75%	24.99%	103.46	34.47	100.00%	34.47
DTPS U # 4	74%	60.96%	109.52	90.22	100.00%	90.22
MTPS U#1 to 3	83%	75.70%	346.15	315.70	100.00%	315.70
MTPS U#4	85%	71.99%	149.29	126.44	100.00%	126.44
MHS	80%	80.00%	33.27	16.64	100.00%	16.64
PHS	80%	80.00%	24.88	12.44	100.00%	12.44



Station	Normative Availability (NAPAF)	Actual Yearly Plant Availability Factor (PAFY)	Annual Fixed Charge (AFC) (Rs. Crore)	Recoverable fixed charges as per CERC formula (Rs. Crore)	Share of firm consumer	Recoverable Fixed charge from Firm Consumers (Rs. Crore)
	A	B	C	D=Min (C, C*B/A)	E	F = D*E
THS	80%	80.00%	9.26	4.63	100.00%	4.63
T & D System	98.50%	99.30%	524.79	529.06	100.00%	529.06
<b>SUB-TOTAL</b>			<b>1455.78</b>	<b>1253.86</b>		<b>1253.86</b>
MTPS U#5 & 6	85%	66.12%	463.58	360.61	70.00%	252.43
MTPS U# 7 & 8	85%	67.98%	1041.11	832.64	38.89%	323.80
CTPS U # 7 & 8	85%	88.26%	538.07	538.07	38.52%	207.28
DSTPS U # 1 & 2	85%	83.25%	1132.67	1109.35	70.00%	776.55
KTPS U # 1 & 2	85%	73.65%	1198.12	1038.14	65.00%	674.79
RTPS U # 1 & 2	85%	25.17%	1398.37	414.08	0.00%	0.00
BTPS 'A'	85%	74.08%	729.81	636.05	60.00%	381.63
<b>SUB-TOTAL</b>			<b>6501.74</b>	<b>4928.95</b>		<b>2616.47</b>
<b>GRAND TOTAL</b>			<b>7957.51</b>	<b>6182.81</b>		<b>3870.34</b>

6.15 The Energy Charges approved by the Commission for FY 2017-18 for own generating stations is summarised below:

**Table 32: Energy Charges as approved by the Commission for FY 2017-18 (Rs. Crore)**

Particulars	FY 2017-18
	Approved
BTPS	232.14
DTPS	0.00
MTPS U# 1 to 3	149.17
MTPS U# 4	0.00
MTPS U# 5 & 6	447.95
MTPS U# 7 & 8	504.85
CTPS U # 7 & 8	246.75
DSTPS U # 1 & 2	1061.50
KTPS U # 1 & 2	759.93
RTPS U # 1 & 2	0.00
BTPS 'A'	375.31
MHS	17.89
PHS	13.21
THS	5.05
<b>Total Energy Charges</b>	<b>3813.74</b>

## Power Purchase Cost from Central Sector Generating Stations (CSGSs) and Other Sources

### Commission's Analysis

- 6.16 The Commission has approved the Fixed Charges for Thermal Power Plants and Hydro Power Plants as per the respective CERC Tariff Orders. The Energy Charge Rate of Thermal Power Plants are approved as per the values submitted by the Petitioner for FY 2017-18 vide its letter dated May 23, 2019. Energy Charge Rate for Hydro Plants are approved as per the Design Energy approved by CERC.
- 6.17 As stated earlier in this Order, the Commission has adopted MOD in approving the power purchase quantum and consequently the power purchase cost for FY 2017-18. Based on the total energy requirement and quantum of energy to be purchased from CSGS and other sources (other than own sources), the Commission has disallowed the purchase of energy from generating stations having the highest variable cost per unit among all new internal generation plants, CSGS's and other sources from where DVC procures power (except RE and hydro power).
- 6.18 The Commission has approved the expenses for purchase of Renewable Energy Certifications (RECs) towards RPO Compliance for Sales in Jharkhand. The Commission approves Rs. 1.00/kWh for both Solar and Non-Solar RECs for FY 2017-18 as per the prevailing floor prices.
- 6.19 The Commission has not considered that the quantum of Hydro Power purchased for RPO Compliance for FY 2017-18 i.e., 619.51 MU as per the National Tariff Policy, 2016. The Commission has also not considered the RPO compliance for energy sold to Other Distribution Licensees as the same shall be met by the respective Licensee either through RE purchase or through purchase of RECs.

**Table 33: Expenses towards RECs for Jharkhand as approved by the Commission for FY 2017-18 (Rs. Crore)**

Particulars	FY 2017-18
	Approved
Solar (REC)	8.20
Non-Solar (REC)	13.93

- 6.20 Thus, the net Power Purchase Cost from Central Sector Generating Stations (CSGSs) and Other Sources (including RE sources and excluding purchase from own generating stations) approved is summarised below:



**Table 34: Source-wise Power Purchase Cost as approved by the Commission for FY 2017-18 (Rs. Crore)**

Particulars	FY 2017-18			
	Approved			
	Quantum (MU)	FC (Rs. Crore)	EC (Rs./kWh)	TC (Rs. Crore)
<b>NHPC</b>				
Rangit	32.90	5.34	5.34	10.69
Teesta- V	233.63	22.14	22.14	44.29
<b>NTPC</b>				
FSTPS I & II		4.75		4.75
FSTPS III		36.85		36.85
KHTPS I	21.90	2.63	5.04	7.67
KHTPS II	47.17	5.80	10.42	16.21
TSTPS I	45.39	5.15	8.34	13.49
<b>PTC</b>				
Chukha	213.11		51.36	51.36
Kurichu	38.21		8.29	8.29
Tala	183.24		39.58	39.58
<b>MPL</b>	1052.68	148.50	209.33	357.82
<b>Solar</b>	64.38		68.37	68.37
<b>Contingency</b>	0			-
<b>Total</b>	<b>1932.61</b>	<b>231.16</b>	<b>420.27</b>	<b>659.37</b>

## Other Fixed Costs

### Commission's Analysis

- 6.21 The Commission has approved the other Fixed Costs viz., Tariff Filing & Publication Fees and Water Cess for FY 2017-18 as per the values submitted by the Petitioner in its reply dated May 23, 2019. The Commission has proportioned the Rebate on Sale of Power for FY 2017-18 as per the break-up submitted for FY 2016-17.
- 6.22 The Commission also approves Interest on Temporary Financial Accommodation as submitted by the Petitioner as it is lower than the value derived based on the methodology adopted in Section A5 of this Order for True-up for FY 2016-17.

## Allocation of Expenses of DVC to Jharkhand Area

### Commission's Analysis

- 6.23 The Commission has allocated the expenses of DVC as a whole to Jharkhand area by following the methodology approved in the previous Order dated May 18, 2018. The following table summarizes the input cost allocated to the Jharkhand area for the period FY 2017-18 as approved in the MYT Order and as approved by the Commission.



**Table 35: Cost Allocation for Jharkhand as approved by the Commission for FY 2017-18 (Rs. Crore)**

Particulars	FY 2017-18	
	MYT Order	Approved
Cost of Own Generation	8,609.25	7,684.07
Power Purchase Cost (Including Transmission Charges and Excluding Renewable Energy Purchase/REC Expenses)	413.40	696.81
CERC Tariff filing fees & publication expenses	5.00	5.21
Water Cess & other State Cesses	2.54	0.16
Less: Non Tariff Income (NTI)	51.42	466.76
Interest on Temporary Financial Accommodation		307.26
<b>Total ARR of DVC (Distribution)</b>	<b>8,978.77</b>	<b>8,226.74</b>
Ratio of Sales in Jharkhand	55.18%	57.71%
<b>ARR Apportioned to Jharkhand</b>	<b>4,954.37</b>	<b>4,747.28</b>

### Interest on Working Capital (IoWC)

#### Commission's Analysis

6.24 The Commission has approved Interest on Working Capital as per the methodology adopted by the Commission for calculation of Interest on Working capital in its previous Order dated May 18, 2018.

**Table 36: Interest on Working Capital as approved by the Commission for FY 2017-18 (Rs. Crore)**

Particulars	FY 2017-18
	Approved
Revenue from Sales in Jharkhand	4858.00
Working Capital Requirement in Jharkhand Area (at 1% of Revenue from sale of power)	48.58
Interest Rate (%)	12.60%
<b>Interest on Working Capital for Jharkhand Area</b>	<b>6.12</b>

### Interest on Consumer Security Deposit

#### Commission's Analysis

6.25 The Commission has approved the Interest on Consumer Security Deposit as per the value submitted by the Petitioner for FY 2017-18 vide its letter dated May 23, 2019.

### Tariff Filing and Publication Expenses (JSERC)

#### Commission's Analysis

6.26 The Commission has approved the Tariff Filing and Publication Expenses in JSERC as per the value submitted by the Petitioner for FY 2017-18 vide its letter dated May 23, 2019.





## Summary of ARR approved by the Commission

6.27 The Commission has approved ARR for FY 2017-18 is summarised below:

**Table 37: Summary of ARR as approved by the Commission for FY 2017-18 (Rs. Crore)**

Station/item	FY 2017-18			
	MYT Order		Approved	
	Energy Cost (Rs. Crore)	Fixed Cost (Rs. Crore)	Energy Cost (Rs. Crore)	Fixed Cost (Rs. Crore)
Cost of Own Generation	4,836.83	3,772.42	3,813.74	3,870.34
Power Purchase Cost (Including Transmission Charges and Excluding Renewable Energy Purchase/REC Expenses)	413.40		359.84	336.97
Tariff filling fees & publication expenses to CERC		5.00		5.21
Water cess		2.54		0.16
Less Non Tariff Income (NTI)		51.42		466.76
Interest on Temporary Financial Accommodation				307.26
<b>Total</b>	<b>5,250.23</b>	<b>3,728.54</b>	<b>4,173.57</b>	<b>4,053.17</b>
Ratio of sales in Jharkhand part to total firm sale in entire DVC	55.18%	55.18%	57.71%	57.71%
<b>ARR before IWC, Interest on SD &amp; tariff filling fees in the licensed area of Jharkhand</b>	<b>2,897.01</b>	<b>2,057.36</b>	<b>2,408.38</b>	<b>2,338.90</b>
Cost of Solar & Non Solar Power and REC Purchased to meet the solar & non solar RPO in the state of Jharkhand	117.68		73.70	
Rebate on Sale of Power				29.48
Interest on Working Capital		6.70		6.12
Interest on security deposit		1.99		0.48
Tariff Filing Fees & Publication Expenses in JSERC		0.78		0.95
<b>Net ARR for Jharkhand</b>	<b>3,014.69</b>	<b>2,066.83</b>	<b>2,482.07</b>	<b>2,375.92</b>
<b>TOTAL ARR</b>	<b>5,081.51</b>		<b>4858.00</b>	
<b>PARTICULARS</b>	<b>QUANTUM</b>		<b>QUANTUM</b>	
Total ARR	<b>5081.51</b>		<b>4858.00</b>	
Sale in Jharkhand (MU)	<b>11441.68</b>		<b>10984.10</b>	
Avg Cost of Supply (Rs. / kWh)	<b>4.44</b>		<b>4.42</b>	

## Revenue from Sale of Power in Jharkhand Area

### Commission's Analysis

6.28 The Commission approves the revenue of Rs. 5285.18 Crore as submitted by the Petitioner for FY 2017-18 vide its reply dated March 05, 2019.

6.29 The Standalone Surplus on account of FY 2017-18 is Rs. 427.18 Crore.



6.30 The Commission is of the view that though the Petitioner has not sought passing on of the impact of FY 2017-18 however, considering there is already considerable amount of surplus till FY 2014-15, it would be prudent to not accumulate such surplus any further and therefore, the Commission has considered to adjust the above surplus in this Order.

### APR for FY 2018-19

#### Consumers, Connected Load and Energy Sales

##### *Petitioner's Submission*

6.31 The Petitioner in its Petition submitted the estimated category-wise number of consumers/connection points, connected load and energy sales in the Damodar Valley area falling within the State of Jharkhand for FY 2018-19 based on the actuals of the first half of FY 2018-19. However, the Petitioner submitted the provisional actuals for FY 2018-19 after the data was sought during TVS held on April 29, 2019.

##### *Commission's Analysis*

6.32 The Commission after scrutinizing the latest information submitted by the Petitioner after TVS on April 29, 2019 and prudence check, approves the number of consumers, connected load and energy sales for FY 2018-19 as summarised below:

**Table 38: Consumers, Connected Load and Sales in Jharkhand as submitted by the Petitioner and Approved by the Commission for FY 2018-19**

Consumer Category	FY 2018-19					
	Petition			Approved		
	Supply Points	Connected Load (MVA)	Consumption (MU)	Supply Points	Connected Load (MVA)	Consumption (MU)
LT (Domestic)	1282	5.13 MW	26.99	1282		29.28
LT (Commercial)	461	2.35 MW	12.37	461	9.10	13.42
33 kV	112	1512.21	8390.05	114	1539.63	7028.90
132 kV	9	331.49	1560.91	7	341.50	1293.13
132 kV (Traction)	4	72.63	305.39	3	72.63	237.38
220 kV	2	302.11	1491.64	2	285.00	1657.16
<b>Total</b>	<b>1870</b>	<b>2218.44</b>	<b>11787.36</b>	<b>1869</b>	<b>2247.86</b>	<b>10259.27</b>

#### Transmission & Distribution Losses and Energy Requirement

##### *Petitioner's Submission*

6.33 The Petitioner submitted that as it is supplying power in bulk to the WBSEDCL and JSEB and since majority of HT consumers falling in the Damodar valley area are at 33 kV and

above voltage, it incurs very low Transmission & Distribution (T&D) losses. The Petitioner submitted a T&D loss of 3.42% for FY 2018-19 as against the approved loss of 3.41% as per the MYT Order dated May 18, 2018.

- 6.34 Further, in addition to the energy sold in the Jharkhand area, the Petitioner also submitted the projected sales in the West Bengal area and the energy wheeled from its inter-state transmission system for the purposes of computation of the energy requirement for the entire Damodar Valley area.
- 6.35 Based on the total energy sales in the Damodar Valley area, the T&D losses and the energy wheeled from the system, the Petitioner submitted the actual energy requirement for the period FY 2018-19 as per Clause 5.23 of the Distribution Tariff Regulations, 2015 as reproduced below:

*“5.23 The Licensee shall file the distribution loss trajectory for the entire Control Period in the Business Plan commensurate with the capital investment plan for each year of the control period for approval of the Commission after verification and evaluation of the same.*

*The Licensee shall be allowed to operate at below 5% audited distribution loss without any incentive/ penalty mechanism.”*

### **Commission’s Analysis**

- 6.36 The Commission observes that Clause 5.23 of the Distribution Tariff Regulations, 2015, provides for approval of actual loss below 5% without any profit/loss to the Licensee. However, since the Petitioner has not been able to substantiate the consistent increase in the T&D losses of the system, the Commission has approved the energy requirement considering the loss of 3.23% as approved for FY 2016-17. The same shall be subject to truing up.

**Table 39: Energy Requirement as submitted by the Petitioner and as approved by the Commission for FY 2018-19 (MU)**

Particulars	FY 2018-19	
	Petition	Approved
Energy sales within the state of Jharkhand	11787.36	10259.27
Energy sales within the state of West Bengal	8449.42	8449.42
Total energy sales in DVC Area	20236.78	18708.69
Energy wheeled	900.00	900.00
Overall Utilization	21136.78	19608.69
T&D loss (MU)	747.62	653.91
T&D loss (%)	3.42%	3.23%



Particulars	FY 2018-19	
	Petition	Approved
Total Energy Requirement for DVC	21884.40	20262.59

## Power Purchase FY 2018-19

### Merit Order Despatch

6.37 The Commission has observed that the Petitioner has proposed low availability against the proposed Plant Availability Factor (PAF) from its own generating stations and the allocated power generation from CSGSs. Hence, the Commission has considered the PAF as per CERC Tariff Regulations for CSGSs and PAF as submitted by the Petitioner for own generating stations. Based on the approach, the Commission observes that there is an energy surplus and has hence applied MOD on the available generation.

### Energy Availability from Own Generating Stations for Distribution Function

#### *Petitioner's Submission*

6.38 The Petitioner submitted that it generates power from its own generating stations to meet part of the power requirements for its consumers in the Jharkhand and West Bengal. The generating stations include both thermal and hydel stations.

6.39 The Petitioner also projected the actual generation available from own stations during the period FY 2018-19.

#### *Commission's Analysis*

6.40 The Commission has considered the submission made by the Petitioner on energy availability from its own generating stations. Based on the submission made by the Petitioner, the Commission approves the energy availability from own generation as per the PAF submitted by the Petitioner. The energy availability from own generation as per the submission of the Petitioner and approved by the Commission is summarised below:

**Table 40: Energy Availability from Own Generating Stations for Distribution as submitted by the Petitioner and as approved by the Commission for FY 2018-19 (MU)**

Particulars	FY 2018-19	
	Petition	Approved
BTPS 'B'	803.19	812.00
DTPS U# 4	918.68	1031.99
MTPS U#1 to 3	2824.59	3265.63
MTPS U#4	585.20	1008.32
HYDEL	250.00	386.50



Particulars	FY 2018-19	
	Petition	Approved
<b>Sub Total</b>	<b>5381.67</b>	<b>6504.44</b>
MTPS U#5 & 6	2766.87	2902.26
MTPS U#7&8	5403.20	5906.15
CTPS U# 7&8	3305.58	3483.93
DSTPS U # 1 & 2	5968.39	6518.99
KTPS U# 1 & 2	6222.10	6453.33
RTPS U # 1 & 2	2716.71	3722.77
BTPS 'A'	2864.52	3006.23
<b>Sub Total</b>	<b>29247.38</b>	<b>31993.65</b>
<b>Total Own Generation</b>	<b>34629.05</b>	<b>38498.09</b>

### Energy Availability from Central Sector Generating Stations (CSGSs) and Other Sources

#### *Petitioner's Submission*

- 6.41 The Petitioner submitted that it is also purchasing power from CSGS and other sources viz. NTPC, NHPC, PTC & other sources (excluding net power purchased under Unscheduled Interchange mechanism) to meet the energy requirements in the DVC area.
- 6.42 Further, during the period FY 2018-19, the Petitioner has also proposed to purchase contingency power.

#### *Commission's Analysis*

- 6.43 The Commission has approved the energy availability from external sources based on the contracted capacity, NAPAF and Normative Auxiliary Consumption for the Thermal Power Plants and based on the Design Energy for NHPC power plants. The Commission has approved the availability as proposed by the Petitioner for power purchase from Tala, Chuka and Kurichu HPS.

### Energy Balance

- 6.44 Based on the energy requirement and energy availability from own generation, T&D losses and power purchase from CSGS and other sources, the energy balance for FY 2018-19 as submitted by the Petitioner and as per Commission's analysis (based on Merit Order Despatch) is summarized in the following table. The Commission has observed that the Petitioner has surplus generation and has approved the surplus power available from internal generation.

**Table 41: Energy Balance as submitted by the Petitioner and as approved by the Commission for FY 2018-19 (MU)**

Particulars	FY 2018-19	
	Petition	Approved
<b>A. Energy Requirement</b>		
Energy sales within the state of Jharkhand	11787.36	10259.27
Energy sales within the state of West Bengal	8449.42	8449.42
Total energy sales in DVC Area	<b>20236.78</b>	<b>18708.69</b>
Energy wheeled	900.00	900.00
Overall Utilization	<b>21136.78</b>	<b>19608.69</b>
T&D loss (MU)	747.62	653.91
T&D loss (%)	3.42%	3.23%
<b>Total Energy Requirement for DVC</b>	<b>21884.40</b>	<b>20262.59</b>
<b>B. Energy Availability</b>		
<i>Own Generation-Firm sources</i>		
Thermal	34379.05	38111.59
Hydel	250.00	386.50
<b>Sub Total</b>	<b>34629.05</b>	<b>38498.09</b>
<i>Own Generation-Infirm sources</i>		
Net Power Purchase (including UI)	2227.35	2061.08
Energy received for Wheeling	935.00	935.00
Less: Energy sold to other licensees & exchange	15907.00	21231.58
<b>Total Energy Available for DVC</b>	<b>21884.40</b>	<b>20262.59</b>

**Power Purchase- Own Generation*****Petitioner's Submission***

6.45 The Petitioner submitted the Power Purchase from own generation plants (new and old) for meeting the demand of its consumers in Jharkhand and WB States.

***Commission's Analysis***

6.46 The Commission has approved the power purchase from own generating stations based on Merit Order Despatch as summarised below:

**Table 42: Power Purchase from Own Generating Stations as submitted by the Petitioner and as approved by the Commission for FY 2018-19 (MU)**

Particulars	FY 2018-19	
	Petition	Approved
BTPS 'B'	803.19	812.00
DTPS U# 4	918.68	0.00
MTPS U#1 to 3	2824.59	0.00
MTPS U#4	585.20	1008.32
HYDEL	250.00	386.50
<b>Sub Total</b>	<b>5381.67</b>	<b>2206.82</b>



Particulars	FY 2018-19	
	Petition	Approved
MTPS U#5 & 6	1890.10	-
MTPS U#7&8	1995.45	2296.78
CTPS U# 7&8	99.48	1393.57
DSTPS U # 1 & 2	4113.29	3044.21
KTPS U# 1 & 2	1825.40	4194.66
RTPS U # 1 & 2	1697.94	2326.73
BTPS 'A'	1718.71	1803.74
<b>Sub Total</b>	<b>13340.38</b>	<b>15059.69</b>
<b>Total Own Generation</b>	<b>18722.05</b>	<b>17266.51</b>

### Power Purchase- Other Sources

#### *Petitioner's Submission*

6.47 The Petitioner submitted the power purchase from other sources viz., NTPC, NHPC, PTC, etc. for meeting its consumer demands in addition to the internal generation.

#### *Commission's Analysis*

6.48 The Commission has approved power purchase from other sources viz., NTPC, NHPC, PTC, etc. for meeting its consumer demands in addition to the internal generation considering Merit Order Despatch as summarised below:

**Table 43: Power Purchase from Other Sources as submitted by the Petitioner and as approved by the Commission for FY 2018-19 (MU)**

Particulars	FY 2018-19	
	Petition	Approved
<b>NHPC</b>		
Rangit	32.60	33.52
Teesta- V	208.26	219.64
<b>NTPC</b>		
FSTPS III	131.22	223.17
TSTPS I	19.66	21.76
KBUNL MTPS II	52.41	68.71
<b>PTC</b>		
Chukha	170.82	170.82
Kurichu	52.78	52.78
Tala	180.14	180.14
<b>MPL</b>	1002.15	1052.68
<b>Solar</b>	69.35	69.35
<b>Net UI</b>	350.00	0.00
<b>Total</b>	<b>2269.39</b>	<b>2092.55</b>

## Cost of Own Generation

### Petitioner's Submission

- 6.49 DVC is a statutory body controlled by the Central Government as envisaged under Section 79 (1) (a) of the Electricity Act, 2003. The tariff for generation of electricity from DVC's own stations is determined by CERC. Accordingly cost of generation for DVC as a whole from own stations has been determined in accordance with the relevant CERC Orders.
- 6.50 While computing the ARR for 2018-19, the Petitioner considered the fixed cost of own generation and T&D system as per the latest Tariff Orders of its own generating stations issued by CERC. In case, Order of any station has not yet been issued by CERC, the fixed charges proposed in the tariff petitions for those stations filed before CERC has been considered.
- 6.51 The Petitioner submitted that while computing the energy charge rate of different thermal generating stations for FY 2018-19, actual energy charge rates based on the stipulated formula of CERC have been considered on monthly basis for the period April 2018 to October-2018. For rest part of FY 2018-19 the energy charge rates have been considered with escalation of 21.66%, considering the CERC's notification dtd. October 15, 2018 in respect of escalation rate of coal price including transportation cost during the period from 01.10.2018 to 31.03.2019 for competitive bidding.

### Commission's Analysis

- 6.52 The Commission has taken note that the CERC has issued final Tariff Orders for the following stations:

**Table 44: CERC Orders considered for approval of Fixed Charges of Own Generating Stations**

Station	Date of CERC Order
BTPS 'B'	19.05.2017
CTPS U# 1,2,3	23.09.2016
DTPS U # 3,4	20.07.2017
MTPS U#1 to 3	31.08.2016
MTPS U#4	20.09.2016
MHS	20.09.2016
PHS	20.09.2016
THS	23.09.2016
T&D System	29.09.2017 (True-up order of CERC for 2009-14)
MTPS U#5 & 6	16.03.2017
MTPS U# 7 & 8	03.10.2016
CTPS U# 7&8	17.02.2017



Station	Date of CERC Order
DSTPS U # 1 & 2	17.03.2017
KTPS U # 1 & 2	28.02.2017
RTPS U # 1 & 2	28.09.2017
BTPS 'A' U # 1	30.05.2018

6.53 The Commission after scrutinizing the information made available by the Petitioner and after perusal of the above CERC Orders has adopted the fixed charges for own power generation from thermal and hydel stations for DVC for FY 2018-19 as approved by CERC in its relevant Tariff Orders. The Commission approves the Energy Charge Rate as submitted by the Petitioner.

6.54 The cost of own power generating stations as submitted by the Petitioner and as adopted by the Commission from the aforementioned CERC Orders for the period FY 2018-19 has been summarized in the following table. The Commission has adopted the methodology used in its previous Order dated May 18, 2019 for calculation of Fixed Charges for own generating stations. The Commission has however approved the purchase of power from the newer generating plants and the Other Sources based on Merit Order Despatch, except for Renewable and Hydro generations.

**Table 45: Fixed Charges approved by the Commission for FY 2018-19 (Rs. Crore)**

Station	Normative Availability (NAPAF)	Actual Yearly Plant Availability Factor (PAFY)	Annual Fixed Charge (AFC) (Rs. Crore)	Recoverable fixed charges as per CERC formula (Rs. Crore)	Share of firm consumer	Recoverable Fixed charge from Firm Consumers (Rs. Crore)
	A	B	C	D=Min (C,C*B/A)	E	F = D*E
BTPS 'B'	75%	49.18%	95.37	62.54	100.00%	62.54
DTPS U # 4	74%	62.68%	112.50	95.29	100.00%	95.29
MTPS U#1 to 3	83%	65.03%	362.06	283.65	100.00%	283.65
MTPS U#4	85%	60.23%	118.93	84.28	100.00%	84.28
MHS	80%	80.00%	34.90	17.45	100.00%	17.45*
PHS	80%	80.00%	25.77	12.88	100.00%	12.88*
THS	80%	80.00%	9.85	4.93	100.00%	4.93*
T & D System	98.50%	99.50%	524.79	530.12	100.00%	530.12
<b>SUB-TOTAL</b>			<b>1248.92</b>	<b>1091.14</b>		<b>1091.14</b>
MTPS U#5 & 6	85%	72.82%	473.78	405.86	0.00%	0.00
MTPS U# 7 & 8	85%	71.16%	1019.21	853.23	38.89%	331.80
CTPS U # 7 & 8	85%	87.41%	530.60	530.60	40.00%	212.24
DSTPS U # 1 & 2	85%	78.54%	1104.17	1020.26	46.70%	476.44
KTPS U # 1 & 2	85%	77.75%	1175.74	1075.45	65.00%	699.04
RTPS U # 1 & 2	85%	37.38%	1395.55	613.66	62.50%	383.54



Station	Normative Availability (NAPAF)	Actual Yearly Plant Availability Factor (PAFY)	Annual Fixed Charge (AFC) (Rs. Crore)	Recoverable fixed charges as per CERC formula (Rs. Crore)	Share of firm consumer	Recoverable Fixed charge from Firm Consumers (Rs. Crore)
	A	B	C	D=Min (C,C*B/A)	E	F = D*E
BTPS 'A'	85%	72.44%	771.89	657.82	60.00%	394.69
SUB-TOTAL			<b>6470.93</b>	<b>5156.88</b>		<b>2497.75</b>
<b>GRAND TOTAL</b>			<b>7719.84</b>	<b>6248.02</b>		<b>3588.89</b>

\*The Petitioner has proposed to recover the total AFC charges through capacity charges, while the Commission has approved the recovery as per the CERC Tariff Regulations, 2014.

6.55 The Energy Charges approved by the Commission for FY 2018-19 for own generating stations is summarised below:

**Table 46: Energy Charges as submitted by the Petitioner and as approved by the Commission for FY 2018-19 (Rs. Crore)**

Particulars	FY 2018-19	
	Petition	Approved
BTPS	190.28	192.37
DTPS	337.24	0.00
MTPS U# 1 to 3	881.98	0.00
MTPS U# 4	158.80	273.62
MTPS U# 5 & 6	604.21	0.00
MTPS U# 7 & 8	565.48	650.88
CTPS U # 7 & 8	20.36	285.26
DSTPS U # 1 & 2	1200.93	888.80
KTPS U # 1 & 2	415.41	954.58
RTPS U # 1 & 2	414.15	567.52
BTPS 'A'	303.81	376.14
MHS	0.00	17.45*
PHS	0.00	12.88*
THS	0.00	4.93*
<b>Total Energy Charges</b>	<b>5092.67</b>	<b>4224.45</b>

\*The Petitioner has proposed to recover the total AFC charges through capacity charges, while the Commission has approved the recovery as per the CERC Tariff Regulations, 2014.

## Power Purchase Cost from Central Sector Generating Stations (CSGSs) and Other Sources

### Petitioner's Submission

6.56 The Petitioner submitted the actual power purchase cost from CSGS and other sources (including RE sources) during the first half of FY 2018-19 based on the actual power purchase bills received from the generators.



- 6.57 The Petitioner also claimed Rs 117.75 Crore and Rs 0.16 Crore towards transmission charges and towards ERPC fund respectively.
- 6.58 The Petitioner has further proposed the cost of REC as Rs. 3.50/kWh for Solar REC and Rs. 1.50/kWh for Non-Solar REC for meeting its RPO targets.

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

- 6.59 The Commission has approved the Fixed Charges for Thermal Power Plants and Hydro Power Plants as per the respective CERC Tariff Orders. The Energy Charge Rate of Thermal Power Plants are escalated by 5.17% p.a. based on submission of the Petitioner from the actual values for FY 2016-17. Energy Charge Rate for Hydro Plants are approved as per the Design Energy approved by CERC. The Energy Charge Rate for Tala, Chuka and Kurichu are approved as per the submission of the Petitioner.
- 6.60 As stated earlier in this Order, the Commission has adopted MOD in approving the power purchase quantum and consequently the power purchase cost for FY 2018-19. Based on the total energy requirement and quantum of energy to be purchased from CSGS and other sources (other than own sources), the Commission has disallowed the purchase of energy from generating stations having the highest variable cost per unit among all new internal generation plants, CSGS's and other sources from where DVC procures power (except RE and hydro power).
- 6.61 Besides, the Petitioner has segregated the cost of RPO into West Bengal and Jharkhand based on the RPO requirements stipulated by the respective State Regulatory Commissions for FY 2018-19. Accordingly, the Commission also finds it prudent to segregate the cost of RPO for FY 2018-19 as per the RPO requirements stipulated by the respective Commissions and actual RPO compliance by the Petitioner.
- 6.62 Based on the RPO Compliance submitted by the Petitioner, the Commission has approved the expenses for purchase of Renewable Energy Certifications (RECs) towards RPO Compliance for Sales in Jharkhand. However, the cost of REC as proposed by the Petitioner is Rs. 3.50/kWh for Solar REC and Rs. 1.50/kWh for Non-Solar REC, while the Commission approves Rs. 1.00/kWh for both Solar and Non-Solar RECs for FY 2018-19 as per the prevailing floor prices.
- 6.63 The Commission observes that the RPO computations as submitted by the Petitioner is not in line with the Tariff Policy 2016. The Petitioner has computed REC requirement even on purchase of power through hydro sources which is not in accordance with the Tariff Policy



2016. The Commission has however not considered that the quantum of Hydro Power purchased for RPO Compliance for FY 2018-19 i.e., 572.17 MU as per the National Tariff Policy, 2016. The Commission has also not considered the RPO compliance for energy sold to Other Distribution Licensees as the same shall be met by the respective Licensee either through RE purchase or through purchase of RECs.

**Table 47: Expenses towards RECs for Jharkhand as submitted by the Petitioner and as approved by the Commission for FY 2018-19 (Rs. Crore)**

Particulars	FY 2018-19	
	Petition	Approved
Solar (REC)	65.16	16.53
Non-Solar (REC)	24.05	18.54

6.64 Thus, the net Power Purchase Cost from Central Sector Generating Stations (CSGSs) and Other Sources (including RE sources and excluding purchase from own generating stations) approved is summarised below:

**Table 48: Source-wise Power Purchase Cost as submitted by Petitioner and as approved by the Commission for FY 2018-19 (Rs. Crore)**

Particulars	FY 2018-19					
	Petition		Approved			
	Quantum (MU)	TC (Rs. Crore)	Quantum (MU)	FC (Rs. Crore)	EC (Rs./kWh)	TC (Rs. Crore)
<b>NHPC</b>						
Rangit	32.60	12.75	33.52	5.16	5.16	10.31
Teesta- V	208.26	51.09	219.64	22.21	22.21	44.42
<b>NTPC</b>						
FSTPS I & II	0.00					
FSTPS III	131.22	58.96	218.70	33.42	56.66	90.08
KHTPS I	0.00					
KHTPS II	0.00					
TSTPS I	19.66	6.20	21.76	2.09	4.79	6.88
KBUNL MTPS II	52.41	26.39	67.33	16.14	17.65	33.79
<b>PTC</b>						
Chukha	170.82	39.12	170.82	-	39.12	39.12
Kurichu	52.78	10.71	52.78	-	10.71	10.71
Tala	180.14	36.39	180.14	-	36.39	36.39
<b>MPL</b>	1002.15	385.39	1052.68	155.10	227.40	382.50
<b>Solar</b>	69.35	73.91	69.35	-	73.91	73.91
<b>Contingency</b>	350.00	175.00	0.00	-	-	0.00
<b>Total</b>	<b>2269.39</b>	<b>875.91</b>	<b>2086.71</b>	<b>234.11</b>	<b>494.01</b>	<b>728.11</b>

6.65 The Commission has approved Rs. 117.75 Crore and Rs. 0.16 Crore towards transmission charges and towards ERPC fund respectively.



## **Tariff Filing and Publication Expenses (CERC)**

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

6.66 The Petitioner has claimed Rs. 5.11 Crore, towards Tariff Filing and Publication Expenses (CERC) for FY 2018-19.

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

6.67 The Commission has approved the amount claimed by the Petitioner towards Tariff Filing and Publication Expenses (CERC) for FY 2018-19.

## **Water Cess and Pollution Cess**

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

6.68 The Petitioner has claimed Rs. 0.20 Crore towards Water Cess and Pollution Cess for FY 2018-19.

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

6.69 The Commission has approved the amount claimed by the Petitioner towards Water Cess and Pollution Cess for FY 2018-19.

## **Non-Tariff Income**

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

6.70 The Petitioner has claimed Rs. 27.00 Crore towards Non-Tariff Income for FY 2018-19.

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

6.71 The Commission has observed the sudden reduction in the Non-Tariff Income claimed by the Petitioner and asked the Petitioner to justify the same. The Petitioner vide its reply submitted that the Non-Tariff Income is mainly attributable to the DPS by the firm consumers and that since JBVNL has entered a PPA to purchase power directly from Koderma TPS and due to increased incentive for payment of bills on time, the Petitioner has proposed a reduction in Non-Tariff Income. The Commission however approves the actual DPS by other consumers except JBVNL for FY 2017-18 of Rs. 48.53 Crore for FY 2018-19, which shall be subject to truing up based on actuals.

## Allocation of Expenses of DVC to Jharkhand Area

### Petitioner's Submission

6.72 The Petitioner has submitted that the input costs including own generation cost, Power Purchase Cost, Other Input Cost, etc. cannot be segregated into the cost pertaining to Jharkhand and West Bengal area as DVC operates as a single entity. Thus, the Petitioner has submitted that, for the purpose of computing retail tariffs pertaining to Jharkhand area, the input cost of DVC be bifurcated in the ratio of the energy sales in Jharkhand area to the total sales in the Damodar Valley area.

### Commission's Analysis

6.73 The Commission has allocated the expenses of DVC as a whole to Jharkhand area by following the methodology approved in the previous Order dated May 18, 2018. The following table summarizes the input cost allocated to the Jharkhand area for the period FY 2018-19 as approved in the MYT Order, that claimed by the Petitioner and as approved by the Commission.

**Table 49: Cost Allocation for Jharkhand as submitted by the Petitioner and as approved by the Commission for FY 2018-19 (Rs. Crore)**

Particulars	FY 2018-19		
	MYT Order	Petition	Approved
Cost of Own Generation	9,291.16	8,698.09	7,813.34
Power Purchase Cost (Including Transmission Charges and Excluding Renewable Energy Purchase/REC Expenses)	490.71	919.90	772.11
CERC Tariff filling fees & publication expenses	5.11	5.11	5.11
Water Cess & other State Cesses	3.55	0.20	0.20
Less: Non Tariff Income (NTI)	55.16	27.00	48.53
<b>Total ARR of DVC (Distribution)</b>	<b>9,735.37</b>	<b>9,596.30</b>	<b>8,542.23</b>
Ratio of Sales in Jharkhand*	54.24%	58.25%	54.84%
<b>ARR Apportioned to Jharkhand</b>	<b>5,280.64</b>	<b>5,589.58</b>	<b>4,684.30</b>

\*Ratio revised by Petitioner pursuant to revised sales submitted by the Petitioner

## Interest on Working Capital (IoWC)

### Petitioner's Submission

6.74 The Petitioner has submitted that the Interest on Working Capital has been determined in accordance with the applicable provisions of Distribution Tariff Regulations, 2015, according to which, the Interest on Working Capital shall be as given below:



*“6.30 Working capital for the Retail Supply of Electricity for the Control Period shall consist of:*

*a) One-twelfth of the amount of Operation and Maintenance expenses for retail supply business for such financial year; plus*

*b) Maintenance spares at 1% of Opening GFA for retail supply business; plus*

*c) Two months equivalent of the expected revenue from sale of electricity at the prevailing tariffs; minus*

*d) Amount held as security deposits under clause (a) and clause (b) of subsection(1) of Section 47 of the Act from consumers and Distribution System Users net of any security held for wheeling business; minus*

*e) One month equivalent of cost of power purchased, based on the annual power procurement plan.*

*6.31 Rate of interest on working capital shall be equal to the base rate of SBI plus 350 bps as applicable on the 1st April of the relevant financial year. ”*

6.75 Accordingly, the Petitioner submitted the Interest on Working Capital required for DVC for Jharkhand Area to be Rs. 111.17 Crore for FY 2018-19.

### **Commission's Analysis**

6.76 The Commission has approved Interest on Working Capital as per the methodology adopted by the Commission for calculation of Interest on Working capital in its previous Order dated May 18, 2018.

**Table 50: Interest on Working Capital as submitted by the Petitioner and as approved by the Commission for FY 2018-19 (Rs. Crore)**

Particulars	FY 2018-19	
	Petition	Approved
Revenue from Sales in Jharkhand		4,791.80
Working Capital Requirement in Jharkhand Area (at 1% of Revenue from sale of power)		47.92
Interest Rate (%)		12.20%
<b>Interest on Working Capital for Jharkhand Area</b>	<b>111.17</b>	<b>5.85</b>





## Interest on Consumer Security Deposit

### *Petitioner's Submission*

6.77 The Petitioner submitted an amount of Rs. 0.44 Crore towards Interest on Consumer Security Deposit.

### *Commission's Analysis*

6.78 The Commission has approved the Consumer Security Deposit as submitted by the Petitioner and has calculated the Interest on Consumer Security Deposit for FY 2018-19 as per Regulation 6.28 of the Distribution Tariff Regulations, 2015 and the Interest Rate as per the Supply Code Regulations, 2015.

## Tariff Filing and Publication Expenses (JSERC)

### *Petitioner's Submission*

6.79 The Petitioner submitted an amount of Rs. 0.73 Crore towards Tariff Filing and Publication Expenses in JSERC.

### *Commission's Analysis*

6.80 The Commission has approved the Tariff Filing and Publication Expenses in JSERC as submitted by the Petitioner.

## Summary of ARR approved by the Commission

6.81 The Commission has approved ARR for FY 2018-19 vis-à-vis the ARR submitted by the Petitioner as summarised below:

**Table 51: Summary of ARR as submitted by the Petitioner and as approved by the Commission for FY 2018-19 (Rs. Crore)**

Station/item	2018-19					
	MYT Order		Petition		Approved	
	Energy Cost (Rs. Crore)	Fixed Cost (Rs. Crore)	Energy Cost (Rs. Crore)	Fixed Cost (Rs. Crore)	Energy Cost (Rs. Crore)	Fixed Cost (Rs. Crore)
Cost of Own Generation	5,289.13	4,002.03	5,092.67	3,605.42	4,224.45	3,588.89
Power Purchase Cost (Incl. Trans. Charges & Excl. RE/REC Expense)	490.71		919.90		420.09	352.02
Tariff filing fees & publication expenses in CERC		5.11		5.11		5.11
Water cess		3.55		0.20		0.20
Less Non Tariff Income (NTI)		55.16		27.00		48.53





Station/item	2018-19					
	MYT Order		Petition		Approved	
	Energy Cost (Rs. Crore)	Fixed Cost (Rs. Crore)	Energy Cost (Rs. Crore)	Fixed Cost (Rs. Crore)	Energy Cost (Rs. Crore)	Fixed Cost (Rs. Crore)
<b>Total</b>	<b>5,779.84</b>	<b>3,955.53</b>	<b>6,012.57</b>	<b>3,583.73</b>	<b>4,644.55</b>	<b>3,897.69</b>
Ratio of sales in Jharkhand part to total firm sale in entire DVC	54.24%	54.24%	58.25%	58.25%	54.84%	54.84%
<b>ARR before IWC, Interest on SD &amp; tariff filling fees in the licensed area of Jharkhand</b>	<b>3,135.09</b>	<b>2,145.55</b>	<b>3,502.16</b>	<b>2,087.42</b>	<b>2,546.93</b>	<b>2,137.37</b>
Cost of Solar & Non Solar Power and REC Purchased to meet the solar & non solar RPO in the state of Jharkhand	155.70		154.62		100.49	
Interest on Working Capital		7.59		111.17		5.85
Interest on security deposit		2.16		0.44		0.44
Tariff Filing Fees & Publication Expenses in JSERC		0.46		0.73		0.73
<b>Net ARR for Jharkhand</b>	<b>3,290.79</b>	<b>2,155.76</b>	<b>3,656.78</b>	<b>2,199.76</b>	<b>2,647.41</b>	<b>2,144.39</b>
<b>TOTAL ARR</b>	<b>5,446.55</b>		<b>5,856.54</b>		<b>4,791.80</b>	
<b>Particulars</b>	<b>Quantum</b>		<b>Quantum</b>		<b>Quantum</b>	
Total ARR	5446.55		5856.54		4791.80	
Sale in Jharkhand (MU)	12424.91		11787.36		10259.27	
Avg Cost of Supply (Rs. / kWh)	4.38		4.97		4.67	

### Revenue from Sale of Power in Jharkhand Area

#### *Petitioner's Submission*

6.82 The Petitioner submitted that the provisional revenue from sale of power in Jharkhand is Rs. 4305.11 Crore for FY 2018-19 during the TVS held on April 29, 2019.

#### *Commission's Analysis*

6.83 The Commission approves the revenue as submitted by the Petitioner for FY 2018-19. The Commission observes that the reduced Revenue realisation of Rs. 4.20/kWh in FY 2018-19 is due to the reduction in Tariff for FY 2018-19 vide the MYT Order dated May 18, 2018.

6.84 The Standalone Gap on account of APR of FY 2018-19 is Rs. 486.69 Crore



## A 7: ARR & TARIFF FOR FY 2019-20

- 7.1 The Petitioner submitted that the details of elements of ARR for FY 2019-20 are projected based on the provisions of JSERC (Terms and Conditions for Determination of Distribution Tariff) Regulations 2015, figures approved in previous Tariff Orders and Principles adopted by the Commission.
- 7.2 The Commission has approved the ARR and Tariff for FY 2019-20 taking into consideration:
- JSERC Distribution Tariff Regulations, 2015.
  - Methodology adopted by the Commission in its earlier Orders.

### Consumers, Connected Load and Energy Sales

#### *Petitioner's Submission*

- 7.3 The Petitioner submitted the estimated category-wise number of consumers/connection points, connected load and energy sales in the Damodar Valley area falling within the State of Jharkhand for FY 2019-20 based on the actuals in the first half of FY 2018-19.

#### *Commission's Analysis*

- 7.4 The Commission after scrutinizing the latest information submitted for FY 2018-19 by the Petitioner after the Technical Validation Session (TVS) on April 29, 2019 and prudence check, approves energy sales for FY 2019-20 considering the LT sales as proposed by the Petitioner, 33kV sales considering the actual sales for FY 2018-19 (excluding JBVNL), escalated by 4 year CAGR and sales for 60 MVA JBVNL demand estimated for FY 2019-20, 132 kV sales for FY 2018-19 escalated by 4 year CAGR and no escalation for sales in 132 kV (Tractions) and 220 kV of FY 2018-19. The Commission has approved the no. of consumers and connected load as submitted by the Petitioner:

**Table 52: Consumers, Connected Load and Sales in Jharkhand as submitted by the Petitioner and Approved by the Commission for FY 2019-20**

Consumer Category	FY 2019-20					
	Petition			Approved		
	Supply Points	Connected Load (MVA)	Consumption (MU)	Supply Points	Connected Load (MVA)	Consumption (MU)
LT (Domestic)	1372	5.49 MW	28.80	1372	5.49 MW	28.80
LT (Commercial)	493	2.51 MW	13.45	493	2.51 MW	13.45
33 kV	86	675.24	3746.36	86	675.24	4085.88
132 kV	7	297.91*	1233.70	7	297.91	1165.39



Consumer Category	FY 2019-20					
	Petition			Approved		
	Supply Points	Connected Load (MVA)	Consumption (MU)	Supply Points	Connected Load (MVA)	Consumption (MU)
132 kV (Traction)	5	75.00	315.36	5	75.00	237.38
220 kV	2	316.84	1601.66	2	316.84	1657.16
<b>Total</b>	<b>1965</b>	<b>1364.99*</b>	<b>6939.33</b>	<b>1965</b>	<b>1364.99</b>	<b>7188.05</b>

\* Considered as per the Petitioner's Model

## Transmission & Distribution Losses and Energy Requirement

### Petitioner's Submission

- 7.5 The Petitioner submitted that as it is supplying power in bulk to the WBSEDCL and JSEB and since majority of HT consumers falling in the Damodar valley area are at 33 kV and above voltage, it incurs very low Transmission & Distribution (T&D) losses. The Petitioner submitted a T&D loss of 3.44% for FY 2019-20 as against the approved loss of 3.37% as per the MYT Order dated May 18, 2018.
- 7.6 Further, in addition to the energy sold in the Jharkhand area, the Petitioner also submitted the projected sales in the West Bengal area and the energy wheeled from its inter-state transmission system for the purposes of computation of the energy requirement for the entire Damodar Valley area.
- 7.7 Based on the total energy sales in the Damodar Valley area, the T&D losses and the energy wheeled from the system, the Petitioner submitted the actual energy requirement for the period FY 2018-19 as summarised as below as per Clause 5.23 of the Distribution Tariff Regulations, 2015 as reproduced below:

*"5.23 The Licensee shall file the distribution loss trajectory for the entire Control Period in the Business Plan commensurate with the capital investment plan for each year of the control period for approval of the Commission after verification and evaluation of the same.*

*The Licensee shall be allowed to operate at below 5% audited distribution loss without any incentive/ penalty mechanism."*

### Commission's Analysis

- 7.8 The Commission observes that Clause 5.23 of the Distribution Tariff Regulations, 2015, provides for approval of actual loss below 5% without any profit/loss to the Licensee. However, since the Petitioner has not been able to substantiate the consistent increase in

the T&D losses of the system, the Commission has approved the energy requirement considering the loss of 3.23% as approved for FY 2016-17.

**Table 53: Energy Requirement as submitted by the Petitioner and as approved by the Commission for FY 2019-20 (MU)**

Particulars	FY 2019-20	
	Petition	Approved
Energy sales within the state of Jharkhand	6939.33	7188.05
Energy sales within the state of West Bengal	8863.90	8863.90
Total energy sales in DVC Area	15803.23	16051.95
Energy wheeled	968.30	968.30
Overall Utilization	16771.53	17020.25
T&D loss (MU)	597.01	567.59
T&D loss (%)	3.44%	3.23%
<b>Total Energy Requirement for DVC</b>	<b>17368.54</b>	<b>17587.83</b>

### Power Purchase FY 2019-20

#### Merit Order Despatch

7.9 The Commission has applied MOD on surplus energy while approving the power purchase for FY 2019-20 as done for FY 2016-17 and FY 2018-19.

#### Energy Availability from Own Generating Stations for Distribution Function

##### *Petitioner's Submission*

7.10 The Petitioner submitted that it generates power from its own stations to meet part of the power requirements for its consumers in the Jharkhand and West Bengal. The generating stations include both thermal and hydel stations.

7.11 The Petitioner also projected the actual generation available from own stations during the period FY 2019-20.

##### *Commission's Analysis*

7.12 The Commission has considered the submission made by the Petitioner on energy availability from its own generating stations. The Commission has approved the energy availability from own generating stations by considering the availability approved by the Commission in its MYT Order dated May 18, 2018 as it is observed that the energy availability from its own generating stations is very low as compared to the proposed Plant Availability Factor (PAF). The Energy Availability from own generation as per the submission of the Petitioner and approved by the Commission is summarised below:



**Table 54: Energy Availability from Own Generating Stations for Distribution as submitted by the Petitioner and as approved by the Commission for FY 2019-20 (MU)**

Particulars	FY 2019-20	
	Petition	Approved
BTPS 'B'	702.38	704.50
DTPS U# 4	710.95	752.92
MTPS U#1 to 3	2881.71	3068.01
MTPS U#4	1062.44	1085.61
HYDEL	270.00	386.50
<b>Sub Total</b>	<b>5627.49</b>	<b>5997.54</b>
MTPS U#5 & 6	2956.37	3028.41
MTPS U#7&8	6089.09	6187.72
CTPS U# 7&8	2923.91	3047.54
DSTPS U # 1 & 2	6089.03	6346.26
KTPS U# 1 & 2	6089.05	6346.26
RTPS U # 1 & 2	5191.61	7949.17
BTPS 'A'	3044.59	3312.15
<b>Subtotal</b>	<b>32383.65</b>	<b>36217.52</b>
<b>Total Own Generation</b>	<b>38011.14</b>	<b>42215.05</b>

### Power Purchase from Central Sector Generating Stations (CSGSs) and Other Sources

#### *Petitioner's Submission*

- 7.13 The Petitioner submitted that it is also purchasing power from CSGS and other sources viz. NTPC, NHPC, PTC & other sources (excluding net power purchased under Unscheduled Interchange mechanism) to meet the energy requirements in the DVC area.
- 7.14 Further, during the period FY 2019-20, the Petitioner has also proposed to purchase contingency power.

#### *Commission's Analysis*

- 7.15 The Commission has approved the energy availability from external sources based on the contracted capacity, NAPAF and Normative Auxiliary Consumption for the Thermal Power Plants and based on the Design Energy for NHPC power plants. The Commission has approved the availability as proposed by the Petitioner for power purchase from Tala, Chuka and Kurichu HPS.

### Energy Balance

- 7.16 Based on the energy requirement and energy availability from own generation, T&D losses and power purchase from CSGS and other sources, the energy balance for FY 2019-20 as

submitted by the Petitioner and as per Commission's analysis (based on Merit Order Despatch) is summarized in the following table:

**Table 55: Energy Balance as submitted by the Petitioner and as approved by the Commission for FY 2019-20 (MU)**

Particulars	FY 2019-20	
	Petition	Approved
<b>A. Energy Requirement</b>		
Energy sales within the state of Jharkhand	6939.33	7188.05
Energy sales within the state of West Bengal	8863.90	8863.90
Total energy sales in DVC Area	<b>15803.23</b>	<b>16051.95</b>
Energy wheeled	968.30	968.30
Overall Utilization	<b>16771.53</b>	<b>17020.25</b>
T&D loss (MU)	597.01	567.59
T&D loss (%)	3.44%	3.23%
<b>Total Energy Requirement for DVC</b>	<b>17368.54</b>	<b>17587.83</b>
<b>B. Energy Availability</b>		
<i>Own Generation-Firm sources</i>		
Thermal	37741.14	41828.55
Hydel	270.00	386.50
<b>Sub Total</b>	<b>38011.14</b>	<b>42215.05</b>
<i>Own Generation-Infirm sources</i>		
Net Power Purchase (including UI)	1884.39	1847.73
Energy received for Wheeling	1010.00	1010.00
Less: Energy sold to other licensees & exchange	23537.00	27484.95
<b>Total Energy Available for DVC</b>	<b>17368.54</b>	<b>17587.83</b>

## Power Purchase- Own Generation

### *Petitioner's Submission*

7.17 The Petitioner submitted the Power Purchase from own generation plants (new and old) for meeting the demand of its consumers in Jharkhand and WB States.

### *Commission's Analysis*

7.18 The Commission has approved the power purchase from own generating stations after applying Merit Order Despatch which is as summarised below:

**Table 56: Power Purchase from Own Generating Stations as submitted by the Petitioner and as approved by the Commission for FY 2019-20 (MU)**

Particulars	FY 2019-20	
	Petition	Approved
BTPS 'B'	702.38	704.50
DTPS U# 4	710.95	0.00
MTPS U#1 to 3	2881.71	311.86



Particulars	FY 2019-20	
	Petition	Approved
MTPS U#4	1062.44	1085.61
HYDEL	270.00	386.50
<b>Sub Total</b>	<b>5627.49</b>	<b>2488.47</b>
MTPS U#5 & 6	2042.01	-
MTPS U#7&8	63.18	2080.61
CTPS U# 7&8	36.31	1058.62
DSTPS U # 1 & 2	1590.06	4108.37
KTPS U# 1 & 2	43.58	-
RTPS U # 1 & 2	3244.76	3198.50
BTPS 'A'	1826.75	1795.54
<b>Sub Total</b>	<b>8846.65</b>	<b>12241.63</b>
<b>Total Own Generation</b>	<b>14474.14</b>	<b>14730.10</b>

### Power Purchase- Other Sources

#### *Petitioner's Submission*

7.19 The Petitioner submitted the power purchase from other sources viz., NTPC, NHPC, PTC, etc. for meeting its consumer demands in addition to the internal generation.

#### *Commission's Analysis*

7.20 The Commission has approved power purchase from other sources viz., NTPC, NHPC, PTC, etc. for meeting its consumer demands in addition to the internal generation considering Merit Order Despatch as summarised below:

**Table 57: Power Purchase from Other Sources as submitted by the Petitioner and as approved by the Commission for FY 2019-20 (MU)**

Particulars	FY 2019-20	
	Petition	Approved
<b>NHPC</b>		
Rangit	32.53	33.52
Teesta- V	207.33	219.64
<b>NTPC</b>		
TSTPS I	14.47	21.76
KBUNL MTPS II	56.58	68.71
<b>PTC</b>		
Chukha	169.23	170.82
Kurichu	49.25	52.78
Tala	179.05	180.14
<b>MPL</b>	1005.00	1,052.68
<b>Solar</b>	73.16	73.16
<b>Net UI</b>	135.00	0
<b>Total</b>	<b>1921.61</b>	<b>1873.20</b>

## Cost of Own Generation

### Petitioner's Submission

- 7.21 DVC is a statutory body controlled by the Central Government as envisaged under Section 79 (1) (a) of the Electricity Act, 2003. The tariff for generation of electricity from DVC's own stations is determined by CERC. Accordingly cost of generation for DVC as a whole from own stations has been determined in accordance with the relevant CERC Orders.
- 7.22 While computing the ARR for 2019-20, the Petitioner considered the fixed cost of own generation and T&D system as per the latest Tariff Orders of its own generating stations issued by CERC for FY 2018-19, escalated by 2.5%.
- 7.23 The Petitioner submitted that while computing the energy charge rate of different thermal generating stations for FY 2019-20, the Energy Charge Rate as approved for FY 2018-19 has been escalated by 5.17%, based on the average coal escalation approved by CERC during the past 5 years.

### Commission's Analysis

- 7.24 The cost of own power generating stations as submitted by the Petitioner and as adopted by the Commission from the aforementioned CERC Orders for the period FY 2018-19 has been summarized in the following table. The Commission has adopted the methodology used in its previous Order dated May 18, 2019 for calculation of Fixed Charges for own generating stations. The Commission has also approved the PAF of old generation units for FY 2019-20 by considering the approved PAF for FY 2019-20 in the MYT Order dated May 18, 2018.
- 7.25 The Commission for FY 2019-20 has approved a 2.5% escalation in the Fixed Charges and Energy Charge Rate approved for FY 2018-19.

**Table 58: Fixed Charges approved by the Commission for FY 2019-20 (Rs. Crore)**

Station	Normative Availability (NAPAF)	Actual Yearly Plant Availability Factor (PAFY)	Annual Fixed Charge (AFC) (Rs. Crore)	Recoverable fixed charges as per CERC formula (Rs. Crore)	Share of firm consumer	Recoverable Fixed charge from Firm Consumers (Rs. Crore)
	A	B	C	$D = \min(C, C \cdot B/A)$	E	F = D * E
BTPS 'B'	75%	42.67%	97.75	55.62	100.00%	55.62
DTPS U # 4	74%	45.73%	115.31	71.26	100.00%	71.26





Station	Normative Availability (NAPAF)	Actual Yearly Plant Availability Factor (PAFY)	Annual Fixed Charge (AFC) (Rs. Crore)	Recoverable fixed charges as per CERC formula (Rs. Crore)	Share of firm consumer	Recoverable Fixed charge from Firm Consumers (Rs. Crore)
	A	B	C	D=Min (C,C*B/A)	E	F = D*E
MTPS U#1 to 3	83%	61.09%	371.12	273.15	100.00%	273.15
MTPS U#4	85%	64.85%	121.90	93.01	100.00%	93.01
MHS	80%	80.00%	35.77	17.89	100.00%	17.89*
PHS	80%	80.00%	25.41	13.21	100.00%	13.21*
THS	80%	80.00%	10.10	5.05	100.00%	5.05*
T & D System	98.50%	98.50%	537.91	537.91	100.00%	537.91
<b>SUB-TOTAL</b>			<b>1280.14</b>	<b>1067.09</b>		<b>1067.09</b>
MTPS U#5 & 6	85%	75.98%	485.62	434.09	0.00%	0.00
MTPS U# 7 & 8	85%	74.55%	1044.69	916.25	33.62%	308.09
CTPS U # 7 & 8	85%	76.46%	543.87	489.22	34.74%	169.94
DSTPS U # 1 & 2	85%	76.46%	1131.77	1018.06	64.74%	659.06
KTPS U # 1 & 2	85%	76.46%	1205.13	1084.05	0.00%	0.00
RTPS U # 1 & 2	85%	79.81%	1430.44	1343.10	40.24%	540.42
BTPS 'A'	85%	79.81%	791.19	742.88	54.21%	402.72
<b>SUB-TOTAL</b>			<b>6470.93</b>	<b>6027.65</b>		<b>2080.23</b>
<b>GRAND TOTAL</b>			<b>7751.07</b>	<b>7094.73</b>		<b>3147.31</b>

\*The Petitioner has proposed to recover the total AFC charges through capacity charges, while the Commission has approved the recovery as per the CERC Tariff Regulations, 2014.

7.26 The Energy Charges approved by the Commission for FY 2019-20 for own generating stations is summarised below:

**Table 59: Energy Charges as submitted by the Petitioner and as approved by the Commission for FY 2019-20 (Rs. Crore)**

Particulars	FY 2019-20	
	Petition	Approved
BTPS	175.00	171.07
DTPS	274.47	0.00
MTPS U# 1 to 3	946.31	99.81
MTPS U# 4	303.20	301.96
MTPS U# 5 & 6	686.50	0.00
MTPS U# 7 & 8	18.83	604.36
CTPS U # 7 & 8	7.82	222.11
DSTPS U # 1 & 2	488.23	1229.48
KTPS U # 1 & 2	10.43	0.00
RTPS U # 1 & 2	832.34	799.66
BTPS 'A'	339.59	383.82
MHS	0.00	17.89*
PHS	0.00	13.21*
THS	0.00	5.05*



Particulars	FY 2019-20	
	Petition	Approved
<b>Total Energy Charges</b>	<b>4082.71</b>	<b>3848.42</b>

*\*The Petitioner has proposed to recover the total AFC charges through capacity charges, while the Commission has approved the recovery as per the CERC Tariff Regulations, 2014.*

## **Power Purchase Cost from Central Sector Generating Stations (CSGSs) and Other Sources**

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

- 7.27 The Petitioner submitted the power purchase cost from CSGS and other sources (including RE sources) for FY 2019-20 by escalating the power purchase cost for FY 2018-19 by 5.17% based on the average coal escalation approved by CERC during the past 5 years.
- 7.28 The Petitioner also claimed Rs 118.93 Crore and Rs 0.16 Crore towards transmission charges and towards ERPC fund respectively.
- 7.29 The Petitioner has further proposed the cost of REC as Rs. 3.50/kWh for Solar REC and Rs. 1.50/kWh for Non-Solar REC for meeting its RPO targets.

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

- 7.30 The Commission has approved the Fixed Charges for Thermal Power Plants and Hydro Power Plants by escalating their respective values approved for FY 2018-19 by 2.5%. The Energy Charge Rate for Thermal Power Plants has been approved by escalating the Energy Charge Rate approved for FY 2018-19 by 2.5%. Energy Charge Rate for Hydro Plants are approved as per the Design Energy approved by CERC.
- 7.31 As stated earlier in this Order, the Commission has adopted MOD in approving the power purchase quantum and consequently the power purchase cost for FY 2019-20. Based on the total energy requirement and quantum of energy to be purchased from CSGS and other sources (other than own sources), the Commission has disallowed the purchase of energy from generating stations having the highest variable cost per unit among all new internal generation plants, CSGS's and other sources from where DVC procures power (except RE and hydro power).
- 7.32 Besides, the Petitioner has segregated the cost of RPO into West Bengal and Jharkhand based on the RPO requirements stipulated by the respective State Regulatory Commissions for FY 2019-20. Accordingly, the Commission also finds it prudent to segregate the cost of RPO for FY 2019-20 as per the RPO requirements stipulated by the respective Commissions and actual RPO compliance by the Petitioner.

- 7.33 The Commission has however not considered the quantum of Hydro Power purchased for RPO Compliance for FY 2019-20 as per the National Tariff Policy, 2016. The Commission has also not considered the RPO compliance for energy sold to Other Distribution Licensees as the same shall be met by the respective Licensee either through RE purchase or through purchase of RECs.
- 7.34 The Commission has approved the expenses for purchase of Renewable Energy Certifications (RECs) towards RPO Compliance for Sales in Jharkhand. The cost of REC as proposed by the Petitioner is Rs. 3.50/kWh for Solar REC and Rs. 1.50/kWh for Non-Solar REC, while the Commission approves Rs. 1.00/kWh for Solar and Non-Solar RECs for FY 2019-20 as per the prevailing floor prices.

**Table 60: Expenses towards RECs for Jharkhand as submitted by the Petitioner and as approved by the Commission for FY 2019-20 (Rs. Crore)**

Particulars	FY 2019-20	
	Petition	Approved
Solar (REC)	91.24	22.92
Non-Solar (REC)	31.86	22.44

- 7.35 Thus, the net Power Purchase Cost from Central Sector Generating Stations (CSGSs) and Other Sources (including RE sources and excluding purchase from own generating stations) approved is summarised below:

**Table 61: Source-wise Power Purchase Cost as submitted by Petitioner and as approved by the Commission for FY 2019-20 (Rs. Crore)**

Particulars	FY 2019-20					
	Petition		Approved			
	Quantum (MU)	TC (Rs. Crore)	Quantum (MU)	FC (Rs. Crore)	EC (Rs./kWh)	TC (Rs. Crore)
<b>NHPC</b>						
Rangit	32.53	13.12	33.52	5.29	5.29	10.57
Teesta- V	207.33	51.24	219.64	22.77	22.77	45.53
<b>NTPC</b>						
TSTPS I	14.47	4.79	21.76	2.14	4.91	7.05
KBUNL MTPS II	56.58	29.20	68.71	16.54	18.46	35.01
<b>PTC</b>						
Chukha	169.23	38.75	170.82	-	40.09	40.09
Kurichu	49.25	10.00	52.78	-	10.98	10.98
Tala	179.05	36.17	180.14	-	37.30	37.30
<b>MPL</b>	1005.00	400.77	1,052.68	158.97	233.09	392.06
<b>Solar</b>	73.16	77.83	73.16	-	77.83	77.83
<b>Contingency</b>	135.00	60.75	0.00	-	-	-
<b>Total</b>	<b>1921.61</b>	<b>722.63</b>	<b>1873.20</b>	<b>205.71</b>	<b>450.72</b>	<b>656.43</b>



7.36 The Commission has approved Rs. 118.93 Crore and Rs. 0.16 Crore towards transmission charges and towards ERPC fund respectively.

### **Tariff Filing and Publication Expenses (CERC)**

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

7.37 The Petitioner has claimed Rs. 5.22 Crore, towards Tariff Filing and Publication Expenses (CERC) for FY 2019-20.

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

7.38 The Commission has approved the amount claimed by the Petitioner towards Tariff Filing and Publication Expenses (CERC) for FY 2019-20.

### **Water Cess and Pollution Cess**

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

7.39 The Petitioner has claimed Rs. 0.25 Crore towards Water Cess and Pollution Cess for FY 2019-20.

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

7.40 The Commission has approved the amount claimed by the Petitioner towards Water Cess and Pollution Cess for FY 2019-20.

### **Non-Tariff Income**

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

7.41 The Petitioner has claimed Rs. 25.00 Crore towards Non-Tariff Income for FY 2019-20.

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

7.42 The Commission has observed the sudden reduction in the Non-Tariff Income claimed by the Petitioner and asked the Petitioner to justify the same. The Petitioner vide its reply submitted that the Non-Tariff Income is mainly attributable to the DPS by the firm consumers and that since JBVNL has entered a PPA to purchase power directly from Koderma TPS and due to increased incentive for payment of bills on time, the Petitioner has proposed a reduction in Non-Tariff Income. The Commission however approves the

actual DPS of Rs. 48.53 Crore of other consumers except JBVNL for FY 2017-18 for FY 2019-20 which shall be subject to truing up.

### Allocation of Expenses of DVC to Jharkhand Area

#### *Petitioner's Submission*

- 7.43 The Petitioner has submitted that the input costs including own generation cost, Power Purchase Cost, Other Input Cost, etc. cannot be segregated into the cost pertaining to Jharkhand and West Bengal area as DVC operates as a single entity. Thus, the Petitioner has submitted that, for the purpose of computing retail tariffs pertaining to Jharkhand area, the input cost of DVC be bifurcated in the ratio of the energy sales in Jharkhand area to the total sales in the Damodar Valley area.

#### *Commission's Analysis*

- 7.44 The Commission has allocated the expenses of DVC as a whole to Jharkhand area by following the methodology approved in the previous Order dated May 18, 2018. The following table summarizes the input cost allocated to the Jharkhand area for the period FY 2019-20 as submitted by the Petitioner and as approved by the Commission.

**Table 62: Cost Allocation for Jharkhand as submitted by the Petitioner and as approved by the Commission for FY 2019-20 (Rs. Crore)**

Particulars	FY 2019-20		
	MYT Order	Petition	Approved
Cost of Own Generation	10,147.27	7,396.60	6,995.73
Power Purchase Cost (Including Transmission Charges and Excluding Renewable Energy Purchase/REC Expenses)	287.79	763.89	697.69
CERC Tariff filling fees & publication expenses	5.22	5.22	5.22
Water Cess & other State Cesses	3.84	0.25	0.25
Less: Non Tariff Income (NTI)	58.90	25.00	48.53
<b>Total ARR of DVC (Distribution)</b>	<b>10,385.22</b>	<b>8,140.96</b>	<b>7,650.36</b>
Ratio of Sales in Jharkhand	53.28%	43.91%	44.78%
<b>ARR Apportioned to Jharkhand</b>	<b>5,729.52</b>	<b>3,574.76</b>	<b>3,425.83</b>

### Interest on Working Capital (IoWC)

#### *Petitioner's Submission*

- 7.45 The Petitioner has submitted that the Interest on Working Capital has been determined in accordance with the applicable provisions of Distribution Tariff Regulations, 2015, according to which, the Interest on Working Capital shall be as given below:



*“6.30 Working capital for the Retail Supply of Electricity for the Control Period shall consist of:*

*a) One-twelfth of the amount of Operation and Maintenance expenses for retail supply business for such financial year; plus*

*b) Maintenance spares at 1% of Opening GFA for retail supply business; plus*

*c) Two months equivalent of the expected revenue from sale of electricity at the prevailing tariffs; minus*

*d) Amount held as security deposits under clause (a) and clause (b) of subsection(1) of Section 47 of the Act from consumers and Distribution System Users net of any security held for wheeling business; minus*

*e) One month equivalent of cost of power purchased, based on the annual power procurement plan.*

*6.31 Rate of interest on working capital shall be equal to the base rate of SBI plus 350 bps as applicable on the 1st April of the relevant financial year. ”*

7.46 Accordingly, the Petitioner submitted the Interest on Working Capital required for DVC for Jharkhand Area to be Rs. 73.90 Crore for FY 2019-20.

### **Commission's Analysis**

7.47 The Commission has approved Interest on Working Capital as per the methodology adopted by the Commission for calculation of Interest on Working Capital in its previous Order dated May 18, 2018.

**Table 63: Interest on Working Capital as submitted by the Petitioner and as approved by the Commission for FY 2019-20 (Rs. Crore)**

Particulars	FY 2019-20	
	Petition	Approved
Revenue from Sales in Jharkhand		3,545.77
Working Capital Requirement in Jharkhand Area (at 1% of Revenue from sale of power)		35.46
Interest Rate (%)		12.55%
<b>Interest on Working Capital for Jharkhand Area</b>	<b>73.90</b>	<b>4.45</b>



## **Interest on Consumer Security Deposit**

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

7.48 The Petitioner submitted an amount of Rs. 0.45 Crore towards Interest on Consumer Security Deposit.

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

7.49 The Commission has approved the Interest on Consumer Security Deposit as submitted by the Petitioner.

## **Tariff Filing and Publication Expenses (JSERC)**

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

7.50 The Petitioner submitted an amount of Rs. 0.76 Crore towards Tariff Filing and Publication Expenses in JSERC.

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

7.51 The Commission has approved the Tariff Filing and Publication Expenses in JSERC as submitted by the Petitioner.

## **Summary of ARR approved by the Commission**

7.52 The Commission has approved ARR for FY 2019-20 vis-à-vis the ARR submitted by the Petitioner as summarised below:



**Table 64: Summary of ARR as submitted by the Petitioner and as approved by the Commission for FY 2019-20 (Rs. Crore)**

Station/item	2019-20					
	MYT Order		Petition		Approved	
	Energy Cost (Rs. Crore)	Fixed Cost (Rs. Crore)	Energy Cost (Rs. Crore)	Fixed Cost (Rs. Crore)	Energy Cost (Rs. Crore)	Fixed Cost (Rs. Crore)
Cost of Own Generation	5,815.17	4,332.10	4,082.71	3,313.90	3,848.42	3,147.31
Power Purchase Cost (Incl. Trans. Charges & Excl. RE/REC Expense)	287.79		763.89		372.88	324.80
Tariff filling fees & publication expenses in CERC		5.22		5.22		5.22
Water cess		3.84		0.25		0.25
Less Non Tariff Income (NTI)		58.90		25.00		48.53
<b>Total</b>	<b>6,102.95</b>	<b>4,282.27</b>	<b>4,846.59</b>	<b>3,294.37</b>	<b>4,221.30</b>	<b>3,429.06</b>
Ratio of sales in Jharkhand part to total firm sale in entire DVC	53.28%	53.28%	43.91%	43.91%	44.78%	44.78%
<b>ARR before IWC, Interest on SD &amp; tariff filling fees in the licensed area of Jharkhand</b>	<b>3,251.88</b>	<b>2,281.75</b>	<b>2,128.18</b>	<b>1,446.58</b>	<b>1,890.30</b>	<b>1,535.53</b>
Cost of Solar & Non Solar Power and REC Purchased to meet the solar & non solar RPO in the state of Jharkhand	185.02		192.02		114.27	
Interest on Working Capital		8.02		73.90		4.45
Interest on security deposit		2.38		0.45		0.45
Tariff Filing Fees & Publication Expenses in JSERC		0.47		0.76		0.76
<b>Net ARR for Jharkhand</b>	<b>3,436.89</b>	<b>2,292.62</b>	<b>2,320.20</b>	<b>1,521.70</b>	<b>2,004.57</b>	<b>1,541.20</b>
<b>TOTAL ARR</b>	<b>5,729.52</b>		<b>3,841.90</b>		<b>3,545.77</b>	
Particulars	Quantum		Quantum		Quantum	
Total ARR	5729.52		3841.90		3545.77	
Sale in Jharkhand (MU)	13200.48		6939.33		7188.05	
Avg Cost of Supply (Rs. / kWh)	4.34		5.54		4.93	

### Revenue from Sale of Power in Jharkhand Area

#### *Petitioner's Submission*

7.53 The Petitioner submitted that the revenue from sale of power in Jharkhand is Rs. 2871.53 Crore for FY 2019-20.

#### *Commission's Analysis*

7.54 The Commission has approved the revenue as calculated below for FY 2019-20 for the existing Tariff.





Table 65: Revenue at Existing Tariff as approved by the Commission for FY 2019-20 (Rs. Crore)

Category	Consumers	Connected Load (MVA)	Sales (MU)	Fixed Charges	Energy Charges	FC (Rs. Crore)	EC (Rs. Crore)	Total Revenue (Rs. Crore)
LT Domestic	1372	5.49 MW	28.80	Rs. 43.00 /Conn./Month	Rs. 4.50 /kWh	0.07	12.96	13.03
LT Commercial	493	2.51 MW	13.45	Rs. 190.00 /kW/Month	Rs. 5.00 /kWh	0.57	6.73	7.30
HT 33 kV	86	271.56	1643.22	Rs. 380.00 /kVA/Month	Rs. 3.35 /kWh	123.83	549.90	673.73
HT 33 kV (Licensee)		403.68	2442.66	Rs. 380.00 /kVA/Month	Rs. 3.40 /kWh	184.08	830.50	1014.58
HT 132 kV	7	92.57	362.12	Rs. 380.00 /kVA/Month	Rs. 3.28 /kWh	42.21	118.69	160.90
HT 132 kV (Licensee)		205.34	803.26	Rs. 380.00 /kVA/Month	Rs. 3.40 /kWh	93.64	273.11	366.75
HT 132 kV (Traction)	5	75.00	237.38	Rs. 380.00 /kVA/Month	Rs. 3.40 /kWh	34.20	80.71	114.91
HT 220 kV	2	35.89	187.69	Rs. 380.00 /kVA/Month	Rs. 3.26 /kWh	16.36	61.19	77.55
HT 220 kV (Licensee)		280.96	1469.47	Rs. 380.00 /kVA/Month	Rs. 3.40 /kWh	128.12	499.62	627.74
<b>Total</b>								<b>3056.49</b>
<b>Less: Rebate</b>								<b>62.38</b>
<b>Total Revenue</b>								<b>2994.11</b>



## A 8: REVENUE GAP AND ITS TREATMENT

### Revenue Gap till FY 2014-15

#### *Petitioner's Submission*

- 8.1 The Petitioner has not proposed any treatment of revenue gap till FY 2014-15. However, the Petitioner has submitted that in the interim order dtd. September 16, 2009 in Appeal No. 146 of 2009 and I.A. No. 264 of 2009 Hon'ble APTEL held as under;

“ ...

*02) It is generally understood that after the CERC has passed the impugned order a retail tariff will be determined by the West Bengal State Electricity Regulatory Commission and the Jharkhand State Electricity Regulatory Commission separately and till retail tariff is fixed by the two commissions the tariff already in force will have to continue. ... ”*

- 8.2 The Petitioner submitted that it accordingly continued with its own tariff until disposal of the Appeal No. 146 of 2009 on May 10, 2010.

- 8.3 In another interim order dtd. October 8, 2009 in Appeal No. 146 of 2009 and I.A. Nos. 264 of 2009, 284 of 2009 and 287 of 2009 the Hon'ble APTEL also held as under;

“ ...

*Mr. Sen Gupta, advocate says that the respondent No.7 has received disconnection notice for being in arrears of payment of fuel surcharge from 01.04.07 onwards. Mr. M. G. Ramachandran submits that the appellant is prepared not to act on the notice of disconnection till 28th Oct. '09 subject to the respondent No.7 paying up the current energy charge, demand charge and current fuel surcharge according to the current bills. The respondent No.7 is directed to pay all the dues as per its own honest calculation of fuel cost surcharge by itself by using the principles relied upon by respondent No.7 within 15 days of this order (without prejudice to rights of the parties). Subject to compliance by respondent No.7, the notice of disconnection will not be acted upon till the hearing on 28th October, 2009. If any other respondent is in default, of payment of surcharge, he will also comply with the same order and any notice issued for disconnection of supply will not be acted upon against him till 28th October, 2009 when the matter will be heard.*

... ”



- 8.4 Acting as per the interim order dtd. October 8, 2009, large number of DVC consumers made less payment against the bills (preferred based on the own tariff of DVC) claimed by DVC based on their respective methodology of honest computation of FCS (Fuel Cost Surcharge) part of the bills. As such DVC also could not collect the entire claimed amount due to the said interim order dtd. October 8, 2009. Hence collection efficiency of DVC got reduced significantly during the same period. Hence calculation of Revenue Surplus/Gap based on the billed amount booked in the Petitioner corporation's Audited Annual Accounts and considering 100% collection efficiency appears to be an injustice to DVC. DVC therefore respectfully submitted that, retrospective revision of tariff for the concerned period will give DVC a chance to recover past dues accrued due to non-acceptance of the tariff prevailed at that point of time by the consumers.
- 8.5 The Petitioner also submitted that if the entire accrued Revenue Surplus/Gap for the period 2006-07 to 2015-16 is passed prospectively in the tariff for future period may not be logical on account of the following;
- If the revenue surplus as already determined by this Hon'ble Commission in the impugned orders dtd. 19.04.2017 and 18.05.2018 is not modified to the above extent this will deprive the consumers who paid in full and left thereafter,
  - The consumers who have started taking power in recent past will get undue benefit at the cost of payments made by the earlier consumers,
  - Serious financial injury and injustice to DVC will be caused for no fault of the petitioner.
- 8.6 The Petitioner submitted that while disposing the Petition filed by the Association of DVC HT Consumers of Jharkhand (Case No. 7 of 2017) the Commission at para 18 of the Order dtd. January 19, 2018 has held as under;

*"18. In view of the said admitted position and the facts and circumstances appearing on record, we are of the view that during the pendency of Appeal No. 198 of 2017 filed by the petitioner in this case and Appeal No. 163 of 2017 filed by the respondent, DVC, before the Hon'ble Appellate Tribunal for Electricity, the order dated 19.4.2017 passed in Case (T) No. 02 of 2016 cannot be said to have attained its finality and it would not be proper to pass any order in the instant case for refund of excess charges claimed by the petitioners at this stage."*



8.7 The Commission also issued multi-year tariff order for the period FY 2016-17 to 2020-21 and Annual Performance Review for FY 2015-16 of DVC for supply of electricity to the consumers and licensees located in the part of Damodar Valley Area falling in the territory of the State of Jharkhand vide tariff order dtd. May 18, 2018. The Commission has disallowed some claims of DVC in the said order. Being aggrieved DVC has filed an appeal (I.A. no. 1188 of 2018 & DFR No. 2430 of 2018) before Hon'ble APTEL. Hon'ble APTEL has admitted the appeal and started the hearing on October 3, 2018. Hence, the Petitioner craved leave to revise the claim for the relevant period based on the decision of the Hon'ble APTEL.

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

8.8 The Commission has gone through the submissions made by the Petitioner. The Commission observes that the cumulative surplus till FY 2014-15 as approved by the Commission in the Order dated April 19, 2017, was subject to the result of Civil Appeal No. 4881 of 2010. The Commission, in Para 2.14 of the Order dated April 19, 2017, had noted that:

*“The Hon'ble Supreme Court of India, vide its Judgment dated 26th October, 2016, has directed the Commission to take-up the issue of True-up of previous years and make the decision subject to the result of Civil Appeal No. 4881 of 2010. The apex court ruled:*

*“.. Therefore, this appeal is disposed of with a direction to Respondent No.1- Jharkhand State Electricity Regulatory Commission to take up the true-up issue and pass the required Orders within a period of six months from today ...”*

*However, the Commission is free to make the decision subject to the result of Civil Appeal No. 4881 of 2010 in case the said civil appeal is not disposed of before the said period.”*

8.9 Further, the Commission in its Order dated January 19, 2018 in Case No 07 of 2017 had also stated:

*“In view of the said admitted position and the facts and circumstances appearing on record, we are of the view that during the pendency of Appeal No. 198 of 2017 filed by the petitioner in this case and Appeal No. 163 of 2017 filed by the respondent, DVC, before the Hon'ble Appellate Tribunal for Electricity, the order*



*dated 19.4.2017 passed in Case (T) No. 02 of 2016 cannot be said to have attained its finality and it would not be proper to pass any order in the instant case for refund of excess charges claimed by the petitioners at this stage.”*

- 8.10 In addition, since the Appeal I.A. no. 1188 of 2018 & DFR No. 2430 of 2018, filed on the Order of the Commission dated May 18, 2018 is sub-judice, the Commission has not proposed any recovery for the past gaps.
- 8.11 The Commission however notes that the said surplus shall increase as carrying cost is to be allowed on the amount not adjusted/refunded. It would be very difficult to refund/adjust the previous years' surplus if it is not gradually reduced.
- 8.12 The Commission therefore, directs the Petitioner to propose a roadmap for adjustment of the abovementioned surplus clearly stating the period of treatment and the manner in which it proposes to do within two months of issue of this Order.

#### **Treatment of Revenue Gap/(Surplus) from FY 2016-17 till FY 2019-20**

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

- 8.13 The Petitioner has not proposed any recovery of Gap/(Surplus) for FY 2017-18 and FY 2018-19, while has proposed a hike in Tariff of ~33.25% purely on the basis of anticipated gap arrived for FY 2019-20 to meet the expenses for FY 2019-20.

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

- 8.14 The Commission observes that the consumer profile of DVC has underwent major changes in FY 2019-20. Consumers earlier drawing significant quantum of power from DVC till FY 2018-19 are no more consumers of DVC in FY 2019-20. It is estimated that such consumers' share in Petitioner's sales was approximately 44.00% in FY 2016-17, 42.00% in FY 2017-18 and 33.00% in FY 2018-19. The Commission in this Order has provisionally allowed the gap/surplus to be passed on to other existing consumers based on their share in Petitioner's sales for the respective years i.e., 56% for FY 2016-17, 58% for FY 2017-18 and 67% for FY 2018-19. The Commission directs the Petitioner to file a proposal for treatment of withheld gap/surplus along with truing up Petition for FY 2017-18.
- 8.15 In accordance with above, the Commission has observed the cumulative gap/(surplus) from FY 2016-17 to FY 2019-20 as summarised below:

**Table 66: Cumulative Revenue Gap/(Surplus) as approved by the Commission till FY 2019-20 (Rs. Crore)**

Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
ARR Approved	4,705.79	4,858.00	4,791.80	3,545.77
Revenue Realised	5,017.09	5,285.18	4,305.11	3,056.49
Gap/(Surplus) Created	(311.30)	(427.18)	486.69	489.28
Opening Gap/(Surplus)		(185.49)	(472.23)	(183.87)
Gap/(Surplus) Passed	(174.33)	(247.77)	326.08	489.28
Interest Rate (%)	12.80%	12.60%	12.20%	12.55%
Carrying Cost on Opening Gap/(Surplus)	-	(23.37)	(57.61)	(11.54)
Carrying Cost on Gap/(Surplus) Addition	(11.16)	(15.61)	19.89	
Closing Gap/(Surplus)	(185.49)	(472.23)	(183.87)	293.87

8.16 The Commission approves the increase of ~9.61% over the existing Tariff to meet the entire revenue gap for FY 2019-20 and further proposes to further rationalise the Tariff structure as discussed in Section A12 of this Order.



## A 9: TARIFF PHILOSOPHY

### ToD Tariff

#### *Petitioner's Submission*

- 9.1 The Petitioner submitted that time periods in respect of Time of Day (TOD) is proposed to be from 06:00 hrs. to 17:00 hrs. for Normal Period, from 17:00 hrs. to 23:00 hrs. for Peak Period and from 23:00 hrs. to 06:00 hrs. for Off Peak Period based on the analysis as directed by the Commission in the tariff order dtd. May 18, 2018. Aforesaid time periods for TOD tariff has been proposed based on the analysis of the drawal pattern of the consumers. It is further mentioned that for uniformity in the load pattern, economic use of resources, good performance and optimal investment throughout the day, reduced rate of energy charge has been proposed for the consumers during off-peak and normal period compared to the peak period.
- 9.2 The Petitioner also submitted that it will require reasonable time of at least 6 (six) weeks to implement the TOD tariffs as per the above proposed time periods, on approval of the Commission, by programming the consumer meters.

#### *Commission's Analysis*

- 9.3 The Commission has observed that the Petitioner has proposed optional implementation of ToD based Tariff for HT consumers, excluding sale of power to Other Distribution Licensees. The Commission is of the view that ToD mechanism is desirable as the same has a considerable impact on Demand Side Management of Load. However, The Commission is of the view that ToD if levied, should be levied for all consumers after looking into various implications for the same. The Commission directs the Petitioner to study the commercial and load impact of implementation of ToD mechanism on all consumers including Distribution Licensees in its area and submit the same to the Commission within 2 months of issue of this Order. The above impact should be assessed considering that the same is either optional or mandatory for all consumers. The Commission has therefore not considered the implementation of the same at this point of time, however, the same shall be considered once the above study is carried out.

## **Power Factor Rebate/Surcharge**

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

- 9.4 The Petitioner proposed that Power Factor (PF) rebate has been structured on the basis of consumption profile during the first quarter of FY 2018-19 and is proposed to be applicable for PF > 92% in different steps. Rate of power factor rebate and surcharge has been proposed to be same for all category of consumers at and above 33 kV level. However, rates are different for TOD and NON-TOD category. Proposed rates of rebate are same as that applicable for the consumers of DVC in the state of West Bengal.

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

- 9.5 The Commission has approved kVAh based Tariff for all HT Consumers. Since, the kVAh based metering has built-in subsidising/penalising of power factor of the consumers, as such, no separate penalties/rebates have been provided for Power Factor.

## **Load Factor Rebate/Surcharge**

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

- 9.6 The Petitioner proposed that Load Factor (LF) rebate shall be applicable above LF of 65% in different steps based on load profile of consumers of DVC in the State of Jharkhand during the first quarter of FY 2018-19 but the rate of such rebate is proposed different at different voltage levels. Load Factor surcharge is proposed to be levied if the load factor falls below 30%. Proposed rates of rebate are same as that applicable for the consumers of DVC in the state of West Bengal.
- 9.7 Load Factor rebate and surcharge is proposed to be levied on Industrial Consumers only (excluding the traction load) if the load factor falls below 30%.

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

- 9.8 The Commission has observed that the average LF for FY 2018-19 (till December 2018) is ~62.85%. Hence, the Commission accepts the proposal to provide rebate above 65% LF. With regard to load factor surcharges, the Commission is of the view that the Petitioner's Tariff structure allows substantial recovery of fixed charges through approved Demand Charges and therefore, there is no requirement of having load factor surcharge as such. The Commission has approved the Load Factor Rebate as discussed in the Section on Terms and Conditions of Supply (Section A13).





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## **Voltage Rebate**

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

- 9.9 The Petitioner submitted that rebate for consumption of electricity at higher voltage levels has also been considered in the tariff design. Such rebates have been embedded in the consumer category wise energy charge rates while designing the tariff.

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

- 9.10 The Commission has rationalised the Voltage rebate to HT consumers by providing rebate for 33 kV and all consumers above 33 kV as the voltage-wise losses are not available and that the difference in loss becomes negligible at higher voltages. The Commission has approved the Voltage Rebate as discussed in the Section on Terms and Conditions of Supply (Section A13).

## **Prompt Payment Rebate**

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

- 9.11 The Petitioner has proposed prompt payment rebate to be varying with the date of payment starting from 2% for payment within 2 days from the date of presentation of the bill and reducing thereafter in stages in line with that allowed by the Commission vide its order dtd. May 18, 2018.

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

- 9.12 The Commission has approved the Online Prompt Payment Rebate in Section A13 of this Order.

## **Reduction in Fixed Charges**

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

- 9.13 The Petitioner submitted that in addition to the existing clause on "Reduction in Fixed Charges", the Petitioner has proposed the Commission to provide for penal charges payable by the consumers or licensees in case of over-drawal during the period under load restriction as below:

*"If in a 15 minutes time block a consumer/licensee draws power more than the restricted drawal, if any, imposed by the utility then the consumer/licensee will pay additional energy charge at a rate twice the applicable rate for that*



*consumer/licensee at that time block. Such additional energy charge shall be payable in addition to the amount that is payable as energy charge for consumption of energy in that particular time block.”*

### **Commission's Analysis**

- 9.14 The Commission has considered the submissions made by the Petitioner. The Commission does not find any appropriate justification submitted by the Petitioner in the current Petition. The Commission has therefore not approved any penal charges at this stage. However, the Petitioner is at liberty to seek the same provided such proposal is backed up with instances attracting such stringent penal provisions.

### **Recovery from Fixed Charges**

- 9.15 The Petitioner has proposed recovery of the complete Fixed Costs incurred through Fixed Charges. The Commission has observed that the weighted average load factor (considering the units sold) for all HT consumers for FY 2018-19 (till December 31, 2018) is ~62.85%. In addition, the Petitioner also recovers at least 75% of the monthly Fixed Charges of HT Industrial Consumers. Considering that the reliability of supply of power by DVC is better the Commission has increased recovery of tariff through fixed charges in this Order. However, Commission does not approve complete recovery of fixed charges through demand charges at this stage.

### **Tariff Simplification and Rationalisation**

- 9.16 The Commission in order to simplify the Tariff, is of the view that all consumers (irrespective of the usage type except Streetlight and Agricultural Consumers) with contracted demand upto 5 kW should be considered as Domestic consumers. The Commission has considered this re-categorisation to enable financially challenged consumers to earn from their homes/workplaces without being levied commercial/LT tariffs. This would also do away with the necessity of having two separate connections for small economic activities to be done from home itself.
- 9.17 The Commission also proposes a uniform Tariff for all HT consumers for simplification of the existing Tariff Structure.



### **Conversion of kWh based metering to kVAh based metering**

- 9.18 The Commission has proposed to introduce kVAh based metering for LTIS consumers (with contracted demand greater than 5 kW) and HT consumers (all consumers including domestic consumers) to improve Grid discipline.



## A 10: APPROVED RETAIL TARIFF FOR FY 2019-20

### *Petitioner's Submission*

10.1 The summary of Tariff proposed by the Petitioner is provided below:

**Table 67: Summary of Proposed Tariff submitted for FY 2019-20**

Category	Existing Tariff		Proposed Tariff	
	Fixed Charges	Energy Charges	Fixed Charges	Energy Charges
LT Domestic	Rs. 43.00 /Conn./Month	Rs. 4.50 /kWh	Rs. 44.00 /Conn./Month	Rs. 4.61 /kWh
LT Commercial	Rs. 190.00 /kW/Month	Rs. 5.00 /kWh	Rs. 195.00 /kW/Month	Rs. 5.13 /kWh
HT 33 kV	Rs. 380.00 /kVA/Month	Rs. 3.45 /kWh	Rs. 928.60 /kVA/Month	Rs. 3.67 /kWh
HT 33 kV (Licensee)	Rs. 380.00 /kVA/Month	Rs. 3.40 /kWh	Rs. 928.60 /kVA/Month	Rs. 3.75 /kWh
HT 132 kV	Rs. 380.00 /kVA/Month	Rs. 3.45 /kWh	Rs. 928.60 /kVA/Month	Rs. 3.63 /kWh
HT 132 kV (Licensee)	Rs. 380.00 /kVA/Month	Rs. 3.40 /kWh	Rs. 928.60 /kVA/Month	Rs. 3.52 /kWh
HT 132 kV (Traction)	Rs. 380.00 /kVA/Month	Rs. 3.40 /kWh	Rs. 928.60 /kVA/Month	Rs. 3.63 /kWh
HT 220 kV	Rs. 380.00 /kVA/Month	Rs. 3.45 /kWh	Rs. 928.60 /kVA/Month	Rs. 3.48 /kWh
HT 220 kV (Licensee)	Rs. 380.00 /kVA/Month	Rs. 3.40 /kWh	Rs. 928.60 /kVA/Month	Rs. 3.41 /kWh

### *Commission's Analysis*

10.2 Based on the above discussions, the summary of Tariff approved by the Commission for FY 2019-20 is as below:

**Table 68: Summary of Approved Tariff for FY 2019-20**

Category	Existing Tariff		Approved Tariff	
	Fixed Charges	Energy Charges	Fixed Charges	Energy Charges
LT Domestic (Urban/Rural)	Rs. 43.00 /Conn./Month	Rs. 4.50 /kWh	Rs. 75.00 /Conn./Month	Rs. 4.25 /kWh
LT IAS	Rs. 20.00 /HP/Month	Rs. 5.00 /kWh	Rs. 30.00 /HP/Month	Rs. 3.00 /kWh
LT Commercial (Urban/Rural)	Rs. 190.00 /kW/Month	Rs. 5.00 /kWh	Rs. 150.00 /kW/Month	Rs. 4.20 /kWh
LTIS	Rs. 100.00 /kVA/Month	Rs. 4.20 /kWh	Rs. 150.00 /kVA/Month	Rs. 4.20 /kVAh
Streetlight	Rs. 100.00 /Conn./Month	Rs. 4.60 /kWh	Rs. 100.00 /Conn./Month	Rs. 4.40 /kWh
HT Domestic	Rs. 150.00 /kVA/Month	Rs. 4.00 /kWh	Rs. 200.00 /kVA/Month	Rs. 3.80 /kVAh
HT Services	Rs. 380.00 /kVA/Month	Rs. 3.45 /kWh / Rs. 3.40/kWh	Rs. 600.00 /kVA/Month	Rs. 2.95 /kVAh

## A 11: SCHEDULE OF CHARGES

### Petitioner's Submission

11.1 The Petitioner has proposed the Miscellaneous Charges as summarised below:

**Table 69: Miscellaneous Charges proposed for FY 2019-20 (Rs.)**

Schedule of Miscellaneous Charges			
S No.	Purpose	Scale of charges	Manner in which payment will be realised
<b>1</b>	<b>Penal Charges</b>		
	penal charges payable by the consumers or licensees in case of over-drawal during the period under load restriction	If in a 15 minutes time block a consumer/licensee draws power more than the restricted drawal, if any, imposed by the utility then the consumer/licensee will pay additional energy charge at a rate twice the applicable rate for that consumer/licensee at that time block. Such additional energy charge shall be payable in addition to the amount that is payable as energy charge for consumption of energy in that particular time block	Payable with energy bill
<b>2</b>	<b>Application Fees</b>		
	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	
	HT Supply	Rs. 200	
	HTSS, EHTS, RTS	Rs. 200	
<b>3</b>	<b>Testing of Consumer Installation</b>		
	First test and inspection free, subsequent test and inspection charges	Single Ph-Rs 100 Three Ph- Rs 200 HT Supply Rs-500	Payable with energy bill
<b>4</b>	<b>Meter test when accuracy disputed by consumer</b>		
	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	
<b>5</b>	<b>Removing/ Refixing of meter</b>		
	Single phase	Rs. 100	Payable with energy bill
	Three phase	Rs. 200	



Schedule of Miscellaneous Charges			
S No.	Purpose	Scale of charges	Manner in which payment will be realised
	Trivector/special type meter, Three phase with CT/HT metering equipment	Rs. 550	
6	Changing of meter/meter equipment/fixing of sub meter on the request of consumer		
	Single phase	Rs. 75	Payable with energy bill
	Three phase	Rs. 180	
	Trivector/special type meter	Rs. 530	
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
	Consumers 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		
	Domestic category 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. 2500	
	132 kV	Rs. 15000	
	RTS or 220 kV	Rs. 15000	
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	
*Applicable for a 6 month duration from the date of taking the transformer on rent, thereafter monthly escalation of 10% would be applicable			

\*Applicable for a 6 month duration from the date of taking the transformer on rent, thereafter monthly escalation of 10% would be applicable



### Dishonored Cheques

In the event of dishonored 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

### Commission's Analysis

11.2 In view of the submissions made by the Petitioner, the Commission has analysed various aspects of these charges and for the purpose of simplification of the schedule, the Commission has rationalised the schedule of miscellaneous charges as given below:

**Table 70: Miscellaneous Charges approved by the Commission for FY 2019-20 (Rs.)**

Sl. No.	Purpose	Scale of Charges	Payment Realisation
1.	Application Fee		
	LT Connection	Rs.100	Payable with Energy Bill
	HT Connection	Rs. 500	
2	Revision of Estimate on Consumer Request based on Revision in Original Application		
	LT Connection	Rs. 100	Payable with Energy Bill
	HT Connection	Rs. 500	
3	Testing of Consumers Installation <sup>1</sup>		
	LT Supply	Rs. 100	Payable with Energy Bill
	HT Supply	Rs. 500	
4	Meter Test when Accuracy disputed by Consumer <sup>2</sup>		
	Single Phase/Three Phase	Rs. 100	Payable with Energy Bill
	Trivector/Special Type Meter, HT, EHT Metering Equipment	Rs. 1000	
5	Removing/Refixing of Meter/Changing of Meter or Meter Equipment/Fixing of Sub Meter on the request of the Consumer/Fixing of Sub Meter Resealing of Meter when seals are found broken		
	Single Phase/Three Phase	Rs. 200	Payable with Energy Bill
	Trivector/Special Type Meter, HT, EHT Metering Equipment	Rs. 1000	
6	Fuse call-Replacement		
	Consumer Fuse	Rs. 100	Payable with Energy Bill
7	Disconnection/ Reconnection		
	LT Connection	Rs. 200	Payable in advance along with the Consumer request. In case, the same consumer is reconnected or disconnected within 12 months, 50% will be charged extra.
	HT Connection	Rs. 1500	



Sl. No.	Purpose	Scale of Charges	Payment Realisation
10	Replacement of meter card, if lost or damaged by Consumer	Rs. 100	Payable with Energy Bill
11	Security Deposit	As per JSERC (Electricity Supply Code) Regulations, 2015 as amended from time to time. However, in case of delay in depositing Security Deposit, the same shall attract 1.5% penal charges per month.	
12	<b>Meter Rent/Month</b>		
	DS Category except Rural Single Phase/Three Phase	Rs. 20/ Rs. 50	Payable with Energy Bill
	LT meter with CT	Rs. 250	
	11 kV	Rs. 400	
	33 kV HT side	Rs. 2500	
	132 kV/ RTS or 220 kV	Rs. 15000	
13	Replacement of Burnt Meter	Cost of Meter	Payable with Energy Bill
14	<b>Transformer Rent<sup>3</sup></b>		
	Upto 200 kVA	Rs. 5500/Month	Payable with Energy Bill
	Above 200 kVA	Rs. 7500/Month	Payable with Energy Bill

<sup>1</sup>First test & Inspection free of charge, but should any further test and inspection be necessitated by faults in the installation or by not compliance with the conditions of supply for each extra test or inspection.

<sup>2</sup>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.

<sup>3</sup>Applicable for 6 month duration from the date of taking the transformer on rent, thereafter monthly escalation of 10% would be applicable.

## Open Access Charges

11.3 **Wheeling Charges:** As determined by the CERC for DVC's network

11.4 **Cross Subsidy Surcharge:**

- 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.”*





- The National Tariff Policy, 2016 has stipulated the following formula for computation of Cross Subsidy Surcharge:

$$S = T - [C / (1 - L/100) + D + R]$$

Where

*S is the surcharge*

*T is the tariff payable by the relevant category of consumers, including reflecting the Renewable Purchase Obligation*

*C is the per unit weighted average cost of power purchase by the Licensee, including meeting the Renewable Purchase Obligation*

*D is the aggregate of transmission, distribution and wheeling charge applicable to the relevant voltage level*

*L is the aggregate of transmission, distribution and commercial losses, expressed as a percentage applicable to the relevant voltage level*

*R is the per unit cost of carrying regulatory assets.*

...

*Provided that the surcharge shall not exceed 20% of the tariff applicable to the category of the consumers seeking open access."*

- The Petitioner has not submitted the Voltage-wise distribution losses. Hence, the Commission has considered the T&D losses of 3.23% as approved for FY 2019-20. The Commission observes that the CSS calculated for FY 2019-20 based on the formula discussed above is "zero" for DVC. Hence the Commission approves no cross-subsidy surcharge for DVC consumers for FY 2019-20.

#### 11.5 Additional Surcharge:

- Clause 6.58 of the JSERC Tariff Regulations, 2015 states the following about Additional Surcharge:

*"Additional Surcharge shall be determined on 'case to case' basis and shall be payable only if the licensee is able to conclusively demonstrate the incidence of any stranded capacity"*



- The Commission is of the view that the Utility may also surrender power due to other reasons like seasonal variations, purchases from Power Exchange, RTC short term power purchases of DISCOMs etc. In some cases, additional renewable capacity may have been added to ensure compliance to RPO and not to meet demand. The burden of surrender of power to that extent should be shared by all consumers.
- To ensure only power surrendered due to open access is considered for computation of additional surcharge, only minimum of power backed down/ surrendered and open access quantum should be considered.
- Based on the above argument, the Commission is of the view that the Petitioner has failed to conclusively demonstrate the incidence of any stranded capacity due to Open Access. It is pertinent to note that the Ministry of Power has brought out a consultative paper on issues related to Open Access which, inter-alia, recommends a methodology for computation of Additional Surcharge. The Petitioner should re-compute the additional surcharge as per the recommended approach and conclusively demonstrate incidence of fixed charge burden due to Open Access.
- Accordingly, the Commission, at the moment has approved an additional surcharge of zero for the FY 2019-20.



## A 12: TARIFF SCHEDULE FOR FY 2019-20

**APPLICABLE FROM 01.06.2019**

### I. Domestic Service- Rural and Urban

#### Applicability:

This schedule shall apply to private residential premises for domestic use for household electric appliances such as Radios, Fans, Televisions, Desert Coolers, Air Conditioner, etc. and including motor pumps for lifting water for domestic purposes and other household electrical appliances not covered under any other schedule.

This rate is also applicable for supply to religious institutions such as Temples, Gurudwaras, Mosques, Church and Burial/ Crematorium grounds and other recognised charitable institutions, where no rental/fees are charged for the energy needs for products and services for which no charge is levied.

This rate is also applicable for all consumers with contracted demand of upto 5 kW mixed, commercial, industrial, educational institutions, drinking water schemes or for any other purpose, except streetlight connections and agriculture/allied connections.

#### Category of Services:

Domestic Service – Rural: areas not covered by Nagar Nigam, Nagar Parishad and Nagar Panchayat.

Domestic Service – Urban: areas covered by Nagar Nigam, Nagar Parishad and Nagar Panchayat.

#### Service Character:

- (i) For Rural: AC, 50 Cycles, Single Phase at 230 Volts, Three Phase at 400 Volts.
- (ii) For Urban: AC, 50 Cycles, Single Phase at 230 Volts, Three Phase at 400 Volts.

#### Tariff:

Category	Fixed Charges		Energy Charges
	Unit	Rate	(Rs./kWh)
<b>Rural</b>	Rs./Conn./month	75	4.25
<b>Urban</b>	Rs./Conn./month	75	4.25

**Delayed Payment Surcharge:** In accordance with Clause II of Terms & Conditions of Supply as provided in Section A13 of this Tariff Order.



**Rebate for Prompt Online Payment:** In accordance with Clause VI of Terms & Conditions of Supply as provided in Section A13 of this Tariff Order.

## II. Domestic Service- HT

### Applicability:

This schedule shall apply to private residential premises for domestic use for household electric appliances such as Radios, Fans, Televisions, Desert Coolers, Air Conditioner, etc. and including motor pumps for lifting water for domestic purposes and other household electrical appliances not covered under any other schedule.

### Category of Services:

Domestic Service – HT: This Schedule shall apply for domestic connection in Housing Colonies / Housing Complex / Houses of multi storied buildings purely for residential use for single point metered supply, with power supply at 33 kV or 11 KV voltage level. DS- HT consumers, who supply power to individual households, the average per unit charges billed to an individual consumer shall not exceed 105% of average per unit cost paid to the Petitioner. This additional 5% allowed reflects the internal distribution losses in housing complex and administrative and distribution costs.

### Service Character:

(i) For HT: AC, 50 Cycles, at 11 KV or 33 kV

### Tariff:

Category	Fixed Charges		Energy Charges
	Unit	Rate	(Rs./kVAh)
DS- HT	Rs./kVA/month	200	3.80

**Delayed Payment Surcharge:** In accordance with Clause II of Terms & Conditions of Supply as provided in Section A13 of this Tariff Order.

**Rebate for Prompt Online Payment:** In accordance with Clause VI of Terms & Conditions of Supply as provided in Section A13 of this Tariff Order.



### III. 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 and Dal mills.

#### Service Character:

AC 50 Cycles, Single Phase at 230 volts / 3 Phase at 400 volts

#### Tariff:

Category	Fixed Charges		Energy Charges
	Unit	Rate	(Rs./kWh)
Metered	Rs./HP/month	30	3.00

**Delayed Payment Surcharge:** In accordance with Clause II of Terms & Conditions of Supply as provided in Section A13 of this Tariff Order.

**Rebate for Prompt Online Payment:** In accordance with Clause VI of Terms & Conditions of Supply as provided in Section A13 of this Tariff Order.



#### **IV. Commercial Services (for contracted demand greater than 5 kW)**

##### **Applicability:**

This schedule shall apply to all consumers, using electrical energy for light, fan and power loads for non-domestic purposes like shops, hospitals (govt. or private), nursing homes, clinics, dispensaries, restaurants, hotels, clubs, guest houses, marriage houses, public halls, show rooms, workshops, central air-conditioning units, offices (govt. or private), commercial establishments, cinemas, X-ray plants, schools and colleges (govt. or private), boarding/ lodging houses, libraries (govt. or private), research institutes (govt. or private), railway stations, fuel – oil stations, service stations (including vehicle service stations), All India Radio / T.V. installations, printing presses, commercial trusts / societies, Museums, poultry farms, banks, theatres, common facilities in multi-storied commercial office/buildings, Dharmshalas, public Electric Vehicles Charging stations and such other installations not covered under any other tariff schedule whose contracted demand is greater than 5 kW.

This schedule shall also be applicable to electricity supply availed through separate (independent) connections for the purpose of advertisements, hoardings and other conspicuous consumption such as external flood light, displays, neon signs at public places (roads, railway stations, airports etc.), departmental stores, commercial establishments, malls, multiplexes, theatres, clubs, hotels and other such entertainment/ leisure establishments whose contracted demand is greater than 5kW.

##### **Service Category:**

Commercial Service Rural: For Rural Areas not covered by area indicated for Commercial Service 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 or Three Phase at 400 Volts.

Urban: AC 50 Cycles, Single phase at 230 Volts or Three Phase at 400 Volts.

**Tariff:**

Category	Fixed Charges		Energy Charges
	Unit	Rate	(Rs./kWh)
Rural	Rs./kW/month	150	4.20
Urban	Rs./kW/month	150	4.20

**Delayed Payment Surcharge:** In accordance with Clause II of Terms & Conditions of Supply as provided in Section A13 of this Tariff Order.

**Rebate for Prompt Online Payment:** In accordance with Clause VI of Terms & Conditions of Supply as provided in Section A13 of this Tariff Order.

**Installation of Shunt Capacitors:** In accordance with Clause V of Terms & Conditions of Supply as provided in Section A13 of this Tariff Order.



## V. Low Tension Industrial Services

### Applicability:

**Low Tension Industrial Service (LTIS):** This schedule shall apply to all industrial units having a contracted load more than 5 kW and less than or equal to 100 kVA (or equivalent in terms of HP or kW). The equivalent HP for 100 kVA shall be 114 HP and the equivalent kW for 100 kVA shall be 85.044 kW.

### Service Character:

**Low Tension Industrial Service (LTIS):** AC, 50 Cycles, Single Phase supply at 230 Volts or 3 Phase Supply at 400 volts.

### Tariff:

Category	Fixed Charges		Energy Charges (Rs./kVAh)
	Unit	Rate	
LTIS	Rs./kVA/month	150	4.20

**Billing Demand:** The billing demand shall be the maximum demand recorded during the month or 75% of contract demand whichever is higher. The penalty on exceeding billing demand will be applicable in accordance with Clause I of Terms & Conditions of Supply as provided in Section A13 of this Tariff Order.

**Delayed Payment Surcharge:** In accordance with Clause II of Terms & Conditions of Supply as provided in Section A13 of this Tariff Order.

**Rebate for Prompt Online Payment:** In accordance with Clause VI of Terms & Conditions of Supply as provided in Section A13 of this Tariff Order.

**Installation of Shunt Capacitors:** In accordance with Clause V of Terms & Conditions of Supply as provided in Section A13 of this Tariff Order.





## VI. HT Services

### Applicability:

**High Tension Service:** All the consumers drawing power at voltage level at 6.6 kV and above except Domestic-HT consumers.

### Service Character:

**High Tension Service:** 50 Cycles at 6.6 kV / 11 kV / 33 kV / 132 kV / 220 kV / 400 kV

### Tariff:

Category	Fixed Charges		Energy Charges (Rs./kVAh)
	Unit	Rate	
HT Services	Rs./kVA/month	600	2.95

**Billing Demand:** The billing demand shall be the maximum demand recorded during the month or 75% of contract demand whichever is higher. The penalty on exceeding billing demand will be applicable in accordance with Clause I of Terms & Conditions of Supply as provided in Section A13 of this Tariff Order.

**Delayed Payment Surcharge:** In accordance with Clause II of Terms & Conditions of Supply as provided in Section A13 of this Tariff Order.

**Rebate for Prompt Online Payment:** In accordance with Clause VI of Terms & Conditions of Supply as provided in Section A13 of this Tariff Order.

**Load Factor Rebate:** In accordance with Clause IV of Terms & Conditions of Supply as provided in Section A13 of this Tariff Order.

**Voltage Rebate:** In accordance with Clause III of Terms & Conditions of Supply as provided in Section A13 of this Tariff Order.



## VII. Street Light

This tariff schedule shall apply for use of Street Lighting system

### Applicability:

**Street Light Service (SS):** This tariff schedule shall apply for use of Street Lighting system, including single system in corporation, municipality, notified area committee, panchayats etc. and also in areas not covered by municipalities and Notified Area Committee provided the number of lamps served from a point of supply is not less than 5.

### Service Character:

**Street Light Service (SS):** AC, 50 cycles, Single phase at 230 Volts or three phase at 400 Volts.

### Tariff:

Category	Fixed Charges		Energy Charges
	Unit	Rate	(Rs./kWh)
Streetlight	Rs./Conn./month	100	4.40

**Delayed Payment Surcharge:** In accordance with Clause II of Terms & Conditions of Supply as provided in Section A13 of this Tariff Order.

**Rebate for Prompt Online Payment:** In accordance with Clause VI of Terms & Conditions of Supply as provided in Section A13 of this Tariff Order.



## VIII. Temporary Connections

### Applicability:

The Temporary tariff shall be applicable as per the following conditions:

- 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 may be given with normal meters with security deposit as per JSERC (Electricity Supply Code) Regulations, 2015.
- Temporary connections may also be given with prepaid meters with minimum prepaid balance equivalent to 45 days of sale of power which shall be based on the assessment formula (LDHF) prescribed by the Commission.
- 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:

Category	Fixed Charges	Energy Charges
	Rate	(Rs.)
All Units	1.5 times of the applicable fixed charges	1.5 times of the applicable energy charges



## **IX. Tariff for Gross/Net Metering of rooftop Solar PV projects**

The Commission had notified the JSERC (Rooftop Solar PV Grid Interaction Systems and Net/Gross Metering) Regulations, 2015, on 10th November, 2015, (hereinafter called the 'Principal Regulations') and further notified its 1st amendment as JSERC (Rooftop Solar PV Grid Interaction Systems and Net/Gross Metering) (1st Amendment) Regulations, 2019. The Tariff for Gross/Net metering of RSPV for FY 2019-20 for such eligible consumers of the DVC shall be as under:

Gross Metering: Rs. 4.16/kWh

Net Metering: Rs. 3.80/kWh

The tariff approved as above for FY 2019-20 shall remain effective till the issue of subsequent Tariff Order/Individual Order as the case may be.



## A 13: TERMS AND CONDITIONS OF SUPPLY

### Terms and Conditions applicable only in case if referred in the Tariff Schedule

#### 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 at 1.5 times the normal tariff rate.

In case actual demand is higher than the contract demand by the quantum and for the duration as specified under Regulations 7.18 of JSERC Supply Code 2015, the Contract Demand shall be revised as per the procedure specified therein.

#### Clause II: 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 21 days after issue date of bill. The bill should be generated and delivered on monthly basis. In case, the licensee defaults in generating and delivering bills on monthly basis, DPS will not be charged for the period of default by licensee. The consumer should not be deprived of any subsidy/benefit which could have been otherwise accrued to the consumers i.e., energy units/amount (in case of unmetered) billed has to be apportioned on average monthly basis for the whole billing duration.

#### Clause III: Voltage Rebate

Voltage rebate will be applicable on energy charges as given below:

Consumer Category	Voltage Rebate
HT 33 kV	2.00%
HT 132 kV	3.00%
HT 220 kV and above	4.00%

*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 IV: Load Factor Rebate

Load Factor rebate will be applicable on energy charges only as given below:



Load Factor	Rebate
Below 65%	Nil
65%-80%	5 %
80%-100%	10 %

*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 V: Installation of Shunt Capacitors**

Connections with inductive load as specified in Regulation 8.2.34 and 8.2.35 of JSERC (Electricity Supply Code) Regulations, 2015 as amended from time to time, shall install capacitors of required kVAr rating provided in the following table:

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 do not get the capacitor installed/replaced within the notice period, the consumer shall be levied a surcharge at 5% on the total billed amount charge (metered or flat), till they have installed the required capacitors.

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 as specified under Regulation 8.2.34 and 8.2.35 of the Supply Code 2015.

#### **Clause VI: Rebate for prompt online payment**

The prompt payment rebate for timely payment of the full amount of the bills only through online web portal or digital methods shall be allowed for all categories of consumers as given below:

No. of days from the date of presentation of the bill (excluding days on which Scheduled Banks are closed)	% rebate
Within 2 days	1.50
3 days to 5 days	1.00
6 days to 12 days	0.50



## **Terms and Conditions applicable for all receiving Supply from DVC**

### **Jharkhand Electricity Duty**

The charges in this tariff schedule do not include charges on account of State Electricity Duty/Surcharge to the consumers under the State Electricity Duty Act and the rules framed there under as amended from time to time and any other Statutory levy which may take effect from time to time after making corrections for the loss in the distribution system.

### **Point of Supply**

The Power supply shall normally be provided at a single point for the entire premises. In certain categories like coal mines power may be supplied at more than one point on request of consumer subject to technical feasibility. But in such cases metering and billing shall be done separately for each point.

### **Dishonoured Cheques**

In terms of Regulation 10.10.5 of the JSERC (Electricity Supply Code) Regulations, 2015 as amended from time to time, in the event of dishonoured cheque for payment against a particular bill, the Licensee shall charge a minimum of Rs. 300 or 0.5% of the billed amount, whichever is higher. In addition to the same, the DPS shall be levied extra as per the applicable terms and conditions of DPS for the respective category. DVC may also pursue other legal remedies available under any other laws.

### **Stopped/ defective meters**

In case of existing consumers with previous consumption pattern, the provisional average bill shall be issued as per Clause 10.3.1 of the JSERC (Electricity Supply Code) Regulations, 2015 as amended from time to time.

In case of meter being out of order from the period before which no pattern of consumption is available, the provisional average bill shall be issued on the basis of sanctioned/ contract load on following load factor applicable to respective categories, as shown below:

<b>Consumer Category</b>	<b>Load Factor</b>
Domestic	0.15
Non Domestic	0.20
LTIS	0.20
DS-HT	0.15
HT Consumers (Including DS-HT)	
11 kV/33 kV till 132 kV	0.30
132/220/440 kV	0.50



### **Sale of Energy**

No consumer, except Other Distribution Licensees shall be allowed to sell the electricity purchased from the Licensee to any other person/ entity. In case of DS- HT consumers, who supply power to individual households, the average per unit charges billed to an individual consumer shall not exceed 105% of average per unit cost paid to the Petitioner. This additional 5% allowed reflects the internal distribution losses in housing complex and administrative and distribution costs.

Other Distribution Licensees would supply electricity as per the Tariff Approved by the Commission for that Distribution Licensee.

### **Release of New Connections**

No new connections shall be provided without appropriate meter.

### **Conversion Factors**

The following shall be the conversion factors, as and where applicable: (PF=0.85):

1 kilowatt (kW) = 1.176 kilo Volt Ampere (kVA)

1 kilowatt (kW) = 1 / 0.746 Horse Power (HP)

1 Horse Power (1 HP) = 0.878 kilo Volt 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.





## A 14: STATUS OF EARLIER DIRECTIVES

The Commission has time and again issued various directives in order to improve the functioning of the Petitioner. The Commission notes with concern that the Petitioner has failed to comply with some of 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
<b>Power Supply below 33 kV</b>		
<p>The Petitioner is directed to provide details of applications for release of connections for LT consumers and their current status along with its next Tariff Petition. The Petitioner is also directed to submit details of action taken to facilitate applications for connections to be made by LT consumers along with its next Tariff Petition.</p> <p>DVC is directed to come up with their investment proposal, as per provision of the Tariff Regulations, required to build up infrastructure to give electric supply to all consumers including low and medium voltage consumers under their area of supply.</p>	<p>The Petitioner submitted that the infrastructure which was built by DVC as a consequence of Damodar Valley Corporation Act 1948 was for the purpose of selling electricity to the consumers within its area of operation at or above 30 kV. It had published advertisements in newspapers to find out the interested consumers desiring to draw power at voltage levels below 33 kV including LT consumers. However, as no favourable response received, development of infrastructure which may be required could not be assessed including its geographical location.</p> <p>The Petitioner also submitted that as such there exists a vast distribution network in the State to cater the electricity demand at low and medium voltage levels. Such creation of any network for supply of electricity at low and medium voltage levels in the operational area of DVC within the State of Jharkhand will only be an additional infrastructure parallel to the existing network of JBVNL.</p> <p>The Petitioner hence submitted that as mandated in Section 43 of the Electricity Act, it is obligated to supply electricity to any consumer located within its operational area on receipt of a valid requisition for such</p>	<p>The Commission observes that the Petitioner has not complied with the direction consistently over the past. The Commission has taken a serious note of this.</p> <p>The Commission observes that the Petitioner is obligated to supply power to all consumer within its supply area who requests supply as per Section 43 of the Electricity Act, 2003. However, to avoid duplication of infrastructure, the Petitioner should strive to utilise the existing infrastructure wherever possible and construct new infrastructure only if necessary.</p>



Directives	Status	Views of the Commission
	supply. Creation of parallel infrastructure in advance for supplying electricity to all category of consumers including supply at low and medium voltage consumers may not be economically viable without proper assessment of demand quantum and its locations within the operational area of DVC. However, if applications from prospective consumers located within the operational area are received, DVC will take up all measures necessary to address the issue on case to case basis.	
<b>Facilitation of applications for new connection</b>		
The Commission directs the Petitioner to make necessary arrangements to ensure that applications for new connections are accepted at every Grid Sub Station. The Petitioner should also explore other avenues of application submission.	The Petitioner submitted that presently the mode of submission of application for new power supply connection is in “On line” mode only. The applicants for new connection may apply on line directly through DVC Portal or may visit the GOMD (Grid Operation and Maintenance Division) Headquarters where applicants may be facilitated by the DVC personnel for making the on-line application. GOMD headquarters in the State of Jharkhand are located at Maithon, Putki, Hazaribagh, Ramgarh and Jamshedpur. However, DVC is exploring the ways to extend such facility from the Grid Sub-Stations located in the State of Jharkhand in near future.	The Commission observes that the Petitioner has failed to meet its self- assigned target during the previous Public Hearings. Further, it is observed that only after rigorous follow up from the Commission, the Petitioner has taken appropriate steps. The Commission directs the Petitioner to implement the option to accept applications for new connection at every Grid Sub Station at the earliest and submit compliance within 2 months of issue of this Order, failing which the Commission shall take appropriate action.
<b>Submission of impact analysis and requisite data along with proposal for introduction of ToD Tariff</b>		
The Commission directs the Petitioner that proposal for	The Petitioner proposed introduction of TOD tariff scheme applicable only	The Commission has gone through the



Directives	Status	Views of the Commission
<p>introduction of Time of the Day (TOD) based tariff must include a detailed analysis on the impact of ToD tariff on the consumer categories that it is proposed to be levied on. The proposal may contain:</p> <p>(a) Identification of system peak period and off-peak period, through the analysis of the system load curve to devise the TOD structure (time bands);</p> <p>(b) Proper load profiling of the consumer categories for which TOD is slated to be introduced, through installation of proper meters;</p> <p>(c) Estimation of the load shifting through the use of different tariff differentials through a study on sample consumers.</p>	<p>for HT and EHT industrial consumers excluding the licensees receiving power from DVC in consumer mode.</p> <p>The Petitioner submitted load profile of only industrial consumers of DVC located in the State of Jharkhand and receiving electricity at a voltage level of 33 kV and above for the purpose of identification of peak and off-peak period in the DVC system for FY 2016-17. Hourly average load has been derived based on the meter reading data for each 15 minute block.</p> <p>Based on the above data of average daily load variation (on hourly basis) average load profile on hourly basis for each month has been arrived at in respect of the industrial consumers for 33 kV, 132 kV and 220 kV consumers.</p> <p>Based on the study following inferences have been drawn excluding a few exceptions;</p> <p>Peak Period – 17:00 hrs. to 23:00 hrs. Off - Peak Period – 23:00 hrs. to 06:00 hrs. Rest of the day i.e., from 06:00 hrs. to 23:00 hrs. as Normal Period</p> <p>The Petitioner submitted that presently the meters installed for consumer billing (both check and main meters) are capable for operation as per the time zones being programmed. However, it would require 6 (six) weeks time for programming the meters based on the time zones approved by the Commission.</p>	<p>submission made by the Petitioner. The Commission is of the view that ToD mechanism is desirable as the same has a considerable impact on Demand Side Management of Load. However, The Commission is of the view that ToD if levied, should be levied for all consumers after looking into various implications for the same. The Commission directs the Petitioner to study the commercial and load impact of implementation of ToD mechanism on all consumers including Distribution Licensees in its area and submit the same to the Commission within 2 months of issue of this Order. The above impact should be assessed considering that the same is either optional or mandatory for all consumers. The Commission has therefore not considered the implementation of the same at this point of time, however, the same shall be considered once the above study is carried out.</p>



Directives	Status	Views of the Commission
<b>Compliance to RPO</b>		
The Commission directs the Petitioner to comply with the Renewable Purchase Obligations (RPO) as per the relevant Regulations, failure of which may lead to penalty.	<p>The Petitioner submitted that DVC has entered into long term agreement with NVVNL for 20 MW and with NTPC for 20 MW solar power purchase from their different solar plants to meet its solar RPO. Any shortfall in solar RPO, if assessed, is met up through purchase of solar REC time-to-time during the respective financial years. Short fall in compliance of solar RPO during 2017-18 happened due to the fact that trading of solar RPO remained suspended during June-2017 onwards due to pendency of Civil Appeal No. 6334 of 2017 and 6083 of 2017 before the Hon'ble Supreme Court. However, such short falls have been carried forward to the next financial year i.e., 2018-19 and is expected to be met in the current financial year.</p> <p>Regarding non-solar RPO, DVC has regularly been publishing advertisements in National dailies for Expression of Interest (EOI) for purchase of non-solar power. But till date no positive response could be obtained. Accordingly, non-solar RPO is met through purchase of REC and generation from mini hydro plant at Tilaya.</p>	The Commission takes note of the submissions made. The Commission directs the Petitioner to comply to RPO targets by purchasing the pending RECs in FY 2018-19 and FY 2019-20.
<b>Quality of power/ Reliability Indices and Standard of Performance (SOP)</b>		
The Commission directs the Petitioner submit a 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.	The Petitioner submitted monthly figures of Reliability Indices in respect of SAIFI and SAIDI for the period from FY 2017-18 to FY 2018-19 (upto September) along with the Petition.	The Commission notes that the Petitioner has not complied with the spirit of the directive as the submission is not made quarterly and all data as per the JSERC (Distribution Licensees' Standards of Performance)



Directives	Status	Views of the Commission
		Regulations, 2015 is not submitted. The Commission has taken a serious note of it and directs the Petitioner to submit quarterly reports as per the formats in the said Regulations, failing which appropriate action may be taken.
<b>Revenue from Trading Business</b>		
The Commission directs the Petitioner to submit the details of energy transacted through power exchanges along with its next tariff petition. The details should include the date, quantum and revenue from sale through power exchanges for the previous financial year FY 2016-17, FY 2017-18 as well as current financial year FY 2018-19 up to the date of filing of Tariff Petition.	<p>The Petitioner submitted relevant details regarding the date, quantum and revenue from sale through power exchanges for the previous financial year FY 2016-17 and FY 2017-18 along with the computation of gain / loss.</p> <p>The Petitioner also submitted that unlike other DISCOMs the power pool for retail supply to the consumers of DVC consists of more than 90% from own generation and balance around 10% or less from purchase of power. Accordingly, cost of generation is claimed by DVC in the distribution ARR limited only to the extent of actual utilization of own generation. As such generation cost (both Fixed Cost and Energy Charges) shared by the consumers of DVC is limited to the quantum of generation actually used for retail supply and not the entire generation.</p>	The Commission notes compliance of the Petitioner.
<b>Investment in Cyber Security solutions</b>		
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.	<p>The Petitioner submitted the Cyber Security measures already adopted by DVC with the following installations;</p> <p><b>Firewall:</b> It is being used to monitor and control incoming and outgoing network traffic based on</p>	The Commission takes note of the steps taken by the Petitioner.



Directives	Status	Views of the Commission
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.	<p>predetermined security rules and it establishes a barrier between internal network and the Internet.</p> <p><b>Deep Discovery Inspector:</b> Deep Discovery Inspector is a cyber threat management solution designed and architected to deliver breakthrough advanced persistent threat visibility, insight, and control. It also provides critical security information, alerts, and reports.</p> <p><b>Deep Discovery Analyser:</b> It is a custom sandbox analysis server that enhances the targeted attack protection of security products. It integrates with Enterprise security suit products to augment the sandbox analysis of other Deep Discovery products.</p> <p><b>Enterprise Security Suit Software:</b> It consists of Antivirus solution bundled with email &amp; web security &amp; filtering features.</p> <p><b>SSL Certificate for DVC Website and e-mail:</b> It is being used to encrypt all data between connected Browser and website using https protocol.</p> <p><b>Datacenter:</b> To provide recommended Security aspects of enterprise IT System.</p> <p><b>Security Audit of Website:</b> It is being conducted to find out the security loopholes for its in-depth assessment.</p> <p><b>Desktop Computers with latest Operating System &amp; Microsoft Office:</b> Ministry of Power advised to discontinue use of computers having</p>	





Directives	Status	Views of the Commission
	<p>older operating System (XP/Vista) as steps to prevent cyber incidents. Accordingly, 868 numbers of Computer having Windows 10 Professional and Microsoft Office 2016 have been procured to replace Computers having outdated OS in a phased manner.</p> <p>The Petitioner submitted that it has also installed some of the aforesaid cyber security systems in compliance to the directives received from the Central Ministry and will claim the expenditure in respect of the cyber security aspect in the Petition for Annual Performance Review for the period FY 2017-18.</p>	
<b>Strengthening/ Increasing effectiveness of consumer grievance redressal mechanism</b>		
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 Petition indicating- total number of complaints received, nature of complaint, complaints resolved, average resolution time, complaints pending etc.	The Petitioner submitted that the Consumer Grievance Redressal Forum (CGRF) is already functional in DVC. Presently the forum consists of Chair Person, Member (Technical), Member (Finance) and Member (Legal) and all the portfolios are functional. All necessary infrastructure for smooth functioning of CGRF have been made available by DVC. Hence timely discharge of any consumer grievance is ensured. At present no case is pending before CGRF.	The Commission notes compliance of the Petitioner. The Commission directs the Petitioner to submit quarterly reports on pending CGRF complaints. Moreover, consumer awareness programmes should be taken up by the Petitioner.
<b>Bank Guarantee for security deposit above Rs 10 Lakh</b>		
The Commission directs the Petitioner to strictly comply with Clause 8.2.20 of the JSERC (Supply Code) Regulations, 2015 as per which:  The Consumer whose total amount of Security Deposit exceeds Rs. 10 Lacs may, at	The Petitioner submitted that it is presently following the directive of the Commission in this regard. Out of 156 supply points of different consumers and licensees BG have been submitted by 63 of consumers. DVC has been issuing letters and reminders and also constantly pursuing rest of the consumers and licensees including PSUs for	The Commission notes compliance of the Petitioner and directs the Petitioner to continue with conversion of security deposit exceeding Rs. 10 Lakh into BG.



Directives	Status	Views of the Commission
<p>his option, furnish irrevocable Bank Guarantee from a nationalized or scheduled commercial Bank initially valid for a period of two years. It shall be the responsibility of the consumer to keep the Bank Guarantee valid at all times and to renew the Bank Guarantee at least 2 months prior to its expiry.</p> <p>The above mentioned clause shall be applicable for all existing as well as new consumers.</p>	<p>submission of BG as security deposit at the earliest. It is expected that submission of BG will improve in near future.</p>	
<b>Optimisation of Power Purchase Cost</b>		
<p>The Commission directs the Petitioner to undertake a detailed demand forecasting exercise for short term, medium term as well as long term based on which it should devise a power procurement strategy with higher focus on managing short term procurement of power through various avenues and optimising costs for procurement other than long term sources.</p>	<p>The Petitioner submitted that it purchases thermal power from Central Sector Generating Stations like NHPC (Rangit and Teesta Projects), NTPC Units (TSTPS-I and FSTPS – III), KBUNL located in Eastern Region and from Chukha, Kurichhu &amp; Tala HEP in Bhutan through PTC as per the capacity allocation of MoP, GoI. DVC also purchases power from Maithon Power Ltd. (a joint venture company between DVC &amp; TATA Power) as per long term bilateral agreement.</p> <p>In order to reduce purchase of costlier power from FSTPS – Stg. III of NTPC, DVC has already taken up the matter with MoP, GoI. DVC has also relinquished around 150 MW of power out of the original contracted quantum of 300 MW with MPL. DVC is making good this shortfall by utilizing its own surplus available generation capacity.</p>	<p>The Commission notes the submission made by the Petitioner. The Commission is of the view that the Petitioner should increase its consumer base to utilise its surplus power and reduce the loading of its fixed charges to the consumers.</p>





Directives	Status	Views of the Commission
	In case of sudden shortage of own generation due to unforeseen reasons DVC purchases power from energy exchanges to meet the consumer load demand.	
<b>Approval of PPAs</b>		
The Commission directs TSL 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.	The Petitioner submitted that the aforesaid directive appears to be not belonging to DVC and that all power purchase agreements between DVC and Generators are old ones and this Commission has also allowed the power purchase quantum and cost from those stations in the tariff orders issued time-to-time. However, DVC will submit new agreement for purchase of power, if there be any, for approval of this Commission.	The Commission notes the submission made by the Petitioner.
<b>Consolidated tariff petition for FY 2019-20</b>		
The Commission directs the Petitioner to file a consolidated Petition for determination of ARR and Tariff for FY 2019-20 along with the True-up of FY 2016-17 and FY 2017-18 and APR for FY 2017-18 within the timelines stipulated in the Tariff Regulations, viz. November 30th, 2018.	The Petitioner has submitted the Petitions for True-up for FY 2016-17, APR for FY 2018-19 and ARR & Tariff for FY 2019-20 along with the reason for delay in filing of the Petitions.	The Commission notes that the Petitioner did not submit the Petition for APR and True-up for FY 2017-18. The Commission directs the Petitioner to submit the Petition for True-up for FY 2017-18 within 1 month of issue of this Order.



## **A 15: DIRECTIVES**

### **Power Supply below 33 kV**

- 15.1 The Commission observes that the Petitioner has not complied with the direction consistently over the past. The Commission has taken a serious note of this.
- 15.2 The Commission observes that the Petitioner is obligated to supply power to all consumer within its supply area who requests supply as per Section 43 of the Electricity Act, 2003. However, to avoid duplication of infrastructure, the Petitioner should strive to utilise the existing infrastructure wherever possible and construct new infrastructure only if necessary.

### **Facilitation of applications for new connection**

- 15.3 The Commission observes that the Petitioner has failed to meet its self- assigned target during the previous Public Hearings. Further, it is observed that only after rigorous follow up from the Commission, the Petitioner has taken appropriate steps.
- 15.4 The Commission directs the Petitioner to implement the option to accept applications for new connection at every Grid Sub Station at the earliest and submit compliance within 2 months of issue of this Order, failing which the Commission shall take appropriate action.

### **Submission of impact analysis and requisite data along with proposal for introduction of ToD Tariff**

- 15.5 The Commission has gone through the submission made by the Petitioner. The Commission is of the view that ToD mechanism is desirable as the same has a considerable impact on Demand Side Management of Load. However, The Commission is of the view that ToD if levied, should be levied for all consumers after looking into various implications for the same.
- 15.6 The Commission directs the Petitioner to study the commercial and load impact of implementation of ToD mechanism on all consumers including Distribution Licensees in its area and submit the same to the Commission within 2 months of issue of this Order. The above impact should be assessed considering that the same is either optional or mandatory for all consumers. The Commission has therefore not considered the implementation of the same at this point of time, however, the same shall be considered once the above study is carried out.



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### **Compliance to RPO**

15.7 The Commission directs the Petitioner to comply to RPO targets by purchasing the pending RECs in FY 2018-19 and FY 2019-20.

### **Quality of power/ Reliability Indices and Standard of Performance (SOP)**

15.8 The Commission notes that the Petitioner has not complied with the spirit of the directive as the submission is not made quarterly and all data as per the JSERC (Distribution Licensees' Standards of Performance) Regulations, 2015 is not submitted. The Commission has taken a serious note of it and directs the Petitioner to submit quarterly reports as per the formats in the said Regulations, failing which appropriate action shall be taken.

### **Strengthening/ Increasing effectiveness of consumer grievance redressal mechanism**

15.9 The Commission notes compliance of the Petitioner. The Commission directs the Petitioner to submit quarterly reports on pending CGRF complaints. Moreover, consumer awareness programmes should be taken up by the Petitioner.

### **Bank Guarantee for security deposit above Rs 10 Lakh**

15.10 The Commission notes compliance of the Petitioner and directs the Petitioner to continue with conversion of security deposit exceeding Rs. 10 Lakh into BG.

### **Optimisation of Power Purchase Cost**

15.11 The Commission notes the submission made by the Petitioner. The Commission is of the view that the Petitioner should increase its consumer base to utilise its surplus power and reduce the loading of its fixed charges to the consumers.

### **Consolidated tariff petition for FY 2019-20**

15.12 The Commission observes, that the Petitioner did not submit true up petition for FY 2017-18 along with the Petitions filed. The Commission therefore directs the Petitioner to submit the Petition for True-up for FY 2017-18 within 1 month of issue of this Order.

### **Quarterly Forecast for Short Term Power Purchase**

15.13 The Commission directs the Petitioner to submit the rolling quarterly forecast of the quantum of short term power to be purchased as per Regulation 5.20 of the Distribution Tariff Regulations, 2015.



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**Roadmap for the treatment of Surplus till FY 2014-15**

15.14 The Commission directs the Petitioner to propose a roadmap for the adjustment of the surplus till FY 2014-15 clearly stating the period of treatment and the manner in which it proposes to treat the said amount within 2 months of the issue of this Order.

**Treatment of Gap/(Surplus) withheld for FY 2016-17, FY 2017-18 and FY 2018-19**

15.15 The Commission directs the Petitioner to file a proposal for treatment of withheld Gap/Surplus for FY 2016-17, FY 2017-18 and FY 2018-19 along with truing up Petition for FY 2017-18.

**Details of Voltage-wise Cost of Supply and Voltage-wise Losses**

15.16 The Commission directs the Petitioner to submit the details of voltage-wise cost of supply and voltage-wise losses along with the next Tariff Petition in order to determine cost-reflective Tariff.

This Order is signed and issued by the Jharkhand State Electricity Regulatory Commission on May 28, 2019.

It is made clear that the Order regarding revision of tariff shall come into effect from June 01, 2019 and shall remain in force till the next order of the Commission to this regard.

Let the order be placed on website of the Commission, and a copy thereof be sent each to the DVC, all the other Licensees of the State, CGRFs/VUSNFs, Department of Energy- Government of Jharkhand, Central Electricity Regulatory Commission, Central Electricity Authority, Electricity Regulatory Commission of all States and Joint Electricity Regulatory Commission.

A copy of the Order be also sent to all Postgraduate Institutions of the State to be kept in their library.

**Date: 28.05.2019**

**Place: Ranchi**

**Sd/-**  
**(R. N. Singh)**  
**MEMBER (Engg.)**

**Sd/-**  
**(Arbind Prasad)**  
**CHAIRPERSON**



## ANNEXURES

### Annexure-1: List of participating members of public in the public hearing

Sr. No.	Name	Address/Organization
<b>Hazaribagh</b>		
1	Dr. Neelu Kumari	Jullu Park (Near head post office) Hazaribagh
2	Smt. Regina Kindo	DVC, Discom, Hazaribagh
3	Smt. Sanngja Desh	SCD, DVC, Hazaribagh
4	Dharmendar Prasad	TSC - IV, DVC, Hazaribagh
5	R. S. Sharma	GOMO-B, DVC, Hazaribagh
6	Shri Sauvik Dhara	DVC Towers, 1st Floor, VIP Road, Kolkata - 54
7	Abhijit Chakraborty	DVC Maithon, Dhanbad
8	Pramod Agarwal	Shivam Iron & Steel Co. Ltd.
9	Hari Budhia	Bihar Foundry & Casting Ltd., Ranchi
10	Mr. Bhushan Rastogi	Consultant, Bihar Foundry & Casting Ltd., Ranchi
11	Mr. Ravi Kalra	Consultant, Bihar Foundry & Casting Ltd., Ranchi
12	B. K. Yadav	DVC Maithon, Dhanbad
13	Satish Kumar	Commercial, DVC Kolkata
14	Debshankar Ghosh	Commercial, DVC Kolkata
15	Rajib Goswami	CE (Comml.) DVC Kolkata
16	Subrata Ghosal	Deputy Chief Engineer, DVC
17	Pulak Bhattacharya	Dy. GM. (Finance), Coml., Kolkata
18	S. Ganguly	DVC Towers, 1st Floor, VIP Road, Kolkata - 54
19	Dhananjay Kumar	Maihar Alloys P Ltd.
20	Brajesh Srivastava	Ramgarh
21	Mazhar Khan	Radha Casting & Metalik P Ltd.
22	Tabarak Khan	Pankaj Steel, Ramgarh
23	S. Haldar	DVC, Kolkata
24	A. Kujur	DVC, Ranchi
25	Subodh Dutta	FD, Comml, DVC, Kolkata
26	A. Bhayankar	DVC Ranchi
27	S. Haldar	Member (F), DVC, Kolkata
28	A. K. Jha	ED, DVC
29	S. K. Bose	CE-I (SPE) DVC
30	A. K. Jha	G-(TSL) I/C DVC Maithon
31	S. K. Sarawgi	Atibir Industries Co. Ltd.
32	Vijay Bajaj	Jai Durga Iron
33	Sanjeev Kumar Azad	Sri Langta Baba Steel P Ltd.
34	B.K. Haldhar	Dayal Steel Ltd.
35	Omkar Gupta	Indrani Steel Pvt. Ltd., Bokaro
36	Rajesh Sinha	Hindustan Press, Hazaribagh
37	Sandeep Singh	Atibir Industries Co. Ltd.



Sr. No.	Name	Address/Organization
38	Taranjeet Singh Saluja	Saluja Steel & Power P Ltd.
39	Rakesh Kumar Singh	Shree Bholey Alloys Pvt. Ltd., Bokaro
40	Kavi Yagnik	Sai Electrocasting Pvt. Ltd., Koderma
<b>Maithon</b>		
1	Sanjay Kumar	SAIL/Bokaro Steel Plant
2	Sanjay Kumar Singh	SAIL/Bokaro Steel Plant
3	Manoj Kumar	SAIL/Bokaro Steel Plant
4	Sauvik Dhara	DVC, DVC Towers Kolkata - 54
5	Pulak Bhattacharya	DVC, DVC Towers Kolkata - 54
6	Debshankar Ghosh	DVC, DVC Towers Kolkata - 54
7	Santosh Kumar Sarawgi	Atibir Industries Co. Ltd.
8	Subrata Ghosal	DCE (Commercial), DVC
9	S.K. Datta	ED (Coml.), DVC
10	T. N. Datta	Sr. CE System E'HoP, Maithon, DVC
11	B. K. Yadav	DVC, Maithon
12	A. Chakraborty	DVC, Maithon
13	Rajesh Kumar	CTC, DVC
14	A.K. Mallik	Chief Engineer, Hydel, DVC, Maithon
15	Jitendra Agrawal	SDE, & Secretary, CGRF, DVC
16	Rakesh Kumar Singh	Shree Bholey Alloys, Bokaro
17	Pramod Agarwal	Association of DVC HT Consumer
19	Rajib Goswami	CE (Coml.), DVC
20	Sangram Mohra	Sr. Manager (F), DVC
21	Satish Kumar	EE, Coml, DVC, Kolkata
22	Sanjeeb Sharma	Ramgarh
23	Mukesh Kumar Sharma	Ramgarh
24	Harendra Saini	Press
25	Animesh Poddar	Press