

**RAJASTHAN ELECTRICITY REGULATORY COMMISSION, JAIPUR**  
**Petition No. RERC 1841/20, 1842/20, 1843/20**

In the matter of approval of Multi Year Aggregate Revenue Requirement, Tariff Petition and investment plan of Jaipur Vidyut Vitran Nigam Ltd. (JVVNL), Ajmer Vidyut Vitran Nigam Ltd. (AVVNL) and Jodhpur Vidyut Vitran Nigam Ltd. (JdVVNL) for FY 2020-21 to FY 2023-24.

**Coram:** **Dr. B. N. Sharma, Chairman**  
**Shri S.C. Dinkar, Member**  
**Shri Prithvi Raj, Member**

**Petitioners:** Jaipur Vidyut Vitran Nigam Ltd., Jaipur (1841/20)  
Ajmer Vidyut Vitran Nigam Ltd., Ajmer (1842/20)  
Jodhpur Vidyut Vitran Nigam Ltd., Jodhpur (1843/20)

**Date of Hearing:** 29.07.2021, 30.07.2021 & 03.08.2021  
**Date of Order:** **24.11.2021**

**ORDER**

**Section-1: Background**

- 1.1 ARR and Tariff Order for FY 2019-20 was issued by the Rajasthan Electricity Regulatory Commission on 06.02.2020. The three distribution companies namely, Jaipur Vidyut Vitran Nigam Ltd. (JVVNL), Ajmer Vidyut Vitran Nigam Ltd. (AVVNL) and Jodhpur Vidyut Vitran Nigam Ltd. (JdVVNL), collectively called Discoms sought multiple extensions for filing ARR & Tariff petition for FY 2020-21. Thereafter, Commission notified amendment in Tariff Regulations, 2019 on 28.02.2020 incorporating provision for filing an option for determination of multi year tariff for remaining period of control period. Accordingly, the Commission in March, 2020 on the request of Discoms has allowed extension in time, to file MYT Petition for remaining control period for FY 20-21 to 23-24 along with Investment Plan. Further, multiple extensions were again sought by Discoms due to COVID-19 pandemic for filling MYT petitions.
- 1.2 Thereafter, Discoms or Petitioners had filed petitions for approval of Multi Year Aggregate Revenue Requirement (ARR), tariff and investment plan for remaining period of the control period i.e. for FY 2020-21 to FY 2023-24 on 24.11.2020 under section 62 & 64 of Electricity Act, 2003 read with RERC (Terms

and Conditions for Determination of Tariff) Regulations, 2019 and amendment thereof and Investment Approval Regulation 2006.

- 1.3 After examining the petitions, the Commission vide letter dated 04.12.20 conveyed the preliminary deficiency observed in the petitions for FY 2020-21 to FY 2023-24 to Discoms and the Discoms were directed to clarify along with supporting documents.
- 1.4 JVVNL on 29.12.2021, AVVNL on 07.01.2021 and JdVVNL on 07.01.2021 filed the revised petitions incorporating the replies of queries raised in preliminary data gaps.
- 1.5 JVVNL, AVVNL & JdVVNL vide their letter dated 07.01.2021, 08.01.2021 & 08.01.2021 respectively, filed additional information relating to approval of ARR, tariff and investment plan for FY 2020-21 to FY 2023-24.
- 1.6 Further, JVVNL, AVVNL & JdVVNL vide their letter dated 12.01.2021, 13.01.2021 & 15.01.2021 respectively, filed second time additional information relating to approval of ARR, tariff and investment plan for FY 2020-21 to FY 2023-24.
- 1.7 On 18.02.2020, 17.02.2020 and 17.02.2020, JVVNL, AVVNL & JdVVNL had filed petition no. 1627/20, 1625/20 & 1626/20 respectively for approval of Investment Plan for FY 2020-21. However, in the instant MYT Petitions Discoms have also filed revised investment plan for FY 2020-21 to FY 2023-24 stating that since they have submitted a revise petition existing petitions will be withdrawn. Accordingly, the Commission has dealt with investment plan as filed in MYT petition and petition no 1627/20, 1625/20 & 1626/20 stand disposed of being infructuous.
- 1.8 Jaipur Discom on behalf of all Discoms had filed the petition no. 1596/19 for determination of additional surcharge for FY 2019-20 on 27.12.2019 based on the data available till FY 2018-19. The Commission had directed the Discom to submit the revised proposal based on actual data for FY 2019-20 vide letters dated 11.05.2020, 01.06.2020, 03.07.2020 and 27.08.2020.
- 1.9 In compliance to Commission's letter dated 27.08.2020, the Discom had submitted the revised proposal for additional surcharge for FY 2019-20 including the block wise back down and box-up data with block wise open access demand for FY 2019-20 on 14.10.2020. Further, Based on the earlier submission for FY 2019-20, the proposal for additional surcharge for FY 2020-21 has been submitted by Discoms along with MYT Petitions for FY 2020-21 to FY 2023-24. Based on above MYT petitions, the Commission has determined the additional

surcharge in this order. However, the same shall be applicable prospectively. Further, petition no 1596/19 automatically stands disposed of being infructuous.

- 1.10 Discoms have also filed a separate petition no. 1799/20 for determination of parallel operation charges for FY 2019-20 on dated 20.08.2020. After examining the petition, the Commission vide letter dated 31.08.2020 conveyed the data gap observed in the above petition. Discoms have filed the reply of data gap in the matter on dated 14.10.2020. As Discoms have also filed proposal of Parallel Operation Charges for FY 2020-21 in the MYT ARR & Tariff Petition for FY 2020-21 to 2023-24, hence Commission vide letter dated 08.01.2021 asked Discoms whether petition for determination of parallel operation charges for FY 2019-20 is to be processed further considering it also for FY 2020-21 or otherwise. Jaipur Discom vide its letter dated 12.01.2021 has requested the Commission for processing the petition of PoC Charges for FY 2019-20 as per petition dated 18.08.2020 and subsequent submission dated 15.09.2020 and for FY 2020-21 to FY 2023-24 as per MYT ARR petition. The Commission has appropriately dealt with the matter later in this order.
- 1.11 As per Section 64(2) of the EA, 2003 which requires that applicant should publish application filed in such abridged form and manner as may be specified by the Appropriate Commission, the Commission on dated 18.01.2021 allowed Discoms to publish the notice in the newspapers.
- 1.12 Accordingly, public notices with salient features of the petitions, inviting comments/suggestions, were published in the following newspapers on the dates shown against each of the petitions and were also placed on the websites of the Commission and Discoms. The last date for submission of comments/ suggestions was notified as 01.03.2021 which was further extended to 08.03.2021 for JVVNL, AVVNL & JdVVNL:

<b>Sr. No.</b>	<b>Name of Newspapers</b>	<b>JVVNL</b>	<b>AVVNL</b>	<b>JdVVNL</b>
(i)	Dainik Bhaskar	30.01.2021	29.01.2021	29.01.2021
(ii)	Times of India	30.01.2021	--	30.01.2021
(iii)	Rashtrdoot	--	--	--
(iv)	Dainik Navivoti	30.01.2021	30.01.2021	31.01.2021
(v)	Hindustan Times	--	30.01.2021	--
(vi)	Raiasthan Patrika	30.01.2021	29.01.2021	29.01.2021

- 1.13 After examining the petitions and reply of aforesaid deficiencies, the Commission vide letter dated 26.03.2021, pointed out additional deficiencies

observed in the petitions for FY 2020-21 to FY 2023-24, the Discoms were directed to clarify along with supporting documents.

1.14 JVVNL on 03.06.2021, AVVNL on 05.06.2021 & JdVVNL on 04.06.2021 submitted replies of additional deficiencies indicated by the Commission.

1.15 In all, 353 numbers of comments/suggestions were received on JVVNL petition and 23 numbers on AVVNL petition and 70 numbers on JdVVNL petition from the stakeholders for FY 2020-21 to FY 2023-24. The list of stakeholders is enclosed at **Annexure-A**.

1.16 The Commission forwarded the suggestions/comments submitted by the Stakeholders to the respective Discom for furnishing the reply.

1.17 Discoms have furnished the reply to Stakeholders as well as to the Commission.

1.18 Due to COVID-19 pandemic, the public hearing in the matter was held through video conferencing on the following dates:-

Discom	Date of Hearing
JdVVNL & AVVNL	29.07.2021
JVVNL	30.07.2021 & 03.08.2021

1.19 The list of stakeholders who have made submissions during the hearing through video conferencing is enclosed at **Annexure-B**.

1.20 Post hearing, the Discoms have also filed clarification in respect of issues raised by the stakeholders during the hearing.

1.21 The Commission has carefully considered the petitions filed by Discoms, objection and suggestion filed by stakeholders thereon, reply given by the Discoms in respect of stakeholder's objections/ suggestions and oral submissions made by the Stakeholders during the hearing, replies received after hearing and also perused all the relevant records while finalizing this order.

1.22 As issues arising in all the petitions are common for all three Discoms and the Stakeholders have also made common submissions on all the petitions and hearings were held in the matter, the Commission, therefore, has decided to consider all the petitions together for FY 2020-21 to FY 2023-24 and dispose them through this common order.

1.23 The projections approved in this order for Generation and Transmission are for the purpose of estimating the Aggregate Revenue Requirements of the

petitioners. It shall not be construed as formal approval of the Commission for any investment or tariff for transmission or generating plant etc.

1.24 For ready reference, a list of abbreviations used in this order is placed at **Annexure – C** of this order.

1.25 All energy figures used in this order, unless stated otherwise, are in Million Units (MU).

1.26 For the purpose of representation, figures given in the tables are shown as rounded off. However, for calculation purpose, actual figures have been considered.

1.27 This order has been structured in five sections as given under:

**a) Section 1 – Background**

**b) Section 2 - Comments/suggestions of Stakeholders, Petitioners' response and the Commission's observations/views thereon**

In this section, the Commission has considered comments/suggestions made by stakeholders on the General and specific issues related to proposals of ARR, tariff determination and investment plan of three Discoms.

**c) Section 3 - ARR and Investment Plan for FY 2020-21 to FY 2023-24 of the three Discoms**

In section 3, the Commission has looked into performance of Discoms, Distribution losses, effect of UDAY, various steps taken by Discoms for efficiency improvement and individually dealt various cost parameters viz power purchase cost, O&M, interest cost, Investment Plan, capital expenditure, depreciation etc. and the ARR of FY 2020-21 to FY 2023-24 and the estimated sales and revenue for various categories of consumers in accordance with RERC (Terms and Conditions for Determination of Tariff) Regulations, 2019.

**d) Section 4 –Tariff Proposals and approved Tariff**

Discoms have proposed certain rationalization measures in order to facilitate better utilization of resources, economic pricing and better revenue management and revision in tariff for various categories which have been dealt in the order.

**e) Section 5-Directives**

In this section, the Commission has considered compliance of its previous order and has made observations and directives for improvement of the sector as a whole and Discoms.

**Section – 2 Stakeholders comments, Petitioners’ response and the Commission’s views:**

**2.1. MYT and Truing up of FY 2019-20 :**

**2.1.1. Stakeholders’ Suggestions/Comments:**

1. It was submitted that the present petition for MYT cannot be processed as no true-up petition of previous year i.e. F.Y. 2019-20 has been submitted by the Discoms along with MYT Petition.
2. It was submitted that RERC regulations provides that in case the Licensee does not file true-up petition of previous financial year within the time limit specified in these Regulations, they will not be entitled to charge the increased tariff and will also be liable to such penalty as the Commission may determine.
3. It was submitted that the projection made by the Discoms are not accurate due to COVID-19 pandemic. Any inaccurate projection for remaining control period would hamper the financial health of consumer in long run, therefore the ARR and Tariff should be determined for FY 2020-21 and FY 2021-22 only.

**2.1.2. Petitioners’ Response:**

1. Discoms submitted that the objection of the stakeholder holds no basis since the previous year in the context of MYT petition from FY21 to FY24 is FY 2018-19 and current year is FY 2019-20. Current Petition has been filed as per the terms and conditions of MYT Regulation, 2019. According to the Regulations 5(3) titled as “Tariff Determination and Tariff Principles” the Discoms have to submit the forecast of expenses and revenue at existing and revised tariff for ensuing years and truing up of expenses and revenue based on the audited accounts of previous year.
2. Discoms submitted that they had proposed tariff hike in the ARR Petition for FY 2019-20, which has been approved by the Commission in the RERC Tariff Order dated 06.02.2020. Therefore, tariff filing under such scenario would lead to erroneous projections. However, post notification of the Tariff Order, nationwide lockdown had been imposed owing to COVID-19 Pandemic, which has shifted the focus towards ensuring the continuous supply of power to the consumers under the situation of severe liquidity crisis. Despite the crisis, the Discoms have made earnest efforts and ARR Petition for FY 2020-21 has been in November, 2020. It was submitted that the Commission in view of the aforesaid situation may kindly relax the conditions stipulated under Regulation 5 of MYT Regulation 2019.

### **2.1.3. Commission's View:**

1. The Commission has taken note of the comments of the Stakeholders and reply of Discoms thereto.
2. The Commission observed that many stakeholders have requested that due to COVID-19 the projections made by Discoms are not accurate and accordingly tariff should not be determined for 4 years i.e. for remaining control period from FY 2020-21 to FY 2023-24 and it should be determined for FY 2020-21 & 2021-22 only. Accordingly, in this Order, Commission has considered ARR, tariff and Investment plan for FY 2020-21 to FY 2021-22 only for all the Discoms including the various proposals made keeping in view the RERC (Terms and Conditions for Determination of Tariff) Regulations, 2019 and norms prescribed therein.

## **2.2. Franchisee:**

### **2.2.1. Stakeholders' Suggestions/Comments:**

1. It was submitted that in case of JVVNL, C&AG observed that there is about Rs. 41.42 Crore recoverable amount from franchisee for the period April 2018 to March 2020. It has also been stated that this amount has not been included in sale of power. Thus the revenue of such period has been shown on lesser side to this extent. Stakeholder sought the information that how much amount is recoverable from Kota and Bharatpur Franchisee. Financial year wise outstanding may be intimated in each case. Whether any late payment Surcharge has been levied on such outstanding and if so, how much is in respect of each Franchisee and what is the status of recovery of the above outstanding.
2. It was submitted that in the notes to Account of JVNNL amount recoverable from KEDL and BESL respectively and in case of JdVVNL from BKESL is appearing. Discoms may provide the information regarding reason and period for which this amount is pending for recovery. Whether on these pending dues any late payment surcharge or interest is chargeable and if so what is such amount. Reason for non-recovery of above dues may also be indicated.
3. It was submitted that the Commission should conduct a review of the functioning of franchisees operating in the Discoms licensee area particularly with respect to adherence to the Franchisee Agreement.

### **2.2.2. Petitioners' Response:**

1. The JVVNL submitted that the breakup of amount receivable from the distribution franchisee as on 31.03.2020 has been shown under Schedule 20 of the Annual accounts.
2. No late payment surcharge has been included in the receivables.
3. JdVVNL submitted the reason behind outstanding is that the Discom provides adjustment of credits because in case the Discom does not provide adjustment of these credits such as interest on security deposits, adjustment of ABR then the DF is permitted to deduct such amounts from the input energy bill payable for the subsequent month. This results in outstanding.
4. JdVVNL submitted that special vigilance drives are being carried out held by Zonal chief Bikaner in order to recover the outstanding amount payable by the consumers and the amount of receivables pending on the consumer's end might be decreasing. But the same might increase during the FY 2020-21 due to the COVID pandemic.
5. Discoms submitted that they are regularly monitoring the performance of the franchisee operating in their area. Discoms have also appointed an Independent Auditor which submits a report on the performance of the franchisees on regular basis.

### **2.2.3. Commission's View:**

The Commission has taken note of the comments of the Stakeholders and reply of Discoms thereto. The Commission directs that report of independent auditor for FY 19-20 & FY 20-21 be furnished to the Commission and should also be made part of next ARR & Tariff and true up filing.

## **2.3. Power Purchase:**

### **2.3.1. Stakeholders' Suggestions/Comments:**

1. It was submitted that in case of JVVNL the statement of merit order, value of fixed cost (with POC Loss), variable cost (with POC loss), Tariff (with POC Loss) etc. have been shown. JVVNL may provide the value of POC Loss included in each of above values.
2. It was submitted that Discoms may provide break up of inter state and Intra state transmission losses for FY 2019-20 and Discom may also provide the quantum of



power purchased from inter-state and intra-state source separately from each generating station/unit during F.Y. 2019-20.

3. It was submitted that the Commission should not allow the sale of surplus power at rate lower than purchase rate.
4. It was submitted that Discom in section 4.11, submitted that "the State already has sufficient tied up capacity". But in section 4.6, Discom submitted that various central sector plants expected to come up during the MYT period and Discom has not considered any projections from such central sector plants as the plants are in 'unsure category'. Discom may submit the details and progress of the currently contracted capacity from central/State/private Sector plants which are under construction.
5. It was submitted that the Commission may direct the Discom to undertake a study to assess the quantum of stranded capacity and analyze the plants with no reliable/efficient/ fuel linkages (gas/coal) and recommend an action plan to address the issue to reduce the burden of the capacity charges.

#### **2.3.2. Petitioners' Response:**

1. JVVNL submitted that the power purchase cost is available with the Discom including the POC loss.
2. Discoms submitted that the breakup of inter-state and intra-state transmission losses is not available with the Discoms and the details submitted in the FY 2018-19 True up petition were submitted by using approved inter-state transmission losses by the Commission and the remaining transmission losses were loaded into intra-state transmission losses. The Discoms further, submitted that transmission losses as submitted in the annual accounts of the FY 2019-20, are as per the actuals. The Discom has figures of actual power purchased and sales made to the consumers. Further, the incoming meters at Discoms periphery are metered and the difference between power procured and reading at Discoms periphery are accounted as transmission losses.
3. Discoms submitted that in order to meet the peak load, they are left with surplus power in the non-peak hours which is sold through exchange and hence, such surplus power is not an inefficiency of the Discom in forecasting and scheduling. The Commission is therefore requested not to disallow the surplus power.

4. Discom submitted that during the FY 2020-21, no such impact from unsure category plants have been considered and for the FY 2021-22 to FY 2023-24, Discom shall submit the revised projections in next ARR petition. Discom submitted that the stakeholder has considered merit order dispatch of only one week and it was submitted that based on annual merit order dispatch and actual basis for must-run power plants, the power purchase projections have been made.
5. Discom submitted that the said study is being undertaken every year for the purpose of computation of additional surcharge and the same has also been submitted in the MYT petition for FY 2020-21 to FY 2023-24.

### **2.3.3. Commission's View:**

The Commission has taken note of the comments of the Stakeholders and reply of Discoms thereto and has dealt with this issue of power purchase in ARR section of this order. The Commission directs that the study to assess the quantum of stranded capacity , action plan to reduce the burden of the capacity charges and projections of available capacity and requirement as assumed by energy assessment committee be furnished along with next ARR and Tariff petition.

### **2.4. Flat Rate Consumers:**

#### **2.4.1. Stakeholders' Suggestions/Comments:**

1. It was submitted that Discoms have indicated the flat rate consumers even at the end of FY 2023-24. This clearly shows that inspite of the direction of the Commission flat rate consumers will exist even upto F.Y. 2023-24 and even beyond it. Discoms are not complying with direction of Commission.
2. It was submitted that targets of the Conversion proposed by the Discom in tariff petition were consistently not achieved, and the deviation in trends also indicate possible manipulation of actual numbers. Therefore, the Commission should take serious cognizance of the issue and mandate 100% metering of agriculture connections by the end of FY 21-22.

#### **2.4.2. Petitioners' Response:**

Discoms submitted that the conversion of flat rate agriculture consumers is in process and has slowed down due to the outbreak of COVID-19 pandemic. The

Discoms requested the Commission for some more time and submitted that they acknowledge the fact that the conversion is beneficial for Discom as well as consumer.

#### **2.4.3. Commission's View:**

Commission has taken note of the comments of the Stakeholders and replies of Discoms thereto and has dealt with this issue of sales in ARR section of this order.

### **2.5. Transmission Charges:**

#### **2.5.1. Stakeholders' Suggestions/Comments:**

1. It was submitted that transmission and SLDC Charges for intra-state system may be allowed as per existing order of Commission and for inter-state charges as per CERC order.
2. It was submitted that for FY 2019-20 the Discoms have considered the total transmission losses based on the audited accounts, i.e. 5.42%. Discoms may report inter-state and intra-state losses separately as per audited accounts.
3. It was submitted that the Commission mandates a trajectory for bringing the transmission losses to less than 2% within the MYT control period, and additional losses shall not be passed on to the distribution company and consumers.
4. Discoms have shown the same transmission charges for the entire MYT period in the table 19 of the petition, despite the increase in the amount of projected sales. Discom should, make changes to reflect the growth in sales and revise the transmission charges for the entire MYT period.

#### **2.5.2. Petitioners' Response:**

1. Discoms have submitted that the Commission may take a prudent view in the matter.
2. Discoms submitted that the audited accounts of Discom report energy loss in transmission system as a combined number. Hence, Discom has submitted 5.42% as total transmission loss which includes intra as well inter-state loss levels. While projecting the energy requirement for the MYT period, Discoms have applied inter-state losses, as approved by the Commission, on the energy procured from outside the state and intra-state losses on the energy procured from within the state. Further, Discoms submitted that the inter as well as intra-state losses are beyond the purview of the Discoms. Hence, the Discoms have projected the losses as per the losses approved by the Commission.

3. Discoms submitted that transmission losses are an uncontrollable factor for the Discoms and the trajectory shall be revised as per the actuals in the ensuing years.
4. Discoms submitted that the transmission charges do not depend on sales made to the consumers but on the contracted capacity and since no new capacity is being projected to be added, thus there has been no hike projected for transmission charges. The Discoms further submitted that revised projections shall be submitted as per the actuals in the ensuing years.

### **2.5.3. Commission's View:**

Commission has taken note of the comments of the Stakeholders and replies of Discoms thereto and has dealt with this issue of Transmission charges in ARR section of this order.

## **2.6. Distribution Losses:-**

### **2.6.1. Stakeholders' Suggestions/Comments:**

1. It was submitted that at the end of FY 2023-24, Discoms have projected Distribution Losses of 14.50%, 14.00% and 14.50% for JVVNL, AVVNL and JdVVNL respectively. This projection should not be accepted as Commission in its trajectory has decided losses at 15% during F.Y. 2019-20, the Commission may therefore disallow the excess power purchase cost on account excess losses.
2. It was submitted that Discom failed to achieve the targets to reduce the AT&C losses by 15%. Discom may provide the quantified details of each of the measures undertaken and the outcomes of such measures in detail along with the trajectory and target-based measures for improving collection efficiency as mandated by the Regulations.
3. Further it was submitted that the targets of collection efficiency as 100% for the MYT period which has been the practice even in the previous tariff petitions but audited data for FY 2019-20, indicate a collection efficiency of 87.45%. It was submitted to fix achievable targets for the collection efficiency.
4. It was also submitted that loss target of Discoms should be set voltage level wise instated of overall losses.

### **2.6.2. Petitioners' Response:**

1. Discoms submitted that the trajectory of distribution losses has been projected after due diligence and keeping the practicality of the situation in view. Due to

the ongoing pandemic, the HT-LT sales mix has changed and thus, the distribution losses are bound to increase.

2. The Discoms duly acknowledge the fact that AT&C losses have yet not reached 15% and all the measures are being undertaken in order to reduce the losses. But the consumers are ensured that any incremental financial burden owing to higher than normative AT&C losses is not being passed on to the consumers.
3. Discoms submitted that they agree with the comment of the stakeholder that the Commission may stipulate realistic trajectory of collection efficiency. By considering the revenue assessed at normative collection efficiency (which is 100% presently), the Discom is already being penalized in case of lower than normative collection efficiency. Discoms submitted that excluding subsidy receipt from the State Government, the collection efficiency of the Discom has always been in the range of 98-99%. Due to shortfall in receipt of tariff subsidy from the GoR, the collection efficiency of the Discoms decreases drastically, in accordance with the MoP formula.

#### **2.6.3. Commission's View:**

Commission has taken note of the comments of the Stakeholders and replies of Discoms thereto and has dealt with this issue of Distribution Losses in ARR section of this order.

#### **2.7. Sales:**

##### **2.7.1. Stakeholders' Suggestions/Comments:**

1. It was submitted that the sales and revenue projection for the control period from F.Y. 2019-20 to 2023-24 do not contain the projection of sales to Franchisee. Discoms may provide the assessment of sale to franchisee.
2. It was submitted that Commission may allow increase in total sales of domestic and non domestic category as per the previous three year's trend.
3. It was submitted that Discoms should file the petition with the provisional sales based on actual values instead of estimated sales projected. The projections also did not take into account sales migrations because of rooftop solar across different categories. Further it was submitted that Discoms should review the current practice projecting the sales on the basis of historical data, using category wise CAGR.

4. It was also submitted that Discoms should file actual sale figure for 20-21 and revised projection for 2021-22 keeping in view development after filling the petition.

#### **2.7.2. Petitioners' Response:**

1. Discoms submitted that the audited sales for the FY 2019-20 have been submitted in its True-up petition and projection for further years have been made using the consumer level sales in the DF area and hence the sales and revenue in the DF areas has been considered by the Discoms.
2. It was submitted that the projections for FY 2020-21 have been done duly taking into account the impact of COVID-19 on electricity demand in the State. The impact was most felt on the sales of domestic, non-domestic and industrial categories in FY 2020-21. Further, based on various industry reports, it has been estimated that after a dip in FY 2020-21, a sharp recovery is expected in FY 2021-22, hence Discom has considered an increased sales growth as compared to business as usual scenario in FY 2021-22. Discoms further submitted that it may take into consideration that the projections for the MYT period are based on Discom's assessment of the COVID-19 situation and its impact on various cost and revenue parameters of the ARR. It is pertinent to note that the Pandemic situation is changing on day-to-day basis and therefore, the projections of ARR for FY 2020-21 and subsequently for the remaining 3 years of the MYT period are bound to undergo change as more and more information is available.
3. Discoms are also undertaking forecasting on a time-block basis to increase the granularity and to accurately schedule power from tie-up generating sources.
4. Discoms submitted provisional sales and power purchase for FY 2020-21 based on which revised projections can be approved by Commission.

#### **2.7.3. Commission's View:**

Commission has taken note of the comments of the Stakeholders and replies of Discoms thereto and has dealt with this issue of Sales in ARR section of this order.

### **2.8. Energy Balance:**

#### **2.8.1. Stakeholders' Suggestions/Comments:**

1. It was submitted that for calculating energy balance, distribution losses on the energy sold to franchisee cannot be loaded.

2. It was submitted that Discom may clarify the discrepancy in the total energy sales data represented in Table 12, Total sales for MYT period (MU) and the Table 14: Distribution losses and Energy Requirement at Discom Periphery of the petition for the FY 2019-20.
3. Further, it was submitted that Discom should revise the calculation to appropriately account the intra-state and inter-state losses on overall power procured and power procured from outside the state respectively.
4. It was submitted that for calculating energy balance For FY 2020-21 to FY 2023-24 intra-state Losses should be considered as 3.33%, 3.31%, 3.30%, 3.30% respectively. So far as inter-state losses are concerned at present these are 2.83 % as per NRLDC website the same could be adopted.

#### **2.8.2. Petitioners' Response:**

1. It was submitted that with regard to energy balance the Commission may take appropriate view.
2. Discom submitted that the sales mentioned in Table-14 for the purpose of computing energy balance are considered based on the energy at input level supplied to the Distribution Franchisee. Table-12 provides category wise sales at the consumer level. Hence, due to the impact of distribution loss in the DF area, sales at consumer levels are lower than the sales considered at input level of DF area.
3. Discoms submitted that the inter as well as intra-state losses are beyond the purview of the Discoms. Hence, the Discoms have projected the losses as per the losses approved by the Commission.

#### **2.8.3. Commission's View:**

Commission has taken note of the comments of the stakeholders and replies of Discoms thereto and has dealt with this issue of energy balance in ARR section of this order.

### **2.9. Voltage wise cost of Supply:**

#### **2.9.1. Stakeholders' Suggestions/Comments:**

It was submitted that as per Tariff Regulations, the Discoms petitions shall include detailed calculation of voltage wise cost of supply, exclusive of external subsidies and cross subsidies in respect of each category of consumers. Discoms must provide the reason for delay and should comply with aforesaid regulation.

### **2.9.2. Petitioners' Response:**

The Discoms submitted that in most of the states across the nation, wheeling charges are being determined by the Commission on HT and LT voltage level only. This is quite evident from such approach that the Regulatory Commissions in other states have also acknowledged that the determination of voltage wise losses would be a complex exercise and hence the Discoms have also apportioned the losses due to the lack of actual voltage wise losses. Discoms have also submitted voltage wise cost of supply in the petition.

### **2.9.3. Commission's View:**

Commission has taken note of the comments of the Stakeholders and reply of Discoms thereto.

## **2.10. O&M Expenses:**

### **2.10.1. Stakeholders' Suggestions/Comments:**

1. It was submitted that O&M expenses may be allowed as per norms but no such charges should be allowed on sales made to franchisee nor the sales made by the franchisee in their area, be computed for this purpose.
2. It was submitted that per unit norms expenses- Employees Expense/A&G Expenses/R&M Expenses of the O&M shall be approved with reference to the energy sales excluding the sales made to the DF. Further it was submitted that the Discoms shall furnish the details of the pay-cuts enforced for the personnel during the same period along with reduction in operating fixed cost of Discom due to reduced workforce for the period of lockdown enforced and to provide details of saving incurred during lockdown because of deductions in salary of employees, reduced intensity of operations and fuel cost reduction for generation.
3. It was submitted that Discoms has claimed additional O&M expense. Commission is requested to obtain the detailed data of item wise additional O&M expense.

### **2.10.2. Petitioners' Response:**

1. The Discoms submitted that the operation and maintenance expenses have been projected on normative basis.
2. Discoms submitted that regarding norms of O&M expenses, the Commission to kindly take a prudent view. Further, Discoms submitted that the actual impact of



savings due to lockdown shall be submitted in the True up petition for the FY 2020-21 and shall be reflected in the reduction in O&M expenses, if any.

3. Discoms submitted that the actual O&M expenses shall be submitted in the True up petition for the respective year and the MYT petition has been submitted as per the norms of the RERC Regulations, 2019.

#### **2.10.3. Commission's View:**

Commission has taken note of the comments of the Stakeholders and replies of Discoms thereto and has dealt with this issue of O&M Expenses in ARR section of this order.

#### **2.11. Depreciation:**

##### **2.11.1. Stakeholders' Suggestions/Comments:**

1. It was submitted that Discoms have not provided the details of assets which have completed 12 years and which have not completed such period as per requirement of regulation 22(4) of RERC Tariff Regulations. This non compliance is being observed from long time. Therefore, Commission may deduct amount from the total depreciation amount for such non-compliance.
2. It was submitted that Discoms have not provided the list of 33 KV, 11 KV, LT distribution lines during the year as also of new sub stations created with MVA capacity and of augmentation of MVA capacity into their cost in each case. Therefore till such information is not made available, no depreciation of newly added assets be allowed.

##### **2.11.2. Petitioners' Response:**

The Discoms submitted that the depreciation have been projected based on norms. Further, Fixed Assets Register have also been submitted.

##### **2.11.3. Commission's View:**

Commission has taken note of the comments of the Stakeholders and replies of Discoms thereto and has dealt with this issue of Depreciation in ARR section of this order.

#### **2.12. Interest on Loan:**

##### **2.12.1. Stakeholders' Suggestions/Comments:**

1. It was submitted that no interest should be allowed on any loan taken in respect of subsidy not given by the state in time and on any loan obtained by the Discom to meet out the gap caused due to non recovery of upfront charges from PHED, on loan obtained for payment of late payment surcharge/Delayed payment surcharge made to generators/transmission licensee and/or to any other agencies and on loan obtained in excess normative working capital. Further, it was submitted that no interest should be allowed in respect of outstanding caused due to non recoveries of the dues.
2. It was submitted that Discom has taken additional accrued interest of Rs. 210 Crore for Moratorium period in FY-21. This interest pertains to FY-20, which has already considered in the tariff of last year. Commission should disallow this moratorium period interest expenses.
3. It was submitted that Discoms may quote realistic charges for interest and finance cost for the MYT control period. Alternatively, Discoms may provide an appropriate justification for the charges considered in the petition with assurance that such significant deviation shall not be entertained during truing up.

#### **2.12.2. Petitioners' Response:**

1. The Discoms submitted that the interest on term loan have been projected based on normative basis.
2. Discom submitted that the additional accrued interest due to the moratorium availed by the Discom have been submitted in the MYT petition and the stakeholder is requested to kindly refer the same.
3. Discom submitted that interest and finance charges are submitted in the ARR petition based on norms of the RERC Regulations and actuals are submitted in the True up petition for the corresponding year and this process of truing up of ARR is done so as to capture the deviations from the ARR, normative values if any.

#### **2.12.3. Commission's View:**

Commission has taken note of the comments of the Stakeholders and replies of Discoms thereto and has dealt with this issue of interest on term loan in ARR section of this order.

## **2.13. Interest on Working Capital**

### **2.13.1. Stakeholders' Suggestions/Comments:**

1. It was submitted that working capital may be allowed on normative basis only.
2. It was submitted that Jaipur Discom has taken interest on working capital @11.25%, due to COVID 19, prevailing interest rate are between 6.5 to 8.5%, and therefore petitioner is not justifying in taking such higher interest rates for FY 21 to FY 24.
3. It was submitted that it is not justified to claim receivables equivalent to one and half month while calculating working capital requirement. Discoms should furnish break-up of period wise billing of consumers and allow receivable level of 15 days for monthly billing of consumer receivable and 7 days for fortnightly billing consumers. This will correctly reflect the requirement of working capital.

### **2.13.2. Petitioners' Response:**

1. The Discoms submitted that the interest on Working Capital have been projected on normative basis.
2. The petitioner submitted that the rate of interest on working capital loans has been computed according to the RERC Regulations, 2019.
3. The Discoms submitted that interest on working capital is being calculated as per RERC Tariff Regulations, 2019.

### **2.13.3. Commission's View:**

Commission has taken note of the comments of the Stakeholders and replies of Discoms thereto and has dealt with this issue of interest on working capital in ARR section of this order.

## **2.14. Insurance Expense:**

### **2.14.1. Stakeholders' Suggestions/Comments:**

1. It was submitted that as per regulation 25 of RERC Tariff Regulations, insurance expenses to be allowed on actual expense incurred basis. Discoms have not provided any document about incurring such expense and as such these are not admissible. Therefore, these may be allowed only to the extent of approved in last true up order.
2. It was submitted that JVVNL may clarify why the insurance expense escalated to Rs. 30.33 Cr, Rs. 31.56 Cr, Rs. 33.49 Cr and Rs. 35.05 Cr. in the projections of FY

2020-21 to FY 2023-24 respectively while the actual Insurance expenses for the FY 2019-20 is Rs. 1.90 Cr.

**2.14.2. Petitioners' Response:**

1. The Discoms submitted that the insurance expenses have been projected on normative basis.
2. JVVNL submitted that the insurance expenses have been submitted as per RERC Regulations, 2019. Further, the ARR petition is based on projections and the actuals shall be submitted in True up petition for the FY 2020-21.

**2.14.3. Commission's View:**

Commission has taken note of the comments of the Stakeholders and replies of Discoms thereto and has dealt with this issue of insurance expenses in ARR section of this order.

**2.15. Terminal Benefits:**

**2.15.1. Stakeholders' Suggestions/Comments:**

1. It was submitted that as per true up order dated 27.01.2021 against the approved amount of terminal benefit, Discoms have deposited very less amount in FY 2018-19. Therefore these may be allowed only to the extent of approved in previous true up order.
2. It was submitted that Discom may clarify why there was no escalation of the Terminal benefits over the MYT period, despite expenses are subjected to inflation and has seen an increasing trend in the past years.

**2.15.2. Petitioners' Response:**

1. The Discoms submitted that the terminal benefit have been projected based on normative basis.
2. Discom submitted that the revised trajectory shall be submitted in the revised ARR petition as per the actual scenario for the FY 2020-21.

**2.15.3. Commission's View:**

Commission has taken note of the comments of the Stakeholders and replies of Discoms thereto and has dealt with this issue of terminal benefit in ARR section of this order.

## **2.16. Specific Consumption of Flat rate Agriculture consumers:**

### **2.16.1. Stakeholders' Suggestions/Comments:**

1. It was submitted that Commission in the previous order observed that "Flat rate consumers are not being reduced by Discoms may be due to recovering the revenue through government subsidy due to assessed consumption. Therefore to arrest this easy going by Discoms, Commission may consider reduction of deemed consumption by 5% every year for subsidy payment and shifting the same to Discoms in next tariff orders." Therefore, the Commission may reduce the specific consumption and Excess energy & its cost be disallowed by the Commission.
2. It was submitted that Discoms have not complied with the direction given in last order to "carry out a detailed study of actual specific consumption of flat rate agriculture consumers of three Discoms separately. This study should be supported by feeder meter reading and total of meter installed at Agriculture Consumers.
3. It was submitted that the veracity of data related to consumption of metered consumers also needs to be ascertained and should be verified.
4. It was submitted that the licensees have claimed specific consumption for agriculture meter consumer ranging between 1390 to 1432 KWh per KW per year whereas for flat rate consumer 1945 KWH per KW per year. The Commission should review this. This difference between the specific consumption of metered consumers and flat rate consumers should not be allowed anymore.
5. It was submitted that Discom may explain the rationale behind increase in the average connected load per consumer in agriculture metered category for the MYT period in comparison to previous data.

### **2.16.2. Petitioners' Response:**

1. Discoms submitted that the specific consumption should not be reduced due to depleting water levels, the specific consumption has been increasing and, if decreased, such burden shall have to be borne by the Discoms.
2. It was submitted that sincere efforts are being made to reduce the flat rate consumers and the same have also been on a reducing trend in last years.

Discoms also submitted that flat rate conversion campaign has been severely hit due to COVID-19 pandemic. However, with restoration of normal position, the conversion work will gain momentum in due course of time.

3. Discoms further submitted that in regard to the reduction of deemed consumption of agriculture flat category by 5% every year for subsidy payment and shifting the same to petitioner in the next Tariff Order, such an approach would be detrimental to financial health of the petitioner who is already in the severe distressed financial condition due to looming situations under COVID-19 Pandemic.
4. Discoms submitted that for the purpose of computing actual specific consumption of flat rate consumers, 100% feeders have been metered but due to a few errors in consumer indexing owing to the huge and scattered consumer base, the losses are sometimes erroneous. Discoms also submitted that the faults are being corrected and once 100% correct consumer indexing is done the study of actual specific consumption shall be finalized. Further, under the KUSUM-C, the feeders have to be segregated which shall expedite the process of computing the specific consumption of flat rate agriculture consumers. Hence, looking to the difficulties in carrying out the study and arriving at the accurate conclusion, the Discoms have requested to grant some more time.
5. Discoms submitted that the trend in sales of agriculture consumers, depends on number of new connections released based on Government directives as well as conversion from flat to metered category. Since, these factors change every year, there is variation in energy consumption every year.
6. Discoms requested the Commission to approve the specific consumption of 1945 kWh/kW/year since the flat rate consumers generally have a tendency to consume more than that of the metered consumers.
7. Discom submitted that they have considered increase in average connected load of agriculture consumers based on various factors such as past trend, release of new connections, conversion of flat to metered category etc. Moreover, various studies suggest that the water table has been depleting at an alarming pace necessitating the need of higher pumps capacity. Based on these factors, the Petitioner has considered an increase in connected load.

### **2.16.3. Commission's View:**

Commission has taken note of the comments of the Stakeholders and replies of Discoms thereto and has dealt with this issue of Sales in ARR section of this order.

### **2.17. Urja Vikas Nigam:**

#### **2.17.1. Stakeholders' Suggestions/Comments:**

1. It was submitted that on what basis Discoms purchases power from Urja Vikas Nigam.
2. It was submitted that information of month wise quantum of energy (MUs) and its cost which is made available to the Discoms by Urja Vikas Nigam may be provided for FY 2019-20.
3. It was also submitted that whether the power purchase by Urja Vikas Nigam is being verified at petitioner's end and if so what manner and on what basis it is done, may also be provided.

#### **2.17.2. Petitioners' Response:**

1. JVVNL submitted that audited accounts have been submitted and actual power purchase cost duly audited has been included in the accounts.
2. Discoms submitted that monthly reconciliation of power procurement is being done based on the Regional Energy Account Statements, SLDC scheduling and dispatch statement, Tariff Orders & PPA of the respective generating stations and bills raised by the generating plants.
3. Source wise (quantum and cost elements) energy accounting is being carried out on regular basis. However, as per the accounting practices, only the requisite information is being displayed in the notes of the audited accounts.
4. The Discoms also submitted that RUVNL is undertaking review of all PPAs to explore options for reduction in power purchase cost. The stations which have completed their useful life or have high variable cost, are being prioritized. Since Rajasthan follows Merit Order Dispatch principle, the stations with high variable cost are backed down as a result.

### **2.17.3. Commission's View:**

Commission has taken note of the comments of the Stakeholders and reply of Discoms thereto.

## **2.18. Outstanding:**

### **2.18.1. Stakeholders' Suggestions/Comments:**

1. It was submitted that as per audited accounts Discoms has large outstanding. Discom may clarify whether the connection of all such consumers against whom the outstanding are for period of more than 6 months have been disconnected and if not reason for such delay may be provided.
2. It was also submitted that details of above outstanding may be provided in two parts i.e. how much amount is outstanding against government department and how much amount is outstanding against consumer other than government department & reason for not recovering the outstanding from be provided.
3. It was submitted that reason for not adjusting the security deposits against outstanding be also provided.

### **2.18.2. Petitioners' Response:**

1. Discoms submitted that the connection of all consumers whom the outstanding for period of more than 6 months have been timely disconnected. There is no delay is disconnection.
2. (i) JVVNL submitted that Rs. 895 Crore is receivable from the government departments and continuous pursuance is being done so as to receive the outstanding amount.  
  
(ii) JdVVNL submitted that the Category-wise details of Outstanding of Rs. 1414.21 Crore against Regular Consumers as on 31.03.2020, Outstanding against State Government Connections: Rs. 231.74 Crore, Outstanding against Local Bodies: Rs. 164.85 Crore, Outstanding against remaining category consumers: Rs. 1017.62 Crore.  
  
(iii) The Discoms also submitted that due measures are being undertaken for adjustment of security.

### **2.18.3. Commission's View:**

Commission has taken note of the comments of the Stakeholders and reply of Discoms thereto.

## **2.19. Regulatory Assets:**

### **2.19.1. Stakeholders' Suggestions/Comments:**



1. It was submitted that Regulatory Assets should be created only as a very rare exception thus Regulatory Asset should be removed from the accounts of the Discoms and no interest shall be allowed on such Regulatory Assets.
2. It was submitted that Jaipur Discom has no unfunded gap as per actual audited accounts for FY 18 to FY 20. It is not justified to charge interest on unfunded gap by taking average rate of interest @10.45%. Due to COVID 19 many financial institutions have reduced their lending rates to 6.5% to 8.5%. Discom should take average prevailing rate of interest which is very low as compared to 10.45%. Commission may disallow the interest on unfunded gap for past years.
3. It was submitted that Commission should suggest Discoms some ways to reduce the gap every year either by reduction in Cost Component & Increase in Revenue Component.
4. It was submitted that the Discoms have proposed no tariff increase for control period. However, such a proposal without adequate additional measures would only increase unfunded gap, additional carrying cost burden and tariff hike in future. The Discoms could issue bonds backed by the State Govt. to ensure recovery of Regulatory Asset. Alternatively, the state govt. should step in to provide additional conditional transitional finance support akin to the design under UDAY scheme to clear past liabilities.

#### **2.19.2. Petitioners' Response:**

1. JVVNL and JdVVNL submitted that nowhere it is mentioned that if the assets are not liquidated, the whole financial burden of the same shall be borne by the Discoms. Further, it is pertinent to mention that Regulatory Assets of Rajasthan, if liquidated, shall further increase the tariffs in the state.
2. JVVNL requested the Commission to take a prudent view on the same.
3. Discom submitted that the issue of bridging revenue gap shall be addressed as per the following measures:
  - (i) Reduction in cost of supply through structural changes and efficiency measures such as installation of smart meters, loss based supply to feeders, energy accounting and auditing, private sector participation (distribution franchisee) already operational,
  - (ii) Implementation of KUSUM scheme,
  - (iii) Power cost optimization and

(iv) Vigilance drives.

4. Discoms submitted that the issuance of Bonds, as suggested by the stakeholder, could be a possible source of raising funds from the market. However, the Discom, in the past has tried several times to issue Bonds. Discom made several efforts to issue bonds but could not achieve the same in the year 2017, due to not receiving RBI backstop from GoR within the timeline given to the Arranger, In FY 18, could not materialize due to higher coupon rate as well as high commission of the arranger, in April 2019, Discoms again initiated the process to receive bids for issue of bonds directly through NSE-EBP platform but the same could not materialize due to inadequate quantum of bids. In May 2019, RFP was again floated for appointment of arranger but due to unfavorable market conditions, no response was received up till the extended deadline of August 19. In spite of above, the Discom is continuously striving to issue Bonds. In January, 2021, the Discoms again began the process of getting their Bonds issuance programme underway and have initiated the credit rating process regarding the stakeholders' suggestion that GoR may provide a transitional finance support akin to the UDAY scheme, it is submitted that the Discoms have taken up this matter with the State Government requesting them to release the pending tariff subsidy as well as Government Department dues. Such release of funds shall enable the Discoms to clear off its outstanding dues and improve its financial position.

#### **2.19.3. Commission's View:**

Commission has taken note of the comments of the Stakeholders and reply of Discoms thereto.

#### **2.20. Demand Based Billing:**

##### **2.20.1. Stakeholders' Suggestions/Comments:**

1. It was submitted that Discoms have proposed that the revision of fixed charges is in such a manner that it does not add to the financial burden of the consumers". However, the tariff proposed for domestic consumers with sanctioned/connected load  $\geq 10$  kW or annual consumption exceeding 12000 units there is only upward revision in fixed charges rate with no reduction in energy charges rates. This is not as per the principle of no tariff increase.
2. It was submitted that Discoms should install Smart Meter having facility to record "Current month MD in kW with Legend". So that harassment to customers is to be avoided.

### **2.20.2. Petitioners' Response:**

1. Discoms submitted that they have proposed demand-based billing and have ensured revenue neutrality on an overall basis for Domestic category.
2. Discoms Submitted that suggestion of the stakeholder pertaining to metering infrastructure have been duly noted by the Discoms.

### **2.20.3. Commission's View:**

Commission has taken note of the comments of the Stakeholders and reply of Discoms thereto.

### **2.21. Wheeling Charges:-**

#### **2.21.1. Stakeholders' Suggestions/Comments:**

1. It was submitted that the Commission in its order of 06.02.2020 has directed the Discoms to furnish fixed assets register along-with physical verification report, furnish detailed report on re-assessment of the wheeling losses and justify the methodology of 2006 order specially with regards to allocation made for 11 kV as over the years Discoms has moved towards LT less system and are creating HT infrastructure to cater to LT consumers. Discoms have not provided these as such Discoms may provide the same.
2. Discoms have worked out wheeling charges based on energy wheeled from 33 kV bus of RVPN's EHV substations considering 3.8% losses on 33 kV sales, 8.8% losses on 11 kV sales and 17.9%-24.00% losses to LT sales without giving its justification. Accordingly wheeling losses applicable for 11 kV will be 8.8% against 12.6% as at present. This may kindly be taken note by the Commission.
3. It was submitted that for the Contracted capacity we are paying fixed charges of HT supply tariff but utilizing it less during the part of the day when solar power is available. The Commission may adjust part of fixed charges on contracted capacity from the wheeling charges.
4. Further, it was submitted that petition does not indicate as to for which year voltage wise sales have been considered. If it is for FY 2020-21 It was submitted that FY 2020-21, was not the normal year due to COVID 19 pandemic and HT sales during the year has been declined. Average impact on sales of large industries is reduction by 25% and wheeling charges would enhance by 33%. The wheeling charges may therefore be calculated on energy sales corrected for abnormal reduction due to COVID-19.

5. Further, it was submitted that in current MYT petition Discoms have proposed to keep the same wheeling charges of Rs. 0.01/kWh at 132 kV voltage level (no increase). However, the Discoms have proposed very much increase in wheeling charges at 33 kV voltage level, from Rs. 0.11/kWh to Rs. 0.26/kWh and for 11 kV voltage level from Rs. 0.32/kWh to Rs. 0.70/kWh, which works out to be more than 100%. Such high increase in wheeling charges is not at all justified.
6. It was submitted that RERC can also fix the wheeling charges trajectory for 5-7 year period. A rebate to the extent of the wheeling charges should be provided to Discoms consumers in energy charges.

#### **2.21.2. Petitioners' Response:**

1. Discoms submitted regarding wheeling charges and losses that they have adopted similar methodology as approved by the Commission in order dated 19.09.2006 for apportionment of voltage wise network costs and voltage-wise losses for determination of wheeling charges.
2. Discoms Submitted that in most of the states across the nation, the wheeling charges are being determined on HT and LT voltage levels based on apportioned losses and costs. Determination of actual losses at each voltage level is a complex activity due to the complexity of the distribution network and limitations in terms of availability of data.
3. For 132 kV level, Discom has to levy a nominal wheeling charge of Rs. 0.01/unit in order to meet expenses pertaining to meter reading, billing and A&G. Discom further submitted that the wheeling charges of Discoms have not been revised since 19.09.2006. At the same time, the expenses pertaining to distribution network have increased by more than 4 times from FY 2006-07 to FY 2019-20. Thus, the wheeling charges levied towards open access consumers are not reflective of the actual costs incurred by Discoms.
4. Discoms also submitted that RERC has notified the MYT Tariff Regulations for the control period FY 2019-24 on dt. 10.05.2019. The wheeling charges are determined based on the said MYT Regulations.

#### **2.21.3. Commission's View:**

Commission has taken note of the comments of the Stakeholders and reply of Discoms thereto.

## **2.22. Parallel Operation Charges:**

### **2.22.1. Stakeholders' Suggestions/Comments:**

1. It was submitted that JVVNL have proposed parallel operation charges (POC) of Rs. 20/kVA/month on captive power generation capacity based on that levied in other states and in support have mentioned decision of Supreme Court, APTEL and other state Regulatory Commission. Commission may kindly consider their relevance with respect to differences, if any, between RERC regulations and other state's regulations and introduction of new regulatory measures like deviation settlement mechanism, state grid code and open access regulations etc. subsequent to orders and provisions of standby contract or temporary supply contracts to take care of for startup power and further provision of open access regulations to consider open access demand considered within the regular contract demand. With limits of harmonic contents and protection requirement for negative sequence (or unbalanced) currents specified in REGC, levy of parallel operation charges only on CPP may be discrimination among consumers. It will be appropriate to define correctly applicability of Parallel operation charges including its non-applicability for RE projects.
2. It was submitted that Discom has proposed POC charges of Rs. 20/kVA/month on captive power generation capacity. Need clarification. Further It was submitted that even otherwise there is no justification of levy of parallel operation charges on solar PV CPP as it does not result in raising fault level and its auxiliary consumption is quite low.
3. It is submitted that Discom has proposed Parallel Operation Charges @ Rs.20/kVA/month, the Captive Power Plants were set up by the Industries at very heavy cost to ensure energy security and reliability of power, when there was shortage of power in Rajasthan and frequent load shedding. Further due to very high cost of coal (through E-Auction), the cost of power from CPP is already very high. Further imposing of Parallel Operation Charges will increase the burden on Industries and render CPP unviable. Therefore, Discom Proposal of POC may not be considered. Unless a scientific study is carried out in this regard. In case the POC is to be levied on CPP, it should not be levied on existing Captive Power Plants but on new Plants.

### **2.22.2. Petitioners' Response:**

1. Discoms submitted that the RERC (Terms and Conditions for Determination of Tariff) Regulations, 2019 have necessary provisions in place for levy of parallel operation charges. The need for levy of parallel operation charges is also recognized by Hon'ble APTEL vide judgment dated 12.09.2006 in appeal no. 99 of 2006 and judgment dated 18.02.2011 in Appeal No. 120 of 2009. The same has also been recognized by Hon'ble Supreme Court vide order dated 29.11.2019 on determination of Grid Support charges.
2. Discom submitted that it is pertinent to mention that captive consumers in Rajasthan have been availing grid support since several years till date. However, no additional charges were paid by them (in the form of parallel operation charges) for taking grid support.
3. Discoms also submitted that the rates of POC proposed by them is equal to or lower than the rate of POC levied in several other states.
4. Discom submitted that it is pertinent to mention that captive consumers in Rajasthan have been availing grid support since several years till date. However, no additional charges were paid by them (in the form of parallel operation charges) for taking grid support. The various advantages of parallel operation to CPPs, as explained in the petition, the Commission may stipulate from time to time the 'parallel operation charges' to be applicable for parallel operation of the CPP with the grid separately". The need for levy of parallel operation charges is also recognized by Hon'ble APTEL vide judgment dated 12.09.2006 in appeal no. 99 of 2006 and judgment dated 18.02.2011 in Appeal No. 120 of 2009. The same has also been recognized by Hon'ble Supreme Court vide order dated 29.11.2019 on determination of Grid Support charges. The rate of POC proposed by the Discom is equal to or lower than the rate of POC levied in several other states.

### **2.22.3. Commission's View:**

Commission has taken note of the comments of the Stakeholders and reply of Discoms thereto.

### **2.23. Cross Subsidy Surcharge:**

#### **2.23.1. Stakeholders' Suggestions/Comments:**

1. It was submitted that Discoms have proposed cross subsidy surcharge as worked out by application of formula without considering ceiling limit as specified under Regulation 89(2) of RERC (Terms and Conditions for Determination of Tariff) Regulations, 2019. However, the Commission in its order dated 06.02.2020 in respect of ARR and Tariff for FY 19-20 has considered CSS as 20% of tariff following the provision of tariff policy dated 28<sup>th</sup> January 2016. Thus ceiling of cross subsidy so specified is different. The Commission may consider and provide appropriate ceiling.
2. It was submitted that RERC can combine the surcharge for cross-subsidy surcharge and additional surcharge and fix it at Rs. 2.5 per unit for a period of 5 years.
3. It was submitted that the Cross subsidy surcharge should be kept at the level of not more than 20% of the cost of supply.

#### **2.23.2. Petitioners' Response:**

1. Discoms submitted that Cross-Subsidy Surcharge proposed in the petition has been calculated based on the methodology provided by the Commission in RERC (Terms and Conditions for Determination of Tariff) Regulations 2019. Any revision in the methodology of arriving at the rate of CSS may be duly prayed to the Commission.
2. Discom submitted that the proposal of the stakeholder to combine the surcharge for CSS and additional surcharge at Rs 2.5 for next 5 years may not be prudent as there is change in cost of supply of the Discoms every year due to uncontrollable parameters such as power generation cost of generators, transmission charges etc. Moreover, the Discom incurs capital expenditure every year for system strengthening to ensure reliable power supply. Therefore, the cross-subsidy surcharge, which should reflect the actual ground conditions year-on-year ought to be determined separately for each year. Similarly, additional surcharge which depends on the extent of open access sales and corresponding backing down of generating stations also varies year on year.
3. Discom submitted that the methodology being followed by the Commission has been adopted for the computation of cross subsidy surcharge and the Commission is requested to kindly take a prudent view while approving the same.

### **2.23.3. Commission's View:**

Commission has taken note of the comments of the Stakeholders and reply of Discoms thereto.

### **2.24. Additional Surcharge:**

#### **2.24.1. Stakeholders' Suggestions/Comments:**

1. It was submitted that NCES generation has increased from FY 2016-17 to FY 2020-21 by 1899 MUs. and increase in back down energy of 1957 MUs is almost coinciding with it. This establishes that increase in back down has been not due to open access but due to increase in NCES generation. JVVNL has supplied time block wise back down data etc, data for 19-22 nos. of central sector thermal power stations, 16 nos. of state sector thermal power stations and box-up of 24 thermal generating units Accordingly block wise backdown, boxup, open access etc. is as per annexures 2 and 3. Thus backdown during night has increased from 10/19 and is clearly due to other than open access. Back down can be due to :-
  - (i) very low load or load crash (say by wide spread rains causing steep fall in agricultural load or drop in temperature reducing AC load etc)
  - (ii) Short term power purchases, contracted in anticipation to load demand but load not picking up to that extent.
  - (iii) Excess contract for long term thermal generation.
  - (iv) Not maintaining requisite spinning reserve, of 330 MW (50% of largest size unit of 660 MW).
2. The criterion of determining stranded capacity due to open access as lesser of (i) actual backing down or (ii) open access drawl, caters to two contingencies. One in which contracted generation capacity is not adequate to meet load plus open access demand in that case backdown will be less than open access drawl and will be due to open access.
3. Second in which generation capacity is in excess of load plus open access drawl, in which case backing down will be equal to (or more than) open access drawl and back down up to open access drawl will be due to open access. However, if excluding generation capacity as per sr. no. (ii), (iii) and (iv) of para 24, generation is less than load plus open access, then backdown of (ii), (iii)
4. and (iv) of para 24 during these instant, will get attributed to open access. However, spinning reserve is not meant for catering load as but for provide in



spinning reserve there would have been no backdown. Further as per APTEL's order dated 25/04/2016 on Appeal No.269 of 2014 only long term contracts are to be considered and as such short time/ RTC power purchase through competitive bidding or otherwise through power exchange and temporary allocations from central sector generation stations are to be excluded. Similarly backing down of generation due to (i) long term contracts (whether conventional as well as non conventional) contracted after open access by a consumer is not due to his open access and is to be excluded.

5. It was submitted that box up capacity shall not be used to compute the net stranded capacity for each time block of each day of the month for the additional Surcharge calculations.
6. It was submitted that Discoms have assumed that the Open Access Scenario will remain the same in FY 2020-21 as in FY 2019-20. This is not correct, as per the Commission's Order dt. 06.02.2020 for Large Industrial consumers with billing demand more than 1 MW, who were eligible to purchase power under Open Access (not from Discom), for such consumers the effective energy charges were considerably reduced (from Rs.7.30/unit to Rs.6.30/unit), while the fixed charges were increased from Rs.185/kVA/month to Rs.270/kVA/month. With such changes in Tariff, the Open Access Scenario in FY 2020-21 cannot remain the same as it was in FY 2019-20.

#### **2.24.2. Petitioners' Response:**

1. Discoms submitted that With respect to the methodology followed for computation of additional surcharge, it is pertinent to mention that the stranded capacity of Discoms due to open access consumers only has been taken into consideration. This is evident from the fact that for every time block, the minimum of (backdown+boxup & open access) has been taken for arriving at the total quantum of stranded capacity applicable towards levy of additional surcharge.
2. Discoms submitted that the minimum of stranded capacity and open access capacity in each block hour is considered for the computation of additional surcharge.

#### **2.24.3. Commission's View:**

Commission has taken note of the comments of the Stakeholders and reply of Discoms thereto.

## **2.25. Domestic:**

### **2.25.1. Stakeholders' Suggestions/Comments:**

1. It was submitted that Discoms proposed fixed charges as Rs.80/kW/month for consumers having consumption of more than 12000 kWh per year or sanctioned connected load equal to or <10 kW. Increase in fixed charges is more than 100%, which is not justified. whereas in other consumer categories, increase in fixed charges has been proposed as about 5% only and energy charges have been reduced. Discoms may clarify the same.
2. It was submitted that on one side the Discom has mentioned that to maintain revenue neutrality along with ensuring prudent cost recovery, Discoms have proposed increase in fixed charges without any financial burden on consumers. However, Discoms have not proposed any reduction in energy charges for Domestic consumers, while in all other categories, the energy charges have been decreased, so as to maintain revenue neutrality. In that case energy charges reduced for domestic category. Further, the fixed charges should be increased only by 10% for 10 kW domestic connection.

### **2.25.2. Petitioners' Response:**

Discoms submitted that Tariff Rationalization of domestic consumer have been proposed after the diligent review. It was proposed to ensure the optimum utilization of the distribution asset and efficient allocation of the associated cost of operating the retail supply business to the consumer based on the cost to service. On critical examination of these parameters, it has been observed that a specific set of the effluent consumers have been reaping the benefit from the current tariff regime to maximize their personal gains instead of aligning their demand along with the principle of the adequacy of the resources under the regulated business of retail supply business. Consumer having the connected load of more than 10 KW has intently kept their demand on the higher side to reap the maximum benefit under facility of net metering. Reservation of such an additional capacity of the distribution asset at marginal change in fixed charges will not only impose burden on Discoms in terms of operation and maintenance and network augmentation cost but also dented the interest of large set of consumers lying in the same category to be devoid of the timely access of the right of having universal supply power and the quality of supply of power. This would also restrict the Discoms to enhance the penetration of supply of power in the specific area in most efficient and economic manner as enshrined in Section 42 of The Electricity Act, 2003. Moreover, such a manner of energy drawl by the effluent consumers, not only limit the Discoms from getting appropriately

compensated for the cost of service given to the consumers but also impacts the interest of the larger set of consumers in perennial manner in form of increase in tariff.

#### **2.25.3. Commission's View:**

Commission has taken note of the comments of the Stakeholders and reply of Discoms thereto.

#### **2.26. Non Domestic:**

##### **2.26.1. Stakeholders' Suggestions/Comments:**

It was submitted that for NDS, reduction in energy charge is not sufficient and as per format furnished the realization per unit from NDS above 5 kW is ranging from Rs. 10.03/kWh and above. In view of such high rate of energy, the reduction in energy charges is not sufficient, it should be reduced more.

##### **2.26.2. Petitioners' Response:**

Discoms submitted that largely the consumers lying into such category have their maximum energy consumptions during the peak hours when the cost of procurement of energy is costliest for the Discoms. Also, the load factor of such consumer is not so promising. The optimization of cost of procurement can be managed from the long term tied up sources. It was further submitted that the concern of the stakeholder has already been addressed as the provision of telescopic tariff has been retained in the proposal of tariff rationalization besides, the energy charges in each slab has correspondingly reduced to ensure the balance of tariff neutrality. Thus, it seems that the comment of the stakeholder is quite subjective and does not fit well in overall context of the tariff rationalization proposal submitted for the aforesaid category.

##### **2.26.3. Commission's View:**

Commission has taken note of the comments of the Stakeholders and reply of Discoms thereto.

#### **2.27. Others:**

##### **2.27.1. Stakeholders' Suggestions/Comments:**

1. It was submitted that in significant accounting policy of JVVNL and JdVVNL it has been mentioned that the amount deducted from the supplier/contractor bills on account of penalties is being treated as Misc. Revenue. In this regard, Stakeholder sought the information that how much amount has been deducted from the bills of the suppliers during 2018-19 and 2019-20 on account of penalties along with nature of supplies for which such amount has been deducted.

2. It was submitted that in the notes to Account of JVVNL and JdVVNL, "Plant & Machinery" shown in Property, Plant Equipment includes value of transformers given on rent the amount of rent recovered on this account during FY 2018-19 and FY 2019-20 be also provided by the Discoms.
3. It was submitted that JVVNL has not furnished the energy audit report for their period 2015-16 to 2018-19. Earlier it was stated that a draft report has been verified. Now the report, with results and actions taken in this regard be provided by the JVVNL. It was also pointed out that data available on Discoms website is not reliable.
4. It was submitted that Discoms should provide Audit related, Training related details as follows:-
  - i) Number of Cases pending in Anti Corruption Bureau (ACB) with status & details of each case in last three years.
  - ii) Number of vigilance/enquiries cases pending against employees of three Discoms with details in last three years.
  - iii) Compensation & Payment made against accident Cases with details of 3 Discoms in last 3 years & action taken/Responsibilities fixed on employees of lapses saving accidents.
  - iv) Employees pension fund deposited by Discoms in last three years against due to be deposited.
  - v) Details of AG Audit para's pending since last 3 years in Discoms.
5. It was submitted that the Discom failed to convert the loan into grant under UDAY R-APDRP –Part B. This inefficiency of the Discom should not result in the financial liability on the stakeholders. Discom should furnish the list of town and cities in which AT&C loss reduction target has been achieved by the target date decided by the Central Govt.

#### **2.27.2. Petitioners' Response:**

1. JVVNL submitted that the majority of the payments are made by the CPC and penalties of Rs. 16.32 Crore and Rs. 12.37 Crore for the FY 2019-20 and FY 2018-19 have been included in the miscellaneous receipts. JdVVNL submitted that amount deducted from contractors/supplier bills has been included in miscellaneous income in annual accounts.
2. JVVNL submitted that the amount recovered from rent has been included in miscellaneous income of the Discom. JdVVNL submitted that the amount

received from rent on the assets given on lease has been shown in non-tariff income of the Discom. JdVVNL also submitted that the amount of rent recovered from transformers is booked under note 21.1.

3. JVVNL submitted the energy audit reports for the FY2017-18 has been provided.
4. Discom submitted that the required details of anti corruption bureau, vigilance enquiries etc. do not pertain to the MYT petition and the stakeholder is requested to kindly raise such issues in appropriate forums.

#### **2.27.3. Commission's View:**

The Commission has taken note of the comments of the Stakeholders and reply of Discoms thereto.

#### **2.28. Non Tariff Income:**

##### **2.28.1. Stakeholders' Suggestions/Comments:**

1. It was submitted that taking lower level of non tariff Income for MYT period is not justified. Therefore, Discom should consider non tariff income and other income at the same level as of audited account of FY 20.
2. It was submitted that for the MYT control period, the estimates for the wheeling charges, cross subsidy surcharge and additional surcharge is taken as constant. Discom fails to accommodate the increasing trends of migration to open access along with increase in captive solar for industries into estimates. Further it was submitted that Discom may revise the estimates for non-tariff income by including the aforementioned issues.

##### **2.28.2. Petitioners' Response:**

1. Discom submitted that the non-tariff income has been projected based on past trajectory and the actual figures shall be submitted in the True up petition for the FY 2020-21.
2. Discom submitted that the suggestion of the stakeholder shall be duly incorporated in the revised estimates to be submitted by the Discom.

##### **2.28.3. Commission's View:**

Commission has taken note of the comments of the Stakeholders and reply of Discoms thereto.

#### **2.29. Fixed Charges:**

##### **2.29.1. Stakeholders' Suggestions/Comments:**

It was submitted that fixed charges were already increased vide Commission order dated 06.02.2020. As such fixed charges for FY2020-21 should not be

increased. Further increase in fixed charges will lead to cost increase on Industries (LIP) already suffering on account of COVID-19. If it is utmost necessary to increase such fixed charges from Rs. 270/kVA/month to Rs. 285/kVA/month, the energy charges be reduced from Rs. 7.30/unit to Rs. 7.00/unit. The same reduced charges should also be passed on to the 132 kV consumers & also the minimum tariff which at present is Rs 5.76 per units should be reduced to Rs 5.26 per unit.

#### **2.29.2. Petitioners' Response:**

Discom submitted that the tariff rationalization in their petition has been proposed after due deliberations and discussions keeping view the interests of the stakeholders.

- a) Most of the cost components of the Discom's ARR are fixed in nature e.g. O&M costs, interest costs, depreciation, fixed cost of PPAs, etc. It is only the energy charge of power procured which depends on the energy sold to consumers.
- b) In FY 2019-20, the revenue recovery through fixed charges from consumers as per approved tariffs is ~17% of the total revenue, whereas the fixed costs of Discoms is ~57% of the total ARR. Thus, there is a significant gap between the recovery of revenue from fixed charges and the fixed costs in the ARR of Discoms.

#### **2.29.3. Commission's View:**

Commission has taken note of the comments of the Stakeholders and reply of Discoms thereto.

### **2.30. MYT Petition:**

#### **2.30.1. Stakeholders' Suggestions/Comments:**

It was submitted that Commission should consider Petitions for tariff determination & Investment Plan only for year 2020-21 & 2021-22. It was submitted that Impact on finances/revenue billed, realized & incentives provided due to COVID 19 cannot be quantified, unless true picture is given by Discoms.

#### **2.30.2. Petitioners' Response:**

Discom submitted that the tariff schedule in the MYT petition FY 2020-21 to FY 2023-24 has been proposed after due deliberations and discussions keeping the interests of the stakeholders in view. Further Discom submitted that revised projections for the ensuing years shall be submitted by the Discom in due course

of time so as to negate the impact of deviation from projections in this petition.

### **2.30.3. Commission's View:**

Commission has taken note of the comments of the Stakeholders and reply of Discoms thereto.

### **2.31. Compliance of Directions of Commission:**

#### **2.31.1. Stakeholders' Suggestions/Comments:**

1. It was submitted that direction by Commission on following issues remain Unattended & Discoms should give Progress on Compliance:-
  - i) It was submitted that adoption of 3 highest loss making sub division each by Chairman, MD, Director technical, no achievement reported regarding this.
  - ii) It was submitted that reply by Discoms is Cursory & general, no specific details as to which special steps taken to reduce losses & theft.
  - iii) It was submitted that most of the Consumer complaints regarding on Metering-Billing Collections issues & survey conducted by Bask Research Foundation states that more than 65% complaints are on the same issue. No specific details given by Discoms. Discoms may provide details of specific steps.
  - iv) It was submitted that no response given by Discoms to Commission regarding General & ARR related following issue-
    - a) Specific reply/pin pointed reply on comments of stake holders.
    - b) Details of Fixed Asset register, its present position.
    - c) Complete details of sales/Connected load revenue realization of Temporary connection & method of refund of extra amount then billed in case of Temporary Connections.
    - d) Revenue realized from defective meters & replacement guidelines.
  - v) It was submitted that Discoms should provide the detail of Impact of E.V., Distributed generation & influx of renewable energy ERP implementation (Time bound), Calculation of Voltage wise cost of supply & procedure to keep critical level of Inventory.
  - vi) It was submitted that Discoms should provide details regarding Consumer Service as under :-
    - a) Details of fault removal of survey team in Rural Areas.
    - b) Details on fuel Surcharge before billing to consumer on website.
    - c) Printing errors details of debits not shown separately with details etc.
  - vii) It was submitted that Discoms should provide following tariff related details :-

- a) Benefits to TOD tariffs must be given with Petition, exact impact loss/profit to Discoms be quantified with details.
  - b) Impact of merging small domestic with General domestic.
  - c) Review Position in terms of service of Tariff Subsidy & rebate by Discoms on various categories of Consumers.
  - d) Action proposed to limit cross subsidy within range of 20% as per guidelines.
2. The Discoms should make proper compliance of the directives given by the Commission.

#### **2.31.2. Petitioners' Response:**

Discom submitted that progress pertaining to the compliance to directives of the Commission in its ARR & Tariff order dated 06.02.2020 have been submitted as a part of this petition and the stakeholder is requested to kindly refer the same.

#### **2.31.3. Commission's View:**

Commission has taken note of the comments of the Stakeholders and reply of Discoms thereto. The Commission has reviewed the status of compliance of directives under order dated 26.03.2021. In this order also the Commission has considered the compliance submitted by Discoms.

### **2.32. Traction load and EV Charging stations :**

#### **2.32.1. Stakeholders' Suggestions/Comments:**

1. It was submitted that Discoms in the petition mentioned that "till date there have been no consumers in the categories of traction load and EV charging station. Further, due to COVID no new connections in these categories are expected for FY 2020-21".
2. EV cell has already been established in JVVNL as per the mandate of the Commission. Further it was submitted that JVVNL may submit details of progress/status of the EV cell and the activities undertaken in the FY 2020-21 along with the detailed activities proposed for MYT period and to clarify why the supply to Jaipur Metro and Indian Railways is not categorized as the traction.

#### **2.32.2. Petitioners' Response:**

JVVNL submitted that Indian Railways is no longer a consumer of the Discoms, hence no sales projections have done for the same.



Regarding Metro load, Discom submitted that the Commission has categorized Metro in Large Industrial category. Accordingly, Discom has considered the sales of Metro in this category. As per the Commission, the Metro Traction Load shall be billed under Large Industrial Category till the traction and non-traction loads of the metro are identified and separated. In this regard, the Discom in its compliance to directives report has stated that a meeting was held with representatives of Jaipur Metro on 18.05.2020 regarding examination of issue of segregation of load, separate metering and billing of Traction /Non-Traction load of Jaipur Metro. After detailed discussions and deliberations, all members of the committee were of the opinion that segregation of traction /non traction load is not feasible, as such the Commission may take a view regarding applicability of tariff for JMRC.

**2.32.3. Commission's View:**

Commission has taken note of the comments of the Stakeholders and reply of Discoms thereto.

**2.33. Bad debts:**

**2.33.1. Stakeholders' Suggestions/Comments:**

It was submitted that Discoms have requested the Commission to exercise the Regulations 95 of RERC tariff Regulation to increase the allowable bad debts norms by 20 times from 0.20% to 5%. It was further submitted that current proposal by the Discom do not fall into those criteria.

**2.33.2. Petitioners' Response:**

Discoms requested the Commission to kindly take a prudent view on the bad debts.

**2.33.3. Commission's View:**

Commission has taken note of the comments of the Stakeholders and reply of Discoms thereto.

**2.34. Subsidy from State Govt.:**

**2.34.1. Stakeholders' Suggestions/Comments:**

1. It was submitted that with regard to subsidy support from state Government for MYT period, Discoms may clarify what constitutes the "Subsidy against compounding charges".

2. It was submitted that the Commission should carry forward delay in subsidy payments along with carrying cost and accounts them in the subsidy commitment in the next year.
3. It was submitted that Discoms should clarify to RERC about changes in fixed charges for agriculture consumer based on relevant documentation.

#### **2.34.2. Petitioners' Response:**

1. Discom submitted that compounding charges have to be submitted to GoR whereas Rajasthan Discoms are retaining such amount.
2. Discoms submitted that Discoms have taken up this matter of pending subsidy with the State Government requesting them to release the pending tariff subsidy as well as Government Department dues. Further, the suggestion of the stakeholder regarding levy of carrying cost on pending subsidy is welcome.
3. Discoms submitted that there is no change in net subsidy from GoR as even though the fixed charges have been increased, there is a corresponding decrease in the energy charges so as the total tariff remains unchanged and there is no increased burden on the GoR.

#### **2.34.3. Commission's View:**

Commission has taken note of the comments of the Stakeholders and reply of Discoms thereto.

#### **2.35. Tariff Rationalization:**

##### **2.35.1. Stakeholders' Suggestions/Comments:**

1. It was submitted regarding proposal of merging small domestic category consumer with general domestic that while households across higher income profiles pay higher unit cost during high demand months, low income household pay a significantly higher cost during low demand months. It was submitted that low income households actually do not receive any cross-subsidy benefits during low consumption months and they end up paying above average cost of supply.
2. It was submitted that domestic tariff slabs should be recalibrated. In addition, RERC should also direct Discoms to take adequate measures to reduce instances of meter tampering and meter splitting and should detail an action plan for the control period for the same to the Commission.

### **2.35.2. Petitioners' Response:**

1. Discoms submitted that as per the directive of the Commission to merge small domestic consumers and general domestic consumers, Discoms have proposed tariff schedule accordingly and the same shall be revised so as to reduce the number of small domestic consumers in the revised projections.
2. Discoms submitted that Discoms duly noted the suggestions of the stakeholder, Discoms have already proposed several measures as suggested by the stakeholder. For consumers consuming upto 50 units (Small Domestic category), the Discoms have proposed that such small domestic consumers which have consumed more than 900 units over a period of 12 months, the consumer will be charged as per the applicable tariffs of the respective slabs under the General Domestic Category from the next month onwards for all subsequent billing cycles. As per the directions of the Commission, the Discoms have proposed demand-based billing for consumers at highest end of consumption only.

### **2.35.3. Commission's View:**

Commission has taken note of the comments of the Stakeholders and reply of Discoms thereto.

## **2.36. Change in eligibility of Dharamshalas under domestic category :**

### **2.36.1. Stakeholders' Suggestions/Comments:**

It was submitted that Dharamshalas with connected load less than 5 kW shall only get the benefit of lower category of tariff.

### **2.36.2. Petitioners' Response:**

Discoms submitted that the Commission may take a prudent view while approving the tariff for Dharamshalas.

### **2.36.3. Commission's View:**

Commission has taken note of the comments of the Stakeholders and reply of Discoms thereto.

## **2.37. Capital Investment Plan Petition:**

### **2.37.1. Stakeholders' Suggestions/Comments:**

It was submitted that Discoms may revise the petition and submit in the format as per the RERC Regulations, 2006.

### **2.37.2. Petitioners' Response:**

1. Discoms submitted that capital investment plan is based on the detailed project report & cost benefit analysis for various works to be carried under a particular scheme illustrating reduction of AT&C losses. Further, Discoms submitted that the guidelines prescribed in RERC Regulations (Investment Approval Regulations), 2006 are being complied with and the Discoms are considering the cost benefit analysis only for the schemes pertaining to loss reduction in T&D losses and system improvement. Further, Discom submitted that Discom is considering the LCA after considering number of consumers and available finance for all other schemes.
2. Discoms submitted that scheme wise financial and physical targets have been submitted in the Reply to Data gaps by the Commission and for the reference of the stakeholder, Discom resubmitted the format.

### **2.37.3. Commission's View:**

Commission has taken note of the comments of the Stakeholders and reply of Discoms thereto.

## **2.38. Redesigning ToD Tariff:**

### **2.38.1. Stakeholders' Suggestions/Comments:**

1. It was submitted that neither an incentive nor penalty is levied for day-time consumption from 0900 hrs.-1700 Hrs. (solar hours), the Dis-incentive for consumption in the evening peak should be higher than the night time incentive and During stress months, the disincentive for the shoulder period should be increased and during high wind months, the incentive for off-peak and evening peak periods can be increased.
2. It was submitted that all consumers with a connected load greater than 10 KW should have ToD meters installed within five year time-frame and should be subjected to ToD tariffs.

### **2.38.2. Petitioners' Response:**

1. Discoms submitted that they have welcomed the suggestion of the stakeholder regarding levy of surcharge during peak hours so that the Discoms are not negatively impacted.

2. Discoms submitted that they have noted the suggestion of the stakeholder regarding introduction of ToD tariffs for more categories. The Discoms shall evaluate this proposal based on cost-benefit analysis, availability of infrastructure for the same and readiness of the Billing systems.

#### **2.38.3. Commission's View:**

Commission has taken note of the comments of the Stakeholders and reply of Discoms thereto.

### **2.39. Measures to ensure accountability for quality of supply and service**

#### **2.39.1. Stakeholders' Suggestions/Comments:**

It was submitted that based on the study and evaluation of Discoms data, the Commission should conduct a public review to hold the Discom accountable for supply and service quality.

#### **2.39.2. Petitioners' Response:**

Discoms submitted that they have been submitting the SOP parameters on quarterly basis to the Commission, in accordance with the directive of the Commission.

Moreover, the Discoms have also conducted a study on consumer satisfaction survey as per the directions of the Commission and the report on the same has been submitted as part of compliance to Directives.

#### **2.39.3. Commission's View:**

Commission has taken note of the comments of the Stakeholders and reply of Discoms thereto.

### **2.40. Feeder segregation:**

#### **2.40.1. Stakeholders' Suggestions/Comments:**

It was submitted that Jaipur Discom has proposed a programme of feeder segregation and two block supply to agriculture feeders and investment in smart metering. The Commission may kindly explore the possibility of two block supply to agriculture consumers and providing the advantage of feeder segregation through smart metering only. Hence, the capital expenditure on feeder segregation should not be allowed.

#### **2.40.2. Petitioners' Response:**

Jaipur Discom submitted that the feeder segregation scheme is essential for the implementation of Feeder solarization under KUSUM scheme in order to segregate the agriculture consumers, thus the submission of feeder segregation may kindly be included as a part of MYT.

#### **2.40.3. Commission's View:**

Commission has taken note of the comments of the Stakeholders and reply of Discoms thereto.

#### **2.41. MES- Military Engineering Services:**

##### **2.41.1. Stakeholders' Suggestions/Comments:**

MES has requested for special slab for them, as per the MoD's communication dated 09.08.2021, a special tariff slab at par or lower than that applicable to domestic consumers be created for the Armed Forces as conveyed earlier vide OM dated 15.02.2021. This will assist the Armed Forces to utilise the Defense revenue Budget in reinforcing the security related infrastructure of our country.

##### **2.41.2. Commission's View:**

Discoms may consider the submission of MES and file suitable proposal with the next tariff petition.

### **Section-3: Multi Year Annual Revenue Requirement and Investment Plan**

#### **3. Multi Year Annual Revenue Requirement for FY 2020-21 and FY 2021-22:**

- 3.1 As discussed in first chapter of this Order, many stakeholders have stated that the projection made by the Discoms are not accurate due to COVID-19 pandemic. Any inaccurate projection for remaining control period would hamper the financial health of Discom and the consumers in longer run, therefore the ARR and Tariff should be determined for FY 2020-21 and FY 2021-22 only. Accordingly, in this Order, Commission has considered ARR and Tariff for FY 2020-21 and FY 2021-22 of all the Discoms including the various proposals made keeping in view the RERC (Terms and Conditions for Determination of Tariff) Regulations, 2019 and norms prescribed therein. For remaining period, the Discoms shall have to file a fresh petition.
- 3.2 Determination of ARR requires assessment of energy sales as well as cost of various elements like power purchase cost, O&M expenses, interest cost and depreciation, etc. Projection of the Discoms with respect to various components of ARR, the Commission's analysis thereon after consideration of views expressed by the Stakeholders and decision with respect to items given below are discussed in the following paras:
- (1) Energy sales
  - (2) Losses, both transmission and distribution
  - (3) Power purchase cost, including transmission charges and SLDC charges
  - (4) Operation and maintenance expenses
  - (5) Interest and finance charges and interest on working capital
  - (6) Depreciation
  - (7) Revenue from existing tariff
  - (8) Non-tariff and other income
  - (9) Revenue deficit based on existing tariff

#### **Energy Sales**

- 3.3 Discoms in the petition have worked out the energy sales for FY 2020-21 and FY 2021-22 on the basis of past growth in consumers, connected load and energy sales to forecast the category-wise energy sales for the MYT period. Projections are based on the methodology approved by the Commission in the past tariff orders. Discoms have computed category wise sales' CAGR for 3 years, 5 years, 7

years and so on based on the historical data. The impact of COVID has been considered while projecting the sales for Domestic, Non-Domestic and Industrial categories, as these categories are expected to be impacted the most due to COVID. The consumer category wise sales projected by the three Discoms and the energy sales being approved now by the Commission have been discussed in the following sub-paras.

- 3.4 The Discoms have projected the energy sales for FY 2020-21 and FY 2021-22 for the following consumer categories:
- (1) All consumer categories, except agriculture
  - (2) Agriculture consumers (Metered)
  - (3) Agriculture consumers (Flat Rate)

**Petitioners' Submission**

**Energy Sales for Metered Categories (except Agriculture)**

- 3.5 The Discoms have submitted that energy sales for FY 2020-21 and FY 2021-22 are projected on the basis of historic sales data using the category wise CAGR as per the methodology approved by the Commission in the previous year tariff orders. For all consumer categories except the agriculture category, past trends have been used while estimating sales. Wherever the trend has seemed unreasonable, the forecast has been appropriately adjusted after taking into consideration the latest available data.
- 3.6 For Domestic category, the sales grew at CAGR of 7% from FY 2012-13 to FY 2019-20. However, in FY 2020-21, the growth is expected to increase further owing to people working from home due to COVID pandemic apart from the organic growth. Therefore, the rate of growth in FY 2020-21 is assumed to be higher by 5% than Business as Usual (BAU) scenario. Thus, the growth rate of sales is considered to be 12% i.e. 7%+5% for FY 2020-21. From FY 2021-22 onwards, the growth rate is expected to stabilize to (BAU) levels i.e. 7%.
- 3.7 For Non-Domestic and industrial consumer category, Discoms stated that due to disruption in industrial and commercial activity due to COVID, the sales for Industrial and Non-Domestic categories have been projected on the basis of actual trend observed in the lockdown period of the current financial year. Since most of the industries, commercial buildings/malls and shops were closed during the initial part of the lockdown period, a significant decrease in sales was observed. Economic activity has slowly started to gain momentum albeit the



ongoing situation of crisis exists. Because of the looming uncertainty that lies ahead, a V-shaped recovery is not expected as per the estimation of Discoms. Thus, for FY 2020-21, the sales for Industrial and Non-Domestic categories are expected to decrease as compared to FY 2019-20. Going forward from FY 2021-22 onwards, the sales are expected to recover with an adequate pace and reach BAU levels by the end of FY 2023-24.

- 3.8 For Public Street Lights, Public Water Works and Mixed Load categories, energy sales are projected on the basis of historical data, using category wise CAGR, as per the methodology approved by the Commission in the previous year tariff orders.
- 3.9 Discoms submitted that for two newly introduced categories Traction Load and EV charging stations, there have been no consumers in these categories till date. Further, due to disruption in economic activity due to COVID, no new connections in these categories are expected. In the next petition for ARR & Tariff, the petitioner shall project the sales for these categories for remaining years of the MYT period on the basis of actual data for FY 2020-21. Thus, the sales for these categories have not been projected in this MYT petition.

#### **Energy Sales to Agriculture Metered (M) Consumers**

- 3.10 For MYT period from FY 2020-21 and FY 2021-22, the energy sales for agriculture metered category has been estimated on the basis of the following factors:
- (a) Existing Consumers at the start of the Financial Year
  - (b) Proposed addition in the consumers during the Financial Year based
  - (c) Consumers converted from 'Agriculture Flat' to 'Agriculture Metered' category
  - (d) Connected load per consumer
  - (e) Estimated specific energy consumption

$$\text{Agriculture Consumption} = \text{No. of consumers} \times \text{Connected load per consumer} \times \text{Specific Consumption}$$

- 3.11 The Discoms submitted that, they have considered the following specific consumption for working out Agriculture(M) Consumption:

**Table 1: specific consumption FY2020-21 and 2021-22**

Year	Specific Consumption		
	JVVNL	AVVNL	JdVVNL
FY 2020-21	1390	1628	1698
FY 2021-22	1404	1644	1715

- 3.12 The Discoms have furnished the following information regarding number of metered consumers, connected load and specific consumption in their petition:

**Table 2: Agriculture (M) sales for FY 2020-21 and FY 2021-22 -JVVNL**

Particulars	YEAR 2020-21				
	Consumers (Nos.)	Connected Load per consumer (kW)	Total Connected Load (kW)	Specific consumption (kWh/kW/year)	Consumption (Sales) MU
Existing consumers	5,30,942	10.53	55,90,819	1,390	7,771
New Consumers	10,000	10.53	1,05,300	1,390	146
Add: converted from flat rate	2,000	10.53	21,060	1,390	29
<b>Total</b>	<b>5,42,942</b>				<b>7,949</b>
Particulars	YEAR 2021-22				
	Consumers (Nos.)	Connected Load per consumer (kW)	Total Connected Load (kW)	Specific consumption (kWh/kW/year)	Consumption (Sales) MU
Existing consumers	5,42,942	10.64	57,76,903	1,404	8,111
New Consumers	25,000	10.64	2,66,000	1,404	373
Add: converted from flat rate	4,000	10.64	42,560	1,404	60
<b>Total</b>	<b>5,71,942</b>				<b>8,541</b>

**Table 3: Agriculture (M) sales for FY 2020-21 and FY 2021-22- AVVNL**

Particulars	YEAR 2020-21				
	Consumers (Nos.)	Connected Load per consumer (kW)	Total Connected Load (kW)	Specific consumption (kWh/kW/year)	Consumption (Sales) MU
Existing consumers	4,95,687	6.75	33,45,887	1,628	5,446
New Consumers	11,903	6.75	80,345	1,628	131
Add: converted from flat rate	3,571	6.75	24,104	1,628	39
<b>Total</b>	<b>5,11,161</b>		<b>34,50,337</b>		<b>5,618</b>

	YEAR 2021-22				
Particulars	Consumers (Nos.)	Connected Load per consumer (kW)	Total Connected Load (kW)	Specific consumption (kWh/kW/year)	Consumption (Sales) MU
Existing consumers	5,11,161	6.89	35,21,899	1,644	5,790
New Consumers	25,000	6.89	1,72,250	1,644	283
Add: converted from flat rate	6,500	6.89	44,785	1,644	74
<b>Total</b>	<b>5,42,661</b>		<b>37,38,934</b>		<b>6,144</b>

**Table 4: Agriculture (M) sales for FY 2020-21 and FY 2021-22- JdVVNL**

Particulars	YEAR 2020-21				
	Consumers (Nos.)	Connected Load per consumer (kW)	Total Connected Load (kW)	Specific consumption (kWh/kW/year)	Consumption (Sales) MU
Existing consumers	3,52,846	18.06	63,72,399	1,698	10,820
New Consumers	15,000	18.06	2,70,900	1,698	460
Add: converted from flat rate	2,000	18.06	36,120	1,698	61
<b>Total</b>	<b>3,69,846</b>		<b>66,79,419</b>		<b>11,341</b>
Particulars	YEAR 2021-22				
	Consumers (Nos.)	Connected Load per consumer (kW)	Total Connected Load (kW)	Specific consumption (kWh/kW/year)	Consumption (Sales) MU
Existing consumers	3,69,846	18.42	68,12,563	1,715	11,684
New Consumers	25,000	18.42	4,60,500	1,715	790
Add: converted from flat rate	4,000	18.42	73,680	1,715	126
<b>Total</b>	<b>3,98,846</b>		<b>73,46,743</b>		<b>12,600</b>

- 3.13 The JVVNL vide letter dated 24.09.2021 submitted the specific consumption of 2057 (kWh/KW/year) during FY 2020-21.
- 3.14 Implementation of Govt's flagship PM-KUSUM scheme will also have an impact on the sales of agriculture consumers.

- (a) Under Component-A of KUSUM scheme, standalone solar PV systems shall be installed in barren agricultural land of farmers / unused and available space in the Discom's land. The power generated from such systems shall be injected into the grid and shall be compensated by Discoms as per tariff determined by Commission.
- (b) Under Component-C of KUSUM scheme, grid connected agriculture pump connections shall be provided with solar PV systems. The power generated from these PV systems will be used for consumption of the farmer. The excess energy generated shall be injected into Discom's grid and the farmer shall be compensated by Discoms on the basis of tariff determined by Commission.

3.15 Discoms have proposed addition in capacity under KUSUM scheme and corresponding projections of power generation from these PV systems for the MYT period is provided below:

**Table 5: Projection of capacity addition under KUSUM Scheme for FY 2020-21**

<b>Component-A: Grid Scale Solar PV at agriculture lands</b>				
<b>Particular</b>	<b>FY 2020-21</b>			
	<b>JVVNL</b>	<b>AVVNL</b>	<b>JdVVNL</b>	<b>Total</b>
Capacity (MW)	25	25	50	100
CUF (%)	20%	20%	20%	20%
Units Generated and fed into the grid (MU)	43.80	43.80	87.60	175.20
<b>Component-C: Grid-connected pumps</b>				
No of pumps	6,367	5,874	504	12,745
Capacity (MW)	33	31	3	67
CUF (%)	20%	20%	20%	20%
Units Generated (MU)	59	54	5	118
Specific consumption (Units/KW)	1390	1628	1300	
Units Consumed (MU)	23	25	2	50
Excess units generated and fed into the grid (MU)	35	29	3	67

**Table 6: Projection of capacity addition under KUSUM Scheme for FY 2021-22**

<b>Component-A: Grid Scale Solar PV at agriculture lands</b>				
<b>Particular</b>	<b>FY 2021-22</b>			
	<b>JVVNL</b>	<b>AVVNL</b>	<b>JdVVNL</b>	<b>Total</b>
Capacity (MW)	50	50	100	200
<b>Particular</b>	<b>FY 2021-22</b>			
	<b>JVVNL</b>	<b>AVVNL</b>	<b>JVVNL</b>	<b>Total</b>
CUF (%)	20%	20%	20%	20%
Units Generated and fed into the grid (MU)	87.60	87.60	175.20	350.40
<b>Component-C: Grid-connected pumps</b>				
No of pumps	18,801	17322	1,512	37,635
Capacity (MW)	99	91	8	198
CUF (%)	20%	20%	20%	20%
Units Generated (MU)	173	159	14	346
Specific consumption (Units/KW)	1404	1644	1715	
Units Consumed (MU)	69	75	7	151
Excess units generated and fed into the grid (MU)	104	85	7	195

**Energy Sales for Agriculture Flat Rate (FR) Consumers**

3.16 For FY 2020-21 and FY 2021-22, the energy sales for agriculture flat- rate category has been estimated on the basis of the following factors:

- (a) Existing Consumers at the start of the Financial Year
- (b) Consumers converted from 'Agriculture Flat' to 'Agriculture Metered' category
- (c) Connected load per consumer
- (d) Approved specific energy consumption

**Agriculture Consumption = No. of consumers × Connected load per consumer × Specific Consumption**

3.17 For forecasting the connected load per consumer for FY 2020-21 and FY 2021-22 , the actual numbers of previous year 2019-20 which are 8.34 kW for JVNL, 11.14 kW for AVVNL and 18.85 kW for JdVVNL has been considered.

3.18 For projecting the sales for agriculture (flat) category for FY 2020-21 and FY

2021-22 Discoms have considered the specific consumption of 1945 kWh/kW/year as approved in earlier tariff orders by the Commission.

3.19 Discoms indicated the following sale to the agriculture Flat Rate category :

**Table 7: Agriculture (FR) Sales for FY 2020-21 and FY 2021-22 – JVVNL**

FY 2020-21					
Particulars	Consumers (Nos.)	Connected Load per consumer (kW)	Total Connected Load (kW)	Specific consumption (kWh/kW/year)	Consumption (Sales) MU
Existing consumers	18033	8.34	150391	1945	293
Less: converted to meter	2000	8.34	16680	1945	32
<b>Total</b>	16033				260
FY 2021-22					
Existing consumers	16033	8.34	133711	1945	260
Less: converted to meter	4000	8.34	33359	1945	65
<b>Total</b>	12033				195

**Table 8: Agriculture (FR) Sales for FY 2020-21 and FY 2021-22– AVVNL**

FY 2020-21					
Particulars	Consumers (Nos.)	Connected Load per consumer (kW)	Total Connected Load (kW)	Specific consumption (kWh/kW/year)	Consumption (Sales) MU
Existing consumers	25320	11.14	282000	1945	548
Less: converted to meter	3571	11.14	39772	1945	77
<b>Total</b>	21749				471
FY 2021-22					
Existing consumers	21749	11.14	242230	1945	471
Less: converted to meter	6500	11.14	72394	1945	141
<b>Total</b>	15249				330

**Table 9: Agriculture (FR) Sales for FY 2020-21 and FY 2021-22 – JdVVNL**

FY 2020-21					
Particulars	Consumers (Nos.)	Connected Load per consumer (kW)	Total Connected Load (kW)	Specific consumption (kWh/kW/year)	Consumption (Sales) MU
Existing consumers	34937	18.85	658618	1945	1281
Less: converted to meter	2000	18.85	37703	1945	73
<b>Total</b>	32937				1208
FY 2021-22					
Existing consumers	32937	18.85	620915	1945	1208
Less: converted to meter	4000	18.85	75406	1945	147
<b>Total</b>	28937				1061

**Total Energy Sales projected by Discoms:**

- 3.20 The projection of energy sales of different consumer categories discussed in preceding sub-paras is given in the following table:

**Table 10: Total Energy Sales for FY 2020-21 and FY 2021-22-Discoms' Projection (MU)**

FY 2020-21				
Particular	JVVNL	AVVNL	JdVVNL	Total
Domestic	6,464	4,506	4,218	15,188
Non-Domestic	2,053	1,080	1,056	4,190
Public Street Light	192	90	111	393
Agriculture (Metered)	7,925	5,543	11,334	24,802
Agriculture (Flat)	260	471	1,208	1,939
Small Industry	239	224	178	641
Medium Industry	675	706	559	1,939
Large Industry	4,913	3,279	1,270	9,462
Public Water Works (S)	419	384	325	1,128
Public Water Works (M)	31	35	98	164
Public Water Works (L)	341	308	646	1,296
Mixed Load / Bulk Supply	202	110	393	706
<b>Total</b>	<b>23,713</b>	<b>16,738</b>	<b>21,397</b>	<b>61,848</b>

<b>FY 2021-22</b>				
<b>Particular</b>	<b>JVVNL</b>	<b>AVVNL</b>	<b>JdVVNL</b>	<b>Total</b>
Domestic	6,909	4,773	4,423	16,105
Non-Domestic	2,464	1,296	1,268	5,027
Public Street Light	201	96	118	414
Agriculture (Metered)	8,425	6,019	12,588	27,032
Agriculture (Flat)	195	330	1,061	1,587
Small Industry	287	268	214	769
Medium Industry	810	847	671	2,327
Large Industry	5,896	3,935	1,523	11,355
Public Water Works (S)	464	393	346	1,203
Public Water Works (M)	32	36	101	169
Public Water Works (L)	367	336	705	1,408
Mixed Load / Bulk Supply	213	113	402	728
<b>Total</b>	<b>26,263</b>	<b>18,444</b>	<b>23,418</b>	<b>68,125</b>

### **Commission's Analysis**

#### **Energy Sales for Metered Categories (except Agriculture Flat Rate Category)**

- 3.21 As the FY 2020-21 has already elapsed, therefore, for all categories except Agriculture Flat, Commission has considered the actual data of FY 2020-21 as submitted by Discoms.
- 3.22 For FY 2021-22, considering approach followed in order dated 06.02.2020, the Commission has escalated actual figure of FY 2020-21 considering the 5 year CAGR (from FY 2014-15 to FY 2019-20) for all categories except Non Domestic, Agriculture, Industrial and PWW(M) in three Discoms and Public street light in JdVVNL. FY 2020-21 being a special year growth rate for 2019-20 has been considered for projecting the sales.
- 3.23 The Commission observed that 5 year CAGR for small industrial consumers is in negative, medium industrial consumers is 1.31%, 1.94%, 2.02% and & large industrial consumers is 7.06%, 8.93% and 4.41% in case of JVNL, AVNL and JdVVNL respectively based on CAGR from FY 2014-15 to FY 2019-20. However, Discoms have submitted that due to disruption in industrial and commercial activity due to COVID, during the initial part of the lockdown period, a significant decrease in sales was observed during FY 2020-21. Thus, for FY 2020-21, the sales for Industrial categories are expected to decrease as compared to FY 2019-20. Going forward from FY 2021-22 onwards, the sales are expected



to recover with an adequate pace and reach BAU levels.

- 3.24 It is observed by Commission that strict Lockdown have been imposed during starting of FY 2021-22, however during FY 2021-22 industrial activity have not been stopped as per lockdown policies of Rajasthan. Further, Rajasthan is a front runner in vaccination , therefore Commission expects the recovery in the sale of industrial category and commercial activity so as to at least reach pre-COVID level . Accordingly, for projecting the sales for FY 2021-22, Commission has considered the sales for Non-domestic category and Industry (M) & (L) at the same level of FY 2019-20.
- 3.25 Further, in case of three Discoms for Public Water works (M) & Industry (S) have shown the negative growth in CAGR. Thus, for projecting the sales for FY 2021-22, the Commission has considered 5% increase over FY 2020-21 sales.
- 3.26 Similarly, in case of JdVVNL, 5 year CAGR for Public Street light shown the negative growth. Thus, for projecting the sales for FY 2021-22, the Commission has considered 5% increase over FY 2020-21 sales.
- 3.27 The sales of Large Industries (consumer having billing demand of 1 MVA and more and having load factor 50% or more for the billing month /sales on tariff with rebate for categories where certain rebates were given, have not been furnished separately by Discoms, therefore the same have not been projected separately by Commission for FY 2020-21 and FY 2021-22.However the revenue impact has been considered under rebate. The Discoms are directed to file separate figure of sales for each subcategory of consumers where rebate or lower tariff is provided as well as for EV and traction load while filing true up petition.
- 3.28 The category wise growth rate and energy sales for FY 2020-21 and FY 2021-22 (except agriculture) are as given in the tables below:

**Table 11: Growth Rate and Energy Sale for FY 2020-21 and FY 2021-22 – JVVNL**

Particulars	Energy Sales (MU) Actual FY 2019-20	JVVNL			Growth Rate Adopted by Commission	Energy Sale (MU) Approved	
		3-Year CAGR	5-Year CAGR	7-Year CAGR		FY 21 (Actual)	FY 22
Domestic	5776	6.34%	7.26%	7.46%	7.26%	5964	6397
Non-Domestic	2519	5.75%	6.90%	7.18%	2019-20	1936	2519
Public Street Light	181	1.18%	1.50%	4.93%	1.50%	178	181
Small Industry	292	-2.46%	-2.68%	0.78%	5.00%	299	314
Medium Industry	821	4.15%	1.31%	3.08%	2019-20	729	821
Large Industry	6039	15.32%	7.06%	7.16%	2019-20	5477	6039
Public Water Works (S)	409	19.26%	13.35%	10.83%	13.35%	405	459
Public Water Works (M)	30	-9.59%	-3.90%	1.52%	5.00%	35	37
Public Water Works (L)	313	0.96%	7.47%	7.45%	7.47%	390	420
Mixed Load / Bulk Supply	200	-1.48%	0.87%	2.29%	0.87%	162	163
<b>Total</b>	<b>16580</b>					<b>15575</b>	<b>17349</b>

**Table 12: Growth Rate and Energy Sale for FY 2020-21 and FY 2021-22 - AVVNL**

Particulars	Energy Sales (MU) Actual FY 2019-20	AVVNL			Growth Rate Adopted by Commission	Energy Sale (MU) Approved	
		3-Year CAGR	5-Year CAGR	7-Year CAGR		FY 21 (Actual)	FY 22
Domestic	4023	5.88%	6.58%	7.60%	6.58%	4541	4839
Non-Domestic	1326	6.82%	8.04%	9.18%	2019-20	1114	1326
Public Street Light	85	4.65%	3.21%	6.10%	3.21%	88	91
Small Industry	274	-0.54%	-0.87%	0.77%	5.00%	274	288
Medium Industry	858	3.21%	1.94%	4.09%	2019-20	764	858
Large Industry	4034	19.06%	8.93%	7.15%	2019-20	3984	4034
Public Water Works (S)	375	9.86%	9.60%	8.97%	9.60%	379	415
Public Water Works (M)	34	-21.18%	-1.95%	0.72%	5.00%	37	39
Public Water Works (L)	285	12.32%	12.20%	9.74%	12.20%	323	362
Mixed Load / Bulk Supply	111	3.01%	0.74%	0.24%	0.74%	92	92
<b>Total</b>	<b>11405</b>					<b>11595</b>	<b>12344</b>

**Table 13: Growth Rate and Energy Sales FY 2020-21 and FY 2021-22 - JdVVNL**

Particulars	Energy Sales (MU) Actual FY 2019-20	JdVVNL			Growth Rate Adopted by Commission	Energy Sale (MU) Approved	
		3-Year CAGR	5-Year CAGR	7-Year CAGR		FY 21 (Actual)	FY 22
Domestic	3768	6.82%	6.17%	7.61%	6.17%	4066	4317
Non-Domestic	1296	7.12%	7.46%	7.53%	2019-20	1120	1296
Public Street Light	105	1.25%	-5.74%	-2.17%	5.00%	96	101
Small Industry	218	-2.03%	-1.50%	0.08%	5.00%	207	217
Medium Industry	680	3.84%	2.02%	2.70%	2019-20	631	680
Large Industry	1560	11.38%	4.41%	6.72%	2019-20	1423	1560
Public Water Works (S)	317	6.42%	5.70%	5.11%	5.70%	315	333
Public Water Works (M)	95	-1.82%	-1.86%	-1.57%	5.00%	90	95
Public Water Works (L)	593	8.88%	8.48%	8.06%	8.48%	631	685
Mixed Load / Bulk Supply	389	1.63%	2.13%	2.16%	2.13%	349	356
<b>Total</b>	<b>9023</b>					<b>8929</b>	<b>9641</b>

**Agriculture Metered (M) consumers**

- 3.29 For FY 2020-21, Actual data of agriculture metered category has been considered. Further, for FY 2021-22, the Commission has accepted Discoms' submissions in respect of number of new consumers and consumers to be converted from flat rate to metered category.
- 3.30 The specific consumption for FY 2021-22 has been considered at same level of for FY 2020-21.
- 3.31 For projecting the sale to metered agriculture consumers connected load and specific consumption as applicable for metered category have been considered for 6 months in case of new consumers and those converted from flat rate for working out their sales for FY 2021-22.
- 3.32 Further, Discoms have projected the impact of KUSUM scheme on agriculture sales. The solar generation of KUSUM scheme to extent of self consumption by farmer has been reduced from the Agriculture (M) sales. The Excess generation have been shown as power purchase under renewable energy. However, during FY 2020-21, Commission has not seen any major working under the aforesaid scheme hence not considered any projection and Due to slow execution of KUSUM scheme the Commission has considered only 30% of

projection made by Discoms in FY 2021-22.

- 3.33 Accordingly for FY 2021-22, based on connected load, consumers as filed by Discoms and actual specific consumption for FY 2020-21, the Commission worked out the sale to agriculture metered category for FY 2021-22 as follows:

**Table 14: Agriculture (M) sales for FY 2021-22-JVVNL**

<b>YEAR 2021-22</b>	<b>JVVNL</b>				
	<b>Consumers (Nos.)</b>	<b>Connected Load per consumer (kW)</b>	<b>Total Connected Load (kW)</b>	<b>Specific consumption (kWh/kW/year)</b>	<b>Consumption (Sales) MU</b>
Existing Consumers	5,41,944	7.86	42,56,995	2,058	8,760
New Consumers	25,000	7.86	1,96,376	2,058	202
Add: converted from flat rate	4,000	8.91	35,639	2,058	37
Less: Impact of Kusum Scheme					21
<b>Total</b>	<b>5,70,944</b>		<b>44,89,010</b>		<b>8,978</b>

**Table 15: Agriculture (M) sales for FY 2021-22 -AVVNL**

<b>YEAR 2021-22</b>	<b>AVVNL</b>				
	<b>Consumers (Nos.)</b>	<b>Connected Load per consumer (kW)</b>	<b>Total Connected Load (kW)</b>	<b>Specific consumption (kWh/kW/year)</b>	<b>Consumption (Sales) MU</b>
Existing Consumers	5,22,913	6.62	34,61,684	1,707	5,910
New Consumers	25,000	6.62	1,65,500	1,707	141
Add: converted from flat rate	6,500	11.23	72,986	1,707	62
Less: Impact of Kusum Scheme					23
<b>Total</b>	<b>5,54,413</b>		<b>37,00,171</b>		<b>6,091</b>

**Table 16: Agriculture (M) sales for FY 2021-22-JdVVNL**

YEAR 2021-22	JdVVNL				
	Consumers (Nos.)	Connected Load per consumer (kW)	Total Connected Load (kW)	Specific consumption (kWh/kW/year)	Consumption (Sales) MU
Existing Consumers	3,70,538	17.67	65,47,239	1,741	11,397
New Consumers	25,000	17.67	4,41,739	1,741	384
Add: converted from flat rate	4,000	19.19	76,765	1,741	67
Less: Impact of Kusum Scheme					2.1
Total	<b>3,99,538</b>		<b>70,65,743</b>		<b>11,847</b>

**Energy Sales for Agriculture Flat Rate (FR) Consumers****Connected Load per Consumer & Specific Consumption for Flat Rate Consumers.**

- 3.34 The Commission has observed that the Discoms have considered the connected load per consumer of 8.34 KW for JVVNL, 11.14 KW for AVVNL and 18.85 KW for JdVVNL for FY 2020-21 and FY 2021-22.
- 3.35 Further, the Commission has found that Discoms have filed the specific consumption of 1945 kWh/kW/year for flat rate consumers as approved by Commission in the previous tariff orders.
- 3.36 The Commission in its Order dated 06.02.2020 for ARR of FY 2019-20 has directed the Discoms as under:

*"It is also observed that the consumption in metered category is less than 1945 kWh//kW/year for all Discoms whereas Discoms are claiming sales of 1945 kWh//kW/year for flat rate category. Therefore, the Commission directs the Discoms to carry out a detailed study of actual specific consumption of three Discoms separately and submit the same to Commission along with the next ARR and Tariff Petition. This study should be supported by Feeder meter reading and total of meters installed at Agriculture Consumers. Based on the study submitted by Discoms, the Commission shall consider the appropriate figure of specific consumption and approve sales accordingly for the year 2020-21"*

- 3.37 Discoms have not submitted any study along with current petition, however with compliance sought Discoms have submitted some details but that were not considered reliable by the Commission.
- 3.38 The Commission directed the Discoms in previous tariff order dated 06.02.2020 that Discoms should convert all flat rate agriculture consumers upto 31.03.2021 as conversion of flat rate consumers to metered category is in the interest of Discoms and would lead to reduction of commercial losses besides correct accounting of electricity consumption. Due to non compliance of the directions for conversion of flat rate consumers to metered category and non submission of study on specific consumption of flat rate, the Commission has considered the Metered category specific consumption for computing the Flat rate sales for FY 2020-21 and FY 2021-22 for AVVNL & JdVVNL. However, in case of JVVNL Metered category specific consumption is more than 1945 kWh/kW/year, thus the specific consumption of JVVNL has been considered at 1945 kWh/kW/year for FY 2020-21 and FY 2021-22.
- 3.39 The Commission has considered the provisional data of connected load and number of consumers of Flat category and approved specific consumption of metered category for computation of sales for flat rate category of FY 2020-21 as stated above though the same shall be subject to true up . Further for FY 2021-22, Commission has considered connected load as opening balance and number of consumers as worked out on provisional data, whereas as discussed above specific consumption of metered category has been considered. It is observed that while computing the sale for flat rate category, Discoms have considered the sale to converted consumer for the full year, instead of that consumers converted on the average could be taken to be in the metered category for 6 months and flat rate for 6 months for FY 2021-22.
- 3.40 The Commission has viewed the non conversion of flat rate to metered category very seriously. The Discoms are directed to convert all flat rate agriculture consumers to metered category by 31.03.22.
- 3.41 Accordingly, the connected load, specific consumption and estimated sales for FY 2020-21 and FY 2021-22 have been approved by the Commission as under:

**Table 17: Agriculture (FR) Sales for FY 2020-21 and FY 2021-22 – JVVNL**

<b>FY 2020-21</b>	<b>JVVNL</b>				
<b>Particulars</b>	<b>Consumers (Nos.)</b>	<b>Connected Load per consumer (kW)</b>	<b>Total Connected Load (kW)</b>	<b>Specific consumption (kWh/kW/year)</b>	<b>Consumption (Sales) MU</b>
Existing consumers	18048	8.77	158202	1945	308
Less: converted to meter	1244	6.82	8483	1945	16
<b>Total</b>	<b>16804</b>		<b>149719</b>		<b>291</b>
<b>FY 2021-22</b>	<b>JVVNL</b>				
Existing consumers	16804	8.91	149719	1945	291
Less: converted to meter	4000	8.91	35639	1945	35
<b>Total</b>	<b>12804</b>		<b>114080</b>		<b>257</b>

**Table 18: Agriculture (FR) Sales for FY 2020-21 and FY 2021-22 – AVVNL**

<b>FY 2020-21</b>	<b>AVVNL</b>				
<b>Particulars</b>	<b>Consumers (Nos.)</b>	<b>Connected Load per consumer (kW)</b>	<b>Total Connected Load (kW)</b>	<b>Specific consumption (kWh/kW/year)</b>	<b>Consumption (Sales) MU</b>
Existing consumers	25320	11.17	282735	1707	483
Less: converted to meter	1286	10.00	12865	1707	22
<b>Total</b>	<b>24034</b>		<b>269870</b>		<b>461</b>
<b>FY 2021-22</b>	<b>AVVNL</b>				
Existing consumers	24034	11.23	269870	1707	461
Less: converted to meter	6500	11.23	72986	1707	62
<b>Total</b>	<b>17534</b>		<b>196883</b>		<b>398</b>

**Table 19: Agriculture (FR) Sales for FY 2020-21 and FY 2021-22 – JdVVNL**

<b>FY 2020-21</b>	<b>JdVVNL</b>				
<b>Particulars</b>	<b>Consumers (Nos.)</b>	<b>Connected Load per consumer (kW)</b>	<b>Total Connected Load (kW)</b>	<b>Specific consumption (kWh/kW/year)</b>	<b>Consumption (Sales) MU</b>
Existing consumers	34918	19.21	670668	1741	1167
Less: converted to meter	165	22.50	3713	1741	6
<b>Total</b>	<b>34753</b>		<b>666955</b>		<b>1161</b>
<b>FY 2021-22</b>	<b>JdVVNL</b>				
Existing consumers	34753	19.19	666955	1741	1161
Less: converted to meter	4000	19.19	76765	1741	67
<b>Total</b>	<b>30753</b>		<b>590190</b>		<b>1094</b>

**Energy Sales as approved by the Commission for all categories**

- 3.42 Based on the approach as discussed in the preceding paragraphs and agriculture flat rate sales, as worked out on the basis of connected load and accepted specific consumption, the energy sales for Discoms are being approved as under:

**Table 20: Energy Sales approved by the Commission for FY 2020-21 and 2021-22 (MU)**

<b>FY 2020-21</b>				
<b>Particular</b>	<b>JVVNL</b>	<b>AVVNL</b>	<b>JdVVNL</b>	<b>Total</b>
Domestic	5964	4541	4066	14570
Non-Domestic	1936	1114	1120	4170
Public Street Light	178	88	96	362
Agriculture (Metered)	8970	5977	11430	26376
Agriculture (Flat)	291	461	1161	1913
Small Industry	299	274	207	780
Medium Industry	729	764	631	2124
Large Industry	5477	3984	1423	10884
Public Water Works (S)	405	379	315	1099
Public Water Works (M)	35	37	90	162
Public Water Works (L)	390	323	631	1345
Mixed Load / Bulk Supply	162	92	349	602
<b>Total</b>	<b>24836</b>	<b>18032</b>	<b>21520</b>	<b>64389</b>



<b>FY 2021-22</b>				
<b>Particular</b>	<b>JVVNL</b>	<b>AVVNL</b>	<b>JdVVNL</b>	<b>Total</b>
Domestic	6397	4839	4317	15553
Non-Domestic	2519	1326	1296	5140
Public Street Light	181	91	101	373
Agriculture (Metered)	8978	6091	11847	26915
Agriculture (Flat)	257	398	1094	1749
Small Industry	314	288	217	819
Medium Industry	821	858	680	2359
Large Industry	6039	4034	1560	11633
Public Water Works (S)	459	415	333	1208
Public Water Works (M)	37	39	95	171
Public Water Works (L)	420	362	685	1467
Mixed Load / Bulk Supply	163	92	356	612
<b>Total</b>	<b>26584</b>	<b>18834</b>	<b>22582</b>	<b>67999</b>

## **Transmission and Distribution losses**

### **Distribution Losses**

#### **Petitioners' Submission**

- 3.43 JVNL and JdVVNL submitted that in the year FY 2019-20 several activities were carried out in order to curb the losses and bring it down to approved levels by the Commission. The actual distribution losses for FY 2019-20 stood at 17.21% and 19.38% respectively.
- 3.44 AVVNL submitted that through continuous efforts and focused activities towards reducing losses, it has been able to achieve AT&C losses lower than the approved losses for FY 2019-20. The audited losses for FY 2019-20 stood at 14.48%.
- 3.45 A few key measures taken by the Discoms for reduction of Distribution losses are:

#### **i. Vigilance checking**

- Saturday Drives for Vigilance Checking for Revenue Recovery
- Rechecking of premises where theft was detected earlier
- Special concentration on theft prone areas

- Checking of DC PDC Consumers having outstanding dues above Rs. 10,000
- Lifting of illegal Transformers
- Special Revenue Recovery Campaign wherein senior officers, camped for revenue recovery
- VCRs upto 31.03.2020 have been logically concluded

## **ii. Improving meter and billing process**

- Capturing of Reading through photo mode by Feeder-in-charge
- Minimizing average & provisional billing
- Checking of zero consumption consumers
- Checking of consumers having average monthly consumption below 50 units
- Cross Reading verification:
- Regularising maximum no of connections (especially agri. consumers)

## **iii. Technical interventions**

- Special focus on High loss feeders to reduce the T&D loss
- Use of RFMS utility: Supply monitoring on agriculture feeders through RFMS to restrict excess supply & to perform vigilance activities
- Load balancing of power transformers
- Defective Meter Replacement Drive

Discoms recognize the significance of reduction of distribution losses and the impact of the same on costs incurred to supply power to the consumers of Rajasthan. An action plan has been prepared at the state level for all Discoms in the state to adopt. Some of the key activities envisaged under the action plan are.

## **iv. Technical loss reduction**

- Network enhancement
- Improve LT:HT ratio
- High Voltage Distribution System implementation, replacement of conductors, etc.
- For consumer service line, non-armoured cable will be replaced with armoured cable

- DTR Load balancing: Post DT metering, Discoms shall correct balance load of Distribution Transformers by augmenting / adding their capacity in required areas
- Feeder segregation

**v. Commercial loss reduction**

- Extensive vigilance
- Effective energy accounting and auditing
- Replacement of defective meters
- Smart metering
- AMR metering
- Consumer awareness programs
- Monthly collection efficiency improvement
- Recovery from TDC and PDC consumers
- Correction of connected loads

**vi. Other measures**

- Tariff rationalization measures
- Public Private Partnerships – Distribution Franchisees
- Implementation of PM KUSUM Scheme

Further, capital expenditure schemes have been planned, viz-a-viz, Feeder Segregation, Smart metering along with network enhancement under Sub-transmission and Distribution scheme for ensuring that distribution losses are curbed.

**3.46 Impact of COVID**

Discoms submitted that due to COVID-19, there has been substantial decrease in consumption (assumed for FY-21) in categories like Non-Domestic and Industrial (Small, Medium and Large). These categories of consumers have the maximum number of connections at HT level.

Domestic category, with maximum number of LT connections, is expected to witness an increase in consumption for FY 2020-21 as compared to BAU levels since a majority of the population is restricted to indoors owing to lockdowns. The load factor in this category is expected to increase, thereby increasing the sales.

The distribution losses are lower in HT categories as compared to LT categories. Since the sales mix for FY 2020-21 is expected to change drastically with increase

in LT sales and decrease in HT sales, it is expected to have a detrimental effect in the HT:LT ratio and increase distribution losses for FY 2020-21.

- 3.47 During FY 2020-21 and FY 2021-22, Discoms have projected the following Distribution Losses:

**Table 21: Distribution Losses Projections of Discoms (%)**

Year	JVVNL	AVVNL	JdVVNL
FY 2020-21	18.00%	16.00%	18.00%
FY 2021-22	16.00%	15.00%	16.00%

### Commission's Analysis

- 3.48 For FY 2020-21, JVNL, AVNL and JdVNL have projected distribution losses at 18%, 16% and 18% respectively and for FY 2021-22, 16%, 15% and 16% for JVNL, AVNL and JdVNL respectively which are at higher side as compared to loss trajectory specified by the Commission for earlier years.
- 3.49 The Commission has observed during the last few years that inspite of clear directives for reduction of Distribution Losses, such losses have not been reduced to the level as approved by the Commission. This is evident from the table given below for the actual Distribution Losses for period FY 2015-16 to FY 2019-20 and FY 2020-21.

**Table 22: Distribution Losses of Discoms (%)**

YEAR	JVNL		AVNL		JdVNL	
	Approved	Actual	Approved	Actual	Approved	Actual
2015 – 16	15.19	31.90	16.36	26.75	14.47	23.32
2016 – 17	22.00	25.48	20.00	22.10	18.00	21.69
2017 – 18	18.50	21.06	17.50	20.15	16.50	19.33
2018 – 19	15.00	20.54	15.00	18.03	15.00	23.12
2019- 20	15.00	17.21	15.00	14.48	15.00	19.38
2020- 21	15.00	19.44	15.00	15.15	15.00	22.46

- 3.50 From the above table it is observed that none of the Discom has achieved the approved losses in any of the above past 5 years (Except Ajmer Discom for FY 2019-20). However, in FY 2020-21 losses of Ajmer also are in the vicinity of approved Losses of 15%. It is observed that Discoms are making lot of investment under various Schemes of the State and Central Government for reducing the AT&C losses but the results are not coming as desired.

- 3.51 The Regulation 7 (1) of the RERC (Terms and Conditions for Determination of Tariff) Regulations, 2019 requires the Commission to approve a trajectory for the Control Period for certain variables like transmission losses, distribution losses and collection efficiency, having regard to the past performance.
- 3.52 Therefore, the Commission approves the Discoms target for distribution losses at 15% for FY 2020-21 and FY 2021-22 and collection efficiency at 100% .
- 3.53 The summary of proposed distribution losses by Discoms and distribution losses approved by the Commission have been provided below:

**Table 23: Proposed and Approved Distribution Losses (%)**

YEAR	JVVNL		AVVNL		JdVVNL	
	Proposed	Approved	Proposed	Approved	Proposed	Approved
FY 2020-21	18.00%	15.00%	16.00%	15.00%	18.00%	15.00%
FY 2021-22	16.00%	15.00%	15.00%	15.00%	16.00%	15.00%

- 3.54 Many stakeholder during the public hearing submitted that the losses at 33 KV and 11 KV are lower at 3.8% and 8.8% respectively as evident from Discoms submission on wheeling charges, whereas the target given by the Commission is combined target for all voltage level. The Discoms are directed to furnish the voltage wise sales and losses in next petition and based on that Commission may consider to set voltage wise loss targets.

### **Collection Efficiency**

- 3.55 The Discoms have projected approx. 95% collection efficiency for FY 2020-21 and 100% collection efficiency for FY 2021-2022. The Commission has considered the collection efficiency at 100%, therefore the AT&C losses and Distribution Losses have been considered at same level, even if actual collection efficiency may be lower than 100%, adoption of lower collection efficiency will increase the revenue gap of Discoms which will indirectly burden the consumers of the State. Hence the target for collection efficiency has been approved to be the same as proposed.

### **Transmission Losses**

- 3.56 The Discoms have filed the intra-state Transmission losses of 3.33% and 3.31% for FY 2020-21 and FY 2021-22 respectively. Inter-state transmission loss of 3.15% For FY 2020-21 and FY 2021-22.
- 3.57 Whereas, the Commission has considered the intra-state transmission loss of 3.33% based on the RVPN Tariff order dated 12.10.2020 for FY 2020-21. Further for

FY 2021-22, Commission has accepted the Discoms submission at 3.31%.

- 3.58 For Inter State Losses: Commission has computed the losses based on 52 weeks Average Losses of Northern and 30 weeks Average Losses of Eastern Region and remaining losses have been disallowed. While computing the PGCIL losses, the Commission has considered losses as per information available for weekly losses on NRLDC website. Northern region losses of 2.84% has been considered on Central power station located outside state and 2.51% losses have been considered on Central power station located within state. Whereas for power stations from eastern region, additional losses of 1.53% have been applied and then Northern Region losses have been applied to such stations.
- 3.59 The levels of transmission losses as proposed by the Discoms and considered by the Commission for FY 2020-21 and FY 2021-22 have been shown in the following table:

**Table 24: Levels of Transmission Loss (%)**

Year	Intra-State Transmission Losses- Discoms (Proposed)	Intra-State Transmission Losses- Discoms (Approved)	Inter-State Transmission Losses- Discoms (Proposed)	Inter-State Transmission Losses- Discoms (Approved)
FY 2020-21	3.33%	3.33%	3.15%	2.79%
FY 2021-22	3.31%	3.31%	3.15%	2.79%

**Energy Requirement as approved vis-à-vis Petitioners' submission**

- 3.60 On the basis of the sales and distribution & transmission losses discussed above, the energy requirement proposed by Discoms and approved by the Commission for FY 2020-21 and FY 2021-22 are given in the following table:

**Table 25: Energy Requirement for FY 2020-21 and FY 2021-22 (MU)**

<b>FY 2020-21</b>								
<b>Particulars</b>	<b>JVVNL</b>		<b>AVVNL</b>		<b>JdVVNL</b>		<b>Total</b>	
	<b>Proposed</b>	<b>Approved</b>	<b>Proposed</b>	<b>Approved</b>	<b>Proposed</b>	<b>Approved</b>	<b>Proposed</b>	<b>Approved</b>
Estimated Sales	23,713	24,836	16,738	18032	21397	21520	61848	64,389
Distribution Loss (%)	18.00%	15.00%	16.00%	15.00%	18.00%	15.00%	17.47%	15.00%
Add: Distribution Loss (MU's)	5,205	4,383	3,188	3,182	4,697	3,798	13090	11,363
Energy Required at Discom Periphery	28,918	29,219	19,926	21,215	26,094	25,318	74938	75,751
Intra-State Transmission Loss (%)	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%
Intra-State Transmission Loss (MU's)	996	1,007	686	731	899	872	2581	2,609
Energy Required at State Periphery	29,914	30,225	20,612	21,945	26,993	26,190	77519	78,361
Inter-State Transmission Loss (%)	3.15%	2.79%	3.15%	2.79%	3.15%	2.79%	3.15%	2.79%
Inter-State Transmission Loss (MU's)	377	371	254	250	305	300	936	921
<b>Gross Energy Requirement</b>	<b>30,291</b>	<b>30,597</b>	<b>20,866</b>	<b>22,195</b>	<b>27,298</b>	<b>26,490</b>	<b>78,455</b>	<b>79,282</b>

<b>FY 2021-22</b>								
<b>Particulars</b>	<b>JVVNL</b>		<b>AVVNL</b>		<b>JdVVNL</b>		<b>Total</b>	
	<b>Proposed</b>	<b>Approved</b>	<b>Proposed</b>	<b>Approved</b>	<b>Proposed</b>	<b>Approved</b>	<b>Proposed</b>	<b>Approved</b>
Estimated Sales	26,263	26,584	18,444	18834	23418	22582	68125	67,999
Distribution Loss (%)	16.00%	15.00%	15.00%	15.00%	16.00%	15.00%	15.73%	15.00%
Add: Distribution Loss (MU's)	5,002	4,691	3,255	3,324	4,461	3,985	12718	12,000
Energy Required at Discom Periphery	31,265	31,275	21,699	22,157	27,879	26,566	80843	79,998
Intra-State Transmission Loss (%)	3.31%	3.31%	3.31%	3.31%	3.31%	3.31%	3.31%	3.31%
Intra-State Transmission Loss (MU's)	1,070	1,071	743	759	954	909	2768	2,739
Energy Required at State Periphery	32,336	32,345	22,442	22,916	28,833	27,476	83610	82,737
Inter-State Transmission Loss (%)	3.15%	2.79%	3.15%	2.79%	3.15%	2.79%	3.15%	2.79%
Inter-State Transmission Loss (MU's)	338	361	228	243	273	292	838	897
<b>Gross Energy Requirement</b>	<b>32,673</b>	<b>32,706</b>	<b>22,669</b>	<b>23,159</b>	<b>29,106</b>	<b>27,768</b>	<b>84449</b>	<b>83,634</b>

## **Power Purchase Cost**

### **Petitioners' Submission**

- 3.61 Discoms submitted that for the estimation of quantum of power procurement, the availability of each station and the corresponding energy (in MU) purchased from that station for each year of MYT period has been considered same as that for FY 2019-20. In case the energy requirement is more in any particular year vis-à-vis FY 2019-20, the Discoms has considered energy procurement based on Merit Order Dispatch (MoD) duly keeping in mind the PLF of that particular station does not exceed a normative level of 85%. In case the energy requirement is less in any particular year vis-à-vis FY 2019-20, Discoms has reduced the energy procurement from the costliest plant as per the MoD principal duly keeping in mind the PLF of that particular station does not fall below a technical minimum level of 55%.
- 3.62 Discoms submitted Rajasthan Urja Vikas Nigam has been formed with objectives to undertake wholesale procurement, sale and wholesale supply related works, rights, financial efficiency and to ensure availability on short, medium and long-term basis, the power requirement of the Government electricity distribution companies of Rajasthan under the related agreements. Power purchase is assumed to be carried out by Rajasthan Urja Vikas Nigam in a consolidated manner for most of the stations and hence, energy requirement of all three distribution companies has been aggregated to arrive at consolidated energy requirement for all for three distribution companies.
- 3.63 Discoms submitted that for the estimation of cost, the fixed charges and energy charges per unit for FY 2020-21 have been taken the same as for the FY 2019-20. For FY 2021-22 and onwards, a nominal hike of 2% in the energy and fixed charges has been considered considering the actual increase in the past few years.
- 3.64 Discoms have not considered prior period charges in forecasting power purchase cost for MYT assuming normal business scenario and considering these cost as extraordinary expenses.
- 3.65 Discoms submitted that while working out power purchase requirement they have also considered new units no. 7&8 of STPS. While there are various Central Sector plants expected to come up during the MYT period, as per the data available from CEA and analysed by RUVN, energy availability from these



Central Sector plants are in 'Unsure Category' owing to issues such as land acquisition, pending clearances, non-achievement of financial closure, bidding not started etc. Accordingly, Discoms have not considered any projections from such Central Sector plants.

- 3.66 The fixed charges and variable charges for the Suratgarh Thermal Power station units 7 and 8 which are going to be commissioned in FY 2020-21 onwards have considered on the basis of the current fixed and energy charges of STPS units 1-6.
- 3.67 Summary of the power purchase quantum and cost as submitted by Discoms in their petitions are as under:

**Table 26: Power Purchase (MU) and Cost (Rs. Cr.) for FY 2020-21 submitted by Discoms**

FY 2020-21						
Particulars	JVVNL		AVVNL		JdVVNL	
	Total Energy (MU)	Total Cost of Energy Received (Rs. Crore)	Total Energy (MU)	Total Cost of Energy Received (Rs. Crore)	Total Energy (MU)	Total Cost of Energy Received (Rs. Crore)
Power from sources other than RVUNL (Net of surplus)	21919	8059	14761	5402	17729	6487
Power from RVUNL sources	10341	5279	6969	3558	8369	4272
Transmission Charges		2065		1392		1671
<b>Total Power Purchase</b>	<b>32260</b>	<b>15404</b>	<b>21730</b>	<b>10352</b>	<b>26097</b>	<b>12431</b>

**Table 27: Power Purchase (MU) and Cost (Rs. Cr.) for FY 2021-22- submitted by Discoms**

FY 2021-22						
Particulars	JVVNL		AVVNL		JdVVNL	
	Total Energy (MU)	Total Cost of Energy Received (Rs. Crore)	Total Energy (MU)	Total Cost of Energy Received (Rs. Crore)	Total Energy (MU)	Total Cost of Energy Received (Rs. Crore)
Power from sources other than RVUNL (Net of surplus)	22047	8397	14815	5574	17766	6683
Power from RVUNL sources	12479	6807	8410	4587	10099	5509
Transmission Charges		2065		1392		1671
<b>Total Power Purchase</b>	<b>34526</b>	<b>17270</b>	<b>23225</b>	<b>11553</b>	<b>27865</b>	<b>13863</b>

### **Commission's Analysis**

- 3.68 While estimating energy availability and power purchase cost for FY 2020-21, the Commission has considered the generation in MUs and cost in Rs. Crore from State and Central generating units based on the submission of actual data for FY 2020-21 by Discoms.
- 3.69 For 2021-22 the Commission has considered actual cost for FY 2020-21 for plants other than RVUN and Rajwest. For these the Commission has considered cost on the basis of relevant order of the Commission.
- 3.70 For estimating the power purchase cost, the Commission has considered availability from various sources for the State as a whole. For working out Discom wise availability and cost, the allocation of power to JVVNL, AVVNL and JdVVNL from all generating stations has been considered in the ratio of 40.27%, 27.14% and 32.59% respectively, except that 100% allocation of RFF share has been considered for JVVNL.

### **Energy Availability and Cost for FY 2020-21 and FY 2021-22**

#### **RVUN Stations**

- 3.71 For RVUN generating stations, including KTPS (Unit 1-7) & STPS (Unit 1-6), RGTPS (Stage I, II & III), Mahi, Chhabra (Unit 1-6) & Kalisindh (Unit 1&2), the Commission has considered the energy availability & cost for FY 2020-21 as per submission of actual data by Discoms and energy availability for FY 2021-22 at 2% escalation over FY 2020-21 whereas in case of RGTPS normative availability has been considered.
- 3.72 With regard to DCCPP, the petition for FY 2020-21 is under consideration therefore, Commission has not considered the same.
- 3.73 The fixed and energy charges for the RVUN plants except Kalisindh are as per RVUN Tariff order dated 11.09.2020 and for Kalisindh as per order dated 04.10.2021 for FY 2021-22.
- 3.74 The Commission has considered the energy availability for STPS Unit 7 based on actuals for FY 2020-21 and for FY 2021-22 at 2% escalation over FY 2020-21. The fixed and energy charges for FY 2021-22 have been considered as per RVUN order dated 03.02.2021.
- 3.75 The Commission observed that STPS Unit 8 has achieved the CoD in the month of October 2021, therefore energy availability has been considered for remaining

days of FY 2021-22 at 60% normative availability and fixed and energy charges are considered as per as per RVUN order dated 03.02.2021.

- 3.76 Tariff of Mini/Micro (MMH) plants have been considered as per Regulation 57 of RERC Tariff Regulations, 2019.
- 3.77 The energy availability and cost of RVUN's generating stations as considered by the Commission have been shown in the table below:

**Table 28: Energy Availability (MU) and Cost (Rs. In Cr.)- RVUN Stations for FY 2020-21**

Station	FY 2020-21	
	Energy Availability (provisional-Actual) (MU)	Cost (provisional-Actual) (Rs. In Cr.)
KTPS(1 to 7)	4757	2108
STPS(1 to 6)	912	1103
STPS Stage V (Unit 7 & 8)	1269	699
DCCPP	0	0
CTPP (1-4)	6262	2741
CTPP (5)	6123	2653
CTPP (6)	1461	583
RGTP(1&2 &3)	550	200
KaTPP#1 & 2	5795	3208
MAHI	201	51
MAHI MMH	1	0
MANGROL	9	4
STPS MMH	1	1
<b>Total RVUN</b>	<b>27342</b>	<b>13351</b>

**Table 29: Energy Availability (MU) and Cost (Rs. In Cr.)- RVUN Stations for FY 2021-22**

Station	FY 2021-22	
	Energy Availability (MU)	Cost (Rs. In Cr.)
KTPS(1 to 7)	4852	2138
STPS(1 to 6)	930	1108
STPS Stage V (Unit 7 & 8)	2958	1440
DCCPP	0	0
CTPP (1-4)	6387	2534
CTPP (5)	6246	2597
CTPP (6)	1490	620
RGTP(1&2 &3)	1619	681
KaTPP#1 & 2	5911	3127
MAHI	205	53
MAHI MMH	1	0
MANGROL	9	4
STPS MMH	1	1
<b>Total RVUN</b>	<b>30610</b>	<b>14302</b>

**Lignite based projects**

- 3.78 The lignite based projects include Giral Lignite Power Limited, Rajwest Limited and Neyveli Lignite Corporation Limited.
- 3.79 For Giral Unit 1 & 2, Commission is not considering any generation for FY 2020-21 and FY 2021-22 as these Units are not functioning for long period of time.
- 3.80 For Neyveil Lignite, the Commission has considered the energy availability, Fixed and energy charges for FY 2020-21 as per actuals and for FY 2021-22, 2% escalation has been given over FY 2020-21.
- 3.81 For Rajwest Power Limited the Commission has considered the energy availability for FY 2021-22, with 2% escalation over FY 2020-21. The fixed and energy charges for FY 2021-22 are as per RWPL tariff order of FY 2018-19 dated 26.09.2018 for FY 2020-21.
- 3.82 The energy availability and total power purchase cost for Lignite based projects have been summarized in the table below:

**Table 30: Energy Availability (MU) and Cost (Rs. In Cr.)- Lignite Plants for FY 2020-21 and FY 2021-22**

Station	FY 2020-21	
	Energy Availability (provisional-Actual) (MU)	Cost (provisional-Actual) (Rs. In Cr.)
Rajwest	6377	2773
GLTPP	0	0
Neyveli Lignite Corporation Ltd	1260	423
<b>Total</b>	<b>7637</b>	<b>3195</b>

Station	FY 2021-22	
	Energy Availability (MU)	Cost (Rs. In Cr.)
Rajwest	6504	2732
GLTPP	0	0
Neyveli Lignite Corporation Ltd	1285	431
<b>Total</b>	<b>7789</b>	<b>3163</b>

#### **Nuclear Power Corporation of India Ltd. (NPCIL)**

- 3.83 The energy availability and tariff of NPCIL has been considered for FY 2020-21 as per actuals and for FY 2021-22, 2% escalation has been given over FY 2020-21.
- 3.84 The energy availability and total power purchase cost for NPCIL plants have been summarized in the table below:

**Table 31: Energy Availability (MU) and Cost (Rs. In Cr.)- NPCIL for FY 2020-21 and FY 2021-22**

Station	FY 2020-21		FY 2021-22	
	Energy Availability (provisional-Actual) (MU)	Cost (provisional-Actual) (Rs. In Cr.)	Energy Availability (MU)	Cost (Rs. In Cr.)
NPCIL	2258	774	2303	790

#### **Partnership Projects (PP)**

- 3.85 The energy availability, fixed and energy charges of partnership projects for FY 2020-21 has been considered as per actuals and for FY 2021-22, 2% escalation has been given on FY 2020-21.
- 3.86 Energy availability and total power purchase cost for partnership projects have been summarized in the table below:

**Table 32: Energy Availability (MU) and Cost (Rs. In Cr.)- Partnership Projects for FY 2020-21 and FY 2021-22**

Station	FY 2020-21		FY 2021-22	
	Energy Availability (provisional-Actual) (MU)	Cost (provisional-Actual) (Rs. In Cr.)	Energy Availability (MU)	Cost (Rs. In Cr.)
Partnership Projects	2930	132	2989	135

**NTPC, NHPC & Others**

- 3.87 The energy availability, fixed and energy charges of NTPC & NHPC and others for FY 2020-21 has been considered as per actuals and For FY 2021-22, 2% escalation has been considered on FY 2020-21.
- 3.88 A new unit of PARBATI HPS is expected to commission during FY 2021-22, accordingly the Commission has considered the normative availability for PARBATI HPS and its charges has been considered based on the existing unit of PARBATI HPS.
- 3.89 The energy availability and total power purchase cost for NTPC, NHPC and other plants have been summarized in the table below:

**Table 33: Energy Availability (MU) and Cost (Rs. In Cr.)- NTPC & NHPC and Other Generating Stations for FY 2020-21 and FY 2021-22**

Station	FY 2020-21		FY 2021-22	
	Energy Availability (provisional-Actual) (MU)	Cost (provisional-Actual) (Rs. In Cr.)	Energy Availability (MU)	Cost (Rs. In Cr.)
NTPC Stations	10213	3519	10418	3589
NHPC Stations	1640	575	1986	635
Others	23301	8368	21928	8040
<b>Total</b>	<b>35154</b>	<b>12462</b>	<b>34332</b>	<b>12264</b>

- 3.90 Further, Ministry of Power, GOI issued the guidelines dated 22.03.2021 enabling Discoms either to continue or exit from PPA after completion of term of PPA, i.e., beyond 25 years or a period specified in the PPA and allowing the Generators to sell power in any mode after State/Discoms exit the PPA. In View of above guidelines, the Discoms have filed the petition for relinquishing share of power of the five eligible Power Plants of Central Generating Stations(CGS).
- 3.91 In the matter of above petition, the Commission vide order dated 28.10.2021 has

allowed Discoms to exit from PPA for the Anta Gas, Auriya Gas, Dadari Gas, FUGTPS (I), Farraka TPS power Plants aggregating to 252 MW. However, its impact on fixed cost will be visible from next year.

### **Non-Conventional Energy Sources**

- 3.92 The Commission has taken the availability from non-conventional energy sources to the extent of RPO requirement, i.e., 8.60% for wind, 7.25% for Solar and 0.80% for Bio-mass for FY 2020-21 and 8.90% for wind, 8.50% for Solar and 0.90% for Bio-mass for FY 2021-22 as per RERC (Renewable Energy Obligation) (Fifth Amendment) Regulation, 2019 dated 11.01.2019 as amended from time to time.
- 3.93 To compute the cost for FY 2020-21 and FY 2021-22, the actual per unit cost of FY 2020-21 has been considered, further the additional units during FY 2021-22 for solar and Biomass has been considered at Rs. 2.50 /unit and Rs. 6.81/unit respectively.
- 3.94 The energy availability and total power purchase cost from non-conventional energy sources have been summarized in the table below:

**Table 34: Energy Availability (MU) and Cost (Rs. in Cr.)- Wind, Solar & Biomass for FY 2020-21 and FY 2021-22**

Station	FY 2020-21		FY 2021-22	
	Energy Availability (MU)	Cost (Rs. in Cr.)	Energy Availability (MU)	Cost (Rs. in Cr.)
Wind	6211	3132	6774	3416
Solar	5236	1688	6470	1997
Biomass	578	420	685	493
<b>Total</b>	<b>12025</b>	<b>5240</b>	<b>13929</b>	<b>5906</b>

### **Short term Sources**

- 3.95 After considering the energy available to Discoms based on their respective allocated shares, the Commission has estimated a surplus in energy availability for FY 2020-21 and FY 2021-22.
- 3.96 Commission estimated the Rajasthan state to be in surplus power by 8063 MU, and 8320 MU for FY 2020-21 and FY 2021-22 respectively. Discoms have proposed to sell the surplus power at the rate of Rs. 2.57 per/unit and Rs 2.50 per/unit, for FY 2020-21 and FY 2021-22 respectively. In this context, the Commission agrees with the Stakeholders' concern that the Discoms must try

to sell the surplus power at least equivalent to or higher than the variable charges of thermal generation, for example, STPS variable charges of Rs. 4.09 per unit for FY 2020-21 and 2% escalation during FY 2021-22. In light of above fact, the Commission has considered the sale price of surplus power at Rs. 4.09/unit during FY 2020-21 and 2% escalation during FY 2021-22.

3.97 However, there may have been a situation when Discoms may have resorted to short term power purchase. In that situation, the Regulation 78(6) provides that the Commission shall indicate a tariff for procurement of short term power. Accordingly, the Commission deems it proper to continue with the rate of Rs. 4/unit considered for this purpose in last year tariff order.

3.98 The Discoms are also directed to ensure strict compliance of merit order dispatch.

#### **Total Power Purchase Cost**

3.99 Based on the above, the summary of source wise and Discom wise breakup of power purchase quantum and cost for FY 2020-21 and FY 2021-22 as considered by the Commission for the three Discoms is given in the table below and details are given at Annexure "E":

**Table 35: Energy Availability (MU) and Cost (Rs. In Cr.) for FY 2020-21 and FY 2021-22**

Station	FY 2020-21		FY 2021-22	
	Energy Availability (MU)	Cost (Rs. In Cr.)	Energy Availability (MU)	Cost (Rs. In Cr.)
NTPC	10213	3519	10418	3589
NHPC	1640	575	1986	635
Others	23301	8368	21928	8040
NPCIL	2258	774	2303	790
Partnership Projects	2930	132	2989	135
RVUN	27342	13351	30610	14302
Lignite Power Projects	7637	3195	7789	3163
Wind Farms, Solar and Biomass	12025	5240	13929	5906
<b>Gross Energy Available</b>	<b>87345</b>	<b>35155</b>	<b>91953</b>	<b>36559</b>
Surplus	-8063	-3298	-8320	-3471
<b>Total</b>	<b>79282</b>	<b>31857</b>	<b>83634</b>	<b>33089</b>



## Transmission Charges

### Petitioners' Submission

- 3.100 Discoms submitted that for FY 2019-20, the transmission charges have been taken as per actual figures. No escalation has been assumed while projecting transmission charges for FY 2020-21 and FY 2021-22.
- 3.101 The details of the PGCIL, RVPN, RLDC and SLDC charges submitted by Discoms have been summarized in the table below:

**Table 36: Transmission Charges & SLDC Charges for 2020-21 and FY 2021-22**  
(Rs. In Crore)

Particulars	Discoms' submission			
	JVVNL	AVVNL	JdVVNL	Total
<b>FY 2020-21</b>				
PGCIL Charges	819	552	663	2034
RVPN and Others Charges	1237	833	1000	3069
RLDC Charges	1	1	1	2
SLDC Charges	10	6	8	24
<b>Total Transmission Charges</b>	<b>2065</b>	<b>1392</b>	<b>1671</b>	<b>5129</b>
<b>FY 2021-22</b>				
PGCIL Charges	819	552	663	2034
RVPN and Others Charges	1237	833	1000	3069
RLDC Charges	1	1	1	2
SLDC Charges	10	6	8	24
<b>Total Transmission Charges</b>	<b>2065</b>	<b>1392</b>	<b>1671</b>	<b>5129</b>

### Commission's Analysis

- 3.102 The Commission has considered the RVPN and SLDC charges for FY 2020-21 as per RVPN ARR and Tariff order dated 12.10.2020 and for FY 2021-22 RVPN and SLDC charges for FY 2020-21 have been escalated by 2%.
- 3.103 Further the Commission has considered PGCIL & other charges for FY 2020-21 as per actuals and for FY 2021-22, 2% escalation have been given on over FY 2020-21.
- 3.104 The transmission & SLDC charges approved by the Commission for FY 2020-21 and FY 2021-22 are as under:

**Table 37: Transmission Charges approved by the Commission for FY 2020-21 and FY 2021-22** (Rs. In Crore)

Particulars	APPROVED			
	JVVNL	AVVNL	JdVVNL	Total
<b>FY 2020-21</b>				
PGCIL Charges	819	552	663	2034
RVPN Charges	1105	745	894	2744
RLDC Charges	1	1	1	2
SLDC Charges	9	6	7	23
<b>Total Transmission Charges</b>	<b>1934</b>	<b>1303</b>	<b>1565</b>	<b>4803</b>
<b>FY 2021-22</b>				
PGCIL Charges	836	563	676	2075
RVPN Charges	1127	760	912	2799
RLDC Charges	1	1	1	2
SLDC Charges	9	6	8	23
<b>Total Transmission Charges</b>	<b>1973</b>	<b>1330</b>	<b>1596</b>	<b>4899</b>

**Proposed Investment Plan for FY 2020-21 and FY 2021-22**

- 3.105 The Discoms have proposed investment under various projects/schemes to be executed along with the proposed targets in FY 2020-21 and FY 2021-22 and revised subsequently through additional submission as detailed below:

**Table 38: Proposed Capital Expenditure for FY 2020-21** (Rs. in Crore)

Sr. No.	Name of schemes (Plan Work)	Proposed for F.Y. 2020-21			
		JVVNL	AVVNL	JdVVNL	TOTAL
1	Sub- Transmission & Distribution	455	360	393	1,208
2	Rural Electrification Works	163	570	454	1,187
3	Rajiv Gandhi Grameen Vidyutikaran Yojna	0.00	0.00	10	10
4	R-APDRP-A	100	0	5	105
5	R-APDRP-B	7	0	13	20
6	Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY)	49	75	34	158
7	Integrated Power Development Scheme (IPDS)	50	25	63	138
8	Sobhagya	20	75	37	132
9	Feeder Segregation	50	70	160	280
10	AP Supply (2 Block Regime)	40	32	51	123
11	Smart metering	234	10	65	309
12	DT Metering	0	25	0	25
13	RT-DAS	0	3	0	3
	<b>Total</b>	<b>1,169</b>	<b>1,245</b>	<b>1,285</b>	<b>3,699</b>

**Table 39: Proposed Capital Expenditure for FY 2021-22****(Rs. in Crore)**

Sr. No.	Name of schemes (Plan Work)	Proposed for F.Y. 2021-22			
		JVVNL	AVVNL	JdVVNL	TOTAL
1	Sub- Transmission & Distribution	651	500	400	1,551
2	Rural Electrification Works	512	600	785	1,897
3	Feeder Segregation	932	300	1,136	2,368
4	AP Supply (2 Block Regime)	235	105	602	942
5	Smart metering	100	50	178	328
6	DT Metering	0.00	20	0.00	20
	<b>Total</b>	<b>2,430</b>	<b>1,575</b>	<b>3,101</b>	<b>7,106</b>

- 3.106 To execute the above work, the Discoms have proposed the funding from following sources:

**Table 40: Source wise details of funding for FY 2020-21****(Rs. in Crore)**

Sr. No.	Sources of funding	JVVNL	AVVNL	JdVVNL	Total
1	Loan	621	696	899	2216
2	Grant	235	108	0	343
3	Equity	313	441	385	1139
	<b>Total</b>	<b>1169</b>	<b>1245</b>	<b>1285</b>	<b>3699</b>

**Table 41: Source wise details of funding for FY 2021-22****(Rs. in Crore)**

Sr. No.	Sources of funding	JVVNL	AVVNL	JdVVNL	Total
1	Loan	1598	1003	2170	4771
2	Grant	0	0	0	0
3	Equity	831	573	930	2334
	<b>Total</b>	<b>2430</b>	<b>1575</b>	<b>3101</b>	<b>7106</b>

**Sub Transmission and Distribution Infrastructure Works:**

- 3.107 The Discoms have proposed a total investment of Rs. 1208 Crore and Rs. 1551 Crore in FY 2020-21 and FY 2021-22 respectively for sub transmission and distribution infrastructure works. The Discoms wise proposed investment and physical targets are provided below:

**Table 42: Proposed Investment and physical target for sub-transmission & distribution works in FY 2020-21 and FY 2021-22**

Sr. No.	Name of Schemes	Proposed Investment & Physical targets for F.Y. 2020-21			
		Units	JVVNL	AVVNL	JdVVNL
1	Sub- Transmission & Distribution				
a.	Proposed Investment	(Rs. in Crore)	455	360	393
b.	33/11 KV S/s	MVA	512	250	387
		Nos.	56	50	50
c.	33 KV Lines	KMs	650	250	350

Sr. No.	Name of Schemes	Proposed Investment & Physical targets for F.Y. 2021-22			
		Units	JVVNL	AVVNL	JdVVNL
1	Sub- Transmission & Distribution				
a.	Proposed Investment	(Rs. in Crore)	651	500	400
b.	33/11 KV S/s	MVA	506	260	450
		Nos.	58	50	70
c.	33 KV Lines	KMs	650	200	560

3.108 The Discoms have submitted that the above investments are required to strengthen the existing network so that the system becomes robust and improved and thereby is able to provide a quality and reliable supply to the consumers with less number of interruptions. These schemes are also aimed to intensify electrification in the Discom area and expansion of the distribution network.

3.109 The Discoms submitted that these schemes are identified on need basis, with the objective to increase reliability of the network, to strengthen the network and for improvement of the system to meet the demand growth; the circle planning department initiate the proposals along with the detailed technical due-diligence & after cost-benefit analysis of the proposed investment to be undertaken in the field. The proposals are being forwarded to the headquarters

for approval. The planning circle at headquarters selects the schemes on the basis of technical and financial feasibility and according to the available sanction for the year from the Government. All the schemes under Sub-Transmission and Distribution works, RE works are under Rs. 10 Cr. and the same are being implemented after administrative, technical and financial sanctions of the competent authority in accordance to delegation of powers (DOP).

#### **Rural Electrification Works:**

- 3.110 Discoms have proposed a total investment of Rs. 1187 Crore & Rs. 1897 Cr. in FY 2020-21 and FY 2021-22 respectively for rural electrification works which includes expansion of distribution network to release agriculture connection, reduction in system losses along with improvement of reliability parameters, providing domestic connections in rural areas and energization of wells with a view to increase water supply. The Discom wise proposed investment and physical targets are provided in table given below:

**Table 43: Discom wise proposed investment for RE works in FY 2020-21 and FY 2021-22**

Sr. No.	Name of Schemes	Proposed Investment & Physical targets for F.Y. 2020-21			
		Units	JVVNL	AVVNL	JdVVNL
1	Rural Electrification Works				
a.	Proposed Investment	(Rs. in Crore)	163	570	454
b.	Domestic connection rural	Nos.	90000	70000	40000
c.	Agriculture Pump Set RE	Nos.	10000	25000	15000

Sr. No.	Name of Schemes	Proposed Investment & Physical targets for F.Y. 2021-22			
		Units	JVVNL	AVVNL	JdVVNL
1	Rural Electrification Works				
a.	Proposed Investment	(Rs. in Crore)	512	600	785
b.	Domestic connection rural	Nos.	120000	100000	125000
c.	Agriculture Pump Set RE	Nos.	31500	25000	25000

**Rajiv Gandhi Grameen Vidyutikaran Yojana:**

- 3.111 Only JdVVNL have proposed an investment of Rs. 10.00 Crore under RGGVY in FY 2020-21 and nil in FY 2021-22, which includes creation of infrastructure required to electrify the identified villages, hamlets and to provide B.P.L and A.P.L. connections. The Discoms also submitted that the scheme provides for free of cost connection to all rural households living below poverty line. The schemes include supply of good quality power which would enable dispersal of small industries in rural areas, facilitate delivery of modern health care, education and application of information technologies.
- 3.112 Discom wise proposed investments are provided as under:

**Table 44: Discom wise proposed investments for RGGVY FY 2020-21**

Sr. No.	Name of schemes	Proposed investment for F.Y. 2020-21			
		Units	JVVNL	AVVNL	JdVVNL
1	Rajiv Gandhi Grameen Vidyutikaran Yojana	(Rs. In Crore)	0.00	0.00	10.00

**R-APDRP-A and R-APDRP-B:**

- 3.113 Jaipur Discom has proposed an investment of Rs. 100 Crore and JdVVNL has proposed an investment of Rs. 5 Crore in FY 2020-21 under RAPDRP-Part A and nil in FY 2021-22. Under RAPDRP-Part A scheme, works for developing IT enable activities such as SCADA etc. and strengthening of existing network have been taken up along with installation of hardware and software for data Center, disaster recovery Centre, establishment of customer care center at Discoms HQ's, installation of Modems for Meter Data Acquisition System etc.
- 3.114 Jaipur Discom has proposed an investment of Rs. 7 Crore and JdVVNL has proposed an investment of Rs. 13 Crore in FY 2020-21 under RAPDRP-Part B and nil in FY 2021-22. Under RAPDRP-Part B focus is on establishment of base line data, maintaining reliability of supply and reduction of AT&C losses through strengthening & up gradation of sub transmission and distribution network. This scheme covers cities and towns of urban areas with population of more than 30,000.

- 3.115 Initially 25% funds will be provided as loan from GOI and balance is to be raised from financial institutions. Based on the criteria for reduction of AT&C losses below 15% and maintaining the same below that level, 10% of the total project cost of the town will be converted into grant every year & that is maximum of 50% of the total project cost of a town can be converted into grant if the losses of that town are brought below the 15% and are maintained for 5 years.
- 3.116 The Discom wise proposed investments are provided in the table given below:

**Table 45: Discom wise proposed investment in FY 2020-21(Rs. in Crore)**

Sr. No.	Name of schemes	Proposed investment for FY 2020-21		
		JVVNL	AVVNL	JdVVNL
1	R-APDRP- Part A	100.00	0.00	5.00
2	R-APDRP- part B	7.00	0.00	13.00

#### **Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY)**

- 3.117 Discoms have proposed a total investment of Rs. 158 Crore in FY 2020-21 and nil in FY 2021-22 for Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) which includes separation of agriculture and non- agriculture feeders, strengthening and augmentation of sub-transmission & distribution infrastructure in rural areas and Rural electrification for completion of the targets laid down under RGGVY for 12<sup>th</sup> and 13<sup>th</sup> Plan by carrying forward the approved outlay for RGGVY to DDUGJY.
- 3.118 All Discoms are eligible for financial assistance under the scheme. Rural Electrification Corporation Limited (REC) will be the nodal agency for implementation of the scheme.

**Table 46: Discom wise proposed investment for DDUGJY in FY 2020-21**

Sr. No.	Name of schemes	Proposed investment for F.Y. 2020-21			
		Units	JVVNL	AVVNL	JdVVNL
1	DDUGJY	(Rs. in Crore)	49.00	75.00	34.00

**AMI Smart Metering:**

- 3.119 Discoms have proposed a total investment of Rs. 309 Cr. and Rs. 328 in FY 2020-21 and FY 2021-22 respectively under Smart Metering Scheme.
- 3.120 Advanced Metering Infrastructure, also referred as “Smart Metering” is the combination of the electronic meters with two-way communications technology for information, monitoring, and control. AMI initiative is targeted to achieve Operational Efficiencies, Protection of Revenue, Increased Cash Flow, Improvement in Customer Service & Conservation and Energy Efficiency.

**Table 47: Discom wise proposed investment for Smart Metering in FY 2020-21 and FY 2021-22**

Sr. No.	Name of Schemes	Proposed Investment for F.Y. 2020-21			
		Units	JVVNL	AVVNL	JdVVNL
1	Smart Metering	(Rs. in Crore)	234	10	65

Sr. No.	Name of Schemes	Proposed Investment for F.Y. 2021-22			
		Units	JVVNL	AVVNL	JdVVNL
1	Smart Metering	(Rs. in Crore)	100	50	178

**Integrated Power Development Scheme (IPDS):**

- 3.121 Discoms have proposed a total investment of Rs. 138.00 Crore in FY 2020-21 and nil in FY 2021-22 under Integrated Power Development Scheme, launched by Government of India, to extend financial assistance against capital expenditure & to address the gaps in sub transmission & distribution network and metering in urban areas to supplement the resources of Discoms/Power Dept.
- 3.122 The projects under the scheme is formulated for urban areas (Statutory Towns) only and will cover works relating to strengthening of sub-transmission & distribution network, including providing of solar panels on Govt. buildings with Net-metering, metering of feeders /distribution transformers / consumers and IT enablement of distribution sector. Scope of IT enablement extended to the statutory towns having population up to 5000 as per Census 2011.



**Table 48: Discom wise proposed investment for Integrated Power Development Scheme in FY 2020-21**

Sr. No.	Name of schemes	Proposed investment & for F.Y. 2020-21			
		Units	JVVNL	AVVNL	JdVVNL
	<b>IPDS</b>				
1	Proposed Investment	(Rs. in Crore)	50	25	63

### **Saubhagya Yojna**

- 3.123 Discoms have proposed an investment of Rs. 132.00 Crore under Saubhagya Yojna scheme.
- 3.124 Saubhagya Yojna was launched by the GoI in September 2017. Under this scheme, electricity connections to all households (both APL and poor families) in rural areas and poor families in urban areas are provided. REC has been designated as its nodal agency. Scope of work of the scheme is:
- Providing last mile connectivity and electricity connections to all un-electrified households in rural areas
  - Providing Solar Photovoltaic (SPV) based standalone system for un-electrified households located in remote and inaccessible villages/habitations, where grid extension is not feasible or cost-effective.
  - Providing last mile connectivity and electricity connections to all remaining economically poor un-electrified households in urban areas. Non-poor urban households are excluded from this scheme.

**Table 49: Discom wise proposed investment for Saubhagya in FY 2020-21**

Sr. No.	Name of schemes	Proposed investment for F.Y. 2020-21			
		Units	JVVNL	AVVNL	JdVVNL
	<b>Saubhagya</b>				
1	Proposed Investment	(Rs. in Crore)	20.00	75.00	37.00

### **Feeders Segregation**

- 3.125 Discoms have proposed a total investment of Rs. 280 Crore in FY 2020-21 and Rs. 2368 Crore. in FY 2021-22 under Feeder Segregation Scheme.
- 3.126 Segregation of agriculture feeders from mixed feeders is a vital step to ensure efficient rural power supply with minimal losses. The activity was undertaken by the Discom since 2004. From 2004 to 2010, segregation of agricultural load from non-agricultural load (virtual feeder segregation) was done. Since the rural consumers are scattered over a large area, a significant number of single-phase transformers were installed at rural areas to provide domestic connections at minimum expense. Further, 11 KV HVDS systems were installed to cater to the electricity demand of agriculture consumers.
- 3.127 Feeder Segregation works were also proposed in the DDUGJY Scheme of Government of India. However, during the implementation of this scheme, the shift of complete focus by Government of India on providing connections to the un-electrified households led to the most utilization of funds in release of connections and associated infrastructure. Discoms had to cut short the works proposed under DDUGJY scheme for Feeder Segregation.
- 3.128 By segregation of Agriculture feeder, an uninterrupted power supply may be given even in day hours utilizing the solar power. So the farmer will get the advantage to get supply in day hours and need not to go in to field in winter time when temperature in state touches to zero degree centigrade.
- 3.129 This project aims at -
- a) To manage uninterrupted block hour power supply to Agriculture Consumers
  - b) To enable uninterrupted 24 hrs supply to rural domestic consumers
  - c) 3-Ph supply to all revenue villages having population >500
  - d) To avoid misuse/theft of single-phase supply by Agriculture consumers
  - e) Better system planning and load management leading to reduction in T&D Loss
- 3.130 Following works are proposed to be carried out under the Segregation of agriculture feeders.
- a) Laying new 11 KV lines Three Phase
  - b) Shifting of 11 KV Single phase tapping to one feeder to other.
  - c) LT lines (three phase) works relating to shifting of Consumers

- d) Shifting of 11 KV Single phase tapping to one feeder to other.
- e) Providing additional Three Phase Distribution Transformers for providing three phase connection
- f) Creation of New 11 kV Bays & Feeder Metering

**Table 50: Discom wise proposed investment for Feeder segregation Scheme in FY 2020-21 and FY 2021-22**

Sr. No.	Name of Schemes	Proposed Investment for F.Y. 2020-21			
		Units	JVVNL	AVVNL	JdVVNL
1	Feeder Segregation	(Rs. in Crore)	50	70	160

Sr. No.	Name of Schemes	Proposed Investment for F.Y. 2021-22			
		Units	JVVNL	AVVNL	JdVVNL
1	Feeder Segregation	(Rs. in Crore)	932	300	1136

### **2-Block Supply to Agriculture Feeders**

- 3.131 Discoms have proposed a total investment of Rs. 123 Crore and Rs. 942 Crore in FY 2020-21 and FY 2021-22 respectively under 2-Block Supply Scheme.
- 3.132 The State of Rajasthan, with ~1.6 Cr consumers, has about 14 lakh agriculture consumers. Being a desert state, the annual rainfall is insufficient to meet the water demand for agricultural activities. Thus, there is lack of free-flowing surface water to meet the irrigation needs of the agriculture lands. As a result, ~70% of irrigation is dependent on ground water. To pump ground water electric pump-sets are required, thereby making electricity supply a key input for agriculture.
- 3.133 At present, the Discom manages power supply to such agriculture consumers by providing power in four blocks. Weekly rotation of the four blocks is done to efficiently manage the demand of agriculture consumers and at the same time to ensure grid stability.
- 3.134 As a result, majority of agriculture consumers get power at inconvenient night hours, making it difficult for them to irrigate their lands. Often such agriculture consumers leave their pump-sets on throughout the night, leading to wastage of electricity as well as ground water. In order to relieve the agriculture consumers

of such inconvenience, Discoms had planned to provide day-time supply to agriculture consumers in 2 blocks.

- 3.135 Following works are to be undertaken for the Segregation of agriculture feeders.
- Strengthening of 33 kV Feeder Conductor
  - Capacity Augmentation of 33/11 kV Power Transformer
  - Providing of additional Power Transformer
  - Providing of 33 KV Kiosk on Incomer
  - New 33/11 KV substations

**Table 51 Discom wise proposed investment for 2-Block Supply Scheme in FY 2020-21 and FY 2021-22**

Sr. No.	Name of Schemes	Proposed Investment for F.Y. 2020-21			
		Un its	JVVNL	AVVNL	JdVVNL
1	AP Supply (2 Block Regime)	(Rs. in Crore)	40	32	51

Sr. No.	Name of Schemes	Proposed Investment for F.Y. 2021-22			
		Un its	JVVNL	AVVNL	JdVVNL
1	AP Supply (2 Block Regime)	(Rs. in Crore)	235	105	602

### **DT Metering**

- 3.136 Ajmer Discom has proposed an investment of Rs. 25 Crore and Rs. 20 Crore. in FY 2020-21 & FY 2021-22 respectively under DT Metering Scheme.
- 3.137 The scheme involves implementation of AMR system for approx.18230 Nos. DTs under IPDS/ Municipal Towns of Ajmer Discom and 10362 Nos. of high value Consumers through the web-based system for Meter data Acquisition, Management and Analysis during FY 2020-21.
- 3.138 Main works of this scheme are as under:-
- Installation of AMR system for DTs. The objective is to implement an AMR system which will enable the Ajmer Discom to capture consumption data from an energy meter. The data can be used to analyze usage and manage consumption and to identify and resolve technical issues of its network.

- b) Installation of AMR system for Consumers. The objective is to implement an AMR system covering communication devices, data acquisition, analysis and reporting system.
- c) To develop an online system having dashboard to display the various information to be customized as per Ajmer Discom requirement.
- d) Web Based system for generation of reports & data analysis.
- e) Maintenance of AMR system implemented under new installations as well as existing AMR system installed under RAPDRP scheme.

**Table 52: Discom wise proposed investment for DT Metering Scheme in FY 2020-21 & FY 2021-22**

Sr. No.	Name of Schemes	Proposed Investment for F.Y. 2020-21			
		Un its	JVVNL	AVVNL	JdVVNL
1	DT Metering	(Rs. in Crore)	0.00	25	0.00

Sr. No.	Name of Schemes	Proposed Investment for F.Y. 2021-22			
		Un its	JVVNL	AVVNL	JdVVNL
1	DT Metering	(Rs. in Crore)	0.00	20	0.00

### **Real Time Acquisition System (RT-DAS)**

- 3.139 Ajmer Discom has proposed an investment of Rs. 3 Crore in FY 2020-21 under RT-DAS.
- 3.140 This project aims to accurately measure reliability of power distribution network and facilitate utility to take suitable administrative action for enhancement of power reliability.
- 3.141 To measure reliability of distribution power, a reliable, robust, accurate system is a must. The same can be ensured by a real time data acquisition system (RT-DAS) using Feeder Remote Terminal Unit (FRTU) at S/S.
- 3.142 It shall also facilitate Utility to take appropriate measures for improvement of SAIDI/SAIFI by knowing the reason of poor values of indices.
- 3.143 The project covers installation of FRTUs for 799 Nos. 11kV Feeders emanating from 198 Nos. 33/11kV sub-stations of IPDS towns (other than SCADA town).

**Table 53: Discom wise proposed investment for Real Time Acquisition System Scheme in FY 2020-21**

Sr. No.	Name of Schemes	Proposed Investment for F.Y. 2020-21			
		Un its	JVVNL	AVVNL	JdVVNL
1	RT-DAS Proposed Investment	(Rs. in Crore)	0.00	3.00	0.00

### **REVAMPED DISTRIBUTION SCHEME**

- 3.144 The Central Government has approved a Revamped Distribution Sector Scheme- a Reforms-based and Results-linked Scheme with an outlay of Rs.3,03,758 Crore over a period of five years from FY 2021-22 to FY 2025-26 with the objective to improve the quality, reliability and affordability of power supply to consumers through a financially sustainable and operationally efficient distribution sector. The Scheme aims to reduce the AT& C losses to pan-India levels of 12-15% and ACS-ARR gap to zero by 2024-25 by improving the operational efficiencies and financial sustainability of all DISCOMs/ Power Departments excluding Private Sector DISCOM.
- 3.145 DISCOMs/ Power Departments would be able to access funds under the Scheme for Pre-paid Smart Metering, System Metering and Distribution infrastructure works for loss reduction and modernisation. The financial assistance for Distribution infrastructure works under the Scheme would be subject to meeting pre-qualifying criteria as well as upon achievement of basic minimum benchmarks by the DISCOM and evaluated on the basis of Action plans.
- 3.146 The Scheme provides for annual appraisal of the DISCOM performance against predefined and agreed upon performance trajectories including AT&C losses, ACS-ARR gaps, infrastructure upgrade performance, consumer services, hours of supply, corporate governance, etc. DISCOMs have to score a minimum of 60% of marks and clear a minimum bar in respect to certain parameters to be able to be eligible for funding against the Scheme in that year.
- 3.147 Implementation of the Scheme would lead to consumer empowerment by way of prepaid Smart metering to be implemented in Public-Private-Partnership (PPP)

mode and leveraging Artificial Intelligence to analyze data generated through IT/OT devices including System Meters, prepaid Smart meters to prepare system generated energy accounting reports every month to enable DISCOMs to take informed decisions on loss reduction, demand forecasting, Time of Day (ToD) tariff, Renewable Energy (RE) Integration and for other predictive analysis.

- 3.148 The Discoms should ensure the compliance of above schemes and try to achieve the targets as set under the scheme thereby receiving the optimum grant support from Gol.
- 3.149 Post hearing Discoms have submitted actual data of FY 2020-21 of scheme wise capital expenditure as under:

**Table 54: Actual data of FY 2020-21 of scheme wise capital expenditure (Rs in Cr.)**

Sr. No	Scheme	JVVNL	AVVNL	JdVVNL	Total
1	ST&DD WORKS	508	344	446	1299
2	RGGVY	0	0	0	0
3	RE Works	515	479	691	1686
4	RAPDRP	19	0	20	39
5	MMSLVY/DDUGLY	70	0		70
6	Saubhagya Scheme	1	113	84	198
7	IPDS	9	21	14	44
8	Two Block Supply	0	13	18	30
9	DT Metering	0	15	0	15
10	DDUGLY New	0	120	34	154
11	Feeder Segregation	8	64	0	72
<b>Total</b>		<b>1130</b>	<b>1169</b>	<b>1308</b>	<b>3607</b>

- 3.150 The capital expenditure in past years and the envisaged plan of FY 2020-21 & FY 2021-22 is as under:

**Table 55: Actual capital expenditure in past years and investment proposed for FY 2020-21 & FY 2021-22 (Rs in Cr.)**

Sr.No.	Financial Year	JVVNL	AVVNL	JdVVNL	TOTAL
1	2017-18 (ACTUAL)	1573	1349	1318	4241
2	2018-19 (ACTUAL)	2767	2454	2195	7417
3	2019-20 (ACTUAL)	1783	2405	2199	6388
4	2020-21 (ACTUAL)	1130	1169	1308	3607
5	2020-21 (PROPOSED)	1169	1245	1285	3699
6	2021-22 (PROPOSED)	2430	1575	3101	7106

### **Analysis of the Commission and decision:**

- 3.151 For FY 2020-21, the Commission observes that against the JVVNL, AVVNL and JdVVNL proposal of Rs. 1169 crore, Rs. 1245 crore and Rs. 1285 crore respectively, the Discoms have approximately incurred expenditure of Rs. 1130 crore, Rs.1169 crore and Rs.1308 crore respectively till March 2021. As the year of investment is already over, the investments actually made are deemed to be approved subject to true-up.
- 3.152 The effect of the Investment Plan gets reflected in tariff by way of capitalization. As such, the impact of investment made in FY 2020-21 in any case would get reflected in True-up petitions.
- 3.153 Further, for FY 2021-22 investment approval, Commission has relied on Hon'ble APTEL judgment in appeal no. 84 of 2006, which has been discussed in subsequent paras.
- 3.154 The issue of according approval by Regulatory Commission of investment plan of a utility had come up before Hon'ble APTEL in appeal no. 84 of 2006. The said appeal had arisen against order of the Karnataka State Regulatory Commission, wherein investment plan of the State Transmission Utility was reduced by the Commission.
- 3.155 Hon'ble APTEL in that case had examined at length the powers and functions of the Regulatory Commission as regards investment approval and observed in following para as under:

**"XXXX**

**9.** *The only provision, if at all which has a relevance is Section 86 (2), which is advisory in nature. This being the position it is obviously clear that the legislature has left it to the utilities to decide their plans of investment or improvement of system or expansion to meet the demand of power within their area including up gradation and maintenance for a better and quality generation, transmission or supply as the case may be. It is the commercial decision of the utility and its source to raise funds which falls within the domain of the utility and not liable to be interfered, except at the stage when utility claims for return on such investment, interest on capital expenditure and depreciation. It is at that stage the Commission shall undertake a prudent check and if deemed fit allow the claim. In appropriate cases the Commission may disallow such claims of utility and it is for the utility to bear the brunt of such investment and it cannot pass it on to consumers.*

.....



**22.** *The consumers interest also do not arise at this stage for consideration nor they could be an objector in respect of proposal or plan or investment by utility as the liability of the consumers, if any, arise or there could be a passing by way of return on equity or interest etc. as such contingency arises only when the Regulatory Commission subject to its prudent check allows such expenditure, while fixing the annual revenue requirement and determining the tariff. Till then, the consumers have no say and there could be no objection from their side. When the consumers complain poor service or failure to maintain supply, to face such a situation the utility has to plan in advance, invest in advance, execute the project or scheme for better performance and maintain."*

- 3.156 In the said judgment, it has been concluded that Regulatory Commission should confine itself to exercising prudent check on investment being made by licensee and should not delve in the area of micro management of utility. This inference has been drawn by Hon'ble APTEL after careful examination of the provisions of Electricity Act, 2003. Suffice to say that any control by a Regulatory Commission on investment plan of a licensee beyond requirement of prudent check would not be in consonance with Electricity Act, 2003.
- 3.157 In view of above, Hon'ble APTEL has clear findings on the subject of investment approval, that the Commission would be exercising only prudent check on the investment of the licensee and allow/dis-allow expenditure based on such prudent check instead of according project/scheme-wise approvals. Regulations have to be seen and applied within the overall mandate and objective of the Electricity Act.
- 3.158 For exercising prudent check of the proposed investment plan, the Commission has kept in view the following:
- a) The ceiling limit on investment as per investment guidelines attached with RERC (Investment Approval) Regulations, 2006;
  - b) The schemes and programme of Central Govt. like RGGVY, RAPDRP, Saubhagya, DDUGJY and IPDS which are formulated, approved and implemented as per guidelines of the Govt. of India;
  - c) Items/works not eligible for inclusion in investment plan;
  - d) The nature of proposed investment and reasons thereof.
- 3.159 Para E of investment guidelines as attached with RERC (investment approval) Regulation, 2006 provides that the size of the annual investment plan (including deposit works of the other agency and consumer/user's contribution) shall not exceed the ceiling limit determined, based on growth of load/sales and annual inflation rate. The deposit works shall be committed only to the extent such work

do not affect annual works planned by the licensees. The annual size of investment plan will be based on criterion that with the addition of assets, cost of generation, transmission and distribution shall not exceed the respective current cost by the inflation rate. For transmission and distribution licensees, it shall not exceed the following ceiling limits:

$$\text{Annual plan} = k * \text{GFA} * [(1 + \text{inflation rate}) * (1 + \text{growth rate}) - 1]$$

Where k=constant to convert GFA at the end of previous year to current cost of assets. Till same is worked out it shall be taken as 1.30.

Inflation rate = ratio of WPI as on 1<sup>st</sup> April of previous year and current year.

Growth rate = growth of sales envisaged for current year over that of previous year.

GFA = Gross Fixed Assets

3.160 Based on above formula, the ceiling limit for FY 2021-22 works out to be as under:

**Table 56: Ceiling Limit for investment plan for FY 2021-22 (Rs. in Crore)**

Sr. No.	Particulars	JVVNL	AVVNL	JdVVNL	Total
1	GFA closing figure of 20-21 (as per tariff petition)-Rs. Crores	22738	18189	18757	59684
2	K	1.30	1.30	1.30	1.30
3	Sale for FY 21 (MU) as per petition	23713	16738	21397	61848
4	Sale for FY 22 (MU) as per petition	26263	18444	23418	68124
5	Growth rate for sale (%)	10.75%	10.19%	9.44%	10.15%
6	Inflation (%)	3.24%	3.24%	3.24%	3.24%
<b>7</b>	<b>Annual Plan ceiling -Rs. Crores</b>	<b>4238</b>	<b>3255</b>	<b>3168</b>	<b>10660</b>

3.161 In respect of Sub Transmission and Distribution works, the Commission has observed that normally financial expenditure in Discoms is not commensurate with the physical target in a year and has exceeded the amount of the investment planned in past years. Care should be taken to initiate an investment in consonance with physical target or augmentation proposed. Unlike centrally sponsored scheme, the Discoms themselves are required to exercise prudence

and control over such investment. The Commission accordingly directs the Discoms to carry out special audit of Investment made by Discoms in all circles and to start with Jaipur city, Ajmer city & Jodhpur city circle to justify the investment made along with cost benefit analysis within 3 months and furnish the same to the Commission. Discom should also issue internal guidelines for field officer indicating steps to exercise prudence while proposing/executing investments.

- 3.162 It is further observed that accounting of scheme wise expenditure is pre-requisite for effective control over capital expenditure. This will avoid any mismatching and accounting under wrong heads. The accounting of expenses should be under respective schemes and care should be taken while booking of expenses under the appropriate head. Discom should ensure that they maintain and submit information in requisite formats.
- 3.163 Target of AT&C losses as given by Commission should be strictly monitored and adhered to while taking up various works and focus should be on IT enablement, Feeder/DT metering, AMR metering, Network strengthening and implementation of ERP system, etc.
- 3.164 It has been observed that centrally sponsored scheme comprises funding from GOI/GOR and the resources of Discoms as per funding pattern of the schemes. Release of funds under the schemes from GOI/GOR is subject to the fulfillment of various conditions as stipulated in the guidelines of such scheme. Therefore, Discoms should ensure release of entire funds from GOI/GOR as per prescribed funding pattern.
- 3.165 The Commission in its various orders has stressed on the need of Compliance of CEA (Measures relating to Safety and Electric Supply) Regulations, 2010 and CEA (Safety requirements for construction, operation and maintenance of electrical plants and electric lines) Regulations, 2011 and to ensure safety for its workmen, Public and Livestock. The Commission has many times stated that if Discoms need to spend any money for compliance of the Safety Regulations, the same can be claimed through Investment Plan/ARR and the Commission reiterate that is willing to consider any additional amount spent on training of employees and for compliance of Safety Regulations.
- 3.166 However, the Discoms have not proposed any specific investment on account of compliance of safety Regulation. The Commission directs the Discoms to file

the details of additional amount, if any, spent over and above O&M expenses towards safety compliance in next True up petition for FY 2020-21 and also furnish separate proposal of additional investment towards safety Compliance, if need be, in ARR for FY 2022-23.

- 3.167 It has been observed by the Commission that in the past Discoms have carried out campaign to identify high risk points and rectify them.
- 3.168 Commission directs that Discoms should carry out such campaign again and furnish the report to the Commission within 45 days of this order. It should be noted that removal of hazardous points is an on-going process and should not be stopped. Therefore, Discoms are directed to organise such campaign regularly and submit report and submit a certificate regarding compliance of CEA Safety Regulations by Discoms to the Commission on half yearly basis.
- 3.169 The Commission reiterates that it is the duty of the Discoms to ensure that safety tools/ devices are made available to each and every worker and training has been imparted to each and every technical worker/officer of the Discom. They should also provide a copy of safety manual in Hindi to each and every workmen and officer. Danger plates should be affixed everywhere, guarding/fencing should be provided wherever it is required and earthing and other protection should be checked /provided as per safety Regulations. Every circle officer should ensure that each line, plant or meter is checked from safety point of view as per the periodicity decided by the Discoms in accordance with safety Regulations. System of line patrolling must be followed vigorously and complaints related to safety must be given overriding priority. If need be, the Discoms may review their staffing pattern and working appropriately.
- 3.170 The envisaged expenditure of FY 2021-22 is lower than the ceiling expenditure worked out as per 2006 Regulations in respect of Discoms. As per the provisions of Electricity Act, 2003, the licensee is under obligation to provide electricity connection to consumers in his area and has to maintain quality of supply and meet standards of performance specified by the Commission. For ensuring this, appropriate investment is imperative.
- 3.171 As per RERC (Investment Approval) Regulation, 2006 Distribution Licensee can spent upto 1% of its Investment Plan on institutional strengthening. The Discoms can accordingly plan for training program & refresher program for all its employees and officers. Discoms should come up with a plan for training for all

of its existing as well as new employees within 3 months of this Order and furnish the status of same quarterly to the Commission.

- 3.172 In previous orders, the Commission has directed the Discoms to submit the fixed assets register. This year JVVNL submitted that FAR of all circles upto 31.03.2019, AVVNL submitted that FAR of Jhunjhunu Circle, Bhilwara Circle, Chittorgarh Circle, office of AO (IA), AVVNL, Ajmer, Pratapgarh Circle, Ajmer City Circle, Ajmer District Circle, Nagaur Circle & Sikar Circle upto 31.03.2020 have been submitted and In respect of the FAR of remaining circles the work is under progress, JdVVNL submitted that FAR of seven circles i.e. Sriganganagar, Hanumangarh, Churu, Bikaner DC, Pali, Sirohi and Jalor till 31.03.2019 have been submitted. However, it has been observed that Discom has not complied completely with Commission directives.
- 3.173 The Commission observed that information of rate of depreciation, amount of depreciation and net fixed assets have not been provided by Discoms, further the information of voltage wise assets have not been provided, the reconciliation of same with scheme wise capitalization have not been provided. The petitioners have not submitted the information of fixed assets register to the full satisfaction of Commission.
- 3.174 Despite repetitive direction for preparation of fixed Assets Register, Discoms could not submit the details required in requisite form, therefore, they are liable for a deduction of Rs. 5.00 Crore for each Discom from their Investment Plan. Further, with regard to fixed assets register, the Discoms should prepare and furnish the fixed assets register indicating details as per directions of the Commission within 6 months of issue of this Order. The Discoms should also prepare and furnish the duly audited scheme wise actual expenditure incurred by them at the time of filing the true up petition for FY 2020-21. In case of non-compliance of above directions, the Commission may take an adverse view and make further deductions. However, in case of submission of FAR to the satisfaction of the Commission no such deduction will be made during true up.
- 3.175 There has been a slippage in investment made during FY 2020-21 and looking to the availability of funds and present scenario it will not be possible for the Discoms to deploy all funds as planned as for 2021-22 the plan is quite higher as compared to previous years.
- 3.176 In view of above actual capital investment made during past years, it is

observed that the capital investment proposed during FY 2021-22 is on higher side, therefore, for FY 2021-22 the Commission has considered 20% higher investment during F.Y. 2021-22 over actuals of F.Y. 2020-21.

- 3.177 In the light of the position discussed above, the Commission considers it appropriate to allow the investment in respect of Discoms as under:

**Table 57: Approved investment plan for FY 2021-22 (Rs. in Crore)**

Sr. No.	Name of schemes Plan Work	Approved for F.Y. 2021-22			
		JVVNL	AVVNL	JdVVNL	TOTAL
1	Approved for FY 2021-22 (120% of actual capital investment of FY 2020-21)	1356	1403	1570	4328
2	Less: Non Compliance regarding Fixed Assets Register	5	5	5	15
<b>3</b>	<b>Net Approved Investment Plan for FY 2021-22</b>	<b>1351</b>	<b>1398</b>	<b>1565</b>	<b>4313</b>

- 3.178 The actual impact of capital expenditure shall be reviewed while doing truing up. Discoms should ensure that capital expenditure incurred during FY 2021-22 are within the above approved investment plan. At the same time the Commission would like to advise management of Discoms to institute adequate Internal Control System and exercise effective control over expenditure being incurred under various schemes and set priorities, so as to ensure that amount being spent is utilized optimally and also look into the need, least cost alternatives, availability of funds and cost benefit analysis before making investment.

## **Capitalization**

### **Petitioners' Submission**

- 3.179 The capital investment and capitalization proposed by Discoms are shown in the table below:

**Table 58: Capital Expenditure and Capitalization proposed for FY 2020-21 and FY 2021-22 (Rs. In Crore)**

FY 2020-21				
Particulars	JVVNL	AVVNL	JdVVNL	Total
Capital Expenditure	1169	1245	1285	3699
Capitalization	1284	2587	1679	5550
FY 2021-22				
Particulars	JVVNL	AVVNL	JdVVNL	Total
Capital Expenditure	2430	1575	3101	7105
Capitalization	2201	1980	2816	6997

### Commission's Analysis

- 3.180 Following the methodology adopted in ARR order for FY 2019-20, the Commission has considered 80% of the proposed capitalization in this ARR order for FY 2020-21 further in view of reduction in capital investment during FY 2021-22 Commission has considered 70% of the proposed capitalization in this ARR order for FY 2021-22 as the capex proposed for FY 2021-22 is disproportionately higher than previous year and has not been allowed as prayed for:

**Table 59: Projected Capitalization approved by the Commission for FY 2020-21 and FY 2021-22 (Rs. In Crore)**

FY 2020-21				
Particulars	JVVNL	AVVNL	JdVVNL	Total
Capitalization	1027	2069	1343	4440
FY 2021-22				
Particulars	JVVNL	AVVNL	JdVVNL	Total
Capitalization	1540	1386	1971	4898

### Operation and maintenance Expenses

#### Petitioners' Submission

- 3.181 Discoms have estimated O&M expenses based on the O&M norms specified in RERC Tariff Regulations, 2019.
- 3.182 The Operation and Maintenance (O&M) expenses comprise of Employee

expenses, Repair and Maintenance (R&M) expenses and Administration and General (A&G) expenses.

- 3.183 The norms for each component of O&M expenses for the distribution business are based on per unit of energy sold and are specified under Regulation 82 of the RERC (Terms and Conditions for Determination of Tariff) Regulations 2019.
- 3.184 The Normative O&M expenses allowed at the commencement of the Control Period (i.e. FY 2019-20) under the aforesaid Tariff Regulations are to be escalated at the rate of 3.63% per annum for each year of the Control Period.
- 3.185 The O&M expenses projected by Discoms for FY 2020-21 and FY 2021-22 have been summarized below:

**Table 60: Operation and Maintenance Expenses for FY 2020-21 and FY 2021-22**

**(Rs. In Crore)**

<b>FY 2020-21</b>				
<b>Particulars</b>	<b>JVVNL</b>	<b>AVVNL</b>	<b>JdVVNL</b>	<b>TOTAL</b>
Employee Costs	1180	833	1064	3076
Administrative & General Costs	160	113	144	417
Repairs & Maintenance Costs	257	182	197	635
Total O&M Costs	1596	1127	1405	4128
Less: Expenses to be Capitalized	305	151	250	706
<b>Net O&amp;M Costs charged to revenue</b>	<b>1291</b>	<b>976</b>	<b>1156</b>	<b>3422</b>
<b>FY 2021-22</b>				
<b>Particulars</b>	<b>JVVNL</b>	<b>AVVNL</b>	<b>JdVVNL</b>	<b>TOTAL</b>
Employee Costs	1354	951	1207	3512
Administrative & General Costs	183	129	163	476
Repairs & Maintenance Costs	275	210	223	708
Total O&M Costs	1812	1290	1593	4695
Less: Expenses to be Capitalized	350	173	283	806
<b>Net O&amp;M Costs charged to revenue</b>	<b>1462</b>	<b>1117</b>	<b>1310</b>	<b>3889</b>

### **Commission's Analysis**

- 3.186 Commission has allowed O&M expenses in accordance with Regulation 82 of RERC Tariff Regulations, 2019.
- 3.187 The per unit norms for each component for first year of the control period FY 2019-20 are as follows:
- Employee expenses-Rs. 0.48/per unit of sale



- A&G expenses-Rs. 0.065/ per unit of sale
- R&M Expenses – R&M Expenses for each year (n) of Control Period:  $k \times \text{GFA}_{n-1} \times (1+ER)$

Where, 'k' is a constant (expressed in %) governing the relationship between R&M expenses and Gross Fixed Assets (GFA) for the (n-1)<sup>th</sup> year and shall be considered as 1.2%; 'GFA' is the average value of the Gross Fixed Assets of the (n-1)<sup>th</sup> year;

'ER' means the escalation rate as specified in Regulation 24; 'n' is the year for which R&M expenses is to be determined.

3.188 The Normative O&M expenses allowed at the commencement of the Control Period (i.e. FY 2019-20) under the aforesaid Tariff Regulations are to be escalated at the rate of 3.63% per annum for each year of the Control Period.

3.189 In accordance with view taken by the Commission in the true up Order the Commission has not considered O&M expenses on sales in DF area and also accounted for revenue of DF separately in this Order. Out of the total sales considered for Discoms, the sale for Distribution franchisee of JVVNL of 1099 MUs, AVVNL of 463 MUs and JdVVNL of 654 MUs for FY 2020-21 and JVVNL of 1284 MUs, AVVNL of 541 MUs and JdVVNL of 714 MUs for FY 2021-22 respectively. Commission has considered the sales (excluding sale by DF) allowed for FY 2020-21 and FY 2021-22 for projecting normative O&M expenses.

3.190 Capitalized O&M expenses have been considered in the same ratio as projected by Discoms.

3.191 O&M expenses approved by the Commission for Discoms for FY 2020-21 and FY 2021-22 have been summarized below:

**Table 61: Operation and Maintenance Expenses approved for FY 2020-21 and FY 2021-22 (Rs. In Crore)**

FY 2020-21				
Particulars	JVVNL	AVVNL	JdVVNL	TOTAL
Employee Costs	1181	874	1038	3093
Administrative & General Costs	160	118	141	419
Repairs & Maintenance Costs	191	125	126	441
Total O&M Costs	1531	1117	1304	3953
Less: Expenses to be Capitalized	293	150	232	674
<b>Net O&amp;M Costs charged to revenue</b>	<b>1238</b>	<b>967</b>	<b>1072</b>	<b>3278</b>

FY 2021-22				
Particulars	JVVNL	AVVNL	JdVVNL	TOTAL
Employee Costs	1304	943	1127	3374
Administrative & General Costs	177	128	153	457
Repairs & Maintenance Costs	197	139	138	475
Total O&M Costs	1678	1210	1418	4306
Less: Expenses to be Capitalized	324	162	252	738
<b>Net O&amp;M Costs charged to revenue</b>	<b>1354</b>	<b>1048</b>	<b>1166</b>	<b>3568</b>

### Terminal Benefit Expenses

#### Petitioners' Submission

- 3.192 For determination of terminal benefits liability, the Petitioner has adopted the guidelines specified under AS-15 (Employee benefit). The guidance of implementing AS-15 states that the benefit involving employer established provident funds, which require interest shortfall to be provided, are to be considered as defined benefit plans. In accordance with the provisions of the AS-15, the company has provided for the shortfall in the terminal benefits in respect to pension and gratuity each year.
- 3.193 Discoms have estimated the contributions based on the average of the last 4 years i.e. FY2016-17 to FY2019-20 assuming a nominal hike of 3% that will be made towards terminal benefits for FY 2020-21 and FY 2021-22.
- 3.194 Terminal benefit liability submitted by the Discoms for FY 2020-21 and FY 2021-22 has been tabulated below:

**Table 62: Terminal Benefit Expenses for FY 2020-21 and FY 2021-22 (Rs. In Crore)**

FY 2020-21				
Particulars	JVVNL	AVVNL	JdVVNL	TOTAL
Terminal Benefit Expense	635	555	555	1745
FY 2021-22				
Particulars	JVVNL	AVVNL	JdVVNL	TOTAL
Terminal Benefit Expense	635	555	555	1745

### Commission's Analysis

- 3.195 The Commission has considered terminal benefit expenses for FY 2020-21 and FY 2021-22 as submitted by Discoms. However, the Commission shall allow the payment made towards actuarial valuation liability in the true up of FY 2020-21 and FY 2021-22 only to the extent of funds actually transferred to the designated Fund.

**Table 63: Terminal Benefit Expenses for FY 2020-21 and FY 2021-22 (Rs. In Crore)**

<b>Approved</b>				
<b>FY 2020-21</b>				
<b>Particulars</b>	<b>JVVNL</b>	<b>AVVNL</b>	<b>JdVVNL</b>	<b>TOTAL</b>
Terminal Benefit Expense	635	555	555	1745
<b>FY 2021-22</b>				
<b>Particulars</b>	<b>JVVNL</b>	<b>AVVNL</b>	<b>JdVVNL</b>	<b>TOTAL</b>
Terminal Benefit Expense	635	555	555	1745

- 3.196 It is observed by the Commission that Discoms are depositing the amount towards terminal benefit significantly lower than the amount approved by the Commission. This amount is being allowed to Discoms to meet its future liabilities in a planned manner. The Commission has time and again expresses its serious concern regarding the continuous default in depositing the requisite amount by Discoms. Accordingly, Commission directs the Discoms that they must deposit the amount equivalent to approved by the Commission in future and submit its compliance alongwith next ARR/Tariff petition and also make a plan to meet their liability towards terminal benefit.

### **Interest on Loans and Finance Charges & Lease rental**

#### **Petitioners' Submission**

- 3.197 To compute the interest on loan, Discoms have considered the Closing balance of normative loan for FY 2019-20 as the opening loan balance for FY 2020-21. Based on the projected capital investments and capitalizations for the MYT period, the total additions to Gross Fixed Assets (GFA) has been considered. Further, total capitalization during the year has been reduced by the amount of capitalization done through consumer contribution projected to be received during the year. Discoms mentioned that the addition in consumer contribution results in addition to both CWIP and GFA. As such proportionate consumer contribution has been used while computing capitalization through consumer contribution. 30% of the remaining capitalization has been considered to be funded through equity and the balance amount has been considered as addition to long term loans during the year. The loan repayment has been considered in accordance with Regulation 21 of the RERC Tariff Regulations, 2019 which caps deemed repayments to the extent of depreciation charged

for the year. The closing normative loan is considered after deducting repayment for FY 2020-21 and FY 2021-22.

- 3.198 The interest on long term loans is estimated on the basis of actual weighted average interest rate for long term loans and applied on the average of normative loans (average of opening and closing normative loan) which works out to be 10.45%, 10.59% and 10.49% for JVVNL, AVVNL and JdVVNL respectively.
- 3.199 The Discoms have considered interest on security deposit for FY 2020-21 and FY 2021-22 on the basis of average of actual security deposit per consumer in the previous two years as per the audited accounts and the projected growth in number of consumers. The interest rate has been considered equivalent to RBI Bank Rate as on 1<sup>st</sup> April 2019, which is in accordance with the RERC norms.
- 3.200 Discoms have projected the finance charges or other borrowing cost for the MYT period have been estimated to increase by 5% per annum.
- 3.201 Impact of COVID
- a) The Reserve Bank of India, in order to provide a relaxation in terms of loans repayments due to the economic distress faced by the nation's economy owing to COVID pandemic, had allowed a moratorium for payment of loans for six months from March 2020 to August 2020.
  - b) Looking at the severe dip in demand from subsidizing consumers (Non-Domestic and Industrial) owing to the lockdown imposed by the State and the Central Government and severe cash crunch faced by the Discoms, the moratorium on debt payments provided a temporary relief to Discoms. However, it is essential to highlight that the interest cost on the outstanding principal continued to accrue during the period of moratorium.
  - c) The Discoms shall have to bear the burden of the accrued interest for the period of April to August in FY 2020-21. This shall add to the financial burden of the petitioner.
  - d) Thus, the accrued interest for 5 months in the FY 2020-21 has been considered in the ARR by the petitioner.
  - e) It is requested that the Commission may allow the addition in interest cost due to moratorium over and above the prescribed norms under RERC (Terms and Conditions for Determination of Tariff) Regulations 2019 by the virtue of powers to remove difficulties as per section 95 of the said regulations.

### **Interest on unfunded revenue gap for past years**

- 3.202 Discoms submitted that in the ARR Order for FY 2019-20 dated 06.02.2020, the Commission had approved a revenue gap for JVVNL, AVVNL and JdVVNL of Rs 1166 Crore, Rs. 1219 Crore and Rs. 3296 Crore respectively for FY 2019-20 at existing tariffs. The provisional additional revenue due to tariff revision for two months (February and March 2020) in FY 2019-20 is Rs. 291 Crore, Rs. 208 Crore and Rs. 293 Crore For JVVNL, AVVNL and JdVVNL respectively. Thus, the total effective unfunded gap for FY 2019-20 stands at Rs. 875 Crore, 1011 Crore And 3003 Crore for JVVNL, AVVNL and JdVVNL respectively.
- 3.203 The average unfunded gap for the MYT period is arrived at by considering the opening balance for FY 2019-20, additions during the year (as provided in the previous para) and closing balance. The same is projected for the entire MYT period.
- 3.204 In order to calculate the interest on unfunded revenue gap, the Discoms have considered the weighted average rate of interest as per the audited accounts for FY 2018-19 available with the Discoms.

### **Interest on Loans take-over by GoR under UDAY**

- 3.205 Discoms had claimed interest charged by GoR under UDAY scheme in the ARR and tariff petition for FY 2019-20. It was proposed that the total interest charged by GoR shall be claimed through ARR petitions in a staggered manner over a period of 5 years from FY 2019-20 to FY 2023-24 in order to not burden the consumers with a tariff shock.
- 3.206 The Commission, in the Tariff Order for FY 2019-20 dated 6<sup>th</sup> February 2020, had approved the total interest on UDAY for the JVVNL, AVVNL and JdVVNL as Rs 2599 Cr, 2690 Cr and 2440 Cr respectively to be recovered over a period of 5 years in equal installments viz. Rs 520 Cr, 538 Cr and 488 Cr for JVVNL, AVVNL and JdVVNL respectively to be recovered each year till FY 2023-24.
- 3.207 Accordingly, the interest charges and finance charges for FY 2020-21 and FY 2021-22 have been summarized in the table below:

**Table 64: Interest and Financing Charges for FY 2020-21****(Rs. In Crore)**

<b>FY 2020-21</b>				
<b>Particulars</b>	<b>JVVNL</b>	<b>AVVNL</b>	<b>JdVVNL</b>	<b>Total</b>
Opening balance of LTL (A)	5073	5445	5792	16311
Capitalization (B)	1284	2587	1679	5550
Capital expenditure financed by Equity (C)	246	710	297	1253
Capital expenditure financed by Consumer Contribution and grants (D)	464	218	691	1373
Receipt of LTL for Capital expenditure E=(B-C-D)	574	1658	692	2924
Principal Repayment(F)	1071	732	903	2706
Closing balance of LTL, G=(A+E-F)	4577	6371	5582	16529
Average LTL, H=(A+G)/2	4825	5908	5687	16420
Average Interest rate of LTL (%) (I)	10.45%	10.59%	10.49%	
Interest Charges on LTL, J=(HXI)	504	625	597	1726
Interest on Security Deposit (K)	97	57	45	199
Finance Charges & Lease Rental (L)	152	123	136	410
Additional Interest accrued	210	261	249	719
Gross Interest Charges, M=(J+K+L)	<b>963</b>	<b>1066</b>	<b>1026</b>	<b>3054</b>
Interest Expenses Capitalized (N)	26	136	19	181
Total Interest & Financing Charges (O)	<b>936</b>	<b>930</b>	<b>1007</b>	<b>2874</b>
Average unfunded Gap up to 2020-21	<b>18361</b>	<b>13318</b>	<b>20612</b>	<b>52291</b>
Interest on Carry Forward Revenue Gap, Q=(PXI)	<b>1919</b>	<b>1410</b>	<b>2162</b>	<b>5491</b>
<b>Interest on loan taken over UDAY, X</b>	<b>520</b>	<b>538</b>	<b>488</b>	<b>1546</b>
Total Interest & Financing Charges after interest on carry forward Gap (O+Q+X)	<b>3376</b>	<b>2878</b>	<b>3657</b>	<b>9911</b>

**Table 65: Interest and Financing Charges for FY 2021-22****(Rs. In Crore)**

<b>FY 2021-22</b>				
<b>Particulars</b>	<b>JVVNL</b>	<b>AVVNL</b>	<b>JdVVNL</b>	<b>Total</b>
Opening balance of LTL (A)	4577	6371	5582	16529
Capitalization (B)	2201	1980	2816	6997
Capital expenditure financed by Equity (C)	508	519	609	1636
Capital expenditure financed by Consumer Contribution and grants (D)	508	249	786	1543
Receipt of LTL for Capital expenditure E=(B-C-D)	1185	1212	1421	3818
Principal Repayment(F)	1155	781	1016	2953
Closing balance of LTL, G=(A+E-F)	4606	6801	5987	17394
Average LTL, H=(A+G)/2	4591	6586	5784	16962
Average Interest rate of LTL (%) (I)	10.45%	10.59%	10.49%	
Interest Charges on LTL, J=(HXI)	480	697	607	1784
Interest on Security Deposit (K)	102	60	49	211
Finance Charges & Lease Rental (L)	159	129	142	431
Gross Interest Charges, M=(J+K+L)	<b>742</b>	<b>887</b>	<b>798</b>	<b>2426</b>
Interest Expenses Capitalized (N)	54	172	46	272
Total Interest & Financing Charges (O)	<b>687</b>	<b>715</b>	<b>752</b>	<b>2155</b>
Average unfunded Gap up to 2021-22	<b>18361</b>	<b>13318</b>	<b>20612</b>	<b>52291</b>
Interest on Carry Forward Revenue Gap, Q=(PXI)	<b>1919</b>	<b>1410</b>	<b>2162</b>	<b>5491</b>
<b>Interest on loan taken over UDAY, X</b>	<b>520</b>	<b>538</b>	<b>488</b>	<b>1546</b>
Total Interest & Financing Charges after interest on carry forward Gap (O+Q+X)	<b>3126</b>	<b>2663</b>	<b>3402</b>	<b>9192</b>

**Commission's Analysis**

3.208 The interest and finance charges have been calculated by the Commission considering the following:

- The closing balance of long-term loans for FY 2019-20 in the true up order has been considered by the Commission as the opening balance for FY 2020-21.

- b) Capitalization for FY 2020-21 & FY 2021-22 has been considered as discussed in foregoing paragraphs. Since only 80% & 70% capitalization has been allowed by the Commission, consumer contribution and grants have also been taken to the extent of 80% & 70% of the total projection by the Discoms.
- c) The long-term loans required for capitalization during the FY 2020-21 and FY 2021-22 have been reduced by the amount of consumer contribution, capital grants and equity projected for the year.
- d) Repayment for FY 2020-21 and FY 2021-22 has been considered equal to the depreciation allowed by the Commission.
- e) Unfunded Gap- For computing the carrying cost, the unfunded gap upto FY 2019-20 has been considered as per true up order dated 07.09.2021.
- f) The weighted average interest rate has been considered at 10.45%, 10.59% and 10.49% as claimed by JVVNL, AVVNL and JdVVNL respectively.
- g) Finance charges and interest on security deposit has been considered as submitted by Discoms.
- h) Recovery of interest on Loan taken over under UDAY: The Commission has considered the payment of the accrued interest in five yearly instalments as allowed vide order dated 06.02.2020 and accordingly considered the 1/5<sup>th</sup> of the amount for FY 2020-21 and FY 2021-22 as claimed by Discoms.

3.209 **Grant on release of New Agriculture Connection under RE Works:** It is observed that during FY 2020-21, JVVNL, AVVNL and JdVVNL has released 8824, 25940 & 17913 no of new agriculture connections respectively and during FY 2021-22, each Discom has indicated release of 25000 no of new agriculture connections in their ARR. It is brought to the notice of Commission that 50% of difference between actual expenditure incurred on release of new connection and amount deposited by consumer shall be given by GoR to Discoms. The Commission has considered it as a grant as it is a part of consumer contribution which would have to be borne by consumer, if Government had not provided aforesaid 50% grant support.

3.210 The JVVNL & JdVVNL submitted that an average expenses of Rs. 296000 per connection and consumer contribution of Rs. 43000 per connection. The 50% of the difference of per connection expenses and consumer contribution of the



above shall be Rs. 126500 per connection, whereas the difference figure in case of AVVNL is Rs. 100000 per connection during FY 2019-20. Based on this the total grant from government towards release of new agriculture connections during the FY 2020-21 is worked out to be Rs. 111.62 Crore, Rs. 259.40 Crore and Rs. 226.60 Crore for JVVNL, AVVNL and JdVVNL respectively. Further, during FY 2021-22 the grant works out to be Rs. 316.25 Crore, Rs. 250 Crore and Rs. 316.25 Crore for JVVNL, AVVNL and JdVVNL respectively.

- 3.211 The Commission has considered this amount as additional grant, Discoms may obtain this amount from the State Government.
- 3.212 The Commission in absence of detailed information has worked out the figure of grant on normative basis, in case of any discrepancy; Discom may come with actual figure of applicable grant and request to recalculate the impact of grant during true up petition of respective year.
- 3.213 The Discoms are directed to renegotiate with banks and financial institutions for availing the loan at a lower interest rate to possible extent.
- 3.214 Based on the above, the approved interest and finance charges (with respect to the assets capitalized) approved for FY 2020-21 and FY 2021-22 for the three Discoms have been summarized in the tables below:

**Table 66: Interest and Finance Charges approved by the Commission for FY 2020-21**  
(Rs. In Crore)

FY 2020-21				
Particulars	JVVNL	AVVNL	JdVVNL	Total
Opening balance of LTL (A)	6852	3338	4099	14289
Capitalization (B)	1027	2069	1343	4440
Capital expenditure financed by Equity (C)	170	501	179	850
Capital expenditure financed by Consumer Contribution and grants (D)	460	399	746	1605
Receipt of LTL for Capital expenditure E=(B-C-D)	397	1169	418	1984
Principal Repayment(F)	772	507	565	1844
Closing balance of LTL, G=(A+E-F)	6478	4000	3952	14430
Average LTL, H=(A+G)/2	6665	3669	4026	14360
Average Interest rate of LTL (%) (I)	10.45%	10.59%	10.49%	
Interest Charges on LTL, J=(HXI)	697	389	422	1507
Interest on Security Deposit (K)	97	57	45	199
Finance Charges & Lease Rental (L)	152	123	136	411
Additional Interest accrued	0	0	0	0
Gross Interest Charges, M=(J+K+L)	946	569	603	2117
Interest Expenses Capitalized (N)	26	72	11	109
Total Interest & Financing Charges (O)	920	496	592	2008
Unfunded Gap up to 2019-20	16742	12539	17389	46670
Interest on Carry Forward Revenue Gap, Q=(PXI)	1750	1328	1824	4902
Interest on loan taken over UDAY, X	520	538	488	1546
<b>Total Interest &amp; Financing Charges after interest on carry forward Gap (O+Q+X)</b>	<b>3189</b>	<b>2362</b>	<b>2904</b>	<b>8456</b>

**Table 67: Interest and Finance Charges approved by the Commission for FY 2021-22**  
(Rs. In Crore)

FY 2021-22				
Particulars	JVVNL	AVVNL	JdVVNL	Total
Opening balance of LTL (A)	6478	4000	3952	14430
Capitalization (B)	1540	1386	1971	4898
Capital expenditure financed by Equity (C)	289	308	355	951
Capital expenditure financed by Consumer Contribution and grants (D)	577	361	789	1727
Receipt of LTL for Capital expenditure E=(B-C-D)	674	718	828	2220
Principal Repayment(F)	809	567	611	1987
Closing balance of LTL, G=(A+E-F)	6343	4151	4169	14663
Average LTL, H=(A+G)/2	6410	4076	4060	14547
Average Interest rate of LTL (%) (I)	10.45%	10.59%	10.49%	
Interest Charges on LTL, J=(HXI)	670	432	426	1527
Interest on Security Deposit (K)	102	60	49	211
Finance Charges & Lease Rental (L)	159	129	142	430
Gross Interest Charges, M=(J+K+L)	931	621	617	2168
Interest Expenses Capitalized (N)	68	120	35	223
Total Interest & Financing Charges (O)	863	500	582	1945
Unfunded Gap up to 2020-21	15888	12277	18358	46523
Interest on Carry Forward Revenue Gap, Q=(PXI)	1660	1300	1926	4886
Interest on loan taken over UDAY, X	520	538	488	1546
<b>Total Interest &amp; Financing Charges after interest on carry forward Gap (O+Q+X)</b>	<b>3043</b>	<b>2338</b>	<b>2995</b>	<b>8377</b>

## Bad Debts

### Petitioners' Submission

- 3.215 Discoms submitted that there has been a major disruption in economic activity due to COVID and expects a severe dip in income level of consumers as well as reduced cash flow in terms of electricity bill payments. The economic activity in the state has already witnessed slowdown and this situation of distress is expected to continue for the entire financial year (FY-21).
- 3.216 For FY-21, the Discoms have assumed that 5% of total revenue from sale of power shall turn into bad debts. Accordingly, considering the financial distress

owing to COVID, the Discoms have claimed bad debts and increase in interest cost due to such bad debts in FY-21.

### Commission's Analysis

- 3.217 The Commission has not considered the submission of bad debts, and the actual impact of bad debts, if any, will be considered in the true up petition for FY 2020-21.

### Interest on Working Capital

#### Petitioners' Submission

- 3.218 Discoms estimated their working capital requirement for FY 2020-21 and FY 2021-22 as per Regulation 27(1) (3) of the RERC Tariff Regulations, 2019 and the same has been tabulated below:

**Table 68: Interest on Working Capital for FY 2020-21 and FY 2021-22 (Rs. In Crore)**

FY 2020-21				
Particulars	JVVNL	AVVNL	JdVVNL	Total
O&M expenses (as per norms)	108	81	96	285
Maintenance Spare (as per norms)	194	146	173	513
Receivables (as per norms)	3,008	2,060	2,377	7,444
<b>Less:</b> Security deposit of Consumers	1,416	1,131	757	3,304
Bad Debts	481	330	380	1,191
Total Working Capital	2,374	1,486	2,269	6,130
Interest Rate (%)	11.25%	11.25%	11.25%	11.25%
<b>Interest on Working Capital</b>	267	167	255	690
FY 2021-22				
Description	JVVNL	AVVNL	JdVVNL	Total
O&M expenses (as per norms)	122	93	109	324
Maintenance Spare (as per norms)	219	168	197	583
Receivables (as per norms)	2,642	1,807	2,078	6,527
<b>Less:</b>				
Security deposit of Consumers	1,499	1,205	811	3,515
Total Working Capital	1,484	863	1,572	3,920
Interest Rate (%)	11.25%	11.25%	11.25%	11.25%
<b>Interest on Working Capital</b>	167	97	177	441

- 3.219 Discoms have further submitted that it has considered the rate of interest as per the applicable SBI rate for first six months of FY 2018-19 plus 300 basis points, which works out to be 11.25%.

### 3.220 **Impact of COVID**

- a) It is pertinent to mention that the Discoms have allowed several relief measures to consumers pertaining to COVID pandemic, as described in para 2.4 and 2.5 of the original petition.
- b) Due to the relief of deferral in payments of bills and rebate on payment of bills till 30<sup>th</sup> June 2020, there shall be a working capital crunch for the first three months in FY-21 (from April to June).
- c) It is essential to highlight that the normative working capital amount shall not be sufficient to cater to the needs of the Discoms, especially for the first quarter of FY 2020-21 in which the impact of economic slowdown due to COVID is severe.
- d) Discoms have taken the working capital requirement for the first quarter of FY 2020-21 as 3 months of receivables in place of normative 1.5 months of receivables. For the rest of the year (July 2020 to March 2021), the working capital requirement as per norms is considered.

3.221 While computing the working capital, the Discoms have claimed the amount of bad debts also.

### **Commission's Analysis**

3.222 The normative working capital requirement along with interest thereon has been calculated as per regulation 27(1)(3) of RERC Tariff Regulations, 2019, by the Commission as under:

- a) Operation and Maintenance expenses for one month; **plus**
- b) Maintenance spares @15% of O&M expenses as per Regulation 82 of the RERC Tariff Regulations 2019; **plus**
- c) Receivables equivalent to one and a half-months billing of consumers; **Less**
- d) The security deposits as submitted by the Discoms have been considered;
- e) For the purpose of calculating interest on working capital, the Commission has considered 300 basis points higher than average base rate prevalent during first six months of the previous year to the relevant year as per RERC Tariff Regulations, 2019. The rate of interest thus works out to 11.39% and 10.14% for FY 2020-21 and FY 2021-22 respectively.

3.223 Apart from above working capital requirement, Discoms submitted that due to the relief of deferral in payments of bills and rebate on payment of bills till 30<sup>th</sup> June 2020, there shall be a working capital crunch for the first three months in FY 2020-21 (from April to June). The normative working capital amount shall not be

sufficient to cater to the needs of the Discoms, especially for the first quarter of FY 2020-21 in which the impact of economic slowdown due to COVID is severe. Discoms have taken the working capital requirement for the first quarter of FY 2020-21 as 3 months of receivables in place of normative 1.5 months of receivables. For the rest of the year (July 2020 to March 2021), the working capital requirement as per norms is considered.

- 3.224 The Commission has considered the above submission of Discoms and accordingly worked out the additional working requirement for April-June 2020, while calculating interest on working capital. While working out the working capital the Commission has not considered any bad debts.
- 3.225 In current scenario Discom's billing period is on Monthly basis but according to GoR announcement in the current budget for BPL, domestic consumers having consumption upto 150 units and agriculture consumers, billing system would be based on bi-monthly. Thus, Discoms would be requiring additional working capital. To meet such crunch of working capital, Discoms are directed to claim the interest on such additional working capital requirement from the GoR. The Commission will not pass on the burden of additional interest liability in this regard.
- 3.226 Accordingly, the interest on working capital considered by the Commission is as under:

**Table 69: Interest on Working Capital approved by the Commission for FY 2020-21**

(Rs. In Crore)

FY 2020-21				
Description	JVVNL	AVVNL	JdVVNL	Total
O&M expenses (as per norms)	103	81	89	273
Maintenance Spare (as per norms)	186	145	161	492
Receivables	3000	2192	2615	7808
<b>Less:</b>				
Security deposit of Consumers	1416	1131	757	3304
Bad Debts				
<b>Total Working Capital</b>	<b>1873</b>	<b>1287</b>	<b>2108</b>	<b>5269</b>
Interest Rate (%)	11.39%	11.39%	11.39%	11.39%
<b>Interest on Working Capital</b>	<b>213</b>	<b>147</b>	<b>240</b>	<b>600</b>

**Table 70: Interest on Working Capital approved by the Commission for FY 2021-22**  
(Rs. In Crore)

FY 2021-22				
Description	JVVNL	AVVNL	JdVVNL	Total
O&M expenses (as per norms)	113	87	97	297
Maintenance Spare (as per norms)	203	157	175	535
Receivables (as per norms)	2508	1816	2184	6509
<b>Less:</b>				
Security deposit of Consumers	1499	1205	811	3515
<b>Total Working Capital</b>	<b>1325</b>	<b>856</b>	<b>1645</b>	<b>3826</b>
Interest Rate (%)	10.14%	10.14%	10.14%	10.14%
<b>Interest on Working Capital</b>	<b>134</b>	<b>87</b>	<b>167</b>	<b>388</b>

## Depreciation

### Petitioners' Submission

- 3.227 The Discoms have submitted that for computation of depreciation they have considered the specified rates as provided in the Regulation 22 of RERC (Terms and Condition for Determination of Tariff) Regulations, 2019 in Annexure-I based on Straight Line Method (SLM).
- 3.228 The depreciation has been determined by applying applicable depreciation rates on the average balance of opening and closing Gross Fixed Assets.
- 3.229 The Discoms have submitted the following Depreciation for FY 2020-21 and FY 2021-22:

**Table 71: Depreciation for FY 2020-21 to FY 2021-22** (Rs. In Crore)

FY 2020-21				
Particulars	JVVNL	AVVNL	JdVVNL	Total
Depreciation	1071	732	903	2706
FY 2021-22				
Particulars	JVVNL	AVVNL	JdVVNL	Total
Depreciation	1155	781	1016	2953

### Commission's Analysis

- 3.230 Commission has considered depreciation based on the following consideration:

- The closing balance of depreciable assets allowed in the true up order for FY 2019-20 has been considered by the Commission as the opening balance for FY 2020-21.
- Commission has considered 80% & 70% of the amount proposed by Discoms as capitalization and capital expenditure financed by consumer contribution & grants during FY 2020-21 & FY 2021-22 respectively.
- Depreciable assets for FY 2020-21 & FY 2021-22 have been reduced by the amount of consumer contribution and capital grants projected for the year.
- Average depreciation rate has been considered as per true up order for FY 2019-20, in which average depreciation rate are approved at 4.86%, 4.52% and 5.10% for JVVNL, AVVNL and JdVVNL respectively.

**Fixed Asset Register:** with regard to FAR, JVVNL submitted the FAR of all circles upto 31.03.2019 have been submitted, AVVNL submitted that FAR of Jhunjhunu Circle, Bhilwara Circle, Chittorgarh Circle, office of AO (IA), AVVNL, Ajmer, Pratapgarh Circle, Ajmer City Circle, Ajmer District Circle, Nagaur Circle & Sikar Circle upto 31.03.2020 have been submitted and In respect of the FAR of remaining circles the work is under progress, JdVVNL submitted that FAR of seven circles i.e. Sriganganagar, Hanumangarh, Churu, Bikaner DC, Pali, Sirohi and Jalor till 31.03.2019 have been submitted. However, it has been observed that Discoms has not complied completely with Commission directives.

3.231 With regard to depreciation, Regulation 22 (4) of RERC Tariff Regulations 2019 provides that:

*“(4) Depreciation shall be calculated annually based on Straight Line Method (SLM) and at rates specified in Annexure-I to these Regulations for the assets of the Generating Station, transmission system and distribution system*

*Provided that the remaining depreciable value as on 31st March of the year closing after a period of 12 years from date of commercial operation shall be spread over the balance useful life of the assets.”*

3.232 Further, with regard to Fixed assets, Regulation 86 (2) of RERC Tariff Regulations 2019 provides that:

*“(2) Wheeling charges so worked out shall be apportioned supply voltage-wise on the basis of fixed asset at each voltage level, as submitted by the Distribution Licensee:”*



- 3.233 This year all Discoms have submitted the FAR, Commission appreciate the efforts of Discoms. However, the FAR does not serve the purpose regarding the information required under the Regulations and requires more efforts at the level of Discoms.
- 3.234 From the reading of above Regulations and the submission of Discoms, the Commission observed that information of rate of depreciation, amount of depreciation and net fixed assets have not been provided by Discoms, further the information of voltage wise assets have not been provided, the reconciliation of same with scheme wise capitalization have not been provided. The petitioners have not submitted the information of fixed assets register to the full satisfaction of Commission.
- 3.235 In order dated 07.09.2021, Commission has disallowed 10% of depreciation on account of non compliance of Commission directives for preparation of Fixed Assets Register. However, during the present determination of ARR the Commission has not deducted such amount.
- 3.236 Discom should furnish the complete updated Fixed Asset Register for all circles in CD along with hard copy with executive summary duly reconciled with audited accounts with true up petition of FY 2021-22, showing details required as per RERC Tariff Regulations failing which the Commission may make suitable deduction in allowable depreciation.
- 3.237 Depreciation allowed by the Commission for each of the three Discoms have been tabulated below:

**Table 72: Depreciation allowed by the Commission for FY 2020-21 (Rs. In Cr.)**

FY 2020-21				
Particulars	JVVNL	AVVNL	JdVVNL	Total
Depreciable Assets at the beginning of the Year (A)	15596	10371	10786	36753
Capitalization during the year (B)	1027	2069	1343	4440
less: Consumer Contribution and Capital Grants during the year (C)	460	399	746	1605
Depreciable Assets added during the Year D=(B-C)	567	1670	597	2835
Depreciable Assets at the end of the Year (E= (A+D))	16163	12042	11383	39587
Average Depreciable Assets during the Year (F=(A+E)/2)	15879	11206	11085	38170
Average Depreciation Rate (G)	4.86%	4.52%	5.10%	
<b>Depreciation (FXG)</b>	<b>772</b>	<b>507</b>	<b>565</b>	<b>1844</b>

**Table 73: Depreciation allowed by the Commission for FY 2021-22****(Rs. In Cr.)**

<b>FY 2021-22</b>				
<b>Particulars</b>	<b>JVVNL</b>	<b>AVVNL</b>	<b>JdVVNL</b>	<b>Total</b>
Depreciable Assets at the beginning of the Year (A)	16163	12042	11383	39587
Capitalization during the year (B)	1540	1386	1971	4898
less: Consumer Contribution and Capital Grants during the year (C)	577	361	789	1727
Depreciable Assets added during the Year D=(B-C)	963	1025	1182	3171
Depreciable Assets at the end of the Year (E= (A+D))	17126	13067	12565	42758
Average Depreciable Assets during the Year (F=(A+E)/2)	16644	12554	11974	41173
Average Depreciation Rate (G)	4.86%	4.52%	5.10%	
<b>Depreciation (FXG)</b>	<b>809</b>	<b>567</b>	<b>611</b>	<b>1987</b>

## Insurance Expenses

### Petitioners' Submission

- 3.238 Discoms have estimated the Insurance expenses for FY 2020-21 and FY 2021-22 on the basis of net fixed assets subject to the ceiling specified in Regulation 25 of the RERC Tariff Regulations, 2019.

**Table 74: Insurance Expenses- Discoms submission for FY 2020-21 and FY 2021-22****(Rs. in Cr.)**

<b>FY 2020-21</b>				
<b>Particulars</b>	<b>JVVNL</b>	<b>AVVNL</b>	<b>JdVVNL</b>	<b>Total</b>
Insurance Expenses	30	23	24	77
<b>FY 2021-22</b>				
<b>Particulars</b>	<b>JVVNL</b>	<b>AVVNL</b>	<b>JdVVNL</b>	<b>Total</b>
Insurance Expenses	32	26	27	84

### Commission's Analysis

- 3.239 Commission has allowed Insurance expenses in accordance with Regulation 25 of RERC Tariff Regulations, 2019.
- 3.240 To compute the insurance expenses on average Net Fixed Assets (NFA) as per aforesaid regulation, the Commission has considered the following:
- The closing balance of Net Fixed Assets allowed in true up order for FY 2019-20 is considered as opening balance for FY 2020-21.

- ii. The capitalization as discussed in above Para's have been added and depreciation for FY 2020-21 & FY 2021-22 has been deducted from the above opening balance to arrive at closing balance.

3.241 Accordingly, the following insurance expenses have been computed on the average NFA.

**Table 75: Insurance Expenses Approved for FY 2020-21 and FY 2021-22**

(Rs. in Crore)

FY 2020-21				
Particulars	JVVNL	AVVNL	JdVVNL	Total
Insurance Expenses	30	21	21	73
FY 2021-22				
Particulars	JVVNL	AVVNL	JdVVNL	Total
Insurance Expenses	32	24	23	78

## Return on Equity

### Petitioners' Submission

3.242 Discoms submitted that as per Regulation 20 of Rajasthan Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2019"

(1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with Regulation 19.

(2) Return on equity shall be computed at the rate of 14% for Transmission Licensees and SLDC, 15% for Generating Companies and 16% for Distribution Licensees".

Hence, the Discoms are eligible for claiming Return on Equity in their ARR @16% of average equity during the year.

3.243 In accordance with the stated regulation, the Discoms had claimed Return on Equity (RoE) in the Tariff Petition for FY 2019-20 for the first time with the aim of improving its financial position and investing in new initiatives. In order to not burden the consumers, a nominal RoE @ 5% was proposed.

However, RERC, in its Tariff Order dated 06.02.2020 has disallowed the claim of the Discoms, stating that:

"It is observed that Discoms have claimed RoE at 5% of Equity base. However, Discoms have not furnished the approval of government for claiming the Return on Equity, therefore, the Commission has not allowed Return on Equity for FY 2019-20."

- 3.244 Discoms submitted that during the times of economic distress, it is in the interest of stakeholders that return on equity should not be claimed and therefore, Discoms are not claiming Return on Equity .

### **Commission's Analysis**

- 3.245 It is observed that Discoms have not claimed RoE on Equity base. Therefore, the Commission has not allowed Return on Equity for FY 2020-21 and FY 2021-22.
- 3.246 It is further observed that looking to the COVID distress, recently, Government of Rajasthan has directed RVUN to return the Return on Equity to the Discoms for FY 2019-20 and FY 2020-21. Accordingly, the Commission has reduced the ARR by the RoE to be recoverable from RVUN of Rs. 857 Crore & Rs. 955 Crore for FY 2019-20 and FY 2020-21 respectively during ARR of FY 2020-21.
- 3.247 Further, in view of direction of GoR given vide letter dated 16.11.2021 regarding withdrawal of permission to RVUN to charge RoE for 2021-22, the Commission has also reduced the ARR of FY 2021-22 by RoE of RVUN for FY 2021-22 of Rs. 1166 Crore.

### **Non-Tariff Income and Wheeling Charges**

#### **Petitioners' Submission**

- 3.248 Discoms submitted that Non-tariff income for FY 2019-20 is considered as per audited accounts. The non-tariff income for the FY 2020-21 and FY 2021-22 has been projected as per the norms in RERC (Terms and Conditions for Determination of Tariff) Regulations 2019.
- 3.249 Income from wheeling charges, cross subsidy surcharge and additional surcharge have been considered based on audited accounts. For FY 2020-21 and FY 2021-22, the same cost parameters have been projected and summarised below:

**Table 76: Non-Tariff Income for FY 2020-21 and FY 2021-22 (Rs. In Crore)**

FY 2020-21				
Particulars	JVVNL	AVVNL	JdVVNL	Total
Interest and other income from investments and deposits	3	2	4	9
Income from sale of scrap	6	64	8	77
Income from deferment of Govt. Grants & Subsidies	244	205	0	449
Rebate for early payment	108	6	0	114
Income from rent on land/building	0	0	15	15
Other miscellaneous receipts	165	51	433	650
<b>Total</b>	<b>527</b>	<b>328</b>	<b>460</b>	<b>1314</b>
FY 2021-22				
Particulars	JVVNL	AVVNL	JdVVNL	Total
Interest and other income from investments and deposits	4	2	4	10
Income from sale of scrap	6	67	8	81
Income from deferment of Govt. Grants & Subsidies	257	215	0	472
Rebate for early payment	94	6	0	100
Income from rent on land/building	0	0	16	16
Other miscellaneous receipts	174	54	447	674
<b>Total</b>	<b>534</b>	<b>344</b>	<b>475</b>	<b>1352</b>

**Table 77: Wheeling Charges, Cross Subsidy Surcharge and Additional Surcharge for FY 2020-21 & FY 2021-22 (Rs. In Crore)**

FY 2020-21				
Particulars	JVVNL	AVVNL	JdVVNL	Total
Income from Wheeling Charges	8	6	3	17
Cross Subsidy Surcharge	46	89	24	159
Additional Surcharge	24	49	22	95
<b>Total</b>	<b>78</b>	<b>143</b>	<b>50</b>	<b>271</b>
FY 2021-22				
Particulars	JVVNL	AVVNL	JdVVNL	Total
Income from Wheeling Charges	8	6	4	17
Cross Subsidy Surcharge	46	98	27	170
Additional Surcharge	24	49	24	97
<b>Total</b>	<b>78</b>	<b>152</b>	<b>55</b>	<b>284</b>

### Commission's Analysis

- 3.250 The Commission has considered the non-tariff income for FY 2020-21 and FY 2021-22 excluding deferred Income from Government Grant (JdVVNL has shown the deferred Income from Government Grant under other miscellaneous receipts).
- 3.251 The Commission has considered wheeling charges, Cross Subsidy Surcharge and additional Surcharge as per Discom's filing. However, actual income from these charges due to impact of this order shall be considered at the time of true up.

**Table 78: Non-Tariff Income for FY 2020-21 and FY 2021-22 (Rs. In Crore)**

<b>FY 2020-21</b>				
<b>Particulars</b>	<b>JVVNL</b>	<b>AVVNL</b>	<b>JdVVNL</b>	<b>Total</b>
Interest and other income from investments and deposits	3	2	4	9
Income from sale of scrap	6	64	8	77
Income from deferment of Govt. Grants & Subsidies	0	0	0	0
Rebate for early payment	108	6	0	114
Income from rent on land/building	0	0	15	15
Other miscellaneous receipts	165	51	169	386
<b>Total</b>	<b>282</b>	<b>123</b>	<b>196</b>	<b>601</b>
<b>FY 2021-22</b>				
<b>Particulars</b>	<b>JVVNL</b>	<b>AVVNL</b>	<b>JdVVNL</b>	<b>Total</b>
Interest and other income from investments and deposits	4	2	4	10
Income from sale of scrap	6	67	8	81
Income from deferment of Govt. Grants & Subsidies	0	0	0	0
Rebate for early payment	94	6	0	100
Income from rent on land/building	0	0	16	16
Other miscellaneous receipts	174	54	175	402
<b>Total</b>	<b>277</b>	<b>129</b>	<b>203</b>	<b>609</b>

**Table 79: Wheeling Charges, Cross Subsidy Surcharge and Additional Surcharge for FY 2020-21 and FY 2021-22** (Rs In Crore)

FY 2020-21				
Particulars	JVVNL	AVVNL	JdVVNL	Total
Income from Wheeling Charges	8	6	3	17
Cross Subsidy Surcharge	46	89	24	159
Additional Surcharge	24	49	22	95
<b>Total</b>	<b>78</b>	<b>143</b>	<b>50</b>	<b>271</b>

  

FY 2021-22				
Particulars	JVVNL	AVVNL	JdVVNL	Total
Income from Wheeling Charges	8	6	4	17
Cross Subsidy Surcharge	46	98	27	170
Additional Surcharge	24	49	24	97
<b>Total</b>	<b>78</b>	<b>152</b>	<b>55</b>	<b>284</b>

### **Aggregate Revenue Requirement**

#### **Petitioners' Submission**

3.252 The Annual Revenue Requirement for FY 2020-21 and FY 2021-22 proposed by the three Discoms have been given in the table below:

Table 80: Summary of ARR for FY 2020-21 – Discoms' submission

(Rs. Crore)

Sr. No	Particulars	FY 2020-21			
		JVVNL	AVVNL	JdVVNL	Total
		Submission	Submission	Submission	Submission
1	Power Purchase Expenses	13,338	8,960	10,759	33058
2	Transmission charges				
	PGCIL	819	552	663	2034
	RVPN	1,236	833	1,000	3069
	RLDC	1	1	1	2
	SLDC	10	6	8	24
3	Operation & Maintenance Expenses	1,291	976	1,156	3422
4	Terminal Benefits	635	555	555	1745
5	Interest and Finance Charges	937	930	1,007	2874
6	Interest on Working Capital	267	167	255	690
7	Interest of Regulatory assets	1,919	1,410	2,162	5491
8	Depreciation	1,071	732	903	2706
9	Other expenses (including prior period)	963	659	760	2382
10	Insurance Expenses	30	23	24	77
11	Return on Equity	-	-	-	-
12	Interest on Uday Loan	520	538	488	1546
13	<b>Aggregate Revenue Requirement</b>	<b>23,036</b>	<b>16,343</b>	<b>19,741</b>	<b>59120</b>
14	Less: Non Tariff Income	527	328	460	<b>1314</b>
15	Less: Income from wheeling charges	8	6	3	17
16	Less: Cross Subsidy Surcharge	46	89	24	159
17	Less: Additional Surcharge	24	49	22	95
18	<b>Net Aggregate Revenue Requirement</b>	<b>22,432</b>	<b>15,872</b>	<b>19,231</b>	<b>57535</b>



**Table 81: Summary of ARR for FY 2021-22 – Discoms' submission (Rs. Crore)**

Sr. No.	Particulars	FY 2021-22			
		JVVNL	AVVNL	JdVVNL	Total
		Submission	Submission	Submission	Submission
1	Power Purchase Expenses	15,204	10,162	12,192	37557
2	Transmission charges				
	PGCIL	819	552	663	2034
	RVPN	1,236	833	1,000	3069
	RLDC	1	1	1	2
	SLDC	10	6	8	24
3	Operation & Maintenance Expenses	1,462	1,117	1,310	3889
4	Terminal Benefits	635	555	555	1745
5	Interest and Finance Charges	687	715	752	2155
6	Interest on Working Capital	167	97	177	441
7	Interest of Regulatory assets	1,919	1,410	2,162	5491
8	Depreciation	1,155	781	1,016	2953
9	Insurance Expenses	32	26	27	84
10	Return on Equity	-	-	-	0
11	Interest on Uday Loan	520	538	488	1546
12	<b>Aggregate Revenue Requirement</b>	<b>23,846</b>	<b>16,793</b>	<b>20,350</b>	<b>60989</b>
13	Less: Non Tariff Income	534	344	475	1352
14	Less: Income from wheeling charges	8	6	4	17
15	Less: Cross Subsidy Surcharge	46	98	27	170
16	Less: Additional Surcharge	24	49	24	97
17	<b>Net Aggregate Revenue Requirement</b>	<b>23,234</b>	<b>16,297</b>	<b>19,820</b>	<b>59352</b>

### Commission's Approval

3.253 Commission has approved the ARR for FY 2020-21 and FY 2021-22 based on the items of expenditure discussed in the preceding sections and the same has been summarized in the table below:

**Table 82: Summary of ARR for all the three Discoms for FY 2020-21 – Approved by Commission (Rs. Crore)**

Particulars	FY 2020-21							
	JVVNL		AVVNL		JdVVNL		Total	
	Submissi on	Approv ed	Submissi on	Approv ed	Submissi on	Approv ed	Submissi on	Approv ed
Power Purchase Expenses*	13,338	12,279	8,960	8,926	10,759	10,652	33,058	31,857
Transmission charges								
PGCIL	819	819	552	552	663	663	2,034	2,034
RVPN	1,236	1,105	833	745	1,000	894	3,069	2,744
RLDC	1	1	1	1	1	1	2	2
SLDC	10	9	6	6	8	7	24	23
Operation & Maintenance Expenses	1,291	1,238	976	967	1,156	1,073	3,422	3,278
Terminal Benefits	635	635	555	555	555	555	1,745	1,745
Interest and Finance Charges	937	920	930	496	1,007	592	2,874	2,008
Interest on Working Capital	267	213	167	147	255	240	690	600
Interest of Regulatory assets	1,919	1,750	1,410	1,328	2,162	1,824	5,491	4,902
Depreciation	1,071	772	732	507	903	565	2,706	1,844
Other expenses(including prior period)	963	-	659	-	760	-	2,382	-
Insurance Expenses	30	30	23	21	24	21	77	73
Return on Equity (RVUN)		-730		-492		-590	-	-1,812
Interest on Uday Loan	520	520	538	538	488	488	1,546	1,546
<b>Aggregate Revenue Requirement</b>	<b>23,036</b>	<b>19,562</b>	<b>16,343</b>	<b>14,297</b>	<b>19,741</b>	<b>16,985</b>	<b>59,120</b>	<b>50,843</b>
Less: Non Tariff Income	527	282	328	123	460	196	1,314	601
Less: Income from wheeling charges	8	8	6	6	3	3	17	17
Less: Cross Subsidy Surcharge	46	46	89	89	24	24	159	159
Less: Additional Surcharge	24	24	49	49	22	22	95	95
<b>Net Aggregate Revenue Requirement from Retail Tariff</b>	<b>22,432</b>	<b>19,202</b>	<b>15,872</b>	<b>14,031</b>	<b>19,231</b>	<b>16,739</b>	<b>57,535</b>	<b>49,971</b>

\*Power purchase cost has been considered after adjustment of sale of surplus power

**Table 83: Summary of ARR for all the three Discoms for FY 2021-22 – Approved by Commission (Rs. Crore)**

Particulars	FY 2021-22							
	JVNL		AVNL		JdVNL		Total	
	Submissi on	Approv ed	Submissi on	Approv ed	Submissi on	Approv ed	Submissi on	Approv ed
Power Purchase Expenses*	15,204	12,913	10,162	9,175	12,192	11,001	37,557	33,089
Transmission charges								
PGCIL	819	836	552	563	663	676	2,034	2,075
RVPN	1,236	1,127	833	760	1,000	912	3,069	2,799
RLDC	1	1	1	1	1	1	2	2
SLDC	10	9	6	6	8	8	24	23
Operation & Maintenance Expenses	1,462	1,354	1,117	1,048	1,310	1,166	3,889	3,568
Terminal Benefits	635	635	555	555	555	555	1,745	1,745
Interest and Finance Charges	687	863	715	500	752	582	2,155	1,945
Interest on Working Capital	167	134	97	87	177	167	441	388
Interest of Regulatory assets	1,919	1,660	1,410	1,300	2,162	1,926	5,491	4,886
Depreciation	1,155	809	781	567	1,016	611	2,953	1,987
Insurance Expenses	32	32	26	24	27	23	84	78
Return on Equity (RVUN)		-470		-317		-380	-	-1,166
Interest on Uday Loan	520	520	538	538	488	488	1,546	1,546
<b>Aggregate Revenue Requirement</b>	<b>23,846</b>	<b>20,422</b>	<b>16,793</b>	<b>14,808</b>	<b>20,350</b>	<b>17,733</b>	<b>60,989</b>	<b>52,963</b>
Less: Non Tariff Income	534	277	344	129	475	203	1,352	609
Less: Income from wheeling charges	8	8	6	6	4	4	17	17
Less: Cross Subsidy Surcharge	46	46	98	98	27	27	170	170
Less: Additional surcharge	24	24	49	49	24	24	97	97
<b>Net Aggregate Revenue Requirement from Retail Tariff</b>	<b>23,234</b>	<b>20,068</b>	<b>16,298</b>	<b>14,528</b>	<b>19,820</b>	<b>17,475</b>	<b>59,352</b>	<b>52,071</b>

\*Power purchase cost has been considered after adjustment of sale of surplus power

## Revenue and Revenue Deficit based on Existing Tariff

### Revenue on Existing Tariff

#### Petitioners' Submission

- 3.254 Discoms have projected the revenue based on energy sales forecasts for FY 2020-21 and FY 2021-22 and the applicable retail tariff as per the RERC's Tariff Orders.
- 3.255 The revenue in FY 2020-21 and FY 2021-22 from existing tariff as per Discoms' submission is as under:

**Table 84: Revenue from existing tariff for FY 2020-21 and FY 2021-22– Discoms' submission (Rs. Crore)**

<b>FY 2020-21</b>				
<b>Particular</b>	<b>JVVNL</b>	<b>AVVNL</b>	<b>JdVVNL</b>	<b>Total</b>
Domestic	5051	3529	3184	11764
Non-Domestic	2392	1252	1202	4846
Public Street Light	158	91	113	362
Agriculture (Metered)	4728	3267	6705	14700
Agriculture (Flat)	216	327	798	1341
Small Industry	229	195	153	577
Medium Industry	698	642	530	1870
Large Industry	4967	3224	1317	9508
Public Water Works (S)	299	272	235	806
Public Water Works (M)	26	28	78	132
Public Water Works (L)	294	248	533	1075
Mixed Load / Bulk Supply	191	109	363	663
<b>Total</b>	<b>19249</b>	<b>13184</b>	<b>15211</b>	<b>47644</b>
<b>FY 2021-22</b>				
<b>Particular</b>	<b>JVVNL</b>	<b>AVVNL</b>	<b>JdVVNL</b>	<b>Total</b>
Domestic	5374	3725	3350	12449
Non-Domestic	2767	1453	1401	5621
Public Street Light	165	95	118	378
Agriculture (Metered)	5020	3544	7439	16003
Agriculture (Flat)	146	257	727	1130
Small Industry	263	224	174	661
Medium Industry	802	744	612	2158
Large Industry	5729	3725	1523	10977
Public Water Works (S)	329	279	249	857
Public Water Works (M)	27	29	80	136
Public Water Works (L)	314	269	579	1162
Mixed Load / Bulk Supply	200	113	371	684
<b>Total</b>	<b>21138</b>	<b>14457</b>	<b>16624</b>	<b>52218</b>

### Subvention and Subsidy

- 3.256 Discoms have shown Subvention from State Govt. against electricity duty, subsidy against compounding charges for FY 2020-21 and FY 2021-22 as under:

**Table 85: Subvention and subsidy for FY 2020-21 and FY 2021-22 (Rs. Crore)**

FY 2020-21				
Particular	JVVNL	AVVNL	JdVVNL	Total
Subvention from State Govt. against ED	654	480	408	1542
Subsidy against compounding charges	10	6	2	18
<b>Total</b>	<b>664</b>	<b>486</b>	<b>410</b>	<b>1560</b>

FY 2021-22				
Particular	JVVNL	AVVNL	JdVVNL	Total
Subvention from State Govt. against ED	740	453	404	1597
Subsidy against compounding charges	10	6	2	18
<b>Total</b>	<b>750</b>	<b>459</b>	<b>406</b>	<b>1615</b>

### Revenue Deficit

- 3.257 The revenue deficits submitted by Discoms for FY 2020-21 and FY 2021-22 at the existing tariff have been provided in the table below:-

**Table 86: Revenue Deficit/Surplus at existing tariff for FY 2020-21 (Rs. Crore)**

Particulars	JVVNL	AVVNL	JdVVNL	Total
	FY 2020-21			
<b>Net Aggregate Revenue Requirement (A)</b>	<b>22,432</b>	<b>15,872</b>	<b>19,231</b>	<b>57,535</b>
<b>Revenue from Existing tariff (B)</b>	<b>19,249</b>	<b>13,184</b>	<b>15210</b>	<b>47642</b>
Income From Trading (B1)	489	215	(298)	<b>406</b>
Subvention from State Govt. against ED	654	480	408	<b>1,542</b>
Subsidy against compounding charges	10	6	2	<b>18</b>
Total of subvention against ED and Subsidy (C)	664	486	410	<b>1,560</b>
<b>Deficit including Carrying cost</b>	<b>-2,029</b>	<b>-1,988</b>	<b>-3,910</b>	<b>-7,927</b>
<b>D= (A-B-B1-C)</b>				

**Table 87: Revenue Deficit/Surplus at existing tariff for FY 2021-22 (Rs. Crore)**

Particulars	JVVNL	AVVNL	JdVVNL	Total
	FY 2021-22			
<b>Net Aggregate Revenue Requirement (A)</b>	<b>23,234</b>	<b>16,298</b>	<b>19,820</b>	<b>59,352</b>
<b>Revenue from Existing tariff (B)</b>	<b>21138</b>	<b>14457</b>	<b>16624</b>	<b>52218</b>
Income From Trading (B1)	448	135	(300)	<b>283</b>
Subvention from State Govt. against ED	740	453	404	<b>1,597</b>
Subsidy against compounding charges	10	6	2	<b>18</b>
Total of subvention against ED and Subsidy (C)	750	459	406	<b>1,615</b>
<b>Deficit including Carrying cost</b>	<b>-898</b>	<b>-1,248</b>	<b>-3,091</b>	<b>-5,236</b>
<b>D= (A-B-B1-C)</b>				

**Commission's Analysis:**

- 3.258 Commission has calculated the category wise revenue from existing tariff at tariff approved in order dated 06.02.2020 on the basis of consumer category wise energy sales (excluding DF sales) approved by the Commission in this order. The revenue from sale of power to DF has been considered separately in below table. Further impact of ToD rebate, incremental consumption rebate and various other rebates have been considered which is subject to true up. The estimated revenue at existing tariff for different consumer categories for all the three Discoms for FY 2020-21 and FY 2021-22 have been summarized in the table below:

**Table 88: Revenue from Existing Tariff for FY 2020-21 Approved by the Commission****(Rs. Crore)**

<b>FY 2020-21</b>				
<b>Particular</b>	<b>JVVNL</b>	<b>AVVNL</b>	<b>JdVVNL</b>	<b>Total</b>
Domestic	4240	3264	2972	10476
Non-Domestic	2084	1198	1177	4458
Public Street Light	121	79	71	272
Agriculture (Metered)	5268	3519	6792	15579
Agriculture (Flat)	187	336	832	1356
Small Industry	260	222	167	648
Medium Industry	697	675	543	1915
Large Industry	5193	3779	1377	10350
Public Water Works (S)	286	269	229	784
Public Water Works (M)	29	29	68	126
Public Water Works (L)	286	261	510	1057
Mixed Load / Bulk Supply	131	82	280	492
<b>Total</b>	<b>18783</b>	<b>13713</b>	<b>15017</b>	<b>47513</b>
add DF income	985	374	518	1877
less: Rebate*	375	279	175	829
<b>Total</b>	<b>19392</b>	<b>13808</b>	<b>15361</b>	<b>48561</b>

\*Rebate: ToD rebate, incremental rebate etc

**Table 89: Revenue from Existing Tariff for FY 2021-22 Approved by the Commission****(Rs. Crore)**

<b>FY 2021-22</b>				
<b>Particular</b>	<b>JVVNL</b>	<b>AVVNL</b>	<b>JdVVNL</b>	<b>Total</b>
Domestic	4513	3447	3130	11090
Non-Domestic	2546	1359	1318	5223
Public Street Light	123	82	74	279
Agriculture (Metered)	5279	3593	7008	15880
Agriculture (Flat)	143	246	736	1125
Small Industry	270	231	174	676
Medium Industry	762	739	575	2076
Large Industry	5584	3819	1481	10885
Public Water Works (S)	321	293	241	855
Public Water Works (M)	31	30	71	132
Public Water Works (L)	305	290	549	1145
Mixed Load / Bulk Supply	132	82	286	500
<b>Total</b>	<b>20011</b>	<b>14212</b>	<b>15643</b>	<b>49865</b>
add DF income	1040	395	547	1983
less: Rebate*	360	266	167	793
<b>Total</b>	<b>20691</b>	<b>14341</b>	<b>16022</b>	<b>51055</b>

\*Rebate: ToD rebate, incremental rebate etc.

## ARR and Revenue

- 3.259 Considering the ARR and Revenue at existing tariff as determined by the Commission, subsidy & subvention as shown by Discoms in their petition, the revenue gap for all the three Discoms for FY 2020-21 and FY 2021-22 at the existing tariff has been worked out.

**Table 90: Revenue Deficit/Surplus at existing tariff for FY 2020-21 –Approved by the Commission** (Rs.Crore)

Particulars	JVVNL	AVVNL	JdVVNL	Total
<b>FY 2020-21</b>				
<b>Net Aggregate Revenue Requirement (A)</b>	<b>19,202</b>	<b>14,031</b>	<b>16,739</b>	<b>49,971</b>
<b>Revenue from Existing tariff (B)</b>	<b>19,392</b>	<b>13,808</b>	<b>15,361</b>	<b>48,561</b>
Subvention from State Govt. against ED	654	480	408	<b>1,542</b>
Subsidy against compounding charges	10	6	2	<b>18</b>
Total of subvention against ED and Subsidy (C)	664	485	410	<b>1,560</b>
<b>(Deficit)/surplus including Carrying cost D= (A-B-C)</b>	<b>854</b>	<b>262</b>	<b>-967</b>	<b>149</b>

**Table 91: Revenue Deficit/Surplus at existing tariff for FY 2021-22 –Approved by the Commission** (Rs.Crore)

Particulars	JVVNL	AVVNL	JdVVNL	Total
<b>FY 2021-22</b>				
<b>Net Aggregate Revenue Requirement (A)</b>	<b>20,068</b>	<b>14,528</b>	<b>17,475</b>	<b>52,071</b>
<b>Revenue from Existing tariff (B)</b>	<b>20,691</b>	<b>14,341</b>	<b>16,022</b>	<b>51,055</b>
Subvention from State Govt. against ED	740	453	404	<b>1,597</b>
Subsidy against compounding charges	10	6	2	<b>18</b>
Total of subvention against ED and Subsidy (C)	751	459	407	<b>1,616</b>
<b>(Deficit)/surplus including Carrying cost D= (A-B-C)</b>	<b>1,374</b>	<b>272</b>	<b>-1,046</b>	<b>601</b>



#### **Section -4 Tariff Proposals and Approved Tariff**

- 4.1 Tariff proposal for FY 2020-21 and FY 2021-22
- 4.1.1 Discoms have proposed that in order to make the proposal of tariff rationalization as revenue neutral, the Discoms have proposed to increase fixed charges and reduce the corresponding energy charges for all categories except domestic .
- 4.1.2 The proposal has been so proposed that the fixed charges recovered from consumers gradually become reflective of the fixed costs incurred by the Discoms. Further, the energy charges have been reduced in order to not burden the consumers.
- 4.1.3 Discoms submitted an impact on revenue during FY 2020-21 and FY 2021- 22 as below:

**Table 92: Impact of Tariff Proposal (Rs. In crore)**

<b>Particulars</b>	<b>Expected Additional Revenue for FY 2020-21</b>	<b>Expected Additional Revenue for FY 2021-22</b>
JVVNL	5.28	-12.88
AVVNL	-8.96	-21.80
JdVVNL	-11.70	-19.08
<b>Total</b>	<b>-15.38</b>	<b>-53.75</b>

- 4.1.4 Discoms have also proposed certain rationalization measures in order to facilitate better utilization of resources, economic pricing and better revenue management.
- 4.1.5 Discoms projected an ARR of Rs. 57535 Crore and Rs. 59352 Crore and net deficit of Rs. 7927 Crore and Rs. 5236 Crore after receipt of Govt. subsidy at existing tariff for FY 2020-21 and FY 2021-22 respectively.
- 4.1.6 After disallowing excess losses beyond approved trajectory and considering other costs on normative basis, the Commission has determined the net ARR as Rs. 49971 Crores and Rs. 52071 Crore with a net surplus of Rs. 149 Crores and Rs. 601 Crore at existing tariff for 2020-21 and FY 2021-22 respectively.
- 4.1.7 A lot of Stakeholders in their submissions have submitted that the fixed charges should not be increased as these are already high.

- 4.1.8 As discussed in preceding Para the Commission has worked out a surplus in ARR of JVVNL and AVVNL of Rs 854 Crore and 262 Crore and a deficit of Rs (967) Crore for JdVVNL. In totally there is surplus of Rs 149 Crore during FY 2020-21 similarly surplus in ARR of JVVNL and AVVNL of Rs 1374 Crore and 272 Crore and a deficit of Rs (1046) Crore for JdVVNL. In totally there is surplus of Rs 601 Crore during FY 2021-22.
- 4.1.9 Looking to the surplus and the fact that a substantial revision in tariff was made vide order dated 06.02.2020 full effect of which will be visible only in FY 2021-22 as during 2020-21 sale remain affected due to COVID, the Commission is of the view that at present there is no need to increase or rationalize tariff for retail consumers for FY 2021-22.
- 4.1.10 At present the Commission is determining uniform tariff across all the three Discoms and more or less same practice is being adopted by many State Commissions. However, Jodhpur Discom is the largest Discom in terms of area and also have highest share of agriculture consumption therefore the Government to balance out the gap among the Discoms may make special dispensation in terms of subsidy /Government support and also make appropriate power purchase allocation so as to wipe out the disparity in these Discoms.
- 4.1.11 In the petitions under consideration, the Discoms have inter alia given the proposal for increase in fixed charges, Load based billing for domestic consumers, merging of small domestic category and Recovery of Fixed charges based on current month billing. However, in view of the stakeholder submission regarding practical difficulties arising out of these proposals and the fact that the Commission is not considering any change in tariff for retail consumers, the Commission has not considered these proposals.
- 4.1.12 However, there are other proposals in the petition of Discoms which requires consideration of the Commission i.e. applicability of Dharamshalas, Addition of Silicosis suffering patients in Astha card holders category (BPL category) and wheeling charges, Cross subsidy surcharge and additional surcharge which are discussed hereunder, apart from these the issue of Time of Day (ToD) is also discussed in the following para(s).

### **Change in eligibility of Dharamshalas under Domestic category**

- 4.1.13 Discoms submitted that Dharamshalas within premises of place of public worship is currently being charged under Domestic category. However, it was submitted that some consumers were involved in gaming in order to avail the benefit of Domestic tariff. For example, a Dharamshala with a connection of 0.5 kW for temple and 46 kW for Dharamshala (guest housing facility) is being eligible for Domestic tariff. Such consumers are availing the benefits of Domestic tariff without being a charitable organization in nature.
- 4.1.14 Discoms submitted that they intended to incentivize only those Dharamshalas which are present under temple premises and are charitable in nature, i.e. they do not run a commercial Dharamshala by charging room rents from people. However, due to certain consumers, as mentioned in the above para, the purpose of providing the benefit got defeated. Three Discoms furnished proposal in this regard with slight variation in language.
- 4.1.15 Jaipur, Discom proposed the following change in the categorization of Dharamshalas being eligible under Domestic category:

*“Dharamshalas within temple premises will be charged under Domestic category Provided that the temple, in the premises of which the Dharamshala is present, should be constructed as per the Rajasthan Religious Buildings and Places Act, 1954 or registered under Rajasthan Public Trust Act, 1959 or charitable Dharamshalas registered under Income Tax Act”.*

- 4.1.16 The Commission accepts the above proposal regarding places of public worship and directs all the Discoms to make the suitable Changes in the tariff booklet regarding Dharamshalas within the premises of places of public worship in accordance with above para.

### **Addition of Silicosis suffering patients in Astha card holders category (BPL category)**

- 4.1.17 Discoms submitted that as per the section 8.4.2 of the “Rajasthan Pneumoconiosis (Silicosis) Policy, 2019”, all silicosis suffering patients and their families shall be provided all the benefits of State Government welfare schemes pertaining to Astha card holders. As per order dated 20.05.2013, Astha card holders are eligible to avail the benefits of BPL category. Hence, it is proposed that such consumer may be billed under the BPL category.

- 4.1.18 The Commission accepts the above proposal of Discoms and directs the Discoms to make the suitable Changes in the tariff booklet.

**Time of Day (ToD) Tariff**

- 4.1.19 In FY 2019-20 ARR Petition Discoms have proposed DSM measure to flatten the load curve i.e. Time of Day (ToD) tariff wherein a surcharge of 10% on EC was proposed on consumption of electricity during peak hours (where the demand of electricity is the highest from consumers) and a rebate of 10% on EC is provided for consumption during off-peak hours for Large Industrial Consumers (HT-5).
- 4.1.20 However, the Commission vide order dated 06.02.2020 has considered only ToD Rebate as under.

**Table 93: ToD Rebate**

Off peak hours	Rebate on EC
11 pm to 6 am (7 hours)	15%

- 4.1.21 During the public hearing, Discoms submitted that only 24 Hrs continuous running industries are taking advantage of the above rebate, therefore Surcharge should also be imposed for such industries.
- 4.1.22 Discoms submitted that, the average rate at which power is sold through exchange is at most INR 2.74/kWh during off-peak hours and thus, providing industrial consumers with an incentive to consume night-time power is financially beneficial for the Discoms. But since there has been no load shift as was envisaged originally by the Commission, only the 24-hour running industries are availing the said rebate when the Discoms are struggling to buy power through exchange at rates as high as INR 6.41/kWh during peak hours.
- 4.1.23 Discoms further submitted that since, no penalty for peak hour power consumption was levied, the industries have no reason to shift their load even slightly as the impact on them due to ToD system is zero. Thus, it is proposed that a ToD rebate and surcharge of 10% be levied in the state on power consumption as per the original proposal of the Discoms in the ARR & Tariff petition dated 06.08.2019:

**Table 94: Proposed ToD rebate and surcharge for FY 2021-22**

Particulars	ToD Rebate	ToD Surcharge
% charge	-10% on energy charges	+10% on energy charges
Hours	12 am to 6 am (6 hours)	6 am to 10 am (4 hours)

## Commission View

- 4.1.24 It is observed by the Commission that in the order dt. 06.02.2020, ToD tariff has been approved in the State for the betterment of industries, Discoms and consumers at large. Earlier surplus power in the night was traded at Power Exchange at significantly lower than the cost of purchase of power, now due to ToD, Discoms are able to sell the surplus power to large industry at a much higher prices of power purchase which is a win-win situation for industries, Discoms and consumers at large, where industries are getting power at lower rates than approved tariff, Discoms are selling power at higher than exchange rates and consumers at large are benefitting from higher revenue realization of Discoms, However, it is brought to the notice of the Commission that only round the clock industry are taking benefit of night time tariff. It is further observed by the Commission, during peak hours Discoms have to purchase the costlier power, therefore peak hours surcharge is essential. This will also nudge the consumers to shift their consumption from peak hours to off-peak hours, thereby helping in flattening of the load curve.
- 4.1.25 In view of above the Commission has approved the following ToD rebate and surcharge for FY 2021-22:

**Table 95: Approved ToD rebate and surcharge for FY 2021-22**

<b>Off Peak hours</b>	<b>Rebate on EC</b>
12 am - 6 am (6 hours)	15%
<b>Peak hours</b>	<b>Surcharge on EC</b>
6 am to 10 am (4 hours)	5%

- 4.1.26 The above TOD rebate/surcharge shall be applicable on Large Industrial consumers (HT-5) and Electric Vehicle charging station (LT-8 and HT-6).
- 4.1.27 The Commission would like to extend the ToD tariff across all categories In future years, the Commission may consider the ToD Rebate and Surcharge with trajectory as under:

**Table 96: ToD Rebate and Surcharge Trajectory**

<b>FY</b>	<b>TOD Rebate Off Peak hours (6 hours)</b>	<b>Surcharge Peak hours (4 hours)</b>
2022-23	12.50%	7.50%
2023-24	10.00%	10.00%

- 4.1.28 After looking into the impact of ToD rebate and surcharge, the Commission may also introduce the seasonal ToD in future Years, therefore the Discoms are directed to furnish the energy data of shifting of load due to ToD and its financial impact in the next year ARR and Tariff Petition so as to enable the Commission to take a view on the trajectory. The impact of aforesaid rebate and surcharge shall be examined in the true up petitions.
- 4.1.29 Discoms are also directed to furnish the impact of various rebate given vide order dated 06.02.2020 in the next ARR and Tariff Petition.
- 4.1.30 Except some tariff rationalization proposals as discussed above. The Commission has not accepted any change in tariff for retail consumers proposed by Discoms, accordingly, the tariff determined vide order 06.02.2020 shall continue to prevail during FY 2021-22 except where changed by this order. The category wise tariff is enclosed at **Annexure – D**.

#### 4.2 **Wheeling Charges**

- 4.2.1 The Discoms have projected the wheeling charges as per the Regulation 86 of RERC (Terms and Conditions for Determination of Tariff) Regulations 2019, estimated voltage- wise losses and the projected ARR for FY 2020-21 in line with the RERC regulations. It has been observed that each Discom has submitted data for all three Discoms. However, furnished data is different for all three Discoms. Therefore, Commission has taken data of respective Discom separately.
- 4.2.2 Discoms submitted that wheeling charges for open access consumers have been computed based on the following assumptions.

##### **Basis for Apportionment of network costs & losses at each voltage**

- i. Apportionment at 132 KV Level: As per the provisions under Regulation 86 (2), the wheeling charges so worked out shall be apportioned supply voltage wise on the basis of fixed asset at each voltage level. The Discoms have submitted that at present they do not have any fixed assets at 132 KV Voltage level, however the Discoms help the open access consumers in installation of lines & poles and claim fee on account of customer service cost (mainly costs associated with metering, billing and collection at this voltage).

The Discoms also submitted that although the cost associated with

metering, billing and collection at 132 KV level has increased but the Discoms do not propose any change in the wheeling charges at 132 KV level of Rs. 0.01/kWh at 132 KV level as the cost of providing customer service to 132 KV level consumers.

Discoms submitted that practically there is no apportionment of gross fixed assets at 132 KV level as the assets attributable to supply at 132 KV level include transformers (220/132 KV) and lines (132 KV). The transformers belong to RVPN and are considered in transmission charges. The Discoms submitted that there are minor system losses at 132 KV level. The procurement of power happens at the periphery of Discom (i.e. GSSs of RVPN). Therefore, transmission charges & losses - whether inter-state or intra-state, have already been considered in determining cost of power purchase in the ARR and tariff petition for FY-21 and accordingly, distribution losses at 132 KV are considered as nil.

- ii. Apportionment at 33 KV, 11 KV and LT Level: The cost of wheeling has been apportioned voltage wise on the basis of the length of network lines and transformation capacity for voltage wise segregation of GFA. Similar methodology is followed by other SERCs like MPERC, PSERC, etc.

4.2.3 Further, Discoms submitted that RERC in its Order dated 19<sup>th</sup> September 2006 has also considered the voltage-wise length of lines and transformation assets as basis for apportionment of wheeling cost at all voltages. The relevant extract of the above-mentioned Order has been summarized below:

“As current cost was to form only the basis of inter-se allocation of operating cost of distribution system among 33 KV, 11 KV & LT distribution systems, current cost of lines and substations, based on that of AVVNL, have been considered for the voltage wise line length plus substation of each Discom. Accordingly, percentile allocation of 33 KV, 11 KV & LT system, worked out as 11.81%, 53.14% and 35.04% has been considered.”

Discoms submitted that to even out any difference due to geography and pace of development, the operational cost and sales for all Discoms has been considered together for apportionment at each voltage. This is in line with the methodology adopted by the Commission in Order dated 19 September 2006. The relevant extract of the above-mentioned Order has been summarized below:

“Distribution system of three Discoms differs due to geographical

conditions and pace of development. The present proportion may get altered in later years. Further, as apportionment is based on assumptions that may reflect the realistic values, so considering them separately for each Discoms may not be appropriate. Considering operational cost and sales for three Discoms together in determining wheeling charges, will even out differences."

4.2.4 The Discoms have submitted the following assumptions to segregate the assets into voltage levels as shown below:

- a. Network Statistics as on 31<sup>st</sup> March 2020 has been considered as the basis for segregation of assets and losses. 33 KV lines have been considered to constitute the assets at 33 KV level, both 11 KV lines and transformation capacity at 33/11 KV have been considered to constitute the assets at 11 KV level and both LT lines and transformation capacity at 11/0.4 KV have been considered to constitute the assets at LT level. These voltage-wise network statistics as on 31 March 2020 have been summarized in following tables.

**Table 97: Network Length in KM**

S. No.	Lines at Voltage Level (KV)	JVVNL	AVVNL	JdVVNL	Total
1	132	0	0	0	0
2	33	15,932	15,914	24,450	<b>56,296</b>
3	11	76,515	64,047	107,918	<b>248,480</b>
4	LT	157,310	185,414	108,224	<b>450,948</b>
<b>Total</b>		<b>249,757</b>	<b>265,375</b>	<b>240,592</b>	<b>755,725</b>

**Table 98: Network Transformation Capacity in MVA**

S. No	Transformation Capacity at Voltage Level (KV)	JVVNL	AVVNL	JdVVNL	Total
1	33/11	11,786	9,241	9,749	<b>30,776</b>
2	11/0.4	17,330	15,261	15,812	<b>48,403</b>

- b. The existing distribution network of Rajasthan is a mixture of old and new assets. Also, the Discoms do not have the fixed asset register for these assets owing to which the present cost of these assets cannot be



ascertained. Therefore, the Discoms have apportioned the Gross Fixed Asset as on 31 March 2020 in proportion to the cost of voltage wise distribution lines and transformation capacity as determined through cost estimates from Store Rates issued on the 1<sup>st</sup> April, 2020.

- c. Estimated cost of single circuit dog conductor having span of 66 meters with 9 meter PCC pole line and single circuit weasel conductor having span of 66 meters with 8 meter PCC pole line has been considered for reckoning the average line cost of 33 KV lines and 11 KV lines respectively.
- d. Similarly, the estimated cost of three phase aerial bunch conductor line, for the supply of industrial connection, having span of 40 meter with 8 meter PCC pole line, has been considered for computation of average cost of LT lines.

**Table 99: Average cost of lines**

S.No.	Voltage Level (kV)	Per Unit Cost (Lakh Rs/Km)
1	33	7.94
2	11	2.94
3	LT	2.01

- e. Transformation cost of 33/11 KV substation has been determined by averaging the estimated cost of 3.15 MVA substation of all the three Discoms, calculated based on the Store Rates issued on the 1<sup>st</sup> April, 2020.
- f. For determination of transformation cost of 11/0.4 kV asset, forty percent of average cost of 33/11 KV substation has been considered.

**Table 100: Average transformation cost on substation**

S.No.	Transformation Capacity (MVA)	Per Unit Cost (Lakh Rs/MVA)
1	33/11 KV	10.01
2	11/0.4 KV	31.36

- g. On the basis of network statistics and average cost as mentioned above, the estimated voltage-wise network cost for Rajasthan Discoms is shown below:

**Table 101: Voltage-wise Infrastructure network cost (in Rs lakh)**

S No	Line at voltage Level (KV)	JVVNL	AVVNL	JdVVNL	Total
1	132	0	0	0	0
2	33	126,422	126,283	194,014	<b>446,719</b>
3	11	224,877	188,232	317,167	<b>730,276</b>
4	LT	315,821	372,243	217,275	<b>905,338</b>

- h. The cost of transformation capacity for three Discoms is summarized as under.

**Table 102: Infrastructure transformation capacity cost (in Rs lakh)**

S. No.	Transformation Capacity at Voltage Level (KV)	JVVNL	AVVNL	JdVVNL	Total
1	33/11	117,982	92,502	97,587	<b>308,072</b>
2	11/0.4	543,457	478,599	495,864	<b>1,517,921</b>

- i. The Discom-wise total infrastructure cost derived on the basis of the above data is as under

**Table 103: Total infrastructure cost derived (in Rs lakh)**

S. No.	Network at Voltage Level	JVVNL	AVVNL	JdVVNL	Total
1	132 KV Line Only	0	0	0	0
2	33 KV Lines Only	126,422	126,283	194,014	<b>446,719</b>
3	11 KV Lines and 33/11 KV S/S	342,859	280,735	414,755	<b>1,038,348</b>
4	LT Lines and 11/0.4 KV S/S	859,277	850,842	713,139	<b>2,423,259</b>
Total (As per GFA)		<b>1,328,558</b>	<b>1,257,860</b>	<b>1,321,908</b>	<b>3,908,326</b>

- j. The above apportionment of estimated cost at each voltage level is being determined to apportion the approved value of depreciable gross fixed assets (as on 31<sup>st</sup> March 2020) as submitted in the ARR and Tariff petition for FY-21. This voltage wise break-up of fixed assets along with the network

usage is worked out to calculate the wheeling charges at 33 KV, 11 KV and LT level.

**Table 104: Apportionment of original cost of Fixed Assets (in Rs lakh)**

S.No.	Network at Voltage Level	JVVNL	AVVNL	JdVVNL	Total
1	132 kV	0	0	0	0
2	33 kV	2041	1566	2507	<b>6,115</b>
3	11 kV	5,536	3,482	5,359	<b>14,378</b>
4	LT	13,875	10,554	9,214	<b>33,644</b>
<b>Gross fixed Asset</b>		<b>21453</b>	<b>15,602</b>	<b>17,080</b>	<b>54,136</b>

- k. Sales Projections for FY-21 of Jaipur, Ajmer and Jodhpur Discoms have been apportioned to the voltage levels based on the approved character of service. The wire costs at higher voltage levels has been further apportioned to lower voltage levels, since the HT system is also being used for supply to the LT consumers. The apportioned sales as per above estimates and losses for EHT and HT consumers has been considered as per the Commission's order dated 19.09.2006 (in absence of voltage wise losses at EHT and HT level), to calculate the input energy at various voltage levels. The balance losses have been allocated to the LT level. The calculations are provided below for Jaipur, Ajmer and Jodhpur:
- l. Apportionment of sales of Rajasthan Discoms for FY-21 us as under.

**Table 105: Apportionment of voltage-wise sales- JVNL**

Voltage Level	Wheeling Cost (Rs Cr.)	Input (MU)	Sale (MU)	Loss %	Assets (Rs Cr.)
220/132 KV	6735.99	396	396	0.00%	0
33 KV		3551	3416	3.80%	2041
11 KV		5287	4821	8.80%	5536
LT		19685	14962	24.00%	13875
<b>Total</b>		<b>28919</b>	<b>23713</b>	<b>18.00%</b>	<b>21453</b>

**Table 106: Apportionment of voltage-wise sales- AVVNL**

Voltage Level	Wheeling Cost (Rs Cr.)	Input (MU)	Sale (MU)	Loss %	Assets (Rs Cr)
220/132 KV	5307.60	468	468	0.00%	0
33 KV		1114	1072	3.80%	1566
11 KV		4251	3877	8.80%	3482
LT		14092	11558	17.99%	10554
<b>Total</b>		<b>19908</b>	<b>16738</b>	<b>16.00%</b>	<b>15602</b>

**Table 107: Apportionment of voltage-wise sales- JdVVNL**

Voltage Level	Wheeling Cost (Rs Cr.)	Input (MU)	Sale (MU)	Loss %	Assets (Rs Cr)
220/132 KV	6581.24	314	314	0.00%	0
33 KV		1116	1073	3.80%	2507
11 KV		1974	1800	8.80%	5359
LT		22691	18210	19.75%	9214
<b>Total</b>		<b>26094</b>	<b>21397</b>	<b>18.00%</b>	<b>17080</b>

- m. Discoms have considered overall distribution losses at LT level which includes commercial losses which is line with methodology followed by PSERC and other SERCs also. Moreover, as open access can be availed by consumers having contract demand of 1 MVA and above, such consumers can be connected at voltages of 11 kV and above only. The Commission is requested to allow the segregation of losses at LT level as per the methodology proposed by the Discoms and followed by other SERCs.
- n. Based on the voltage wise asset segregation, the Discoms have allocated the wheeling cost to the asset at respective voltage levels which is depicted in the table below:

**Table 108: Wheeling cost allocation into assets at different voltage levels (Rs Cr)**

Particulars	JVVNL	AVVNL	JdVVNL
33KV	641	533	966
11KV	1738	1185	2065
LT	4357	3590	3550
<b>Total</b>	<b>6736</b>	<b>5308</b>	<b>6581</b>

- o. The assessed wheeling cost (as derived above) at each voltage level have been reallocated to the different voltage levels in the proportion of their contribution to energy input at each voltage levels:

**Table 109: Wheeling cost apportioned on the basis of network usage (Rs Cr)**

Particulars	JVVNL	AVVNL	JdVVNL
33KV	80	31	42
11KV	368	275	165
LT	6288	5003	6374
<b>Total</b>	<b>6,736</b>	<b>5,308</b>	<b>6,581</b>

- p. The apportioned wheeling cost as estimated above is used to calculate the wheeling charge applicable at each voltage level on the basis of estimated sales at each voltage level for Rajasthan.

4.2.5 The Discoms submitted that since uniform tariff is prevailing in the State of Rajasthan, therefore, the proposal of average wheeling charges is to be made applicable as the wheeling charges for the open access users in the Rajasthan. Thus, the Discoms have proposed following charges at each voltage to maintain uniform wheeling tariff across the State.

**Table 110: Proposed Wheeling Charges for FY 2020-21**

Wheeling charges for FY 2020-21	
Wheeling Charges at 132 KV Voltage Level (Rs/kWh)	0.01
Wheeling Charges at 33 KV Voltage Level (Rs/kWh)	0.26
Wheeling Charges at 11 KV Voltage Level (Rs/kWh)	0.70

**Commission's view:**

4.2.6 For Computation of wheeling charges, Regulation 86 of the RERC tariff Regulations 2019 provides the following:

*“ 86 (1) For determination of Wheeling charges of a Distribution Licensee, shall be computed by deducting the following amounts from its aggregate revenue requirement worked out under Regulation 76 (1):*  
*(a) Cost of power purchase as per Regulation 78,*  
*(b) Interest payable on security deposits of consumers,*

- (c) Transmission & SLDC charges and
- (d) 10% of O&M expenses

86 (2) Wheeling charges so worked out shall be apportioned supply voltage-wise on the basis of fixed asset at each voltage level, as submitted by the Distribution Licensee:

Provided that the Distribution Licensee shall work out the voltage wise asset allocation and losses within one year of coming into force of these Regulations or the extended period as approved by the Commission. The Distribution Licensee shall also give the basis of allocation of fixed costs to the different voltage levels, energy supplied at each voltage level and prevalent distribution losses at each voltage level in the petition for determination of wheeling charges:

Provided further that till the time Distribution Licensee submits the actual allocation of fixed assets at each voltage level, the Commission shall apportion fixed assets at each voltage level on the basis of length of distribution lines in ckt. km and transformation capacity in MVA as furnished by the Distribution Licensee or any other methodology which it feels appropriate,

86 (3) Payment of wheeling charges:

Wheeling charges may consist of the following or any one or combination thereof:

- (a) Fixed charge in Rs. per month per KW of contracted power.
- (b) A charge in Rs. per KWh of energy wheeled separately for
  - (i) Wire business
  - (ii) Installation, operation and maintenance of meters, metering system and any other equipment at consumer's premises.
  - (iii) Billing & collection of payment
- (iv) Consumer services.
- (c) Connectivity fee.
- (d) Reactive energy charge / incentive

4.2.7 Discoms submitted that, presently they do not have audited accounts for voltage wise assets. As per present accounting practices of Rajasthan Discoms, it is difficult to segregate the GFA among the voltage levels directly. Moreover, voltage wise gross fixed asset register would also require the original cost of each asset to be determined, present cost after applying depreciation and allocation to voltage level. Thus, as mentioned earlier, the study is a time intensive exercise considering the quantum of work and data limitation.

- 4.2.8 Discoms have requested to consider the apportionment of present value of fixed assets and losses based on the network cost, transformation capacity at 33 KV, 11 KV and LT level and system losses to determine the voltage wise wheeling charges and losses.
- 4.2.9 Discoms have proposed uniform wheeling charges based on the combined figure of three Discoms. Accordingly, the Commission has also determined uniform wheeling charges.
- 4.2.10 In view of above regulations and submission of Discoms, the Commission has worked out the segregation of wheeling charges at each voltage level based on the cost of line and transformer submitted by the Discoms and losses as approved in order dated 19.09.2006 have been considered. Further, to work out the per unit wheeling charges, sales as approved in the instant order has been considered.
- 4.2.11 Discoms in their petition have submitted the calculation of wheeling charges for FY 2020-21. However, as the FY 2020-21 is already over and the Commission has also determined the ARR for FY 2021-22 and the wheeling charges are determined based on ARR. Thus, the Commission has determined the wheeling charges for FY 2021-22 based on ARR for FY 2021-22.
- a) Based on the approved ARR for FY 2021-22, the wheeling charges as per Regulation 86 of RERC (Terms and Conditions for Determination of Tariff) Regulations, 2019 is as under:

**Table 111: Wheeling Charges**

**(Rs in Crores)**

S. No.	Particulars	FY 2021-22			
		JVVNL	AVVNL	JdVVNL	Total
1	<b>Net Aggregate Revenue Requirement (A)</b>	20068	14528	17475	52071
2	Cost of Power Purchase	12913	9175	11001	33089
3	Interest Payable on security deposit of consumers	102	60	49	211
4	Transmission Charges	1973	1330	1596	4899
5	10% of O&M Expenses	199	160	172	531
	<b>Sub-total (B)</b>	<b>15186</b>	<b>10725</b>	<b>12818</b>	<b>38730</b>
6	<b>Wheeling Charges (in Crores) (A-B)</b>	<b>4882</b>	<b>3803</b>	<b>4657</b>	<b>13341</b>

- b) As regards wheeling charges at 132 KV and above the Commission accepts submission of the Discoms.
- c) Based on the following cost of lines and Transformer as submitted by the Discoms, the aforesaid wheeling charges has been segregated at each voltage level in the following percentage:

**Table 112: Cost of lines and Transformer (Rs. In Lakhs)**

Network at Voltage Level	FY 2021-22			
	JVVNL	AVVNL	JdVVNL	Total
132 KV Line Only	-	-	-	-
33 KV Lines Only	126,422	126,283	194,014	<b>446,719</b>
11 KV Lines and 33/11 KV S/S	342,859	280,735	414,755	<b>1,038,348</b>
LT Lines and 11/0.4 KV S/S	859,277	850,842	713,139	<b>2,423,259</b>
<b>Total</b>	<b>1,328,558</b>	<b>1,257,860</b>	<b>1,321,908</b>	<b>3,908,326</b>
132 KV Line Only	-	-	-	
33 KV Lines Only	9.52%	10.04%	14.68%	
11 KV Lines and 33/11 KV S/S	25.81%	22.32%	31.38%	
LT Lines and 11/0.4 KV S/S	64.68%	67.64%	53.95%	
Total	100%	100%	100%	

- d) Based on the aforesaid percentage, the wheeling charges has been segregated at each voltage level as under:

**Table 113: Wheeling Cost Allocation into Assets at different Voltage Levels (Rs in Crore)**

Voltage Level	JVVNL	AVVNL	JdVVNL
33KV	1,584	1,260	1,757
11KV	4,295	2,802	3,757
LT	10,765	8,492	6,460
<b>Total</b>	<b>16,644</b>	<b>12,554</b>	<b>11,974</b>

- e) Further, based on the losses as approved in order dated 19.09.2006 and sales as approved in the instant order has been considered at each voltage level as under:



**Table 114: JVVNL sales and losses at each voltage level**

Voltage Level	Wheeling Cost in Rs Crores	FY 2021-22			
		Input (MU)	Sales (MU)	Losses in %	Loss (in MU)
132 KV	4882	444	444	0.00%	0
33 KV		3981	3830	3.80%	151
11 KV		5926	5405	8.80%	522
LT		20923	16905	19.21%	4018
Total		31274	26584	15.00%	4691

**Table 115: AVVNL sales and losses at each voltage level**

Voltage Level	Wheeling Cost in Rs Crores	FY 2021-22			
		Input (MU)	Sales (MU)	Losses in %	Loss (in MU)
132 KV	3803	527	527	0.00%	0
33 KV		1253	1205	3.80%	48
11 KV		4783	4362	8.80%	421
LT		15594	12739	18.31%	2855
Total		22157	18833	15.00%	3324

**Table 116: JdVVNL sales and losses at each voltage level**

Voltage Level	Wheeling Cost in Rs Crores	FY 2021-22			
		Input (MU)	Sales (MU)	Losses in %	Loss (in MU)
132 KV	4657	332	332	0.00%	0
33 KV		1177	1133	3.80%	45
11 KV		2083	1900	8.80%	183
LT		22975	19218	16.35%	3757
Total		26567	22583	15.00%	3985

- f) Based on the voltage wise asset segregation, Commission has allocated the wheeling cost to the asset at respective voltage levels which is depicted in the table below:

**Table 117: Wheeling cost allocation into assets at different voltage levels (Rs Cr)**

Particular	JVVNL	AVVNL	JdVVNL
33KV	465	382	684
11KV	1260	849	1461
LT	3157	2572	2512
<b>Total</b>	<b>4882</b>	<b>3803</b>	<b>4657</b>

- g) The assessed wheeling cost (as derived above) at each voltage level have been reallocated to the different voltage levels in the proportion of their contribution to energy input at each voltage levels:

**Table 118: Wheeling cost apportioned on the basis of network usage (Rs Cr)**

Particular	JVVNL	AVVNL	JdVVNL
33KV	60	22	31
11KV	278	199	121
LT	4544	3581	4505
<b>Total</b>	<b>4882</b>	<b>3803</b>	<b>4657</b>

- h) The apportioned wheeling cost as estimated above is used to calculate the wheeling charge applicable at each voltage level on the basis of estimated sales at each voltage level for Rajasthan.

4.2.12 Per unit wheeling charges approved in this order is as under:

**Table 119: Per unit Wheeling charges**

Particular	FY 2021-22
Wheeling Charges at 132 KV and above Voltage Level (Rs/kWh)	<b>0.01</b>
Wheeling Charges at 33 KV Voltage Level (Rs/kWh)	<b>0.20</b>
Wheeling Charges at 11 KV Voltage Level (Rs/kWh)	<b>0.49</b>

- 4.2.13 The above Wheeling Charges shall be levied and collected with effect from the date of this Order and remain in force till Wheeling Charges are re-determined by the Commission.

#### 4.3 Cross Subsidy Surcharge

- 4.3.1 The Discoms have projected the cross-subsidy surcharge for FY 2020-21 as per the formula provided by the Commission in RERC (Terms and Conditions for Determination of Tariff) Regulations, 2019. The relevant clause of the said regulations for cross-subsidy surcharge is as under:

***“90. Cross-subsidy Surcharge***

*The surcharge payable by consumers opting for open access on the network of the Distribution Licensee or transmission Licensee will be determined by the Commission as per the following Formula:*

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

*Where,*

***S*** is the surcharge;

***T*** is the Tariff payable i.e., Average Billing Rate of the relevant category of consumers;

***C*** is the per unit weighted average cost of power purchase by the Licensee;

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

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

***R*** is the per unit cost of carrying regulatory assets or unfunded gap recognised by the Commission:

*Provided that if S is computed to be negative as per above Formula, S shall be considered as zero.”*

- 4.3.2 Discoms submitted that categories of consumers for whom cross-subsidy surcharge is applicable are Large Industries, Mixed Load-HT & Non-Domestic-HT. The details of the tariff for said categories of consumers at different voltage levels is provided below:

**Table 120: Tariff for FY 2020-21**

Category	Tariff (Rs./kWh)		
	11 kV	33 kV	132 kV
LIP	10.05	9.75	9.65
Mixed Load	9.40	9.12	9.03
NDS (HT)	12.83	12.44	12.31

- 4.3.3 The Discoms have considered distribution losses at different voltage levels for calculation of cross-subsidy surcharge as per the Commission's Order dated 01.12.2016. The transmission losses have been considered as per the losses projected in ARR for FY 2019-20. The details of the same are provided below:

**Table 121: Transmission and Distribution losses considered for cross-subsidy surcharge**

Losses	11kV	33kV	132kV
Distribution	12.60%	3.80%	0%
Transmission	5.42%	5.42%	5.42%
<b>Total</b>	<b>18.02%</b>	<b>9.22%</b>	<b>5.42%</b>

- 4.3.4 The Discoms submitted that Open access consumers are only in the HT category. For these categories, the collection efficiency is 100% and as such there is no commercial loss. So, in calculation of 'L', commercial losses are taken as 0%.
- 4.3.5 The Discoms submitted that Transmission Cost per unit has been considered as per the projected transmission cost and sales in ARR for FY 2020-21. The aggregate transmission and wheeling cost at different voltage levels has been summarized below:

**Table 122: Wheeling and Transmission Costs for FY 2020-21**

Discom	Cost per unit (Rs/kWh)	11kV	33kV	132kV
JVNL	Wheeling cost	0.70	0.26	0.01
	Transmission cost	0.87	0.87	0.87
	<b>Total</b>	<b>1.57</b>	<b>1.13</b>	<b>0.88</b>
AVVNL	Wheeling cost	0.70	0.26	0.01
	Transmission cost	0.83	0.83	0.83
	<b>Total</b>	<b>1.53</b>	<b>1.10</b>	<b>0.84</b>
JdVNL	Wheeling cost	0.70	0.26	0.01
	Transmission cost	0.78	0.78	0.78
	<b>Total</b>	<b>1.48</b>	<b>1.04</b>	<b>0.79</b>
RAJASTHAN	Wheeling cost	0.70	0.26	0.01
	Transmission cost	0.81	0.81	0.81
	<b>Total</b>	<b>1.51</b>	<b>1.08</b>	<b>0.82</b>

- 4.3.6 The per unit carrying cost of regulatory assets (element 'R') for FY 2020-21 has been determined on the basis of approved interest on unfunded gap by the Commission. The summary of carrying cost for FY 2020-21 is summarized below:

**Table 123: Carrying Cost of Regulatory Assets for FY 2020-21**

Discom	Interest on unfunded gap (Rs. Cr.)	Total Sales (MU)	Carrying Cost (Rs./unit)
JVVNL	1919	23713	0.81
AVVNL	1410	16722	0.84
JdVVNL	2162	21314	1.01
<b>RAJASTHAN</b>	<b>5491</b>	<b>61750</b>	<b>0.89</b>

- 4.3.7 Based on the above cost parameters, the cross-subsidy surcharge for FY 2020-21 as submitted by Discoms is as under:

**Table 124: Cross Subsidy Surcharge for FY 2020-21 -JVVNL**

Category	Voltage (kV)	Tariff (Rs./ kWh)	Weighted Average Power Purchase Cost (Rs./kWh)	Aggregate Transmission, Distribution and Commercial Losses (%)	Aggregate Transmission, Distribution and Wheeling Charges (Rs./kWh)	Carrying cost of Regulatory Assets (Rs./ kWh)	CSS at Existing Tariff (Rs./ kWh)
LIP	132	9.65	4.28	5%	0.82	0.89	3.41
	33	9.75	4.28	9%	1.08	0.89	3.07
	11	10.05	4.28	18%	1.52	0.89	2.42
Mixed Load- HT	132	9.03	4.28	5%	0.82	0.89	2.79
	33	9.12	4.28	9%	1.08	0.89	2.44
	11	9.40	4.28	18%	1.52	0.89	1.78
NDS- HT	132	12.31	4.28	5%	0.82	0.89	6.08
	33	12.44	4.28	9%	1.08	0.89	5.76
	11	12.83	4.28	18%	1.52	0.89	5.20

**Table 125: Cross Subsidy Surcharge for FY 2020-21 -AVVNL**

Category	Voltage (kV)	Tariff (Rs./ kWh)	Weighted Average Power Purchase Cost (Rs./kWh)	Aggregate Transmission, Distribution and Commercial Losses (%)	Aggregate Transmission, Distribution and Wheeling Charges (Rs./kWh)	Carrying cost of Regulatory Assets (Rs./ kWh)	CSS at Existing Tariff (Rs./ kWh)
<b>LIP</b>	132	9.65	4.18	5%	0.82	0.89	3.52
	33	9.75	4.18	9%	1.08	0.89	3.18
	11	10.05	4.18	18%	1.51	0.89	2.55
<b>Mixed Load-HT</b>	132	9.03	4.18	5%	0.82	0.89	2.9
	33	9.12	4.18	9%	1.08	0.89	2.56
	11	9.4	4.18	18%	1.51	0.89	1.91
<b>NDS-HT</b>	132	12.31	4.18	5%	0.82	0.89	6.19
	33	12.44	4.18	9%	1.08	0.89	5.88
	11	12.83	4.18	18%	1.51	0.89	5.33

**Table 126: Cross Subsidy Surcharge for FY 2020-21 -JdVVNL**

Category	Voltage (kV)	Tariff (Rs./ kWh)	Weighted Average Power Purchase Cost (Rs./kWh)	Aggregate Transmission, Distribution and Commercial Losses (%)	Aggregate Transmission, Distribution and Wheeling Charges (Rs./kWh)	Carrying cost of Regulatory Assets (Rs./ kWh)	CSS at Existing Tariff (Rs./ kWh)
<b>LIP</b>	132	9.65	4.18	5%	0.82	0.89	3.52
	33	9.75	4.18	9%	1.08	0.89	3.18
	11	10.05	4.18	18%	1.51	0.89	2.55
<b>Mixed Load-HT</b>	132	9.03	4.18	5%	0.82	0.89	2.9
	33	9.12	4.18	9%	1.08	0.89	2.56
	11	9.4	4.18	18%	1.51	0.89	1.91
<b>NDS-HT</b>	132	12.31	4.18	5%	0.82	0.89	6.19
	33	12.44	4.18	9%	1.08	0.89	5.88
	11	12.83	4.18	18%	1.51	0.89	5.33

### **Commission's view:**

#### **Computation of Cross Subsidy Surcharge**

- 4.3.8 Commission has observed that Discoms have submitted different proposal for Cross subsidy Surcharge. However, Commission has determined uniform Cross subsidy Surcharge in view of that the tariff for these category is uniform across all the Discoms.
- 4.3.9 Discoms in their petition have submitted the calculation of Cross Subsidy Surcharge for FY 2020-21. However, as the FY 2020-21 is already over and the Commission has also determined the ARR for FY 2021-22 and the Cross Subsidy Surcharge is determined based on ARR. Thus, the Commission has determined the Cross Subsidy Surcharge for FY 2021-22 based on ARR for FY 2021-22.
- 4.3.10 For the purpose of computation of Cross Subsidy Surcharge for FY 2021-22, the Commission has considered the formula as specified in the RERC Tariff Regulations, 2019. Based on the formula as per Tariff Regulations, 2019, the item wise computation of Cross Subsidy Surcharge is as follows:

**(1) "T" (Average Billing Rate of the relevant category of consumers):**

As per Regulation 90 of the Rajasthan Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2019, T is the Tariff payable i.e., Average Billing Rate of the relevant category of consumers.

**Table 127: Calculation of "T" for FY 2021-22**

<b>Particulars</b>	<b>Avg. Realisation (Rs./per Unit) FY2021-22</b>
Non Domestic Category (NDS)	11.10
Bulk Supply for Mixed Load (ML)	9.59
Large Industries (LIS)	9.70

**(2) "C" (is the per unit weighted average cost of power purchase by the Licensee):**

Based on the figures as approved in foregoing paras, the weighted average cost of power purchase is worked out to be Rs. 3.96/unit for FY 2021-22.

(3) “L” (is the aggregate transmission, distribution and commercial losses, expressed as percentage applicable to the relevant voltage level):

- a. Commission has considered voltage wise distribution losses as per the Commission's Order dated 01.12.2016. The transmission losses have been considered as per the losses approved in foregoing paras as under :

**Table 128: Transmission and Distribution losses considered for FY 2021-22**

Losses	11kV	33kV	132KV
Distribution	12.60%	3.80%	0.00%
Transmission	4.25%	4.25%	4.25%
Total	16.85%	8.05%	4.25%

(4) “D” (is the aggregate of transmission, distribution and wheeling charges applicable to the relevant voltage level):

**Table 129: Transmission, Distribution and Wheeling Charges for 2021-22**

FY 2021-22			
Cost per unit (Rs/kWh)	11kV	33kV	132kV
Wheeling cost	0.49	0.20	0.01
Transmission cost	0.72	0.72	0.72
Total	1.21	0.92	0.73

(5) “R” (is the per unit cost of carrying regulatory assets or unfunded gap recognised by the Commission):

- a. While working out the per unit cost of regulatory assets, Commission has considered interest on unfunded gap (including Interest on Uday) as approved in forgoing paras.

**Table 130: Carrying Cost of Regulatory Assets**

Particulars		FY 2021-22
Interest on unfunded gap	Rs. In Crores	6432
Total Sales	(MU)	67999
Carrying Cost	(Rs./unit)	0.95

- b. The stakeholder's have contended that CSS should not be increased.



- c. Many of the stakeholder's submitted that as per National Tariff Policy, CSS should be kept at 20% of average tariff.
- d. There is no dispute on the legal position that the CSS should be reduced progressively but the reduction should relate to the actual cost and not to historical facts. While determining CSS in the present order, the Commission has to rely on the present values and accordingly has taken the values as approved in its Tariff Order for FY 2021-22. The CSS determined in the order is in accordance with the spirit of the Act on Cross Subsidy Surcharge. However, the Commission has capped CSS at the rate of 20% of Average Tariff as per Tariff Policy.

(6) “S” (is the surcharge) i.e.,

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

4.3.11 Based on the above discussions, the Cross Subsidy Surcharge payable for FY 2021-22 by the open access consumers works out as below:

**Table 131: Cross Subsidy Surcharge for FY 2021-22 as per RERC Tariff Regulations, 2019 (Rs/kWh)**

CATEGORY OF CONSUMER	VOLTAGE LEVEL	TARIFF (T)	WEIGHTED AVERAGE COST OF POWER (C)	SYSTEM LOSSES (L)	TRANSMISSION, DISTRIBUTION AND WHEELING CHARGES (D)	PER UNIT COST OF CARRYING REGULATORY ASSETS (R)	CROSS SUBSIDY SURCHARGE (S)	20% of Tariff	Cross Subsidy Surcharge to be Levied
		(A)	(B)	(C)	(D)	(E)	$S = T - [C / (1 - L / 100) + D + R]$ (F)	(G)	Min (F,G)
NON DOMESTIC SERVICE	11 KV	11.1	3.96	16.85%	1.21	0.95	4.19	2.22	2.22
	33 KV	10.77	3.96	8.05%	0.92	0.95	4.61	2.15	2.15
	132 KV	10.66	3.96	4.25%	0.73	0.95	4.85	2.13	2.13
MIXED LOAD/ BULK SUPPLY	11 KV	9.59	3.96	16.85%	1.21	0.95	2.68	1.92	1.92
	33 KV	9.3	3.96	8.05%	0.92	0.95	3.14	1.86	1.86
	132 KV	9.21	3.96	4.25%	0.73	0.95	3.40	1.84	1.84
LARGE INDUSTRIAL SERVICE	11 KV	9.7	3.96	16.85%	1.21	0.95	2.78	1.94	1.94
	33 KV	9.41	3.96	8.05%	0.92	0.95	3.24	1.88	1.88
	132 KV	9.31	3.96	4.25%	0.73	0.95	3.5	1.86	1.86

- 4.3.12 The Commission, in the matter of petition filed by M/s Jindal Saw Ltd for review of Commission's Order dated 01.12.2016, held that the consumer of 132 kV and above is to be treated as same whether he takes supply at 132 kV or at a higher voltage.
- 4.3.13 In last tariff order dated 06.02.2020, the Commission has given various rebate and offered lower tariff for industrial consumers with a view to promote industry as well as ensure improvement in sales of Discoms. Further, for the purpose of computation the Commission has considered the full tariff of non domestic, mixed load and large industry categories without any rebate or special tariff being offered to any category.
- 4.3.14 Accordingly, the Commission determines the following Cross Subsidy Surcharge payable for FY 2021-22 by Open Access Consumers of the respective category who are liable to pay CSS in accordance with the Electricity Act, 2003 and Rules and Regulations made there under:

**Table 132: CSS as Approved by the Commission**

Category of Open Access Consumer	Voltage Level	Cross Subsidy Surcharge (Rs./Unit) FY 2021-22
NON DOMESTIC SERVICE	11 KV	2.22
	33 KV	2.15
	132 KV and above	2.13
MIXED LOAD/ BULK SUPPLY	11 KV	1.92
	33 KV	1.86
	132 KV and above	1.84
LARGE INDUSTRIAL SERVICE	11 KV	1.94
	33 KV	1.88
	132 KV and above	1.86

- 4.3.15 The above Cross Subsidy Surcharge shall be levied and collected with effect from the date of this Order and remain in force till CSS is re-determined by the Commission.

#### 4.4 **Additional Surcharge**

##### 4.4.1 The Discoms have submitted the following regarding the additional surcharge.

*The Discoms had filed the petition for determination additional surcharge for FY 2019-20 on 27.12.2019 based on the data available till FY 2018-19. The Hon'ble Commission had directed the petitioner to submit the revised proposal based on actual data for FY 2019-20 vide letters dated 18.05.2020, 01.06.2020 and 03.07.2020.*

*Further, as per Hon'ble Commission's letter dated 27.08.2020, the Discoms had submitted the revised proposal for additional surcharge for FY 2019-20 including the blockWise backdown and boxup data with blockWise open access demand for FY 2019-20 on 14.10.2020.*

*Based on the earlier submission for FY 2019-20, the proposal for additional surcharge for FY 2020-21 is provided below.*

*Section 43 of the Electricity Act, 2003 provides for a duty on the distribution licensees of the area of supply to develop and maintain an efficient, coordinated and economical distribution system and to supply electricity to all in the area in accordance with the provisions of the Act. Section 43 (1) of the Electricity Act reads as under:*

*"Section 43. (Duty to supply on request): --- (1) 1[Save as otherwise provided in this Act, every distribution] licensee, shall, on an application by the owner or occupier of any premises, give supply of electricity to such premises, within one month after receipt of the application requiring such supply:*

*Provided that where such supply requires extension of distribution mains, or commissioning of new sub-stations, the distribution licensee shall supply the electricity to such premises immediately after such extension or commissioning or within such period as may be specified by the Appropriate Commission: Provided further that in case of a village or hamlet or area wherein no provision for supply of electricity exists, the Appropriate Commission may extend the said period as it may consider necessary for electrification of such village or hamlet or area.*

*1[Explanation.- For the purposes of this sub-section, "application" means the application complete in all respects in the appropriate form, as required by the distribution licensee, along with documents showing payment of necessary*

charges and other compliances.]”

To meet the universal supply obligation, Discoms have entered into long term PPAs with Generating Companies which inter-alia provide for payment of the guaranteed fixed charges payable irrespective of the fact whether Discoms are able to off take the entire power made available over the plant load factor.

In exercise of the powers under Section 181 of the Electricity Act, 2003, the State Commission has notified the Open Access Regulations, 2016, inter alia, providing for a person with contract demand of one MVA and above to draw electricity from sources other than the distribution licensees of the area through the Open Access.

Whenever any consumer opts for open access, the Petitioner continues to pay fixed charges to its contracted generation stations as per the PPAs. However, the Petitioner is not able to sufficiently recover such fixed cost obligation from the open access consumers. The cost recovered from fixed tariff schedule is less than the fixed costs incurred by the Petitioner which leads to the situation where the Petitioner is saddled with the stranded cost on account of its universal supply obligation.

To ensure that the burden of fixed cost of stranded power due to open access does not adversely impact the Discoms and is also not passed onto the general consumers at large, the Discoms are entitled to collect Additional Surcharge as per Section 42 (4) of the Electricity Act, 2003.

“Section 42 (4): Where the State Commission permits a consumer or class of consumers to receive supply of electricity from a person other than the distribution licensee of his area of supply, such consumer shall be liable to pay an additional surcharge on the charges of wheeling, as may be specified by the State Commission, to meet the fixed cost of such distribution licensee arising out of his obligation to supply.”

Regulation 17 of the RERC Open Access Regulations, 2016 also entitle the Petitioners to collect additional surcharge from consumers opting for open access.

#### “17. Additional Surcharge

(1) A consumer availing open access and receiving supply of electricity from a

*person other than the Distribution Licensee of his area of supply shall pay to the Distribution Licensee an additional surcharge, in addition to wheeling charges and cross subsidy surcharge, to meet the fixed cost of such Distribution Licensee arising out of his obligation to supply as provided under sub-section (4) of section 42 of the Act."*

*The Hon'ble Commission in its order dated 24th August 2016 has determined the additional surcharge payable by open access consumers using the following methodology.*

*"114. The lower of the back-down quantum and open access quantum has been considered as power surrendered due to open access for each of the 96 time blocks in a day, i.e., if the back down quantum is more than the open access quantum, the open access quantum has been considered, and if the back down quantum is less than the open access quantum, then the back down quantum has been considered as the quantum stranded due to Open Access Consumers not sourcing power from Discoms. This ensures that only the power stranded because of Open Access Consumers is taken.*

*115. Since the quantum of power surrendered every day is not from a specific power plant, and fixed cost associated with every power plant is different, the Commission has calculated an effective per unit fixed cost for every month by calculating weighted average fixed cost per unit based on the relevant tariff order of generating station against fixed charges and the quantum of energy drawn from each station for FY 2015-16 (up to Jan 2016).*

*116. To work out a total effective per unit fixed cost of generation backed down, the fixed costs for the individual power plant units as per tariff order have been taken in the same proportion as the proportion in which individual power plant units have contributed to the surrendering of power. As compared to the consideration of actual payments made to generators, taking the fixed costs as per tariff orders eliminates all apprehensions about the period for which payments pertain. Thus, the rates of fixed costs are consistent.*

*117. This fixed cost has been considered for calculating the amount of total fixed charges that the Petitioner has paid because of the total stranded power owing to corresponding open access for FY 2015-16 (up to Jan.16).*

*118. To compute the Additional Surcharge recoverable, the effective per unit*

fixed cost obtained as explained above is multiplied to the quantum of stranded power (in MUs) which has been considered to be surrendered because of consumers opting for open access.

119. To compute per unit Additional Surcharge to be levied on Open Access Consumers, it has been assumed that the Open Access scenario will remain the same in FY 2016-17. Therefore, the total Additional Surcharge recoverable for the FY 2015-16 (up to Jan.16) computed above has been spread over the total open access quantum for the FY 2015-16 (up to Jan.16) to arrive at Additional Surcharge of Rs. 0.80 per unit."

The Discoms have relied on the similar methodology to compute the payable additional surcharge. The Hon'ble Commission in its order dated 24th August 2016 had not considered the stranded cost of boxed up stations. However, in FY 2019-20 the quantum of power boxed up was significantly higher when compared to boxed up capacity in FY 2014-15. Therefore, the Discoms in this petition have also considered the Boxup power along with the power backed down.

Accordingly, the computation of additional surcharge for FY 2020-21 is based on the following methodology.

The lower of the stranded power (backdown quantum + boxup quantum) and open access quantum has been considered as power surrendered due to open access for each of the 96 time blocks in a day, i.e., if the quantum of stranded power is more than the open access quantum, the open access quantum has been considered, and if the stranded power quantum is less than the open access quantum, then the stranded power quantum has been considered as the quantum stranded due to Open Access Consumers not sourcing power from Discoms. This ensures that only the power stranded because of Open Access Consumers is taken.

Since the quantum of power surrendered every day is not from a specific power plant, and fixed cost associated with every power plant is different, the Discoms have calculated an effective per unit fixed cost by calculating weighted average fixed cost per unit based on the relevant tariff order of generating station against fixed charges and the quantum of energy drawn from each station for FY 2019-20.

*To work out a total effective per unit fixed cost of generation stranded, the fixed costs for the individual power plant units as per tariff order have been taken in the same proportion as the proportion in which individual power plant units have contributed to the surrendering of power. As compared to the consideration of actual payments made to generators, taking the fixed costs as per tariff orders eliminates all apprehensions about the period for which payments pertain. Thus, the rates of fixed costs are consistent.*

*This fixed cost has been considered for calculating the amount of total fixed charges that the Petitioner has paid because of the total stranded power owing to corresponding open access for FY 2019-20.*

*To compute the Additional Surcharge recoverable, the effective per unit fixed cost obtained as explained above is multiplied to the quantum of stranded power (in MUs) which has been surrendered because of consumers opting for open access.*

*To compute per unit Additional Surcharge to be levied on Open Access Consumers in the FY 2020-21, it has been assumed that the Open Access scenario will remain the same in FY 2020-21 as in FY 2019-20. Therefore, the total Additional Surcharge recoverable for the FY 2020-21 computed above has been spread over the total open access quantum for the FY 2019-20 to arrive at the payable Additional Surcharge.*

*For the sake of brevity, the daily block wise details of station wise power backed down, power boxed up and bilateral purchases along with net open access have been provided.*

- 4.4.2 Based on the earlier submission for FY 2019-20, the Discoms proposed additional surcharge for FY 2020-21 as given below.
- i. Stranded power due to Open Access (MW):

**Table 133: Stranded power due to Open Access (MW):**

Month	Backdown Aggregated over 96 Time Blocks	Boxup Aggregated over 96 Time Block	Boxup + Backdown aggregated over 96 time blocks	Open Access Aggregated over 96 Time Blocks	Backdown due to Open Access Aggregated over 96 Time Blocks
	MW	MW	MW	MW	MW
April	3448562	3420385	6868947	1264093	1257041
May	2415860	1504250	3920110	757089	650219
June	2383093	533500	2916593	624178	503269
July	3885254	3733525	7618779	826729	811988
August	4696485	4516645	9213130	1190429	1173129
September	2759821	1775490	4535311	572845	530473
October	4455757	2054120	6509877	423384	423384
November	4238753	2108680	6347433	615074	598225
December	3332132	2589930	5922062	1017782	879707
January	3855801	2446170	6301971	1213683	971566
February	2807994	2196830	5004824	800368	558614
March	4260230	6481215	10741445	397471	355171
<b>Total</b>	<b>42539743</b>	<b>33360740</b>	<b>75900483</b>	<b>9703125</b>	<b>8712786</b>

ii. Effective fixed cost of generation stranded (Rs./kWh):

**Table 134: Effective fixed cost of generation stranded (Rs./kWh)**

Station	Power Stranded in FY 2019-20 (MU)	% of surrender	Fixed charges (approved Rs./kWh)	Component of fixed cost (Rs./kWh)
AURIYA GTPS	18	0.09%	0.67	0.00
ANTA GTPS	14	0.07%	0.75	0.00
NCPP-2 (Dadri-II Thermal)	326	1.72%	1.50	0.03
DADRI GTPS	49	0.26%	0.60	0.00
UNCHAHAAR 1	131	0.69%	1.13	0.01
UNCHAHAAR 2	317	1.67%	1.04	0.02
UNCHAHAAR 3	180	0.95%	1.40	0.01
UNCHAHAAR 4	456	2.41%	1.62	0.04
FARAKKA STPS	37	0.20%	0.85	0.00



Station	Power Stranded in FY 2019-20 (MU)	% of surrender	Fixed charges (approved Rs./kWh)	Component of fixed cost (Rs./kWh)
KAHALGAON- 1 STPS	68	0.36%	1.08	0.00
KAHALGAON-2 STPS	278	1.46%	1.12	0.02
CGPL	636	3.35%	0.94	0.03
PTC MCCPL	150	0.79%	1.83	0.01
PTC DB POWER	234	1.23%	2.84	0.04
SINGRAULI STPS	542	2.86%	0.69	0.02
RIHAND 3 STPS	162	0.86%	1.51	0.01
RIHAND 1 STPS	141	0.75%	0.88	0.01
RIHAND 2 STPS	143	0.75%	0.74	0.01
Sasan	185	0.97%	0.18	0.00
Tanda-II	78	0.41%	1.66	0.01
Meja	36	0.19%	1.48	0.00
DCCPP		0.00%	1.02	0.00
Ramgarh GTP(Stage-III)	3	0.02%	1.19	0.00
STPS-(I-VI)	6630	34.95%	0.82	0.29
KTPS Unit(I-VII)	2845	15.00%	0.61	0.09
Ramgarh GTP(Stage-I&II)		0.00%	1.19	-
Adani Power	1643	8.66%	1.31	0.11
Rajwest Power	1631	8.60%	1.70	0.15
Kalisindh TPP-I	567	2.99%	1.79	0.05
Kalisindh TPP-II	365	1.92%	1.79	0.03
CTPP I-IV	707	3.72%	1.48	0.06
CTPP-V	184	0.97%	1.96	0.02
CTPP-VI	202	1.06%	1.56	0.02
GIRAL Unit-I	0	0.00%	1.86	-
GIRAL Unit-II	0	0.00%	1.86	-
NLC Barsinghsar	13	0.07%	2.32	0.00
<b>Total</b>	<b>18971</b>	<b>100.00%</b>		1.08

iii. Additional surcharge to be levied in the FY 2020-21

**Table 135: Additional surcharge to be levied in the FY 2020-21**

	Open Access Aggregated over each time block	Total Open Access	Back-down due to Open Access Aggregated over 96 Time Blocks	Back-down due to Open Access	Effective Fixed Cost	Additional Surcharge
	MW	MU	MW	MU	Rs. / kWh	Rs. Cr.
Total	9703125	2426	8712786	2178	1.08	235.34
<b>Additional Surcharge Recoverable per unit considering same open access scenario for the next year (Rs./kWh) (Total Additional Surcharge/Total Open Access*10)</b>						<b>0.97</b>

### Commission View

- 4.4.3 Discoms have submitted that while computing wheeling charges, purchase from bilateral have been reduced from sum of backdown and boxup quantum. However, the Commission observed that bilateral purchase has been indicated as zero having no effect on the calculation.
- 4.4.4 Discoms in their petition have submitted the calculation of Additional Surcharge for FY 2020-21 based on actual figures of FY 19-20. However, the FY 2020-21 is already over. Thus, the Commission has determined the Additional Surcharge for FY 2021-22 based on actual as submitted by Discoms for 2019-20 as FY 2020-21 was a COVID impacted year and the numbers for this year would not be reflective of the actual prevalent scenario in terms of lack of demand and associated backing down/boxing up. Even while estimating the sales for non domestic and medium/large industries, Commission has considered sales to these categories to be at the same level of FY 2019-20.
- 4.4.5 With Regard to Additional surcharge Stakeholders submitted that box up capacity should not be used to compute the net stranded capacity for each time block of each day of the month for the additional Surcharge calculations.
- 4.4.6 As regards the consideration of boxup quantum the Commission accepts the submission of Discoms that in FY 2019-20 the quantum of power boxed up was significantly higher when compared to boxed up capacity in FY 2014-15 and ultimately it is because of lack of demand. However, the Commission has considered the lower of the boxup + back-down quantum and open access

quantum as power surrendered due to open access.

- 4.4.7 Contention of the stakeholder that there is no back down due to open access cannot be accepted as only the lower of the boxup + back-down quantum and open access quantum has been considered as power surrendered due to open access for each of the 96 time blocks in a day, i.e., if the box-up+back down quantum is more than the open access quantum, the open access quantum has been considered, and if the box-up+back down quantum is less than the open access quantum, then the box-up+back down quantum has been considered as the quantum stranded due to Open Access Consumers not sourcing power from Discoms. This ensures that only the power stranded because of Open Access Consumers is taken.
- 4.4.8 Since the quantum of power surrendered every day is not from a specific power plant, and fixed cost associated with every power plant is different, the Commission has calculated an effective per unit fixed cost for every month by calculating weighted average fixed cost per unit based on the relevant tariff order of generating station against fixed charges and the quantum of energy drawn from each station for FY 19-20.
- 4.4.9 To work out a total effective per unit fixed cost of generation backed down, the fixed costs for the individual power plant units as per tariff order have been taken in the same proportion as the proportion in which individual power plant units have contributed to the surrendering of power. As compared to the consideration of actual payments made to generators, taking the fixed costs as per tariff orders eliminates all apprehensions about the period for which payments pertain. Thus, the rates of fixed costs are consistent.
- 4.4.10 This fixed cost has been considered for calculating the amount of total fixed charges that the Petitioner has paid because of the total stranded power owing to corresponding open access for FY 2019-20.
- 4.4.11 To compute the Additional Surcharge recoverable, the effective per unit fixed cost obtained as explained above is multiplied to the quantum of stranded power (in MUs) which has been considered to be surrendered because of consumers opting for open access.

### Calculation of Additional Surcharge based on the above method

4.4.12 In view of the above, Additional Surcharge based on data of FY 2019-20 is worked out as below:

i. Calculation of back down due to Open Access (MW):

**Table 136: Back down due to Open Access (MW)**

Month	Backdown Aggregated over 96 Time Blocks	Boxup Aggregated over 96 Time Block	Boxup + Backdown aggregated over 96 time blocks	Open Access Aggregated over 96 Time Blocks	Backdown due to Open Access Aggregated over 96 Time Blocks
	MW	MW	MW	MW	MW
April	3448562	3420385	6868947	1264093	1257041
May	2415860	1504250	3920110	757089	650219
June	2383093	533500	2916593	624178	503269
July	3885254	3733525	7618779	826729	811988
August	4696485	4516645	9213130	1190429	1173129
September	2759821	1775490	4535311	572845	530473
October	4455757	2054120	6509877	423384	423384
November	4238753	2108680	6347433	615074	598225
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January	3855801	2446170	6301971	1213683	971566
February	2807994	2196830	5004824	800368	558614
March	4260230	6481215	10741445	397471	355171
<b>Total</b>	<b>42539743</b>	<b>33360740</b>	<b>75900483</b>	<b>9703125</b>	<b>8712786</b>

ii. Calculation of effective fixed cost of generation back down:

**Table 137: Effective fixed cost of generation back down**

Station	Power Stranded in FY 2019-20 (MU)	% of surrender	Fixed charges (approved Rs./kWh)	Component of fixed cost (Rs./kWh)
AURIYA GTPS	18	0.09%	0.64	0.00
ANTA GTPS	14	0.07%	0.72	0.00
NCPP-2 (Dadri-II Thermal)	326	1.72%	1.45	0.02
DADRI GTPS	49	0.26%	0.58	0.00
UNCHAHAAR 1	131	0.69%	1.09	0.01
UNCHAHAAR 2	317	1.67%	1.02	0.02
UNCHAHAAR 3	180	0.95%	1.36	0.01

Station	Power Stranded in FY 2019-20 (MU)	% of surrender	Fixed charges (approved Rs./kWh)	Component of fixed cost (Rs./kWh)
UNCHAHAHAR 4	456	2.41%	1.54	0.04
FARAKKA STPS	37	0.20%	0.84	0.00
KAHALGAON- 1 STPS	68	0.36%	1.06	0.00
KAHALGAON-2 STPS	278	1.46%	1.10	0.02
CGPL	636	3.35%	0.90	0.03
PTC MCCPL	150	0.79%	1.79	0.01
PTC DB POWER	234	1.23%	2.85	0.04
SINGRAULI STPS	542	2.86%	0.66	0.02
RIHAND 3 STPS	162	0.86%	1.46	0.01
RIHAND 1 STPS	141	0.75%	0.86	0.01
RIHAND 2 STPS	143	0.75%	0.71	0.01
Sasan	185	0.97%	0.17	0.00
Tanda-II	78	0.41%	1.60	0.01
Meja	36	0.19%	1.13	0.00
DCCPP	1	0.00%	1.02	0.00
Ramgarh GTP(Stage-III)	3	0.02%	1.19	0.00
STPS-(I-VI)	6630	34.95%	0.82	0.29
KTPS Unit(I-VII)	2845	15.00%	0.61	0.09
Adani Power	1643	8.66%	1.33	0.12
Rajwest Power	1631	8.60%	1.70	0.15
Kalisindh TPP-I	567	2.99%	1.79	0.05
Kalisindh TPP-II	365	1.92%	1.79	0.03
CTPP I-IV	707	3.72%	1.48	0.05
CTPP-V	184	0.97%	1.96	0.02
CTPP-VI	202	1.06%	1.56	0.02
NLC Barsingshar	13	0.07%	2.31	0.00
Total	18971	100.00%	-	1.08

iii. Calculation of Additional Surcharge based on above

**Table 138: Additional Surcharge**

	Open Access Aggregated over each time block	Total Open Access	Back-down due to Open Access Aggregated over 96 Time Blocks	Back-down due to Open Access	Effective Fixed Cost	Additional Surcharge
	MW	MU	MW	MU	Rs. / kWh	Rs. Cr.
Total	9703125	2426	8712786	2178	1.08	235.34
<b>Additional Surcharge Recoverable per unit (Rs./kWh) (Total Additional Surcharge/Total Open Access*10)</b>						<b>0.97</b>

- 4.4.13 In view of the foregoing discussion, the Commission hereby allows Petitioners claim of Additional Surcharge at Rs. 0.97/unit to be recoverable from all the Open Access consumers except CPPs to the extent they consume the electricity generated by them for their own use.
- 4.4.14 The above additional Surcharge shall be levied and collected with effect from the date of this Order and remain in force till additional surcharge is re-determined by the Commission.
- 4.4.15 Jaipur Discom on behalf of all Discoms had filed the petition no. 1596/19 for determination of additional surcharge for FY 2019-20 on 27.12.2019. As the additional surcharge has been determined in this order, the above petition is also disposed of as infructuous. However, prior to date of issue of this order, the Additional surcharge earlier determined by the Commission shall be continued.

#### 4.5 **Parallel Operation Charges**

- 4.5.1 In the instant petition, Discoms have filed parallel operation charges for FY 2020-21 whereas through a separate petition no. 1799/20, Discoms have also filed parallel operation charges for FY 2019-20.
- 4.5.2 With regard to parallel operation charges, the Hon'ble APTEL in appeal 103 of 2020 & IA Nos 402 & 403 of 2020 in the matter of Shree Cement Ltd. Vs JdVVNL has observed as under:

*"that there is no scientific study or survey made or undertaken, nor any data called for or gathered, there being nothing before the State Commission in the nature of information as to cost incurred on which there could be legitimate return quantified for the purposes of determining the rate of parallel operation charge to be imposed"*

- 4.5.3 To comply with the above observation of Hon'ble APTEL, the Discoms are directed to conduct a scientific study and furnish an appropriate proposal based on the study within 2 months of issuance of this order. Accordingly, the instant proposal and petition no 1799/20 both are disposed of in these terms.

#### 4.6 **Power factor rebate and surcharge**

- 4.6.1 During previous tariff orders the Commission introduced various rebates for certain categories of consumers which resulted into realization of lower energy

charges from these consumers to Discoms.

- 4.6.2 There is a provision of power factor rebate and surcharge in tariff for various categories which is worked out in terms of percentage of energy charges. There is a possibility that a consumer is availing all rebates and effectively paying lower energy charges as compared to determined tariff. If the energy charges as per tariff are considered for calculation of power factor rebate and surcharge an anomalous situation will be created in which the consumer is effectively paying lower energy charges but claiming power factor rebate or paying surcharge on higher energy charges. As such to avoid the anomalous situation, the Commission directs that for the categories where rebates/surcharge are offered the power factor rebate/ surcharge shall be worked out on energy charges arrived at after availing all rebates/surcharge except power factor rebate/surcharge.

#### 4.7 **Monetization of Discoms' Assets**

- 4.7.1 It has been brought to the notice of the Commission that there is huge potential of earning additional revenue by the Discoms from optimum use of its assets which may include poles, land and buildings etc. While poles can be used to lay communication cable and rent can be earned from land/buildings. Discom may also set up EV Charging Stations, Buildings can be used for advertisement hoardings and setting up of ATMs and such other uses. The Discoms may even earn additional revenue from advertisement on its Portal/Apps. Parts of unused lands at commercial location may be considered for sale to local bodies.
- 4.7.2 The Commission has made a provision in this regard in Supply Code and also directed Discoms vide True-up order dated 27.09.2021 to ensure optimum use of its assets, mainly focusing on revenue from communication cable on poles. However, Discoms are not able to explore full potential of revenue from optimum utilization of their assets, due to inaction on their part, though, Communication cables on poles are clearly visible everywhere and can be easily identified and measured by field officers.
- 4.7.3 The Commission express its displeasure over the inaction on the part of Discoms'. In Commission's view, the revenue from communication cables on poles shall be substantial and be easily realized by Discoms which alongwith other revenue from monetization of assets will substantially improve financial health of Discoms. Accordingly, the Commission directs that;

- a) Discoms should identify its assets properly such as Land, Buildings, Poles and any useful assets which can be monetized and explore full potential of its assets subject to safety norms.
- b) Discoms should digitalize Assets Register and asset mapping should be made compulsory upto JEN level. MD of Discom shall be personally responsible for digitization of assets by each JEN level within 1 month. Thereafter, the assets mapping should be done instantly on go live basis.
- c) The MD of Discoms are personally directed to implement the concept of asset monetization and issue necessary guidelines to institute a transparent mechanism for identification of the assets, measurement and verification of revenue and create necessary accounting framework within one month parallel to the above exercise of digitalization of Asset Register and thereafter submit quarterly compliance report in this regard indicating action taken and circle wise revenue realised.
- d) In case of revenue loss due to connivance or negligence of staff of Discoms necessary disciplinary action be taken against the erring officers

#### 4.8 **Revenue Deficit**

- 4.8.1 Discoms in their petition have shown a combined deficit of Rs. 7927 Crores and Rs. 5236 Crore FY 2020-21 & FY 2021-22 respectively. The Discoms submitted that they have taken various initiatives to reduce the cumulative revenue gap and to improve overall efficiency such as Loss Reduction, Feeder Segregation, Billing efficiency, Network Strengthening, Cost Optimisation, Vigilance Drives, Private Sector Participation, Demand Side Management, Focus on customer service and other efficiency improvement measures.
- 4.8.2 Against the aforesaid deficit, Commission has approved the combined Surplus of Rs. 149 Crore and 601 Crore at existing tariff for FY 21-21 and 21-22 respectively. If in future years further surplus situation arises, any surplus shall be adjusted against the accumulated revenue gap of previous years.
- 4.8.3 Discoms should attempt to bridge the accumulated gap by taking measures for



loss reduction, efficiency improvement and cost optimization.

- 4.8.4 The Government may suitably reallocate power so as to bring all the Discoms to a level playing field in terms of power purchase cost so as to remove differentiation in gap due to adverse consumer mix and climatic conditions in JdVVNL. State Government may also consider to provide additional support to JdVVNL so as to meet their deficit determined by the Regulator. Government of Rajasthan (GoR) may consider to work on innovative models for management of quality, reliable and affordable Power for agricultural consumers.
- 4.8.5 In the Section 5, the Commission has reviewed compliance of its directives and issued fresh directives to the Discoms. MDs of each Discom are directed to personally submit a quarterly compliance report of these directives. One important issue flagged in this order is of monetization of Discoms' Assets. The MDs shall also furnish a quarterly report to the Commission of its compliance.
- 4.8.6 This tariff order shall come into force from the date of issue of this order and remain in force till the next tariff order of the Commission. All existing provisions which are not modified by this order shall continue to be in force. Discoms shall publish salient features of tariff within one week in two daily newspapers in Hindi and one in English having large circulation in their respective areas of supply. Discoms shall revise the existing tariff structure in accordance with this order and publish in Hindi and English a booklet containing all details of tariff and its applicability for the benefit of consumers. It should be made available for sale to general public at a nominal price.

**(Prithvi Raj)**  
**Member**

**(S.C. Dinkar)**  
**Member**

**(Dr. B.N. Sharma)**  
**Chairman**

## Section 5- Commission Directives

5.1 The Commission in its last order dated 06.02.2020 issued certain directives/ measures for improvement in working of the Discoms. The submission of the Discoms on these is summarized below:

Directive	Submission
<b>Reduction of losses and control of theft</b>	
<p>Each feeder should be treated as a management and profit center and feeder manager should be made fully responsible for each feeder.</p>	<p><b>JVVNL:</b> Already taken an initiative to treat every feeder as profit center. Discoms vide order dated 31.08.2015 have designated feeder in-charges (or feeder managers) at each feeder &amp; assigned responsibility includes proper operations and maintenance of 11 kV lines, 11/0.4 kV substation/transformer, LT lines, services lines for their respective feeders. The feeder in-charges have been made entrusted with the task of constant monitoring and reducing of the AT&amp;C losses on their respective feeders and suitable actions may be initiated against them in case of non-reduction in losses.</p> <p><b>AVVNL:</b> Already taken an initiative to treat every feeder as profit center. Vide order dated, 31.08.2015 , feeder in-charges (or feeder managers) have been appointed whose responsibilities include proper operations and maintenance of 11 kV lines, 11/0.4 kV substation/transformer, LT lines, services lines, replacement of meters, release of connections, recovery of arrears etc. for their respective feeders. The Zonal Chief Engineers have been made entrusted with the task of constant monitoring.</p> <p><b>JdVVNL:</b> Already taken an initiative to treat every feeder as profit center. Discoms vide order dated 31.08.2015 have designated feeder in-charges (or feeder managers) at each feeder &amp; assigned responsibility which includes proper operations and maintenance of 11 kV lines, 11/0.4 kV substation/transformer, LT lines, services lines for their respective feeders. The feeder in-charges have been entrusted with the task of constant monitoring and reducing of the AT&amp;C losses on their respective feeders and suitable actions are initiated against them in case of non-reduction in losses.</p>

Upload feeder wise losses on its website and analyze the feeder wise losses for last 3 years and submit a report to the Commission for 25 % feeders where the losses were highest during last year along with action taken by the Discoms for reduction in losses.

**JVVNL:** An online system "Bijli Prabandh" has been developed for collecting and analyzing feeder wise losses. A sample report on the Feeder wise losses for the month of May 2020 of Jaipur City Circle is submitted.

Discom submitted that, upon analysis of the feeder-wise losses on the 'BijliPrabandh' portal, few discrepancies in the loss levels of various feeders have been observed. The Discoms are in the process of identifying the root cause(s) of such discrepancies such as incorrect consumer indexing, issues in feeder meters etc. and the same are being rectified.

**AVVNL:** 11 KV feeder wise Cumulative Energy Audit/Losses Report from March-17 to Feb-20 & from March-20 to Oct-20 has been uploaded & available on website of Discom. Status of 2402 feeders where losses have been reduced during the period April-20 to July-20 from that of Dec-19 to March-20 period has also being submitted.

Moreover to assess the real time power quality and quantity parameters of all 11kV Rural Feeders on to a national platform and to provide web based access of same to all stake holders 11kV Rural Feeder Management System (RFMS) (An initiative of Ministry of Power, Govt. of India) has been implemented. LoA was placed by M/s RECTPCL upon M/s Lampex on 11/07/2017. Tripartite Agreement executed among AVVNL, M/s Lampex & M/s RECTPCL on 5th July, 2018. Scope of Work include Supply, installation, Commissioning, integration with Central MDAS, operation & maintenance of Modems for a period of 5 years after Go Live for 8000 nos. 11kV Rural/ Agriculture/ Mixed feeders.

Firm has installed total 7482 nos. Modems on 11kV Feeder Meters. (4930 nos. in 1<sup>st</sup> phase already declared Go-live and 2552 nos. Modems in 2<sup>nd</sup> phase yet to be declared Go-live). Total 5899 Nos. Feeder Modems are communicating as on 31/12/2020. All the Feeders with communicating Modems are being monitored at National Power Portal.

**JdVVNL:** Feeder wise losses are being uploaded on its website

A snapshot/ screenshot of the uploaded feeder wise losses

	<p>has been submitted. The status of AT&amp;C losses summary for March, 2019 to Feb, 2020 and 25% highest loss feeders is submitted.</p> <p>The petitioner submitted that, upon analysis of the feeder-wise losses, few discrepancies in the loss levels of various feeders have been observed. The Discom is in the process of identifying the root cause(s) of such discrepancies such as incorrect consumer indexing, issues in feeder meters etc. and the same are being rectified.</p>
<p>MD of each Discom should adopt two circles where losses are highest, whereby Distribution losses of Discoms can be reviewed and monitored properly and can be reduced in a progressive manner. Technical Director should also adopt one circle with third highest loss. Outcome of this measure should be reported to the Commission after six months of issue of the orders.</p>	<p><b>JVVNL:</b> The circle wise losses for the FY 2019-20 have been submitted.</p> <p>In compliance to the Directive of the Commission, MD, JVJNL, vide order dated 12.06.2020, has adopted two circles with highest losses viz. Bharatpur and Dholpur. Director, Technical has also adopted Karauli circle for reviewing, monitoring and reducing of losses.</p> <p><b>AVJNL:</b> In compliance of the directive of the Commission, MD, Ajmer Discom has taken up Nagaur &amp; Jhunjhunu Circles which were having highest losses as per reports of Mar-20. Several prominent steps were taken, to ensure that the losses of these two circles are reduced, which are detailed as hereunder:</p> <ul style="list-style-type: none"> <li>• Nagaur being a theft prone circle, several steps were taken to prevent theft and reduce losses.</li> <li>• Technical and commercial interventions such as load balancing of power transformers, capturing actual readings of removed meters, defective meter replacement drive and minimizing average and provisional billing have been undertaken to achieve the target loss levels</li> <li>• Intensive Vigilance activities were carried out there. In Nagaur 207 illegal transformers in-circuited in theft were removed and seized. Similarly, 61 Illegal Transformers have been lifted in Jhunjhunu Circle so far.</li> <li>• Various theft prone sites were visited, where illegal transformers &amp; lines were removed in presence of MD, Ajmer Discom.</li> <li>• The Work of Ag Feeder Segregation are being carried out in highest loss making Nagaur circle. Out of 188 feeders</li> </ul>

selected for Ag Feeder Segregation, 94 nos. Ag Feeders have been completed.

- Connections are being released by motivating the consumers to prevent illegal use of electricity. Various camps are being organized. Approximately 2986 Ag Connections have been released in Khinvsar and Mundwa sub divisions of Nagaur by motivating the consumers to prevent illegal use of electricity.
- Load enhancement of Ag Consumers are being carried out & camps are also being organized under VLDS scheme. Nagaur & Jhunjhunu Circles have enhanced total of 26,990 HP & 21,733 HP load respectively in Ag category.
- Regular meetings for micro monitoring are being taken through video conferencing by MD, Ajmer Discom.
- No consumers are being billed on zero basis without verification of site by concerned JEN.
- All removed meters are being tested at sub-division level, for capturing of actual readings.

Thus with above implementations and joint efforts of teams in circle, significant reduction in T&D losses were achieved as detailed below:

Circle	(%) T&D Losses (as on Mar-20)	(%) T&D Losses (upto Nov-20)	Reduction in T&D losses (upto Nov-20)	Targeted T&D (%) losses (upto Mar-21)
Nagaur	32.27%	26.96%	5.31%	26.00%
Jhunjhunu	18.74%	15.53%	3.21%	14.00%
Banswara	17%	16.63%	0.37	13.00%

**JdVVNL:** The Managing Director, Jodhpur Discom has taken Jodhpur DC & Bikaner DC and the Director(Tech.) has taken Churu (O&M) Circle. Jodhpur DC, Bikaner DC and Churu Circle have AT&C losses 45.24%, 38.96% and 38.73% in Oct-19 respectively and been reduced to 38.37%, 34.79% and 34.28% in oct-20 respectively.

Carry out compulsory checking of meters installed at quarters of GSS, police Station, public places and other Government colonies.

**JVVNL:** Vigilance is a continuous process and the theft prone areas are being checked regularly so as to reduce the losses. As part of a special drive to further increase the focus on vigilance activities, 15,734 number of checking's were done in 13 Circles during 1<sup>st</sup> June, 2020 to 24<sup>th</sup> August, 2020 in which 45259 nos. cases of theft were detected. Similar vigilance drives were conducted in the months of September to November. The outcome of such special drives has been submitted.

For the reference at JPDC circle following compulsory vigilance checking of meter were done as under and VCR's were drawn where any irregularity was detected/found.

1.	GSS quarter	286 nos.
2.	Police quarter	163 nos.
3.	Other Govt. quarter	204 nos.
4.	Public Place	293 no.s

Further, in compliance to directive, Additional SP (Vig.), Jaipur Discom and SE (Vigilance), Jaipur Discom were pursued vide letter no. 145 dated 15.06.2020 to submit regular reports on vigilance activities and checking's being done by them.

**AVVNL:** Vigilance is a continuous process and the theft prone areas are being checked consistently so as to reduce the losses. Further, MD, Ajmer Discom is participating in the vigilance drives to further motivate the team in order to recover maximum amounts pertaining to thefts and malpractices. The details of checking of meters installed at quarters of GSS, police Station, public places and other Government colonies from 01.02.2020 to July, 2020 is also submitted. In the aforesaid checking, 8 cases of theft have been found at public places by AEN (Vig) Kushalgarh with an assessment of 1.47 lacs. The concerned public places departments have been intimated for necessary action in the matter.

**JdVVNL:** Vigilance is a continuous activity and the petitioner recognizes the importance of regular checking of meters in ultimately reducing the distribution losses. The theft prone

	<p>areas (including quarters of GSS, police station, public place and other Govt. colonies) are being checked regularly so as to reduce the losses. The copies of special vigilance campaign carried out since June, 2020 have been submitted.</p>
<p>Take necessary initiatives to reduce the scope of theft like regular checking of theft prone installations.</p>	<p><b>JVVNL:</b> A special vigilance drive was organized from 1<sup>st</sup> June to 24<sup>th</sup> August 2020 in which 45,259 cases of theft were detected. The outcome of such special drives has been submitted.</p> <p>Further Additional SP and SE (Vigilance), Jaipur Discom have been advised to take necessary initiatives to eliminate theft. The areas which are more electricity thief prone are being chosen and regular impartial checking is being done.</p> <p><b>AVVNL:</b> Vigilance is a continuous activity and the petitioner recognizes the importance of regular checking of meters in ultimately reducing the distribution losses. The theft prone areas(including quarters of GSS, police station, public place and other Govt. colonies) are being checked regularly so as to reduce the losses..</p> <p><b>JdVVNL:</b> Vigilance checking is a regular activity in Discom. To target specific category/type of consumers, special checking drives are being carried out. Regular checking is being done in theft prone area.</p>
<p>Due to various legal proceeding, there is a stay on release of connections in certain areas. Initiate necessary steps for either taking legal recourse to allow them to release the connections in such theft prone areas or step up vigilance activities in such areas with help of local administration</p>	<p><b>JVVNL:</b> M.D, Jaipur Discom had constituted the Committee to take up the task directed by the Hon'ble Commission.</p> <p>To reduce the litigation in various forums, field officers are directed from time to time to resolve the grievances of consumers regarding connections, metering, billing, etc. at sub-division level, so as not to escalate the litigation to higher level. Training programmes are also organized at Circle Level for JEN's &amp; AENs and they are conveyed about the provisions of Tariff and TCOS, so that they can work as per existing provisions and grievance of consumers can be minimized. Field officers are also advised to adhere the timelines prescribed on SOP for various consumer services for better consumer satisfaction. At Corporate Level also, the grievances of consumers are resolved by M.D. Jaipur Discom on daily basis. Grievances Redressal Camps are</p>

<p>so as to avoid cases of theft/ unauthorized use.</p>	<p>being organized at a fixed date every month at Sub-division level. Apart from above, efforts are being made to minimize litigation in various forums by resolving them through Public Lok Adalat.</p> <p>In certain areas such as the Prithviraj Nagar area in Jaipur falling under the jurisdiction of Jaipur Discom, there is stay on release of new connections from Hon'ble Rajasthan High Court, which leads to theft of electricity by the residents of those areas. To avoid such situation a petition is filed by the Jaipur Discom in Hon'ble Rajasthan High Court, to allow new connections to residents of such areas who have already constructed their houses and living there. Further, it is submitted that intensive vigilance drives are being done in such areas so as to reduce theft in the areas. In the past 7 years, 3435 theft cases have been detected in these areas and Rs 544.61 lacs have been recovered from the defaulters. The report of the Committee has been submitted.</p> <p><b>AVVNL:</b> To avoid any sort of unnecessary litigations, 2 level of Committees have been formed in the Ajmer Discom, Further, it is submitted that regular vigilance drives are being done so as to reduce theft in the area.</p> <p><b>JdVVNL:</b> A committee has been formed vide order 91 dated 24.07.2020 in this regard.</p>
<p>Initiate a scheme of appreciation and reward, where a person who informs the Discoms about theft cases is being appreciated and rewarded.</p>	<p><b>JVVNL, AVVNL, JdVVNL:</b> The scheme is under consideration at the Senior Management level of the Discom.</p>
<p>Re-assess wheeling losses and furnish detailed report.</p>	<p><b>JVVNL, AVVNL, JdVVNL:</b> The process of re-assessment of wheeling losses was in place but due to the COVID-19 pandemic outbreak the same has been delayed. Hence, requested for some more time regarding the same.</p>



Discoms are directed to make loss reduction plan.	<b>JVVNL, AVVNL, JdVVNL:</b> As per the compliance of the Directive of the Commission, the Discoms submitted the detailed loss reduction plan .
Furnish a detailed report of AT&C Losses.	<b>JVVNL, AVVNL, JdVVNL:</b> The petitioner Discoms submitted the report on AT&C losses.
<b>Metering, Billing and Collection related</b>	
Discoms may also work out a tariff design which incentivizes the consumer to move to metered category and keep the meter in healthy condition and furnish suitable proposal along with next tariff petition.	<b>JVVNL, AVVNL and JdVVNL:</b> A tariff design incentivizing the consumers to keep their meters in healthy condition and not tamper their meters, has been worked upon by the Discoms, the details of which have been submitted in the MYT Tariff Petition. Since, a majority of the defective meters pertain to agriculture category consumers, the Discoms have proposed a revised tariff design, in which the Fixed charges have been increased and the corresponding energy charges have been decreased so as to make the proposal revenue neutral. As the energy charges payable by the agriculture consumer shall be reduced, the incentive for them to tamper their meters and make them defective shall reduce.
Identify all unmetered streetlight points and ensure that no streetlight point exists without correct meter.	<p><b>JVVNL:</b> The report from each circle is being collected with regard to unmetered streetlight points. For instance, in Dausa and Alwar circle, 3458 and 4,301 unmetered PSL points have been identified. In Jaipur City circle, presently 1825 metered connections and 97105 direct streetlight points are regularly billed for unmetered streetlight points (direct point).</p> <p>A joint survey was conducted by JCC circle with Nagar Nigam officials and estimates were prepared for converting unmetered points into metered point by drawing phase wire. The demand notice of above estimates has already been issued to Nagar Nigam by the respective sub-divisions. The Nagar Nigam authorities have taken a decision that above work shall be carried out by the Nagar Nigam on their own. Further, 162 no. metered connections have been released, and 596 no. of direct points have been metered.</p>

	<p>The Nagar Nigam is in the process of releasing other connections.</p> <p><b>AVVNL:</b> The reports from each and every circle have been collected with regard to unmetered streetlight points.</p> <p>As on 31.03.2019, there were a total of 14,708 unmetered points whereas as on 31.03.2020, there are NIL unmetered streetlight points in the Discom.</p> <p><b>JdVVNL:</b> Discom is very much particular about unmetered points and it is making all efforts to meter the same on regular basis. Discom has metered 680 unmetered street light points.</p>
Discoms should ensure that Message/ bills are timely delivered to end consumer.	<p><b>JVVNL:</b> A spot billing system has been deployed at the Jaipur Discom which ensures bills are instantly generated and delivered. SMS/ Messages are also being sent to all the consumers in a timely manner. Moreover, the Discom has also provided a facility to its consumers to access all the details related to current bills, past bills, payment details etc. on the 'BijliMitra' app, which is available on the Android as well iOS platforms.</p> <p><b>AVVNL:</b> All measures are being taken to ensure that bills are reached to end consumers on time, such that they can avail the benefit of prompt payment rebate. Further, consumers having android/iOS phones, are also availing the benefit of the mobile app developed by M/s Pragyaware Informatics Pvt. Ltd. Mobile App (URJA SARTHI) has been launched which is also available in Google Play Store. Following are the main functionalities of the mobile app:</p> <p>(i) Current Bill, (ii) Previous Bill, (iii) Consumption Pattern, (iv) Average Consumption, (v) Pay Energy Bill, (vi) Online Payment Details, (vii) Complaint Status, (viii) Register Technical Complaint, (ix) Register Theft Complaint</p> <p><b>JdVVNL:</b> All measures are being taken to ensure that bills are delivered to end consumers in a timely manner. Further, SMS regarding bills/dues and payments on issuance of bills/receipts of payment, due dates, reminders, etc. are also being sent to the consumers on their registered mobile</p>

	number.
<p>Carry out a detailed study of actual specific consumption of flat rate agriculture consumers of three Discoms separately and submit the same to Commission along with the next ARR and Tariff Petition. This study should be supported by Feeder meter reading and total of meters installed at Agriculture Consumers.</p>	<p><b>JVVNL:</b> The Discom is in the process of converting the flat rate consumers to metered category. Also, feeder segregation and accurate feeder metering, which is a vital component required for the study is under process. The Petitioner shall furnish a detailed report in compliance to the directive of the Hon'ble Commission in due course of time.</p> <p><b>AVVNL:</b> The reports from every circle has been collected with regard to metered and unmetered agricultural connections for the FY 2019-20, the connected load, unit consumption and based on aforementioned parameters, specific consumption has been calculated and the report is being submitted</p> <p><b>JdVVNL:</b> For this purpose, 100% feeders have been metered but due to a few errors in consumer indexing owing to the huge and scattered consumer base, the losses are sometimes erroneous. The petitioner submits that the faults are being corrected and once 100% correct consumer indexing is done the study of actual specific consumption shall be finalized.</p> <p>Further, under the KUSUM-C, the feeders have to be segregated which shall expedite the process of computing the specific consumption of flat rate agriculture consumers.</p> <p>Hence, looking at the difficulties in carrying out the study and arriving at the accurate conclusion, the Discom requests the Hon'ble Commission to kindly grant some more time.</p>
<p>There is provision of giving 5% rebate to consumers on average bills if meter remains defective. The Discoms should ensure that they pass on this rebate to consumers. In</p>	<p><b>JVVNL:</b> That the rebate of 5% to the consumers with defective meters is being passed for amount Rs. 17.82 Lakhs in the FY 2019-20.</p> <p><b>AVVNL:</b> Total 5% rebate amount passed on to consumers from April-20 to Nov-20 for the F.Y. 2020-21 is Rs 27.80 lakhs.</p> <p><b>JdVVNL:</b> The rebate of 5% to the consumers with defective meters is being passed on. The statement showing the rebate allowed on defective meters upto Oct.2020 of FY</p>

<p>case of non-replacement of meter timely, suitable disciplinary action be taken against the concerned employee.</p>	<p>2020-21 has been submitted.</p>
<p>To fix some targets in terms of numbers / percentage of total meter readings for these officers and on such checking if difference in meter reading is found, strict action be taken against defaulters.</p>	<p><b>JVVNL:</b> Discom has set the targets for counter-checking of meter readings per month,</p> <p>Counterchecking of the meter reading taken by meter readers of the Discoms/ private agencies are being regularly done and suitable action against defaulters, in case of discrepancy in meter readings, is being undertaken.</p> <p><b>AVVNL:</b> The order issued in respect of cross reading verification and its progress is being submitted for kind consideration of the Hon'ble Commission. As on 01.08.2020, 37,774 consumers were cross checked. In this 3,921 cases were found where difference in reading is there and 326 theft cases were detected. In totality the units captured were 27,42,743 KWh.</p> <p><b>JdVVNL:</b> All XEns and AEns have been directed to cross check readings taken by the feeder in-charges and other firms as per fixed targets, and action is being taken against defaulters.</p>
<p>To review category wise and age wise position of arrears and initiate a drive for recovery of arrears.</p>	<p><b>JVVNL:</b> Details of category-wise arrears for FY 2018-19 and FY 2019-20 has been submitted. Further, a special drive for recovery of arrears from PDC consumers is being initiated by the Discom on a regular basis. Amnesty schemes have been introduced for long pending outstanding of DC and PDC consumers. Field officers have been entrusted with the task of recovering dues from PDC consumers. Nearly Rs. 40.42 Cr. have been recovered from PDC consumers. Strict actions like disconnections against willful defaulters has been taken.</p> <p><b>AVVNL:</b> Continuous analysis of arrears is being done for each category. The petitioner submitted the details of the</p>

	<p>category wise arrears status.</p> <p>Due to impact of COVID-19 pandemic the arrear recovery efforts has been seriously affected . officers of Discom were assigned sub divisions to mobilize revenue recovery drive from time to time . As a result of this drive, 49.91 Cr has been recovered. Moreover each and every month, circle wise target of Revenue Remittance is also given. Such drives will continue for ensuring cent per cent recovery.</p> <p><b>JdVVNL:</b> The details of category wise arrears has been submitted.</p> <p>Further, a special drive for recovery of arrears from PDC consumers is being initiated by the Discom on regular basis. Amnesty schemes have been introduced for long pending outstanding of DC and PDC consumers.</p>
<p>To ensure that while purchasing meters of new technology, they should ensure its usability over the useful life and also choose communicate protocol/software carefully.</p>	<p><b>JVVNL:</b> Meters of the highest technology standards are being procured with. Further, usability over the useful life is being checked and ensured for the best quality.</p> <p><b>AVVNL:</b> Meters of the highest technology standards are being procured with. Further, usability over the useful life is being checked and ensured to the best quality. The defective meters and transformers failed in guarantee period received from the field are in the software at the circle store.</p> <p><b>JdVVNL:</b> Meters are purchased as per IS and metering Regulation standards are being complied with. Further, usability over the useful life is being checked and ensured for the best quality.</p>
<b>General and ARR related Directions</b>	
<p>Furnish the pin pointed replies while responding to the stakeholders comments.</p>	<p><b>JVVNL, AVVNL, JdVVNL: Discoms</b> acknowledged the same.</p>

<p>File separate information of category wise number of temporary connections, connected load, sales and revenue realization from them in next petition.</p>	<p><b>JVVNL:</b> The separate information of category wise number of temporary connections, connected load, sales and revenue realization from them has been provided</p> <p><b>AVVNL:</b> The separate information of category wise number of temporary connections, connected load, sales and revenue realization from them has been provided. The petitioner further submits that the billing authorities have been reiterated and directed to ensure that billing of temporary connections should only be carried out through system only in order to ensure readily availability of required data for temporary connections.</p> <p><b>JdVVNL:</b> The separate information of category wise number of temporary connections, connected load, sales and revenue realization from them has been provided to the Hon'ble Commission as a part of the Replies to Data gaps on True up petition for the FY 2018-19.</p>
<p>Discoms are directed to file detailed category wise calculation of sales and revenue realization made for consumers with defective meters along with the next year ARR and Tariff petition.</p>	<p><b>JVVNL:</b> The category wise details of revenue recovered from consumers with defective meters for FY 18-19 &amp; FY 2019-20 are submitted.</p> <p><b>AVVNL:</b> The said directions have been provided to the billing agency to capture the sales and revenue for consumers with defective meters in the MIS and the same shall be provided to the Hon'ble Commission in an expedited manner.</p> <p><b>JdVVNL:</b> The statement of sales &amp; revenue realization from consumers with defective meters upto Nov.20 during FY 2020-21 has been submitted.</p>
<p>Furnish Fixed Assets Register along with physical verification report in next true up/ tariff filing.</p>	<p><b>JVVNL:</b> The process of compilation of fixed assets register has been taken up on war footing as per the orders of the Hon'ble Commission dated 31.12.2019. The Fixed Assets Registers of 8 (O&amp;M) circles i.e. JPDC, JCC, Tonk, Dholpur, Dausa, SawaiMadhopur, Bundi and Kota &amp; 4 (Non-O&amp;M) circles i.e. Jaipur Zone, MM,M&amp;P-IT are being submitted as part of this MYT petition. The physical verification of assets in</p>

	<p>the remaining circles is underway and the FAR of such circles shall be submitted once verification is completed by the concerned agency.</p> <p>The FAR of the 12 circles is being submitted in a Compact Disk (CD).</p> <p><b>AVVNL:</b> The fixed Assets Register of Jhunjhunu circle comprising details of fixed assets installed/commissioned as on 31.03.2020, have been submitted. The petitioner submits that preparation of Fixed Assets Register for remaining circles is under progress and shall be submitted shortly. The Hon'ble Commission is requested to kindly grant some more time for the same to the petitioner.</p> <p><b>JdVVNL:</b> The process of preparation of fixed assets register has been taken up as per the orders of the Hon'ble Commission. Requisite information on location wise duly physically verified quantity of assets has been collected and work of valuation is under process for the said matter which was delayed due to the outbreak of COVID-19 pandemic.</p> <p>Fixed Assets Register for Hanumangarh circle is completed &amp; is being submitted to Hon'ble Commission. The Discom requests the Hon'ble Commission to kindly grant some more time for furnishing the Fixed Assets Register of remaining circles.</p>
<p>Prepare a medium-term business plan indicating likely impact and strategy to deal with electric vehicles, distributed generation, prosumers and influx of renewable energy and other related trends of power sector.</p>	<p><b>JVVNL, AVVNL, JdVVNL:</b> It was in the process of the preparing a medium-term business plan duly incorporating the various megatrends such as Electric Vehicles, Distributed Energy, Prosumers etc. However, the advent of COVID-19 pandemic resulted in disruption in normal business activities of the Discom. In the aftermath of such a Pandemic, the Discoms are striving to bring in normalcy to their business akin to a pre-COVID or Business As Usual scenario. Hence, once things normalize, there shall be a need for strategic rethinking of Discom's medium term Business Plan looking at the new normal post the pandemic. Accordingly, the Petitioner requests the Hon'ble Commission to allow it to submit a medium-term business plan along with the next tariff petition.</p>

<p>Prepare a financial turnaround plan which shall contain the road map for financial turnaround showing likely expenses, revenues, availability and requirement of funds, need for tariff increase, plan for optimization of capital and revenue expenses, need for improvement in operational parameters, restructuring of debts and initiative for cash flow improvement.</p>	<p><b>JVVNL, AVVNL, JdVVNL:</b> The detailed report has been submitted..</p>
<p>To make a time bound program clearly showing milestones and responsibilities of various officers regarding implementation of ERP.</p>	<p><b>JVVNL:</b> The report of ERP implementation with timeline of deliverables and responsibilities of officers has been as submitted.</p> <p><b>AVVNL:</b> ERP implementation in Ajmer Discom under IPDS has been rolled out through two separate work orders issued to RajComp Info Services Limited (DoIT, GoR) and work of some modules are under progress.</p> <p><b>JdVVNL:</b> The compliance of the Directive of the Hon'ble Commission, the matter has been taken up by the senior management and the details of responsibilities of nodal officers have been submitted.</p>
<p>Furnish detailed calculation of voltage wise cost of supply with the next tariff filing.</p>	<p><b>JVVNL ,AVVNL:</b> The process of reassessment of voltage wise losses was in place but due to the COVID-19 pandemic outbreak the same has been delayed. Hence, the petitioner requests the Hon'ble Commission to kindly grant some more time regarding the same. However, the petitioner has submitted the voltage-wise cost of supply as</p>



	<p>per the judgment of Hon'ble APTEL with this MYT petition.</p> <p><b>JdVVNL:</b></p> <p>The petitioner has submitted the voltage-wise cost of supply as per the judgment of Hon'ble APTEL, in Appeal No. 102 of 2010, with this MYT petition.</p>
<p>Set a critical level of inventory and optimize their purchases and ensure that no material lies idle in the store beyond the pre-determined level.</p>	<p><b>JVVNL:</b> Due consideration is given before making any capital expenditure and every measure is being taken to avoid any inventory lying idle in the stores.</p> <p><b>AVVNL , JdVVNL:</b> Discom has set a minimum of 4 months inventory to be available in the stores and if material is found excess/shortage as per the requirement then action has to be initiated as per the direction issued by Hon'ble Managing Director.</p>
<b>Consumer service related</b>	
<p>Set up 24X7 Helpline/Helpdesk and hold at least one consumer campaign in each circle. Focus on rural areas for better areas and to conduct regular Chaupal/Jan Sunwai for redressal of their problems and consumers awareness.</p>	<p><b>JVVNL, :</b> 24x7 helpline has been set up in the Jaipur Discom and consumers are continuously availing the benefit of the same. For redressal of consumer grievances and for awareness Chaupal/Jan Sunwai are being held at sub-divisional level in the month of each 2<sup>nd</sup>&amp; 4<sup>th</sup> Saturday and on every Monday in Jaipur City Circle.</p> <p><b>AVVNL:</b> 24x7 helpline has been set up in the Discom and consumers are continuously availing the benefit of the same. For redressal of consumer grievances and for awareness Chaupal/Jan Sunwai are being held at sub-divisional level in the month of each 2<sup>nd</sup>&amp; 4<sup>th</sup> Saturday</p> <p><b>JdVVNL</b> Consumers grievances redressal is regular feature in office hours and afterwards through call centre and online media i.e. twitter/whatsapp/Gmail/samparkportal consumers grievances are regularly being monitored and resolved. Further, under "Smart Consumer Care Centre" scheme M/s Intelenet Global Service Pvt. Ltd. have been appointed for deployment of call center executives, divisional level customer care help desk agents etc.</p>
<p>Separate Fault</p>	<p><b>JVVNL:</b> FRT teams have also been deployed and M/s</p>

<p>Removal Teams be also formed in rural areas as well.</p>	<p>Intelenet Global Services Pvt. Ltd. has been entrusted with the task of deployment of Fault Rectification Services including vehicles and manpower.</p> <p><b>AVVNL:</b> due considerations have been given for the deployment of FRT teams in the rural areas to improve the quality of supply. Prior to the directive of the Hon'ble Commission the petitioner had already initiated the process of deployment of FRTs in various sub-divisions of the Discom along with appropriate infrastructure for rectification of No-Current complaints of LT consumers as well as rectification of various types of faults occurring on LT and HT lines (upto 11kV). work order for deployment of FRTs have been awarded to M/s Sandha &amp; Co. Gurgaon on 11-07-2020. All the consumer complaints as well as faults on LT / HT lines of entire jurisdiction of the Sub-division are to be handled by the contractor. As per the current status, FRTs have been deployed in 174 out of total 200 sub-divisions of the Discom. Deployment of FRTs in rest of the sub-divisions is under progress.</p> <p><b>JdVVNL:</b> The work order for engagement of Agency for "Smart Customer Care System with Fault Rectification Team (FRT)" in rural area of Jodhpur Discom has been given to M/s Tele performance Global Services Pvt. Ltd.</p>
<p>Collect mobile number of every consumer within 3 months' time from the date of issue of this order and prepare a data base for informing consumers regarding bills, schedule outages, etc. time to time.</p>	<p><b>JVVNL:</b> Address &amp; Email are the key parameters of a consumers and are being updated with a proper application and proof received from consumer. Sub-Div. Revenue wing have the rights to update the Address, mobile &amp; Email of a consumer. Feeder in charge is also having the facility to update the mobile no of the consumer at the time of billing so that it will be updated in the masters for alerts and messages. Since Mobile Number along with "K Number" can be used to resister and access various services offered by Discom hence are being updated in master data with secured mechanism.</p> <p><b>AVVNL:</b> Address &amp; Email are the key parameters of a consumer and are being updated with a proper application and proof received from consumer. Since Mobile Number along with K number can be used to register and access various services offered by Discom</p>

	<p>hence are being updated in master data with secured mechanism. It is submitted that the consumers having their mobile numbers registered with the Discom are being communicated for their bills. As on Dec-20, mobile numbers of 44,82,447 consumers (86.47 %of total consumers) have been collected.</p> <p><b>JdVVNL:</b> Regular monitoring for completion of activity of registration of Mobile no. by all consumers is being done with field office. A Google form has been made available to the consumers for facilitating / mapping update of mobile no. on continuous basis. Guidelines have been issued for updating Mobile No. of Consumers in their electricity account. Since March,2020 total 111731 mobile numbers have been uploaded in the system. Field officers are regularly being directed to update the mobile numbers. Some mobile numbers could not be updated as many premises remain lock for most of the time. The status of month wise mobile number updated has been submitted.</p>
<p>To place details of calculations of fuel surcharge and methodology for recovering it on website before raising the claims. The fuel surcharge calculation should be got verified from an independent auditor.</p>	<p><b>JVVNL:</b> The details of calculations of Fuel Surcharge and methodology for recovering are being regularly placed on the Jaipur Discom website.</p> <p>Further, for recovering the fuel surcharge for the 4<sup>th</sup> quarter of FY 2019-20 , calculations have been audited &amp; verified from independent auditor M/S KSPJ &amp; same is also uploaded on the Jaipur Discom website.</p> <p><b>AVVNL:</b> The details of Fuel Surcharge are being submitted on the website. The details of the FSA of Quarter-1 of FY 2020-21 with verification report by the third-party auditor has been uploaded on the website of Nigam.</p> <p><b>JdVVNL:</b> As per the Directive of the Hon'ble Commission, the details of Fuel Surcharge are being submitted on the website.</p> <p>Further, as per the direction of Hon'ble Commission, the fuel surcharge is levied post audit by an independent auditor</p>
<p>Furnish the details of statement of accounts to the consumers duly</p>	<p><b>JVVNL:</b> Appropriate directions have been issued to the billing agency for making the requisite changes in the software.</p>

<p>indicating the consumption, date of payment and amount thereof, the security held and interest payable and when it was paid, additional security, if any, required and due date of the same, at the end of each financial year.</p>	<p>The consumers also have the option of accessing details of consumption, date of payment, amount, security amount etc. through the 'BijliMitra' App, available on Android and iOS platforms. Further, JVVNL will provide a link on its website for downloading this statement for each and every consumer.</p> <p><b>AVVNL:</b> Details of consumer accounts are available on Mobile App (URJA SARTHI) of the petitioner which can be installed by the consumer for accessing its account. Also the details in physical form, if required and requested by consumer, is also provided.</p> <p><b>JdVVNL:</b> Details of statements of accounts to the consumers duly indicating the consumption, date of payment and amount &amp; Security amount are being made available to the consumers through Discom's Web Self Service(WSS) portal as well as mobile application "VidyutSaathi".</p>
<p>Security Deposit amount should be shown separately in the bills of consumers after due verification and that should be considered as sufficient proof if the consumer seeks refund.</p>	<p><b>JVVNL, AVVNL, JdVVNL:</b> The security deposit amount is already being shown in the electricity bill of the consumers and the interest on security deposit is being shown in the bill of month July/August. Further, as directed security amount as shown in the electricity bill will be considered as a sufficient proof if any consumer seeks refund.</p>
<p>To clearly indicate the detailed break up of other debits, fuel surcharge and other miscellaneous charges shown in consumer electricity bills.</p>	<p><b>JVVNL:</b> Due the Spot Billing practice being followed by the Jaipur Discom, there is a constraint on the space available on the bill being generated under such Spot Billing. Hence, detailed breakup of other debits, FSA and miscellaneous charges is not being presently indicated. However, alternatives such as providing detailed breakup in e-copy are being explored.</p> <p><b>AVVNL:</b> The directive of the Hon'ble Commission and the same shall be put in place but due to lack of space in the electricity bill being sent to the consumers, the same has not been implemented, but alternatives such as detailed</p>

	<p>breakup in e-copy are being explored. As of now, the amount of Fuel Surcharge is being shown separately and other miscellaneous charges are being shown under "Other Debits</p> <p><b>JdVVNL:</b> Break up of most of the items highlighted by the Commission is being provided with the bill.</p>
<b>Tariff related</b>	
<p>Submit suitable proposals for merging Small Domestic category with General Domestic consumers along with next tariff petition.</p>	<p><b>JVVNL, AVVNL:</b> It has proposed a methodology to gradually merge the two-mentioned categories. In order to avoid tariff shock to the consumers, the Discom has planned to merge the 2 categories in a phased manner. The Discom has proposed the following provision in order to ensure the benefit of subsidized tariff is not provided to consumers with significant consumption above the norms of 50 units per month:</p> <p><i>"Provided that in case any small domestic consumers has consumed more than 900 units over a period of last 12 months, the consumer will be charged as per the applicable tariffs of the respective slabs under the General Domestic Category from the next month onwards for all subsequent billing cycles."</i></p> <p><b>JdVVNL:</b> It has proposed a methodology to gradually merge the two-mentioned categories. In order to avoid tariff shock to the consumers, the Discom has planned to merge the 2 categories in a phased manner. The details of the Discom's proposal have been provided in the Section on Tariff Rationalization in the MYT Petition, for the perusal of the Hon'ble Commission.</p>
<p>To review the various rebates and incentive as well as the tariff for newly created sub-category at regular intervals and file suitable proposals</p>	<p><b>JVVNL, AVVNL and JdVNNL:</b> Due to the COVID-19 pandemic, the data available for detailed impact analysis of various rebates and incentives shall not indicate a true/ realistic picture. Therefore, at present, the Petitioner has not proposed any revision in rebates or incentives.</p>

for revision, if required.	
Study month wise and hourly, Peak hours and off-peak hours and the power rates in power exchange during such peak and off-peak hours in Rajasthan and accordingly suggest the ToD tariff in the next tariff petition for FY 2020-21.	<b>JVVNL ,AVVNL, JdVVNL:</b> Due to the COVID-19 pandemic, the data available for detailed impact analysis such as power purchase and sale rates in exchange, peak and off-peak demand, shall not indicate a realistic picture. Therefore, at present, the Petitioner has not proposed any revision in the ToD tariff in the petition. However, the Discoms submitted a proposal post hearing.
File a fresh petition for determination of wheeling charges.	<b>JVVNL,AVVNL,JdVVNL:</b> Revised wheeling charges are being submitted as a part of the MYT petition.
Convene a meeting with representative of Jaipur Metro for considering various issues related to metro including bifurcation of Non-Domestic Load and furnish proposals for revision in tariff in next petition.	<b>JVVNL:</b> Meeting was held with representatives of Jaipur Metro on 18/05/2020 regarding examination of issue of segregation of load, separate metering and billing of Traction /Non-Traction load of Jaipur Metro. After detailed discussions and deliberations, all members of the committee are of the opinion that segregation of traction /non traction load is not feasible, as such Hon'ble Commission may take a view regarding applicability of tariff for JMRC.
File suitable proposals for allowing demand/Load based billing along with suitable proposal for revision in fixed charges	<b>JVVNL, AVVNL, JdVVNL:</b> In compliance to the directive of the Hon'ble Commission, the petitioner has proposed demand-based billing for the Domestic consumers with sanctioned connected load greater than or equal to 10 kW or with annual energy consumption more than 12,000 kWh in the previous financial year, the details of which have been submitted in the MYT Petition.

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Internal Audit, Training and Studies																															
To form a Committee to review the working of contractors to whom certain substations have been outsourced specially with regards to deployment of skilled manpower and safety.	<p><b>JVVNL:</b> Vide order no. 27 dated 30.04.2020 had constituted the committee in this regard. The report of committee with regard to deployment of skilled labour and their safety has been submitted.</p> <p><b>AVVNL:</b> The committee has been formed to review the working of contractors to whom certain substations have been outsourced specially.</p> <p><b>JdVVNL:</b> A proposal in this regard is under consideration.</p>																														
To run a program for skill development, imparting training, refresher training to new entrants, Engineers, Administrative and Financial personnel, Technical workmen and the Executives for improving their services.	<p><b>JVVNL:</b> Training programs are being organized from time to time at various levels in the Discom. Total of 7,039 participants were seen at XEn/AEn/JEn level, Ministerial Staff and Technical Employees in FY 2019-20..</p> <p><b>AVVNL:</b> Training programs are being organized from time to time at various levels in the Discom. Details of participants are provided below:</p> <table><tr><th>No</th><th>Organizer</th><th>Year</th><th>Category</th><th>Partici pants</th></tr><tr><td>1</td><td>REC, Hyderabad</td><td>2018-19</td><td>C&amp;D</td><td>800</td></tr><tr><td>2</td><td>AVVNL, Ajmer</td><td>2019-20</td><td>C&amp;D</td><td>9991</td></tr><tr><td>3</td><td>AVVNL, Ajmer</td><td>2018-19</td><td>Newly Appointed Jen</td><td>253</td></tr><tr><td>4</td><td>AVVNL, Ajmer</td><td>2019-20</td><td>Newly Appointed Jr. Actt.</td><td>269</td></tr><tr><td>5</td><td>AVVNL, Ajmer</td><td>2019-20</td><td>Helper-II</td><td>399</td></tr></table> <p>The training for executive officers was conducted at Ajmer from, 13.02.2019 to 15.02.2019 &amp; Udaipur from 18.02.2019 to 20.02.2019 organized by REC IPMT, Hyderabad in the month of Feb, 2019. The NTPC also conducted One day training on dt. 03.05.2019 for the executive officers of AVVNL for improving their services. Such trainings of the executive</p>	No	Organizer	Year	Category	Partici pants	1	REC, Hyderabad	2018-19	C&D	800	2	AVVNL, Ajmer	2019-20	C&D	9991	3	AVVNL, Ajmer	2018-19	Newly Appointed Jen	253	4	AVVNL, Ajmer	2019-20	Newly Appointed Jr. Actt.	269	5	AVVNL, Ajmer	2019-20	Helper-II	399
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	<p>officers are generally conducted from time to time.</p> <p><b>JdVVNL:</b> Training programs are being organized from time to time at various levels in the Discom. Due to COVID-19, no training could be organized during FY 2020-21 but as soon as the situation improves, it shall be restarted. However, virtual trainings are being organized.</p>
<p>Discoms should carry out consumer satisfaction study w.r.t various parameters of Standards of Performance including handling of complaints, transformer failure, scheduled outages, voltage variation, replacement of meters and timely release of connections, etc.</p>	<p><b>JVVNL, AVVNL, JdVVNL:</b> Discoms submitted that the detailed consumer satisfaction study has been submitted.</p>
<p>Technical &amp; financial internal audit should be conducted in a time bound manner for each subdivision and top management must take action on the reports of internal audit.</p>	<p><b>JVVNL:</b> Due consideration is being given towards technical and financial audit for each subdivision. Technical audit as well as revenue audit was undertaken in 38 sub-divisions and 186 sub-divisions respectively during FY 2019-20.</p> <p><b>AVVNL:</b> Due consideration has been given towards technical and financial audit for each subdivision and the Discom has taken appropriate measures towards it.</p> <p><b>JdVVNL:</b> Technical and financial internal audits are being conducted in the Discom. In case of irregularities, action against defaulting officers is being taken.</p>
<p>Carry out a third-party audit of material used in various capital investments schemes and</p>	<p><b>JVVNL:</b> The reports of material used in various schemes are being collected. In this context, it is intimated that the M/s. Voyants Solutions Pvt. Ltd. (VSPL), Gurugram, Haryana. (Third party concurrence evaluation agency) has been authorized by the Power Finance Corporation, New Delhi (PFC) for field quality inspection under IPDS scheme and</p>



<p>retrieval of old material during execution of these schemes.</p>	<p>M/s. FeedbackInfra Pvt. Ltd, Gurgaon, Haryana has been appointed as Project Management Agency (PMA) at circle level for quality assurance, inspection and monitoring of DDUGJY and IPDS scheme under Jaipur Discom.</p> <p>DDUGJY and Saubhagya schemes have been completed recently which are rural electrification schemes of Central Govt. and REC Ltd. is its nodal agency. To ensure quality of material and of infra created under the schemes ,REC Ltd., appointed the M/S Voyants Solutions Pvt. Ltd. ,Gurugram for DDUGJY scheme and M/S Cabcon India Ltd., for Saubhagya as REC Quality Monitors(RQM) i.e. Third-party concurrence evaluation agency for these schemes. The appointed RQM agency, conducted inspection of key materials at manufacturer works.</p> <p>The defects observed by RQM in infra are uploaded on REC on-line quality monitoring portal "Sakshya" which are online diverted to the respective turn-key contractor and compliance of same are back uploaded on the portal. The activity wise status of pending defects and compliance as on dated 5.5.2020 are submitted for DDUGJY and Saubhagya schemes respectively. The pending defects could not be resolved by the firms due to COVID-19 however, efforts are being made now for rectification of remaining defects as early as possible.</p> <p>It is also submitted that Nodal Agency REC Ltd. frequently do the inspection of material and infra as per their convenience to be aware with the ground reality of works. Further, at Jaipur Discom level, a quality control wing is also constituted.</p> <p>Further submitted that multi-level inspection of material and of infra created under DDUGJY and Saubhagya Scheme have been done to ensure the project execution in accordance with the approved bidding documents /tender specification. Material retrieved by the firms under IPDs scheme are being checked by the concerned PMA and Executive Engineer (DDUGJY) and thereafter has been deposited through proper MCNs to concerned store.</p> <p><b>AVVNL:</b> A third-party audit on various capital investment schemes are being carried out in Ajmer Discom &amp; it is</p>
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	<p>insured that retrieval of old material is materialized. In case of any short-fall post recoveries are imposed on the agency caring out work.</p> <p><b>JdVVNL:</b> A third-party audit of material used in various schemes is necessary for the cost optimization and the same has been implemented by the Discom.</p>
<p>Discoms are directed to take adverse comments of Auditors in Audit reports seriously and take suitable measures to address the issues and ensure to improve their working accordingly.</p>	<p><b>JVVNL:</b> Due consideration shall be given to the comments of Auditors in the Annual audited accounts and measures shall be taken to improve the working in future.</p> <p><b>AVVNL:</b> It is stated that observations raised by the statutory auditors in their audit report have been suitably responded by the management in the management responses included in the annual report. Moreover, specific issues related to a particular circle office as raised by the Statutory Auditor, have been communicated to that particular office for its resolution. Further, in respect of adverse comments/objections raised by the statutory auditors in audit report of FY 2018-19, directions have been issued to concerned officers for compliance.</p> <p><b>JdVVNL:</b> Continuous efforts are being made to improve the overall working of the Discom considering the statutory auditors comments.</p>
<p>Discoms are directed to make a time bound programme for IT implementation clearly showing milestones and responsibilities of various officers, Discoms are directed to furnish quarterly reports in respect of IT implementation as it will not be possible</p>	<p><b>JVVNL:</b> Various IT initiatives has been taken as under:</p> <p><b>1. ERP Implementation:</b></p> <p>LOI No.1665 dt. 07.01.2019 and work order No.2005 dt. 1.3.2019 has been placed upon M/S RISL .</p> <p><b>2.Mobile Application for Billing &amp; Collection:</b></p> <p>JVVNL has started Mobile Application based Spot billing in all the circles as part of RMS(Revenue Management System).</p> <p>JVVNL has launched Bijlimitra Application (Web &amp; Mobile) for number of consumer services such as Online Bill Payment, New Connections, Complaints &amp; Tracking which are available at:</p>

<p>for the Discoms to exercise effective control without implementation IT measures.</p>	<p>“<a href="https://www.bijlimitra.com/customerLoginPage">https://www.bijlimitra.com/customerLoginPage</a>” and can be downloaded from play store at <a href="https://play.google.com/store/apps/details?id=consumera.pp.bsmart.bcits.JVVNLcis&amp;hl=en">https://play.google.com/store/apps/details?id=consumera.pp.bsmart.bcits.JVVNLcis&amp;hl=en</a>”</p> <p>Bill payment can also be done using Popular UPI Apps such as Googlepay, Phonepe, Paytm etc.</p> <p>Consumer Grievance: JVVNL also provide 12 distinct ways of registering consumer complaints as under:</p> <ol style="list-style-type: none"> <li>1. By IVRS or call to customer care through toll free no. 1800-180-6507 &amp; 1912</li> <li>2. By IVRS or call to customer care through tolled no. 0141-2203000</li> <li>3. Mobile app: BijliMitra</li> <li>4. Web application: <a href="http://www.bijlimitra.com">www.bijlimitra.com</a></li> <li>5. Through SMS to 57575 and 9414037085</li> <li>6. Through WhatsApp on 9414037085</li> <li>7. Through email: <a href="mailto:helpdesk@jvvn.org">helpdesk@jvvn.org</a></li> <li>8. Facebook: <a href="https://www.facebook.com/managingdirector.jvvn.1">www.facebook.com/managingdirector.jvvn.1</a></li> <li>9. Twitter: @jvvnccare @md_jvvn</li> <li>10. Online chat: <a href="http://jvccc.intelenetglobal.com">jvccc.intelenetglobal.com</a></li> <li>11. Webpage: <a href="https://jvccc.intelenetglobal.com/registercomplaint">https://jvccc.intelenetglobal.com/registercomplaint</a></li> <li>12. In person by reaching to "UpbhoktaSewa Kendra"</li> </ol> <p><b>3. IT Implementation:</b></p> <p>Key IT project Implemented by JVVNL are as under:</p> <ul style="list-style-type: none"> <li>• Revenue Management System for monitoring of readings, Billing, revenue, collection, releasing new connections, energy audit etc.</li> <li>• Smart Customer Care Centre established for lodging, rectifying and monitoring of consumer complaints.</li> <li>• Feeder Monitoring System is established for AMR of 11 KV feeders as well as well as monitoring of supply</li> </ul>
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	<p>position on these feeders.</p> <ul style="list-style-type: none"> <li>• "SCADA" is implemented in Jaipur and Kota for proper monitoring and control of 33 KV S/S.</li> <li>• NIC E-power project: The work order has been placed to NIC on date 07.03.2019 for development of in-house billing software for all three Discoms. Duration for development and support is 5 years.</li> <li>• ERP: LOI No.1665 dt. 07.01.2019 and Work order no. 2005 dt. 1.3.2019 has been placed upon M/s RISL.</li> </ul> <p>Following Modules are being implemented:</p> <ol style="list-style-type: none"> <li>1. Finance and accounting.</li> <li>2. Project Management.</li> <li>3. Material Management.</li> <li>4. Human Resource Management.</li> </ol>
<p>The Commission directs that, before taking up any investment, Discoms must check the need of the same in the first instance and look into cost benefit analysis thereafter. This will ensure that investments are prioritized and are made where they are really needed.</p>	<p><b>JVVNL:</b> Any capital investment work is taken up after a thorough cost benefit analysis in accordance with the guidelines laid down in the RERC (Investment Approval) Regulations. The petitioner Jaipur Discom submits that all proposals of Rural S/Ss are examined and benefit to cost ratio of the same is calculated before getting the same duly approved from higher authorities. The Discom attached a copy of the order issued regarding creation of 33/11 KV S/S in Urban areas and RIICO Industrial areas. Based on the BC ratio, priorities are fixed for their creation under Capital budget.</p> <p><b><u>AVVNL, JdVVNL</u></b></p> <p>The petitioner submits that any capital investment work is taken up after a thorough cost benefit analysis in accordance with the guidelines laid down in the RERC (Investment Approval) Regulations.</p>
<p>Furnish the quarterly report indicating details of prompt</p>	<p><b>JVVNL, AVVNL, JdVVNL:</b> The Discoms submitted the amount of prompt payment rebate is being given to consumers. The petitioner also submits that the bills paid by the</p>

<p>payment rebate paid to consumers and indicating average minimum and maximum days taken by consumer after receipt of bills</p>	<p>consumers varies from 1 day from receipt of bill to the time LPS starts getting levied.</p>
<p>Discoms should convert all flat rate agriculture consumers upto 31.03.2021</p>	<p><b>JVVNL:</b> The conversion of flat rate agriculture consumers is in process and has slowed down due to the outbreak of COVID-19 pandemic. The Discom requests the Hon'ble Commission for some more time and submits that the Discom is also acknowledging the fact that the conversion is beneficial for Discom as well as consumer.</p> <p><b>AVVNL:</b> The conversion of flat rate agriculture consumers is in process and has slowed down due to the outbreak of COVID-19 pandemic. It is further submitted that till Nov-20, 554 number of agriculture flat rate consumers have been converted to agriculture metered category. As on end of Nov-20, flat rate consumers existing are 24,766. Due to COVID-19, the supply of meters to Discom has been severely hit resulting in slow down of conversion rate. However, meter supply is now restoring to its normal position and the conversion work will gain momentum in due course of time. It is further submitted that conversion of almost all flat category to meter in 8 circles of Discom viz. ACC, ADC, Bhilwara, Rajsamand, Udaipur, Pratapgarh, Doongarpur &amp; Banswara has been carried out. Flat Ag consumers of only 4 circles viz. Chittorgarh, Nagaur, Sikar and Jhunjhunu are pending for conversion. In these circles also the conversion will be carried out at the earliest.</p> <p><b>JdVVNL:</b> That in its premises, all the flat rate consumers have been supplied with metered transformer so as to keep a check on the losses. Further, as per the compliance of the directive of the Hon'ble Commission, the Discom has gradually reduced the number of flat rate category consumers to less than 35,000 and plans to further reduce these consumers in the coming years while trying to eliminate the same within this MYT period. It is humbly submitted that the directions to field officers have been imparted to expeditiously convert the flat rate consumers to</p>

	<p>metered category and to not release any new connection under flat category. Also, whenever a flat rate consumer approaches the Discom for load extension/reduction, name change, shifting etc., then same is allowed post conversion of consumer to metered category. Owing to this herculean task, the Discom requests the Hon'ble Commission to kindly grant some more time.</p>
<p>Furnish the sub-division wise no. of flat rate consumers along with reasons for not converting them to Metered category.</p>	<p><b>JVVNL, AVVNL, JdVVNL:</b></p> <p>The Discoms submitted the flat-rate consumers as on 31.03.2020 in each sub-division total of which are in case of JVJNL is 18033 numbers, in case of AVVNL is 25320 numbers and in case of JdVVNL is 34930 numbers.</p>
<p>Submit a detailed report on benefits of feeder improvement program and feeder segregation program</p>	<p><b>JVVNL:</b> Benefits of feeder segregation programme, issues addressed by segregating agriculture feeders and 11 kV mixed-feeders in rural areas and works envisaged under the programme submitted.</p> <p><b>AVVNL:</b> Details in respect of benefits arrived at due to feeder improvement program is being submitted for kind consideration of the Hon'ble Commission.</p> <p>Due to FIP scheme, the quality of supply has been improved. In Nov-20 out of 955 Nos of 33 KV feeders, only 25 feeders (2.61%) reported trippings of more than 20 whereas 628 feeders (65.76%) reported less than 3 trippings. Similarly for 11 KV feeders, out of 8756 feeders, only 128 feeders (1.46%) reported trippings of more than 20 whereas 5639 feeders (64.40%) reported less than 3 trippings.</p> <p><u>Feeder Segregation Programme</u></p> <p>Initially the scheme of feeder segregation work of Ag feeders, in whole Discom, by segregating Ag &amp; Rural Domestic feeders to put a check on theft during single phase supply hours has been prepared and efforts were made to generate funds for carrying the work. Due to certain bottlenecks, the funds for the scheme could not be approved and Discom has implemented the scheme in</p>

	<p>highest loss making Nagaur Circle through its own arrangements. Under the scheme tender for 75 feeders of Khinvsar and Mundwa sub divisions of Nagaur under TN-82 amounting to Rs 35.32 Cr was placed to M/s Om Builders, Ghaziabad. Thereafter tender for 113 feeders of Nagaur under TN-85 amounting to Rs 25.48 Cr was placed to M/s Shilpa Construction. Out of aforesaid 188 feeders selected under Ag feeder segregation programme, work on 94 nos. Ag Feeders have been completed. The monthly savings in units is around 165.84 LU/month and in amount is around 787.97 lakhs/month. A short pay back period is anticipated. In totality under this scheme started in Nagaur circle, till Nov-20 benefit of 547.40 LU amounting to around Rs 26.02 Cr have been achieved.</p> <p>The anticipated benefits of the scheme are drastic reduction in T&amp;D losses, decrease in number of trippings in rural areas resulting in ensuring good and uninterrupted 24x7 rural domestic power supply, reduced rate of burning of power &amp; distribution transformers and a healthy and stable distribution network.</p> <p><b>JdVVNL</b> submitted that in order to reduce the electric accidents pertaining to departmental personnel, general public and animals significant efforts are being made under FRP, Further insertion of poles in long span for providing adequate ground clearance is being done. Under the FRP preventive maintenance is being carried out including maintenance of loose wires, tilted poles and reducing long spans by inserting ploe is being done. Laying of new 11 KV Lines, shifting of 11 KV single phase line, addition of three phase distribution transformers work is being carried out to segregate domestic load from agriculture feeders to reduce AT&amp;C losses and increase quality of supply.</p>
Whenever a flat rate consumer is disconnected due to default in payment or seeks voluntarily temporary disconnections, its	<p><b>JVVNL:</b> The same is being religiously followed in the Discom premises and shall be continued until the Discom fully converts all the unmetered agriculture consumers into metered.</p> <p><b>AVVNL:</b> The same is being religiously followed in the Discom and shall be continued until the Discom fully converts all the unmetered agriculture consumers into metered category.</p>

<p>connection on payment of dues should only be restored in metered category. Similarly, in case of applications for change in load, change in name or shifting etc. connection should only be processed after converting the consumer to metered category.</p>	<p>The petitioner further submits that clause 11.4 of Ag Policy, 2017 also specifies that under flat rate category cases of name change, shifting of connection, load extension/reduction and reconnection of connection disconnected for more than 2 years, shall mandatory be carried out with conversion to metered category. Directions vide letter No. 2107 dated 05.01.2021 have been issued to concerned officers for strictly adhering to the Hon'ble Commission's directive. Copy of letter is submitted for kind consideration of the Hon'ble Commission.</p> <p><b>JdVVNL:</b> Directions of the Hon'ble Commission are being followed.</p>
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#### **Directives to Discoms:**

The Commission has noted compliance as submitted by Discoms. The Commission has already reviewed the compliance of directives issued in the order dated 06.02.2020, vide order dated 26.03.2021. In the said order some more directions were given mainly focused to improve governance, operational efficiency and effective financial management of Discoms.

Considering the discussions in this order, directives issued earlier, compliance of directives furnished by Discoms and the directives given vide order dated 26.03.21 the Commission issues following directives to Discoms for compliance and advise to Govt. of Rajasthan for consideration.

#### **Reduction of Losses and Control of Theft**

1. The Commission till now has given overall distribution loss target. It has been observed that the distribution losses target i.e. 15% is the target for combined losses inclusive of Losses at 33 KV, 11 KV and LT Level. However, for FY 2022-23 onwards, the Commission may consider the 15% Losses only at LT level. Therefore the combined distribution losses shall be lower than 15%. Hence, The Discoms are directed to furnish the voltage wise sales and losses in next petition and based on that Commission may consider to set voltage wise loss targets.
2. Discoms are directed to ensure the proper metering of 11 KV feeders either departmentally or through outsourcing and monitoring of 11 KV feeders which will result into reduction in feeder losses. Each feeder should be



treated as a management and profit centre and feeder manager should be made fully responsible for each feeder.

3. Discoms should identify the industrial feeders with more than 5% losses and ensure proper monitoring and supervision of such feeders, so that the losses of such feeders should be brought to less than 5%.
4. Take necessary initiatives to reduce the scope of theft like regular checking of theft prone installations.
5. Initiate a scheme of appreciation and reward, where a person who informs the Discoms about theft cases is being appreciated and rewarded.
6. Re-assess wheeling losses and furnish detailed report.
7. Segregate Technical and Commercial Losses and to come out with an action plan for implementation of energy audit and segregation of technical and commercial losses.
8. Commission vide its order dated 06.2.2020 has directed MD/ Director (T) of Discoms' to adopt circles having highest distribution losses. In this regard, JVVNL has not furnished detail of the impact of the said adoption. Commission directs MDs of three Discoms to furnish the detailed comparative report from FY 2019-20 to FY 2021-22 stating interventions made and achievement in reduction of losses .

#### **Metering, Billing and Collection related**

9. Discoms may also work out a tariff design which incentivizes the consumer to move to metered category and keep the meter in healthy condition and furnish suitable proposal along with next tariff petition.
10. It has been observed that despite continuous pursuance by the Commission, Discoms are not able to convert all flat rate consumers, The Discoms are directed to convert all flat rate agriculture consumers to metered category by 31.03.22.

#### **General and ARR related Directions:-**

11. Furnish the pin pointed replies while responding to the stakeholders comments.

12. Discoms are directed to file detailed category wise calculation of sales and revenue realization made for consumers with defective meters along with the next year ARR and Tariff petition.
13. Discom should furnish the complete updated Fixed Asset Register for all circles in CD along with hard copy with executive summary duly reconciled with audited accounts within 6 months from the issue of this order, showing details required as per RERC Tariff Regulations.
14. Before taking up any investment, Discoms must check the need of the same in the first instance and look into cost benefit analysis. This will ensure that investments are prioritized and are made where they are really needed.
15. The Commission directs the Discoms to carry out special audit of Investment made by Discoms in all circles and to start with Jaipur city, Ajmer city & Jodhpur city circle to justify the investment made along with cost benefit analysis within 3 months and furnish the same to the Commission.
16. Discoms should monitor and review all capex and rate contracts regularly and make necessary intervention to remove shortcomings /loopholes observed.
17. Set a critical level of inventory and optimize their purchases and ensure that no material lies idle in the store beyond the pre determined level.
18. Data collection, reporting and analysis which ultimately affects proper decision making and implementation of various projects. As such Discoms should make all efforts to implement ERP and IT intervention. Discoms are directed to make a time bound program regarding implementation of ERP.
19. Discoms are directed to furnish detailed calculation of voltage wise cost of supply along with next year tariff petition for FY 2022-23.
20. Regarding depositing the terminal benefits amount, Commission directs the Discoms that they must deposit the amount equivalent to approved by the Commission in future and submit its compliance alongwith next ARR/Tariff petition and also make a plan to meet their liability towards terminal benefit.

21. Discoms are directed to renegotiate with banks and financial institutions (Including REC and PFC) for availing the loan at a lower interest rate to possible extent.
22. In current scenario Discom's billing period is on Monthly basis but according to GoR announcement in the current budget for BPL, domestic consumers having consumption upto 150 units and agriculture consumers billing system would be based on bi-monthly. Thus, Discoms would be requiring additional working capital. To meet such crunch of working capital, Discoms are directed to claim the interest on such additional working capital requirement from the GoR. The Commission will not pass on the burden of additional interest liability in this regard.
23. Prepare a medium-term business plan indicating likely impact and strategy to deal with electric vehicles, distributed generation, prosumers and influx of renewable energy and other related trends of power sector.
24. The Commission directs Discoms that the study to assess the quantum of stranded capacity .recommend an action plan to address the issue to reduce the burden of the capacity charges and projections of available capacity and requirement as assumed by energy assessment committee be furnished along with next ARR and Tariff petition.

#### **Consumer Service related**

25. Separate Fault Removal Teams be also formed in rural areas, if any area is still left.
26. To clearly indicate the detailed break up of other debits, fuel surcharge and other miscellaneous charges shown in consumer electricity bills.

#### **Tariff Related**

27. The Discom are directed to file separate figure of sales for each subcategory of consumers where rebate or lower tariff is provided as well as for EV and traction load also while filing true up petition.
28. Discoms are also directed to furnish the impact of various rebate given vide order dated 06.02.2020 in the next ARR and Tariff Petition.
29. Discoms are also directed to review the various rebates and incentive as well as the tariff for various sub-category at regular intervals and file suitable proposals for revision, if required.

30. Study month wise and hourly, Peak hours and off peak hours and the power rates in power exchange during such peak and off peak hours in Rajasthan and accordingly suggest the ToD tariff in the next tariff petition considering the road map given by the Commission.
31. The Discoms are directed to furnish the energy data of shifting of load due to ToD and its financial impact in the next year ARR and Tariff Petition so as to enable the Commission to take a view on the trajectory.
32. The Commission directs that for the categories where rebates/surcharge are offered the power factor rebate/ surcharge shall be worked out on energy charges arrived at after availing all rebates/surcharge except power factor rebate/surcharge.

#### **Internal Audit, Training and Studies**

33. Review the working of contractors to whom certain substations have been outsourced specially with regards to deployment of skilled manpower and safety.
34. Discoms are also directed to initiate a scheme of appreciation and reward, where an employee who performs best in the organization is being appreciated and rewarded. Such scheme shall ultimately enhance the motivation level and improve overall working of Discoms.
35. Technical & financial internal audit should be conducted in a time bound manner for each subdivision and top management must take action on the reports of internal audit.
36. Carry out a third party audit of material used in various capital investments schemes and retrieval/disposal of old material during execution of these schemes.
37. Discoms are directed to take adverse comments of Auditors in their Audit reports seriously and take suitable measures to address the issues and ensure to improve their working accordingly.
38. The Commission directs that a report on the performance of the franchisees by independent auditor for FY 19-20 & FY 20-21 be furnished to the Commission and should also be made part of next ARR & Tariff and true up filing.

## **Safety and Training**

39. Discoms should ensure the compliance of CEA (Measures relating to safety and Electric Supply) Regulations, 2010 and CEA (Safety requirements for construction, operation and maintenance of electrical plants and electric lines) Regulation 2011. If Discoms need to spend any additional amount for compliance of the Safety Regulations, the same can be claimed through ARR.
40. Discoms are also directed to run a program for skill development, imparting training, refresher training to new entrants, Engineers, Administrative and financial personnel, technical workmen and the executives for improving their services. Discoms should come with a plan for training for all of its employees within 3 months of this Order and furnish the status of same quarterly to the Commission.
41. It is the duty of the Discoms to ensure that safety tools/ devices are made available to each and every worker and training has been imparted to each and every technical worker/officer of the Discom. They should also provide a copy of safety manual in Hindi to each and every workmen and officer. Danger plates should be affixed everywhere, guarding/fencing should be provided wherever it is required and earthing and other protection should be checked /provided as per safety Regulations. Every circle officer should ensure that each line, plant or meter is checked from safety point of view as per the periodicity decided by the Discoms in accordance with safety Regulations. System of line patrolling must be followed vigorously and complaints related to safety must be given overriding priority. If need be, the Discoms may review their staffing pattern and working appropriately.
42. Commission directs that Discoms should carry out campaign to identify high risk points and rectify them again and furnish the report to the Commission within 45 days of this order. It should be noted that removal of hazardous points is an on-going process and should not be stopped. Therefore, Discoms are directed to organise such campaign regularly and submit report and submit a certificate regarding compliance of CEA Safety Regulations by Discoms to the Commission on half yearly basis.

## **Monetization of Discoms' Assets**

43. It has been brought to the notice of the Commission that there is huge potential of earning additional revenue by the Discoms from optimum use

of its assets which may include poles, land and buildings etc. While poles can be used to lay communication cable and rent can be earned from land/buildings. Discom may also set up EV Charging Stations, Buildings can be used for advertisement hoardings and setting up of ATMs and such other uses. The Discoms may even earn additional revenue from advertisement on its Portal/Apps. Parts of unused lands at commercial location may be considered for sale to local bodies.

44. The Commission has made a provision in this regard in Supply Code and also directed Discoms vide True-up order dated 27.09.2021 to ensure optimum use of its assets, mainly focusing on revenue from communication cable on poles. However, Discoms are not able to explore full potential of revenue from optimum utilization of their assets, due to inaction on their part, though, Communication cables on poles are clearly visible everywhere and can be easily identified and measured by field officers.

45. The Commission express its displeasure over the inaction on the part of Discoms'. In Commission's view, the revenue from communication cables on poles shall be substantial and be easily realized by Discoms which alongwith other revenue from monetization of assets will substantially improve financial health of Discoms. Accordingly, the Commission directs that;

(1) Discoms should identify its assets properly such as Land, Buildings, Poles and any useful assets which can be monetized and explore full potential of its assets subject to safety norms.

(2) Discoms should digitalize Assets Register and asset mapping should be made compulsory upto JEN level. MD of Discom shall be personally responsible for digitization of assets by each JEN level within 1 month. Thereafter, the assets mapping should be done instantly on go live basis.

(3) The MD of Discoms are personally directed to implement the concept of asset monetization and issue necessary guidelines to institute a transparent mechanism for identification of the assets, measurement and verification of revenue and create necessary accounting framework within one month parallel to the above exercise of digitalization of Asset Register and thereafter submit

quarterly compliance report in this regard indicating action taken and circle wise revenue realised.

(4) In case of revenue loss due to connivance or negligence of staff of Discoms necessary disciplinary action be taken against the erring officers.

46. The Commission also directs Discoms to improve the internal audit and revenue audit system so as to control the expenses and plug revenue leakages and create proper accounting system commensurate with information sought by the Commission.

#### **MoD –Merit Order Dispatch**

47. Discoms should ensure dispatch of power strictly on merit order principle. Merit order should also be placed on the website of the Discoms.

#### **Parallel Operation Charges**

48. Regarding Parallel Operation Charges, Discoms are directed to conduct a scientific study and furnish an appropriate proposal based on the study within two months of issuance of this order.

#### **Commission's Advice to Government:**

49. The Commission advises the Government of Rajasthan (GoR) to release the subsidy in advance. Alternatively, instead of paying subsidy to Discoms, the State Government can also plan for Direct Benefit Transfer Scheme.

50. Government of Rajasthan is also advised to consider to review the tariff subsidy to flat rate agriculture consumers so as to make these consumers shift to metered category.

51. The State Government, as principal owner of the Discoms, is also advised to constitute a task force to monitor performance of Discoms and to take corrective measures to improve their operational efficiency and financial management. To improve corporate governance, Independent Directors may also be appointed in Board of Directors.

52. The Government may suitably reallocate power so as to bring all the Discoms to a level playing field in terms of power purchase cost so as to remove differentiation in gap due to adverse consumer mix and climatic

conditions in JdVVNL. State Government may also consider to provide additional support to JdVVNL so as to meet their deficit determined by the Regulator. Government of Rajasthan (GoR) may consider to work on innovative models for management of quality, reliable and affordable Power for agricultural consumers.

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**Annexure A****JVVNL**

<b>Sr. No</b>	<b>Name</b>
1	Sh. Hemant Jain, Kota. Rajeev Gandhi Nagar Welfare Society
2	Sh. Sumit Singhal, Jodhpur
3	Sh. Ravindra Singh, Jaipur
4	Sh. Shubham Agarwal, Kota
5	Pursottam Dayal
6	various consumers, Kota
7	Sh. Vinoo Mehta, M/s DCM Shriram, Kota
8	Sh. Amarjit Singh, Shree Cement Limited, Beawar
9	Sh. Ashok Kimar Jain, Rajasthan Textile Mills Association, Jaipur
10	Ms. Shruti Audichya, Rudraksh Tradelinks Ltd., Jaipur
11	Sh. Surja Ram Meel, M/s Technocrats and Managers Society of Advance Learning and Gramothan, Jaipur
12	Sh. Surja Ram Meel, M/s Radhamohan Builders Private Limited, Jaipur
13	Sh. Surja Ram Meel, M/s Meel Hotels Private Limited, Jaipur
14	Ms. Ann Josey & Sh. Saumendra Agarwal, Prayas (Eneergy Group), Pune
15	Sh. Naveen Mittal, Kota Hostel Association
16	Sh. H.M.Vashisth, Rahasthan Textile Mills, Bhawanimandi
17	Sh. Jogendra Behera, Indian Energy Exchange Limited (IEX), Noida
18	Sh. Shanti Pradad, Jaipur
19	Sh. B. M. Sanadya, Samta Power, Jaipur
20	Sh. Ramesh Chand Sharma, Dausa
21	Sh. S.S. Agarwal, Rajasthan Hospital, Jaipur
22	Sh. G. L. Sharma
23	Sh. Shelendra Kumar, Jaipur
24	Sh. D. D. Agarwal, Jaipur
25	Sh. Y.K. Boliya, Udaipur.
26	Sh. Mohan Sukhani, Tulsi Palace Resorts P. Ltd., Jaipur
27	M/s Globetrotters Educational Innovations Pvt. Ltd, Jaipur
28	BASK Research Foundation
29	Sh. Pankaj Saboo, Paradise Properties, Jaipur

<b>Sr. No</b>	<b>Name</b>
30	M/s Esprit Stones Pvt. Limited., Jaipur
31	Sh. Sameer Khandelwal, DSL Infosys Pvt Ltd,
32	Sh. Dinesh Gupta, Rays Power Experts Pvt Ltd
33	Step by Step Shiksha Samiti
34	Sh. Punit Malot
35	Sh. D. P. Chirania, Jaipur
36	Sh. Manish Mehta, Bundi
37	Rajasthan Steel Chamber, Jaipur

#### **AVVNL**

<b>Sr. No</b>	<b>Name</b>
1	Sh. Sumit Singhal, Jodhpur
2	Sh. Ravindra Singh, Jaipur
3	Sh. Y.K. Boliya, Udaipur.
4	Sh. Amarjit Singh, Shree Cement Limited, Beawar
5	Sh. Ashok Kimar Jain, Rajasthan Textile Mills Association, Jaipur
6	M/s Hindushtan Zinc Ltd, Chittorgarh
7	Ms. Shruti Audichya, Rudraksh Tradelinks Ltd., Jaipur
8	Sh. Liyakat Ali, Upbhokta Margdarsan Samiti, Jodhpur
9	Ms. Ann Josey & Sh. Saumendra Agarwal, Prayas (Energry Group), Pune
10	Sh. Jogendra Behera, Indian Energy Exchange Limited (IEX), Noida
11	Sh. Hastimal Chaurdiya, Chittorgarh
12	Sh. Shanti Prasad, Jaipur
13	Sh. B. M. Sanadya, Samta Power, Jaipur
14	M/s Secure Meters Limited, Jaipur
15	Sh. G. L. Sharma
16	Sh. Aajad, Fatehpur, Sikar
17	Smt. Johana, Masuda, Ajmer
18	Sh. Narendra, Kanod, Udaipur
19	Sh. D. D. Agarwal, Jaipur
20	Sh. Virendra Gahlot

<b>Sr. No</b>	<b>Name</b>
21	Sh. Dinesh Gupta, Beawar
22	Sh. Y.K. Boliya, Udaipur.
23	BASK Research Foundation
24	Sh. D. P. Chirania, Jaipur

#### **JdVVNL**

<b>Sr. No</b>	<b>Name</b>
1	Sh. Ramjan Ali Chopdar
2	Sh. Sumit Singhal, Jodhpur
3	Sh. Ravindra Singh, Jaipur
4	Sh. Amarjit Singh, Shree Cement Limited, Beawar
5	Sh. Ashok Kimar Jain, Rajasthan Textile Mills Association, Jaipur
6	Ms. Shruti Audichya, Rudraksh Tradelinks Ltd., Jaipur
7	Sh. Pawan Kumar, LT. Col. Garison Engineer (Army) Utility, Jodhpur
8	Shri Jain Swetambar Nakoda Parswanath Tirth, Balotara, Badmer
9	Ms. Ann Josey & Sh. Saumendra Agarwal, Prayas (Enegrgy Group), Pune
10	Sh. Jogendra Behera, Indian Energy Exchange Limited (IEX), Noida
11	Sh. Liyakat Ali, Upbhokta Margdarsan Samiti, Jodhpur
12	Sh. Shanti Pradad, Jaipur
13	Sh. B. M. Sanadya, Samta Power, Jaipur
14	Sh. G. L. Sharma
15	Sh. A. Kumar, Bijli Upbhokta Sangharsh Samiti, Hanumangarh
16	Sh. Purab, Jhalana, Hanumangarh
17	Sh. D. D. Agarwal, Jaipur
18	Sh. Y.K. Boliya, Udaipur.
19	BASK Research Foundation
20	Sh. D. P. Chirania, Jaipur

**JVVNL**

<b>Sr. No</b>	<b>Name</b>
1	Sh. Shubham Agarwal, Kota
2	Pursottam Dayal
3	M/s DCM Shriram, Kota
4	Rajasthan Textile Mills Association, Jaipur
5	Rudraksh Tradelinks Ltd., Jaipur
6	M/s Technocrats and Managers Society of Advance Learning and Gramothan, Jaipur
7	M/s Radhamohan Builders Private Limited, Jaipur
8	M/s Meel Hotels Private Limited, Jaipur
9	Kota Hostel Association
10	Rahasthan Textile Mills, Bhawanimandi
11	Indian Energy Exchange Limited (IEX), Noida
12	Sh. B. M. Sanadya, Samta Power, Jaipur
13	Sh. S.S. Agarwal, Rajasthan Hospital, Jaipur
14	Sh. G. L. Sharma
15	Sh. D. D. Agarwal, Jaipur
16	Sh. Punit Malot
17	Sh. D. P. Chirania, Jaipur
18	Sh. Manish Mehta, Bundi
19	Rajasthan Steel Chember, Jaipur

**AVVNL**

<b>Sr. No</b>	<b>Name</b>
1	M/s Hindushtan Zinc Ltd, Chittorgarh
2	Sh. Hastimal Chaurdiya, Chittorgarh
3	M/s Secure Meters Limited, Jaipur
4	Sh. Virendra Gehlot
5	Sh. Dinesh Gupta, Beawar
6	Sh. Y.K. Boliya, Udaipur.
7	BASK Research Foundation

**JdVVNL**

<b>Sr. No</b>	<b>Name</b>
1	Sh. Ramjan Ali Chopdar
2	Sh. Sumit Singhal, Jodhpur
3	Shree Cement Limited, Beawar
4	LT. Col. Garison Engineer (Army) Utility, Jodhpur
5	Shri Jain Swetambar Nakoda Parswanath Tirth, Balotara, Badmer
6	Ms. Ann Josey & Sh. Saumendra Agarwal, Prayas (Eneery Group), Pune
7	Sh. Liyakat Ali, Upbhokta Margdarsan Samiti, Jodhpur
8	Bijli Upbhokta Sangharsh Samiti, Hanumangarh

List of abbreviations		
A&G	:	Administrative and General Expenses
AMR	:	Automatic Meter Reading
APTEL	:	Appellate Tribunal for Electricity
ARR	:	Aggregate Revenue Requirement
AT & C	:	Aggregate Technical and Commercial
AVVNL	:	Ajmer Vidyut Vitran Nigam Ltd.
BAU	:	Business as Usual
CAGR	:	Compound Annual Growth Rate
CEA	:	Central Electrical Authority
CPP	:	Captive Power Plants
CSEB	:	Chhattisgarh State Electricity Board
CTPP	:	Chhabra Thermal Power Plant
DCCPP	:	Dholpur Combined Cycle Gas based Thermal Power Plant
DF	:	Distribution Franchisee
DISCOM	:	Distribution Company
DSM	:	Demand Supply Management
EA, 2003	:	Electricity Act, 2003
ED	:	Electricity Duty
ERP	:	Enterprise Resource Planning
EV	:	Electric Vehicle
FR	:	Flat Rate
FY	:	Financial Year
GFA	:	Gross Fixed Assets
GoR	:	Government of Rajasthan
GLTPP	:	Girai Lignite Thermal Power Plant
HT	:	High Tension
JdVVNL	:	Jodhpur Vidyut Vitran Nigam Limited
JVVNL	:	Jaipur Vidyut Vitran Nigam Limited
KTPS	:	Kota Thermal Power Station
KW	:	Kilo Watt
KWH	:	Kilo Watt Hour
KVA	:	Kilo Volt Ampere
LED	:	Light Emitting Diode
LT	:	Low Tension
LTL	:	Long-Term Loans

<b>List of abbreviations</b>		
MMH	:	Mini Micro Hydro
ML	:	Mixed Load
MoU	:	Memorandum of Understanding
MU	:	Million Unit
MW	:	Mega Watt
NCES	:	Non Conventional Energy Sources
NDS	:	Non Domestic Supply
NFA	:	Net Fixed Assets
NHPC	:	National Hydro Power Corporation
NLC	:	Neyveli Lignite Corporation
NPCIL	:	Nuclear Power Corporation
NTPC	:	National Thermal Power Corporation
NVVN	:	NTPC Vidyut Vyapar Nigam
O&M	:	Operation & Maintenance
PGCIL	:	Power Grid Corporation of India Ltd.
PLF	:	Plant Load Factor
POC	:	Parallel Operation Charges
PP	:	Partnership Projects
PPA	:	Power Purchase Agreement
PSERC	:	Punjab State Electricity Regulatory Commission
PWW	:	Public Water Works
RAPDRP	:	Restructured Accelerated Power Development & Reform Programme
RBI	:	Reserve Bank of India
RERC	:	Rajasthan Electricity Regulatory Commission
RGVY	:	Rajiv Gandhi Grameen Vidyutikaran Yojana
RGTPS	:	Ramgarh Gas Thermal Power Station
RLDC	:	Region Load Dispatch Centre
RoE	:	Return on Equity
RPO	:	Renewable Purchase Obligation
RUVNL	:	Rajasthan Urja Vikas Nigam Ltd.
RVPN	:	Rajasthan Vidyut Prasaran Nigam
RVUN	:	Rajasthan Vidyut Utpadan Nigam
R&M	:	Repairs & Maintenance
SCL	:	Sanctioned Connected Load
SERC	:	State Electricity Regulatory Commission

<b>List of abbreviations</b>		
SIP	:	Small Industrial Power
SLDC	:	State Load Dispatch Centre
SLM	:	Straight Line Method
STPS	:	Suratgarh Thermal Power Station
TSA	:	Transmission Service Agreement
T&D	:	Transmission & Distribution
UDAY	:	Ujwal Discom Assurance Yojana
UPSEB	:	Uttar Pradesh State Electricity Board



**Tariff for Retail Consumers**

Looking to the COVID pandemic and surplus arising in this order, the Commission has not allowed any increase in retail tariff for any category of retail consumers. For retail consumers existing Tariff as per Order dated 06.02.2020 shall continue to be charged as under:

**DOMESTIC CATEGORY (LT-1 and HT-1)**

(BPL, Astha Card Holders and Small Domestic having consumption upto 50 units per month)

**BPL and Small Domestic**

Domestic Category		
Particulars	Approved Tariff	
	Energy Charges	Fixed Charges
BPL and Astha card Holders*		
For consumption upto first 50 units per month	Rs. 3.50/ unit	Rs. 100/ connection / month
Small Domestic*		
For consumption upto first 50 units per month	Rs. 3.85/ unit	Rs. 125/ connection / month

\*Note: The BPL and Astha card Holder domestic tariff shall be exclusively applicable to individual consumer person and shall not be applicable to any institution. In case any BPL, Astha Card Holder and Small Domestic consumers has consumed more than 50 unit per month in any billing cycle, the consumer will be charged as per the applicable tariff of the respective slab under the LT-I domestic category for the additional units consumed.

**General Domestic-1**

Domestic Category		
Particulars	Approved Tariff	
General Domestic-1 (Consumption upto 150 units/month)		
	Energy Charges	Fixed Charges
(i) For consumption upto first 50 units per month	Rs. 4.75/ unit	Rs. 230/ connection / month
(ii)For consumption above 50 units and upto 150 units per month	Rs. 6.50/ unit	

**General Domestic-2**

Domestic Category		
Particulars	Approved Tariff	
General Domestic-2 ( Consumption above 150 units and upto 300 units/month )		
	Energy Charges	Fixed Charges
(i) For consumption upto first 50 units per month	Rs. 4.75/ unit	Rs. 275/ connection / month
(ii)For consumption above 50 units and upto 150 units per month	Rs. 6.50/ unit	

Domestic Category		
Particulars	Approved Tariff	
(iii) For consumption above 150 units and upto 300 units per month	Rs. 7.35/ unit	

### General Domestic-3

Domestic Category		
Particulars	Approved Tariff	
General Domestic-3 (Consumption above 300 and upto 500 units/month)		
	Energy Charges	Fixed Charges
(i) For consumption upto first 50 units per month	Rs. 4.75/ unit	Rs. 345/ connection / month
(ii)For consumption above 50 units and upto 150 units per month	Rs. 6.50/ unit	
(iii)For consumption above 150 units and upto 300 units per month	Rs. 7.35/ unit	
(iv)For consumption above 300 units and upto 500 units per month	Rs. 7.65/ unit	

### General Domestic-4

General Domestic-4		
Domestic Category		
Particulars	Approved Tariff	
General Domestic-4 (Consumption above 500 units/month)		
	Energy Charges	Fixed Charges
(i) For consumption upto first 50 units per month	Rs. 4.75/ unit	Rs. 400/ connection / month
(ii)For consumption above 50 units and upto 150 units per month	Rs. 6.50/ unit	
(iii) For consumption above 150 units and upto 300 units per month	Rs. 7.35/ unit	
(iv)For consumption above 300 units and upto 500 units per month	Rs. 7.65/ unit	
(v)For consumption above 500 units per month	Rs. 7.95/ unit	

### Domestic Category (HT-1)

Domestic Category		
Particulars	Approved Tariff	
HT – Domestic (HT-1)		
	Energy Charges	Fixed Charges
For contract demand over 50 KVA	Rs. 7.15/ unit	Rs. 250 per kVA of Billing Demand per month

### NON-DOMESTIC CATEGORY (LT-2 & HT-2)

#### NDS up to 5 kW of SCL

#### (NDS- Type1)

Non-Domestic Category	
Particulars	Approved Tariff
LT-NDS(LT-2)	

Type1 (Consumption upto 100 units/month)		
	Energy Charges	Fixed Charges
Consumption upto first 100 units per month	Rs. 7.55 /unit	Rs. 300/ connection / month

**(NDS- Type2)**

Non-Domestic Category		
Particulars	Approved Tariff	
LT-NDS(LT-2)		
Type 2 (Consumption above 100 units/month and upto 200 units/month)		
	Energy Charges	Fixed Charges
Consumption upto first 100 units per month	Rs. 7.55 /unit	Rs. 300/ connection / month
Consumption above 100 units and upto 200 unit per month	Rs. 8.50 /unit	

**(NDS- Type 3)**

Non-Domestic Category		
Particulars	Approved Tariff	
LT-NDS(LT-2)		
Type 3 (Consumption above 200 units and upto 500 units/month)		
	Energy Charges	Fixed Charges
Consumption upto first 100 units per month	Rs. 7.55 /unit	Rs. 380/ connection / month
Consumption above 100 units and upto 200 unit per month	Rs. 8.50 /unit	
Consumption above 200 unit and upto 500 unit per month	Rs. 8.85 /unit	

**(NDS- Type 4)**

Non-Domestic Category		
Particulars	Approved Tariff	
LT-NDS(LT-2)		
Type 4 (Consumption above 500 units/month)		
	Energy Charges	Fixed Charges
Consumption upto first 100 units per month	Rs. 7.55 /unit	Rs. 460/ connection / month
Consumption above 100 units and upto 200 units per month	Rs. 8.50 /unit	
Consumption above 200 units and upto 500 units per month	Rs. 8.85 /unit	
Consumption above 500 unit per month	Rs. 8.95 /unit	

**NDS Above 5 kW of SCL**

Non-Domestic Category	
Particulars	Approved Tariff

<b>NDS above 5 KW of SCL (LT-2)</b>		
	<b>Energy Charges</b>	<b>Fixed Charges</b>
Consumption upto first 100 units per month	Rs. 7.55 /unit	Rs.135/ KW of SCL / month
Consumption above 100 units and upto 200 units per month	Rs. 8.50 /unit	
Consumption above 200 units and upto 500 units per month	Rs. 8.85 /unit	
Consumption above 500 units per month	Rs. 8.95 /unit	Rs. 150/ KW of SCL / month Or Rs. 270 per kVA of Billing Demand per month (If SCL is more than 18.65 KW)

### **NDS –Contract Demand Over 50 kVA**

<b>HT-NDS (HT-2)</b>	<b>Approved Tariff</b>	
<b>For contract demand over 50 kVA</b>	<b>Energy Charges</b>	<b>Fixed Charges</b>
All units	Rs. 8.85 /unit	Rs.270/ kVA of Billing Demand per month

### **PUBLIC STREET LIGHTING (LT-3)**

<b>Particulars</b>	<b>Approved Tariff</b>	
<b>Public Street Lighting</b>	<b>Energy Charges</b>	<b>Fixed Charges</b>
Population <1 Lakh	Rs. 7.55/ unit	Rs. 115/ Lamp point/ month subject to a maximum of Rs. 1150 /service connection/month
Population =>1 Lakh	Rs. 8.10/ unit	Rs. 145/ Lamp point/ month subject to a maximum of Rs. 2835 /service connection/month

### **AGRICULTURE (Metered and Flat Rate) (LT-4)**

Particulars	Approved Tariff	
Metered (AG/MS/LT-4)		
Agriculture Supply	Energy Charges	Fixed Charges
(i) General (getting supply in block hours)	Rs. 5.55 /unit	Rs.30 per HP per Month of SCL
(ii)All others not covered under items (i) and getting supply more than block hours	Rs. 7.10 /unit	Rs.60 per HP per Month of SCL
Flat/ unmetered (AG/FR/LT-4)		
(i)General (getting supply in block hours)	Rs. 745/ HP /Month	Rs.30 per HP per Month of SCL
(ii)All others not covered under items (i) above and getting more than block hour supply	Rs. 895/ HP /Month	Rs.60 per HP per Month of SCL

### **SMALL INDUSTRIES (LT-5)**

Particulars	Approved Tariff	
Small Industrial Service (LT-5) (Load not exceeding 18.65 kW (25HP))	Energy Charges	Fixed Charges
Upto first 500 units	Rs.6.00/ unit	Rs. 80/ HP/ month of sanctioned connected load
Above 500 units	Rs.6.45/ unit	Rs. 110/ HP/ month of sanctioned connected load

#### MEDIUM INDUSTRIES (LT-6 and HT-3)

Particulars	Approved Tariff	
	Energy Charges	Fixed Charges
Medium Industrial Service (LT-6)	Rs. 7.00/ unit	Rs. 115 per HP per month of sanctioned connected load or Rs. 230 per kVA of Billing Demand per month
Medium Industrial Service (HT-3)	Rs. 7.00/ unit	Rs. 230/ kVA of Billing Demand per month

#### BULK SUPPLY FOR MIXED LOAD (LT-7 and HT-4)

Particulars	Approved Tariff	
	Energy Charges	Fixed Charges
Schedule ML/LT-7	Rs. 8.05/ unit	Rs. 105 per HP per month of sanctioned connected load OR Rs. 215 per kVA of Billing Demand per month
Schedule ML/HT-4	Rs. 8.05/ unit	Rs. 215/kVA of Billing Demand per month

#### LARGE INDUSTRIES (HT-5)

Particulars	Approved Tariff	
	Energy Charges (on whole consumption)	Fixed Charges
(A) SCL above 150 HP &/or having Contract/Maximum Demand above 125 kVA	Rs. 7.30/ unit	Rs. 270/ kVA of Billing Demand per month
(B) Consumer having Billing demand of 1 MVA or more for the billing month and having load factor 50% or more for the billing month	Rs. 6.30/ unit	Rs. 270/ kVA of Billing Demand per month

#### VOLTAGE-WISE TARIFF APPROVED\* FOR LARGE INDUSTRIES CATEGORY

Voltage wise Approved Tariff* for Consumer having SCL above 150 HP &/or having Contract/Maximum Demand above 125 kVA		
Voltage Level	Energy Charges	Fixed Charges
11 kV	7.300	Rs. 270 per KVA of Billing Demand per month
33 kV	7.081	
132 kV	7.008	

<b>Voltage wise Approved Tariff* for Consumer having SCL above 150 HP &amp;/or having Contract/Maximum Demand above 125 kVA</b>		
<b>Voltage Level</b>	<b>Energy Charges</b>	<b>Fixed Charges</b>
220 kV	6.935	
<b>Voltage wise Approved Tariff* for Consumer having Billing demand of 1 MVA or more for the billing month and having load factor 50% or more for the billing month</b>		
<b>Voltage Level</b>	<b>Energy Charges</b>	<b>Fixed Charges</b>
11 kV	6.300	Rs. 270 per KVA of Billing Demand per month
33 kV	6.111	
132 kV	6.048	
220 kV	5.985	

\*No other voltage rebate shall be applicable for Large Industrial category.

#### **MINIMUM ENERGY CHARGES\***

<b>Voltage Level</b>	<b>Energy Charges</b>
11 kV	6.000
33 kV	5.820
132 kV	5.760
220 kV	5.700

\*No other voltage rebate shall be applicable for Large Industrial category

#### **ELECTRIC VEHICLE CHARGING STATION (LT-8 and HT-6) (Approved Tariff)**

<b>Category</b>	<b>Energy Charges</b>	<b>Fixed Charges</b>
Public charging station (LT-8)	Rs. 6.00/ unit	Rs. 40/ HP/ month of sanctioned connected load
Public charging station (HT-6)	Rs. 6.00/ unit	Rs. 135/kVA/Month

#### **ToD Rebate and Surcharge (Applicable on Large Industries and Electric Vehicle Charging Stations)**

<b>Off peak hours</b>	<b>Rebate on EC</b>
12 am - 6 am (6 hours)	15%
<b>Peak hours</b>	<b>Surcharge on EC</b>
6 am to 10 am (4 hours)	5%

#### **TRACTION LOAD (HT-7) (Approved Tariff)**

<b>Category</b>	<b>Energy Charges</b>	<b>Fixed Charges</b>
Traction load (HT-7)	Rs. 5.70/ unit	Rs. 135/kVA/Month

**Other Tariff (Wheeling, Cross Subsidy Surcharge and Additional Surcharge):**

<b>Wheeling Charges for</b>		<b>FY 2021-22</b>
Wheeling Charges at 132 KV and above Voltage Level (Rs/kWh)		<b>0.01</b>
Wheeling Charges at 33 KV Voltage Level (Rs/kWh)		<b>0.20</b>
Wheeling Charges at 11 KV Voltage Level (Rs/kWh)		<b>0.49</b>

**Cross Subsidy Surcharge**

<b>Category of Open Access Consumer</b>	<b>Voltage Level</b>	<b>Cross Subsidy Surcharge (Rs./Unit) FY 2021-22</b>
NON DOMESTIC SERVICE	11 KV	2.22
	33 KV	2.15
	132 KV and above	2.13
MIXED LOAD/ BULK SUPPLY	11 KV	1.92
	33 KV	1.86
	132 KV and above	1.84
LARGE INDUSTRIAL SERVICE	11 KV	1.94
	33 KV	1.88
	132 KV and above	1.86

**Additional Surcharge**

<b>Additional Surcharge (Rs./kWh)</b>	<b>0.97</b>
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**General Note:**

1. All existing provisions which are not modified by this order, shall continue to be in force.
2. This tariff order shall come into force from the date of issue of this order and remain in force till the next tariff order of the Commission.

FY 2020-21

	Rajasthan			JVJNL				AVJNL				JdJVNL			
	Net Generat ion (MU)	Total Annual Fixed charges (Rs. Cr.)	Variable Cost (Rs./ unit)	Net Generat ion (MU)	Total Annu al Fixed charg es (Rs. Cr.)	Varia ble Cost (Rs. Cr)	Total Cost JVJNL (Rs. Cr.)	Net Generat ion (MU)	Total Annu al Fixed charg es (Rs. Cr.)	Varia ble Cost (Rs. Cr)	Total Cost JVJNL (Rs. Cr.)	Net Generat ion (MU)	Total Annu al Fixed charg es (Rs. Cr.)	Varia ble Cost (Rs. Cr)	Total Cost JVJNL (Rs. Cr.)
<b>NTPC</b>															
ANTA GTPS	34	6	2.80	14	2	4	6	9	2	3	4	11	2	3	5
AURIYA GTPS	46	28	3.90	18	11	7	18	12	8	5	12	15	9	6	15
DADRI GTPS	120	32	3.07	48	13	15	28	33	9	10	19	39	10	12	22
FGUTTPS –I	74	14	3.26	30	6	10	15	20	4	7	10	24	5	8	12
FGUTTPS –II	133	23	3.40	54	9	18	28	36	6	12	19	43	8	15	22
FGUTTP III	101	20	3.47	41	8	14	22	27	5	10	15	33	6	11	18
FGUTTP IV	343	77	3.12	138	31	43	74	93	21	29	50	112	25	35	60
F.S.T.P.S	48	6	2.81	19	3	5	8	13	2	4	5	16	2	4	6
K.H.S.T.P.S. I	126	17	2.25	51	7	11	18	34	5	8	12	41	5	9	15
K.H.S.T.P.S. & II	487	67	2.12	196	27	42	68	132	18	28	46	159	22	34	55
RHIND STPS	591	53	1.42	238	22	34	55	160	15	23	37	193	17	27	45
RIHAND II	746	49	1.49	300	20	45	65	202	13	30	44	243	16	36	52
RIHAND III	834	116	1.45	336	47	49	95	226	32	33	64	272	38	39	77
SINGUARLI	1950	135	1.40	785	54	110	164	529	37	74	111	635	44	89	133
KHPS-I	340	96	2.41	137	39	33	72	92	26	22	48	111	31	27	58
NCTPS 2	6	0	11.51	2	0	3	3	2	0	2	2	2	0	2	2
Singuarli- Hydel	4	0	5.04	2	0	1	1	1	0	1	1	1	0	1	1
TANDA-II STPS	227	46	2.67	91	18	24	43	62	12	16	29	74	15	20	35
TALCHAR STPS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NTPC BHADLA- II (Solar)	425	0	5.00	171	0	86	86	115	0	58	58	138	0	69	69
NTPC NSM- BUNDLED	3391	248	2.97	1365	100	405	505	920	67	273	340	1105	81	328	408
NTPC – MEJA	187	57	2.65	75	23	20	43	51	15	13	29	61	18	16	35
<b>Total NTPC</b>	<b>10213</b>	<b>1090</b>		<b>4113</b>	<b>439</b>	<b>978</b>	<b>1417</b>	<b>2772</b>	<b>296</b>	<b>659</b>	<b>955</b>	<b>3329</b>	<b>355</b>	<b>792</b>	<b>1147</b>
<b>NHPC</b>															
TANAKPUR HEP	40	9	1.69	16	4	3	6	11	2	2	4	13	3	2	5
SALAL HEP	101	8	1.74	41	3	7	10	27	2	5	7	33	3	6	8
CHAMERA-I	438	40	1.20	176	16	21	37	119	11	14	25	143	13	17	30
CHAMERA-II	64	9	1.09	26	4	3	7	17	3	2	4	21	3	2	5
CHAMERA-III	107	26	1.97	43	11	8	19	29	7	6	13	35	9	7	15
URI HEP	257	23	1.34	104	9	14	23	70	6	9	16	84	8	11	19
URI HEP II	175	39	2.74	71	16	19	35	48	11	13	24	57	13	16	28
DHOLIGANGA	109	16	1.57	44	7	7	13	30	4	5	9	36	5	6	11
DULHASTI	242	64	3.02	97	26	29	55	66	17	20	37	79	21	24	44
PARBATI III	66	33	1.54	27	13	4	17	18	9	3	12	21	11	3	14
SEWA II	40	9	2.84	16	4	5	8	11	2	3	6	13	3	4	7



	Rajasthan			JVVNL				AVVNL				JdVVNL			
	Net Generat ion (MU)	Total Annual Fixed charges (Rs. Cr.)	Variable Cost (Rs./ unit)	Net Generat ion (MU)	Total Annu al Fixed charg es (Rs. Cr.)	Varia ble Cost (Rs. Cr.)	Total Cost JVVNL (Rs. Cr.)	Net Generat ion (MU)	Total Annu al Fixed charg es (Rs. Cr.)	Varia ble Cost (Rs. Cr.)	Total Cost JVVN L (Rs. Cr.)	Net Generat ion (MU)	Total Annu al Fixed charg es (Rs. Cr.)	Varia ble Cost (Rs. Cr.)	Total Cost JVVNL (Rs. Cr.)
<b>Total NHPC</b>	<b>1640</b>	<b>276</b>		<b>660</b>	<b>111</b>	<b>120</b>	<b>232</b>	<b>445</b>	<b>75</b>	<b>81</b>	<b>156</b>	<b>534</b>	<b>90</b>	<b>97</b>	<b>187</b>
SJVNL															
NATHPA- JHAKRI	522	62	1.14	210	25	24	49	142	17	16	33	170	20	19	40
Rampur	149	36	2.31	60	14	14	28	40	10	9	19	49	12	11	23
<b>Total SJVNL</b>	<b>672</b>	<b>98</b>		<b>270</b>	<b>39</b>	<b>38</b>	<b>77</b>	<b>182</b>	<b>26</b>	<b>25</b>	<b>52</b>	<b>219</b>	<b>32</b>	<b>31</b>	<b>62</b>
IPP/UMPP															
NEYVELI LIGNITE CORPORATION LTD	1260	287	1.08	507	116	55	170	342	78	37	115	411	94	44	138
ARAVALI POWER CO PVT LTD															
NVVN BUNDLED POWER	2352	223	3.71	947	90	351	441	638	61	237	297	767	73	284	357
Coastal Gujarat	2098	219	1.89	845	88	159	248	569	59	107	167	684	71	129	200
ADANI POWER RAJASTHAN LIMITED	8194	1171	2.64	3300	471	871	1343	2224	318	587	905	2671	381	705	1087
SASAN POWER LTD	2773	40	1.30	1117	16	145	161	753	11	98	109	904	13	117	131
PTC DB	2258	631	1.69	909	254	154	408	613	171	104	275	736	206	125	330
KARCHAM WANGTOO (PTC)	447	80	1.68	180	32	30	63	121	22	20	42	146	26	25	51
PTC Maruti	1375	254	1.87	554	102	104	206	373	69	70	139	448	83	84	167
PTC (TEESTA)	440	142	2.72	177	57	48	105	119	38	33	71	143	46	39	85
SKS	330	0	2.88	133	0	38	38	89	0	26	26	107	0	31	31
<b>TOTAL IPP/UMPP</b>	<b>21527</b>	<b>3046</b>		<b>8669</b>	<b>1227</b>	<b>1956</b>	<b>3183</b>	<b>5842</b>	<b>827</b>	<b>1318</b>	<b>2145</b>	<b>7016</b>	<b>993</b>	<b>1583</b>	<b>2576</b>
<b>NPCIL</b>															
NAPP	295	0	3.01	119	0	36	36	80	0	24	24	96	0	29	29
RAPP-I &II	297	0	3.30	120	0	39	39	81	0	27	27	97	0	32	32
RAPP-III &IV	1052	0	3.33	424	0	141	141	286	0	95	95	343	0	114	114
RAPP-V & VI	614	0	3.85	247	0	95	95	167	0	64	64	200	0	77	77
<b>Total NPCIL</b>	<b>2258</b>	<b>0</b>		<b>909</b>	<b>0</b>	<b>312</b>	<b>312</b>	<b>613</b>	<b>0</b>	<b>210</b>	<b>210</b>	<b>736</b>	<b>0</b>	<b>252</b>	<b>252</b>
<b>Others</b>															
TEHRI	227	43	1.97	91	17	18	35	62	12	12	24	74	14	15	28
KOTESHWAR	101	23	2.29	40	9	9	18	27	6	6	12	33	7	8	15
TALA THROUGH PTC (BHUTAN)	50	0	2.16	20	0	4	4	14	0	3	3	16	0	4	4
<b>Total Others</b>	<b>377</b>	<b>65</b>	<b>0.00</b>	<b>152</b>	<b>26</b>	<b>32</b>	<b>58</b>	<b>102</b>	<b>18</b>	<b>21</b>	<b>39</b>	<b>123</b>	<b>21</b>	<b>26</b>	<b>47</b>
<b>STATE GEN. &amp; OTHER</b>															
RVUN															
KTPS(1 to 7)	4757	493	3.39	1916	199	650	849	1291	134	438	572	1550	161	526	687

	Rajasthan			JVNL				AVVNL				JdVVNL			
	Net Generat ion (MU)	Total Annual Fixed charges (Rs. Cr.)	Variable Cost (Rs./ unit)	Net Generat ion (MU)	Total Annu al Fixed charg es (Rs. Cr.)	Varia ble Cost (Rs. Cr.)	Total Cost JVNL (Rs. Cr.)	Net Generat ion (MU)	Total Annu al Fixed charg es (Rs. Cr.)	Varia ble Cost (Rs. Cr.)	Total Cost JVNL (Rs. Cr.)	Net Generat ion (MU)	Total Annu al Fixed charg es (Rs. Cr.)	Varia ble Cost (Rs. Cr.)	Total Cost JVNL (Rs. Cr.)
STPS(1 to 6)	912	728	4.12	367	293	151	444	248	198	102	299	297	237	122	360
STPS 7 & 8	1269	278	3.32	511	112	170	282	344	75	114	190	414	91	137	228
DCCPP															
CTPP (1-4)	6262	944	2.87	2522	380	724	1104	1700	256	488	744	2041	307	586	893
CTPP (5)	6123	1095	2.54	2466	441	627	1068	1662	297	423	720	1996	357	508	865
CTPP (6)	1461	252	2.26	588	102	133	235	397	68	90	158	476	82	108	190
RGTP(1,2 &3)	550	65	2.46	221	26	54	81	149	18	37	54	179	21	44	65
KaTPP#1 & 2	5795	1431	3.07	2334	576	716	1292	1573	388	482	871	1889	466	579	1046
MAHI	201	45	0.30	81	18	2	20	55	12	2	14	66	15	2	17
MAHI MMH	1	0	4.16	0	0	0	0	0	0	0	0	0	0	0	0
MANGROL	9	0	4.16	4	0	2	2	2	0	1	1	3	0	1	1
STPS MMH	1	0	4.16	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total RVUN</b>	<b>27342</b>	<b>5330</b>		<b>11011</b>	<b>2147</b>	<b>3230</b>	<b>5377</b>	<b>7421</b>	<b>1447</b>	<b>2177</b>	<b>3624</b>	<b>8911</b>	<b>1737</b>	<b>2614</b>	<b>4351</b>
OTHERS															
GLTPP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RAJWEST POWER LIMITED	6377	1139	2.56	2568	459	658	1117	1731	309	443	752	2078	371	532	904
<b>SHARE PROJECTS</b>															
BBMB(BHAKRA, DEHAR&PONG	2681	0	0.49	1079	0	53	53	728	0	36	36	874	0	43	43
CHAMBAL	250	0	0.00	101	0	0	0	68	0	0	0	81	0	0	0
<b>Total Shared Project</b>	<b>2930</b>	<b>0</b>		<b>1180</b>	<b>0</b>	<b>53</b>	<b>53</b>	<b>795</b>	<b>0</b>	<b>36</b>	<b>36</b>	<b>955</b>	<b>0</b>	<b>43</b>	<b>43</b>
R.F.F.	183	0	3.60	183	0	66	66								
P.T.C. INDIA LTD(GOHP)	671	0	2.53	270	0	68	68	182	0	46	46	219	0	55	55
NVVN	598	0	2.76	241	0	67	67	162	0	45	45	195	0	54	54
Tata Power	183	0	2.85	74	0	21	21	50	0	14	14	60	0	17	17
MANIKARAN POWER LTD	350	0	2.83	141	0	40	40	95	0	27	27	114	0	32	32
<b>Others Total</b>	<b>1985</b>	<b>0</b>		<b>908</b>	<b>0</b>	<b>261</b>	<b>261</b>	<b>489</b>	<b>0</b>	<b>132</b>	<b>132</b>	<b>587</b>	<b>0</b>	<b>158</b>	<b>158</b>
NCES															
Wind Farms	6211	0	5.04	2501	0	1261	1261	1686	0	850	850	2024	0	1021	1021
SOLAR	5236	0	3.22	2109	0	680	680	1421	0	458	458	1706	0	550	550
BIOMASS	578	0	7.27	233	0	169	169	157	0	114	114	188	0	137	137
<b>Total NCES</b>	<b>12025</b>	<b>0</b>		<b>4842</b>	<b>0</b>	<b>2110</b>	<b>2110</b>	<b>3264</b>	<b>0</b>	<b>1422</b>	<b>1422</b>	<b>3919</b>	<b>0</b>	<b>1708</b>	<b>1708</b>
Total	<b>87345</b>	<b>11044</b>		<b>35283</b>	<b>4447</b>	<b>9749</b>	<b>14196</b>	<b>23656</b>	<b>2997</b>	<b>6526</b>	<b>9523</b>	<b>28406</b>	<b>3599</b>	<b>7836</b>	<b>11436</b>
Short Term	-8063	0	4.09	-4686	0	1917	-1917	-1461	0	-597	-597	-1916	0	-784	-784
<b>Net</b>	<b>79282</b>	<b>11044</b>		<b>30597</b>	<b>4447</b>	<b>7832</b>	<b>12279</b>	<b>22195</b>	<b>2997</b>	<b>5929</b>	<b>8926</b>	<b>26490</b>	<b>3599</b>	<b>7053</b>	<b>10652</b>

# FY 2021-22

	Rajasthan			JVNL				AVVNL				JdVVNL			
	Net Generat ion (MU)	Total Annual Fixed charges (Rs. Cr.)	Variab le Cost (Rs./ unit)	Net Generat ion (MU)	Total Annua l Fixed charge s (Rs. Cr.)	Variab le Cost (Rs. Cr)	Total Cost JVNL (Rs. Cr.)	Net Generat ion (MU)	Total Annua l Fixed charge s (Rs. Cr.)	Variab le Cost (Rs. Cr)	Total Cost JVNL (Rs. Cr.)	Net Generat ion (MU)	Total Annua l Fixed charge s (Rs. Cr.)	Variab le Cost (Rs. Cr)	Total Cost JVNL (Rs. Cr.)
<b>NTPC</b>															
ANTA GTPS	35	6	2.80	14	2	4	6	9	2	3	4	11	2	3	5
AURIYA GTPS	47	29	3.90	19	12	7	19	13	8	5	13	15	9	6	15
DADRI GTPS	122	32	3.07	49	13	15	28	33	9	10	19	40	10	12	23
FGUTTPS -I	76	14	3.26	31	6	10	16	21	4	7	11	25	5	8	13
FGUTTPS -II	136	24	3.40	55	10	19	28	37	6	13	19	44	8	15	23
FGUTPP III	103	20	3.47	41	8	14	22	28	5	10	15	34	7	12	18
FGUTPP IV	350	79	3.12	141	32	44	76	95	21	30	51	114	26	36	61
F.S.T.P.S	49	6	2.81	20	3	6	8	13	2	4	5	16	2	5	7
K.H.S.T.P.S. I	129	17	2.25	52	7	12	19	35	5	8	13	42	6	9	15
K.H.S.T.P.S. & II	497	68	2.12	200	27	42	70	135	18	29	47	162	22	34	57
RHIND STPS	603	55	1.42	243	22	35	57	164	15	23	38	196	18	28	46
RIHAND II	760	50	1.49	306	20	46	66	206	14	31	44	248	16	37	53
RIHAND III	851	119	1.45	343	48	50	97	231	32	33	66	277	39	40	79
SINGUARLI	1989	137	1.40	801	55	112	167	540	37	76	113	648	45	91	136
KHPS-I	346	98	2.41	140	39	34	73	94	27	23	49	113	32	27	59
NCTPS 2	6	0	11.51	2	0	3	3	2	0	2	2	2	0	2	2
Singuarli- Hydel	4	0	5.04	2	0	1	1	1	0	1	1	1	0	1	1
TANDA-II STPS	231	46	2.67	93	19	25	44	63	13	17	29	75	15	20	35
TALCHAR STPS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NTPC BHADLA-II (Solar)	433	0	5.00	175	0	87	87	118	0	59	59	141	0	71	71
NTPC NSM- BUNDLED	3459	253	2.97	1393	102	413	515	939	69	278	347	1127	82	334	417
NTPC - MEJA	191	58	2.65	77	23	20	44	52	16	14	29	62	19	17	35
<b>Total NTPC</b>	<b>10418</b>	<b>1111</b>		<b>4195</b>	<b>448</b>	<b>998</b>	<b>1445</b>	<b>2827</b>	<b>302</b>	<b>672</b>	<b>974</b>	<b>3395</b>	<b>362</b>	<b>808</b>	<b>1170</b>
<b>NHPC</b>															
TANAKPUR HEP	41	9	1.69	17	4	3	7	11	3	2	4	13	3	2	5
SALAL HEP	103	8	1.74	42	3	7	11	28	2	5	7	34	3	6	9
CHAMERA-I	447	41	1.20	180	16	22	38	121	11	15	26	146	13	17	31
CHAMERA-II	65	10	1.09	26	4	3	7	18	3	2	5	21	3	2	5
CHAMERA-III	109	27	1.97	44	11	9	19	30	7	6	13	35	9	7	16
URI HEP	263	24	1.34	106	10	14	24	71	6	10	16	86	8	11	19
URI HEP II	179	40	2.74	72	16	20	36	49	11	13	24	58	13	16	29
DHOLIGANG A	111	17	1.57	45	7	7	14	30	4	5	9	36	5	6	11
DULHASTI	246	65	3.02	99	26	30	56	67	18	20	38	80	21	24	45
PARBATI III	67	33	1.54	27	13	4	18	18	9	3	12	22	11	3	14
SEWA II	40	9	2.84	16	4	5	8	11	3	3	6	13	3	4	7
<b>Total NHPC</b>	<b>1672</b>	<b>282</b>		<b>673</b>	<b>113</b>	<b>123</b>	<b>236</b>	<b>454</b>	<b>76</b>	<b>83</b>	<b>159</b>	<b>545</b>	<b>92</b>	<b>99</b>	<b>191</b>

	Rajasthan			JVNL				AVNL				JdVNL			
	Net Generat ion (MU)	Total Annual Fixed charges (Rs. Cr.)	Variab le Cost (Rs./ unit)	Net Generat ion (MU)	Total Annua l Fixed charge s (Rs. Cr.)	Variab le Cost (Rs. Cr)	Total Cost JVNL (Rs. Cr.)	Net Generat ion (MU)	Total Annua l Fixed charge s (Rs. Cr.)	Variab le Cost (Rs. Cr)	Total Cost JVNL (Rs. Cr.)	Net Generat ion (MU)	Total Annua l Fixed charge s (Rs. Cr.)	Variab le Cost (Rs. Cr)	Total Cost JVNL (Rs. Cr.)
SJVNL															
Nathpa- Jhakri	533	63	1.14	215	25	24	50	145	17	16	34	174	21	20	40
Rampur	152	36	2.31	61	15	14	29	41	10	10	19	50	12	11	23
<b>Total SJVNL</b>	<b>685</b>	<b>100</b>		<b>276</b>	<b>40</b>	<b>39</b>	<b>79</b>	<b>186</b>	<b>27</b>	<b>26</b>	<b>53</b>	<b>223</b>	<b>32</b>	<b>31</b>	<b>64</b>
IPP/UMPP															
NEYVELI LIGNITE CORPORATI ON LTD	1285	293	1.08	517	118	56	174	349	79	38	117	419	95	45	141
ARAVALI POWER CO PVT LTD															
NVVN BUNDLED POWER	2399	228	3.71	966	92	358	450	651	62	242	303	782	74	290	364
COASTAL GUJARAT	2140	223	1.89	862	90	163	252	581	61	110	170	697	73	132	204
ADANI POWER RAJASTHAN LIMITED	8358	1194	2.64	3366	481	889	1370	2268	324	599	923	2724	389	719	1108
SASAN POWER LTD	2828	41	1.30	1139	17	148	165	768	11	100	111	922	13	120	133
PTC DB	2303	643	1.69	928	259	157	416	625	175	106	280	751	210	127	337
KARCHAM WANGTOO (PTC)	455	82	1.68	183	33	31	64	124	22	21	43	148	27	25	52
PTC Maruti	1403	259	1.87	565	104	106	210	381	70	71	141	457	84	85	170
PTC (TEESTA)	449	145	2.72	181	58	49	107	122	39	33	72	146	47	40	87
SKS	336	0	2.88	135	0	39	39	91	0	26	26	110	0	32	32
<b>TOTAL IPP/UMPP</b>	<b>21957</b>	<b>3107</b>		<b>8842</b>	<b>1251</b>	<b>1995</b>	<b>3247</b>	<b>5959</b>	<b>843</b>	<b>1345</b>	<b>2188</b>	<b>7156</b>	<b>1013</b>	<b>1615</b>	<b>2628</b>
<b>NPCIL</b>															
NAPP	300	0	3.01	121	0	36	36	82	0	25	25	98	0	29	29
RAPP-I &II	303	0	3.30	122	0	40	40	82	0	27	27	99	0	33	33
RAPP-III &IV	1074	0	3.33	432	0	144	144	291	0	97	97	350	0	117	117
RAPP-V & VI	627	0	3.85	252	0	97	97	170	0	66	66	204	0	79	79
<b>Total NPCIL</b>	<b>2303</b>	<b>0</b>		<b>928</b>	<b>0</b>	<b>318</b>	<b>318</b>	<b>625</b>	<b>0</b>	<b>214</b>	<b>214</b>	<b>751</b>	<b>0</b>	<b>257</b>	<b>257</b>
<b>Others</b>															
TEHRI	231	44	1.97	93	18	18	36	63	12	12	24	75	14	15	29
KOTESHWAR	103	23	2.29	41	9	9	19	28	6	6	13	33	7	8	15
TALA THROUGH PTC (BHUTAN)	51	0	2.16	20	0	4	4	14	0	3	3	17	0	4	4
<b>Total Others</b>	<b>385</b>	<b>66</b>	<b>0.00</b>	<b>155</b>	<b>27</b>	<b>32</b>	<b>59</b>	<b>104</b>	<b>18</b>	<b>22</b>	<b>40</b>	<b>125</b>	<b>22</b>	<b>26</b>	<b>48</b>
<b>STATE GEN. &amp; OTHER</b>															
RVUN															
KTPS(1 to 7)	4852	493	3.39	1954	199	662	861	1317	134	446	580	1581	161	536	697

	Rajasthan			JVNL				AVNL				JdVNL			
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STPS(1 to 6)	930	728	4.09	375	293	153	446	252	198	103	301	303	237	124	361
STPS 7 & 8	2958	634	2.73	1191	255	325	580	803	172	219	391	964	207	263	469
DCCPP															
CTPP (1-4)	6387	944	2.49	2572	380	640	1020	1734	256	432	688	2082	307	518	826
CTPP (5)	6246	1235	2.18	2515	497	548	1046	1695	335	370	705	2035	403	444	846
CTPP (6)	1490	295	2.18	600	119	131	250	404	80	88	168	486	96	106	202
RGTP(1,2 & 3)	1619	190	3.03	652	77	198	274	439	52	133	185	528	62	160	222
KaTPP#1 & 2	5911	1407	2.91	2380	567	693	1259	1604	382	467	849	1926	459	561	1019
MAHI	205	46	0.30	83	19	2	21	56	13	2	14	67	15	2	17
MAHI MMH	1	0	4.16	0	0	0	0	0	0	0	0	0	0	0	0
MANGROL	9	0	4.16	4	0	2	2	3	0	1	1	3	0	1	1
STPS MMH	1	0	4.16	1	0	0	0	0	0	0	0	0	0	0	0
<b>Total RVUN</b>	<b>30610</b>	<b>5972</b>		<b>12327</b>	<b>2405</b>	<b>3355</b>	<b>5759</b>	<b>8308</b>	<b>1621</b>	<b>2261</b>	<b>3882</b>	<b>9976</b>	<b>1946</b>	<b>2715</b>	<b>4661</b>
<b>OTHERS</b>															
GLTPP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RAJWEST POWER LIMITED	6504	1106	2.50	2619	445	655	1100	1765	300	441	741	2120	360	530	890
<b>SHARE PROJECTS</b>															
BBMB(BHAKR A,DEHAR&PO NG	2734	0	0.49	1101	0	54	54	742	0	37	37	891	0	44	44
CHAMBAL	255	0	0.00	103	0	0	0	69	0	0	0	83	0	0	0
<b>Total Shared Projects</b>	<b>2989</b>	<b>0</b>		<b>1204</b>	<b>0</b>	<b>54</b>	<b>54</b>	<b>811</b>	<b>0</b>	<b>37</b>	<b>37</b>	<b>974</b>	<b>0</b>	<b>44</b>	<b>44</b>
R.F.F.	186	0	3.60	186	0	67	67								
PARBATI (new)	314	0	1.54	126	0	20	20	85	0	13	13	102	0	16	16
<b>Others</b>	<b>500</b>	<b>0</b>		<b>313</b>	<b>0</b>	<b>87</b>	<b>87</b>	<b>85</b>	<b>0</b>	<b>13</b>	<b>13</b>	<b>102</b>	<b>0</b>	<b>16</b>	<b>16</b>
<b>NCES</b>															
Wind Farms	6774	0	5.04	2728	0	1376	1376	1839	0	927	927	2208	0	1113	1113
Solar	6470	0	3.09	2605	0	804	804	1756	0	542	542	2109	0	651	651
Biomass	685	0	7.20	276	0	199	199	186	0	134	134	223	0	161	161
<b>Total NCES</b>	<b>13929</b>	<b>0</b>		<b>5609</b>	<b>0</b>	<b>2378</b>	<b>2378</b>	<b>3780</b>	<b>0</b>	<b>1603</b>	<b>1603</b>	<b>4540</b>	<b>0</b>	<b>1925</b>	<b>1925</b>
<b>Total</b>	<b>91953</b>	<b>11744</b>		<b>37141</b>	<b>4729</b>	<b>10033</b>	<b>14762</b>	<b>24906</b>	<b>3187</b>	<b>6717</b>	<b>9904</b>	<b>29907</b>	<b>3827</b>	<b>8065</b>	<b>11893</b>
<b>Short Term</b>	-8320	0	4.17	-4434	0	-1850	-1850	-1746	0	-729	-729	-2139	0	-892	-892
<b>Net</b>	83634	11744		32706	4729	8183	12913	23159	3187	5988	9175	27768	3827	7173	11001