# RAJASTHAN ELECTRICITY REGULATORY COMMISSION, JAIPUR Petition No. RERC 2066/2022, 2067/2022, 2068/2022

In the matter of approval of True up for FY 2021-22 and Aggregate Revenue Requirement, Tariff and Investment Plan for FY 2023-24 of Jaipur Vidyut Vitran Nigam Ltd. (JVVNL), Ajmer Vidyut Vitran Nigam Ltd. (AVVNL) and Jodhpur Vidyut Vitran Nigam Ltd (JdVVNL).

Coram: Dr. B.N. Sharma, Chairman

Shri Hemant Kumar Jain, Member

Dr. Rajesh Sharma, Member

**Petitioners:** Jaipur Vidyut Vitran Nigam Ltd., Jaipur (2066/2022)

Ajmer Vidyut Vitran Nigam Ltd., Ajmer (2067/2022)

Jodhpur Vidyut Vitran Nigam Ltd., Jodhpur (2068/2022)

Date of hearing: 28.02.2023, 01.03.2023 & 02.03.2023

Date of Order: 31.03.2023

#### ORDER

#### Section-1: Background

1.1 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 or Petitioners had filed petitions on 30.11.2022 for approval of true-up of ARR for FY 2021-22 under RERC (Terms and Conditions for Determination of Tariff) Regulations, 2019 along with Aggregate Revenue Requirement (ARR), Tariff and Investment Plan for FY 2023-24 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 Regulations, 2006.

- 1.2 As per Section 64(2) of the Electricity Act, 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 21.12.2022 allowed JVVNL, AVVNL & JdVVNL to publish the notice in the newspapers.
- 1.3 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 30.01.2023 for JVVNL, AVVNL and JdVVNL:

Sr. No.	Name of Newspapers	JVVNL	AVVNL	JdVVNL
(i)	Times of India	28.12.2022		
(ii)	Danik Bhaskar	28.12.2022	31.12.2022	29.12.2022
(iii)	Rajasthan Patrika	28.12.2022	28.12.2022	29.12.2022
(IV)	Danik Navjoti	28.12.2022	28.12.2022	
(V)	First India	28.12.2022		
(VI)	Hindustan Times		28.12.2022	
(VII)	The Indian Express			29.12.2022

- 1.4 After examining the petitions, the Commission vide letter dated 10.01.2023 pointed out the deficiencies observed in the petitions for Truing up of ARR for FY 2021-22, ARR, Tariff and Investment Plan for FY 2023-24 and the Discoms were directed to clarify along with supporting documents. Commission also directed that clarification on the same and any additional information given by Discoms shall also form an integral part of this petition and should also be placed on Discom's website.
- 1.5 JVVNL, AVVNL & JdVVNL vide letter dated 09.02.2023, 13.02.2023 & 15.02.2023 respectively, submitted reply to the deficiencies indicated by the Commission.
- 1.6 Further JVVNL vide letter dated 27.02.2023 submitted additional information related to True up and ARR.
- 1.7 As directed by the Commission, JVVNL, AVVNL & JdVVNL also made Audiovisual presentation at their head offices on dated 10.01.2023 & 11.01.2023, 12.01.2023 and 16.01.2023 respectively.

1.8 In all, 20 numbers of comments/suggestions were received from the stakeholders on JVVNL, 23 numbers on AVVNL & 20 numbers on JdVVNL for True Up petition for FY 2021-22 and Aggregate Revenue Requirement (ARR), Tariff and Investment Plan for FY 2023-24. The list of stakeholders who submitted their written suggestions/objections are given in the table below:

Sr. No.	Name of Stakeholder	Discoms	
1	Sh. Bal Mukund Sanadhya, Samta Power, Jaipur	JVVNL, AVVVNL, JdVVNL	
2	Sh. Shanti Prasad	JVVNL, AVVVNL, JdVVNL	
3	Sh. D. S. Agarwal	JVVNL, AVVVNL, JdVVNL	
4	Sh. Y. K. Bolia	JVVNL, AVVVNL, JdVVNL	
5	Sh. D. P. Chirania	JVVNL, AVVVNL, JdVVNL	
6	Reliance Jio	JVVNL, AVVVNL, JdVVNL	
7	Sh. Mansuri Ayub Mohmad, Sanchor, Jalore	JdVVNL	
8	Udaipur Chamber of Commerce & Industry	AVVNL	
9	Sh. V. K. Gupta	JVVNL	
10	Cellular Operators Association of India	JVVNL, AVVVNL, JdVVNL	
11	Bharti Hexacom Limited (Airtel)	JVVNL, AVVVNL, JdVVNL	
12	Indus Tower Limited	JVVNL, AVVVNL, JdVVNL	
13	SBF Ispat Private Limited	JVVNL, AVVVNL, JdVVNL	
14	Renewable Energy Association (REAR)	JVVNL	
15	Marble Gangsaw Association Limited, Rajsamand	AVVNL	
16	Sh. Varun Kumar Kaushik, Jalor	JdVVNL	
17	Zone-54, Vikas Samiti, Mansarovar, Jaipur	JVVNL	
18	Sh. Pramod Jhanwar, Udaipur	AVVNL	
19	Sh. Prateek Agarwal, Council on Energy, Environment and Water (CEEW), New Delhi	JVVNL, AVVVNL, JdVVNL	
20	Rajasthan Textile Mills Association	JVVNL, AVVVNL, JdVVNL	
21	Sh. Bhavnesh Chandra Mathur, Samta Power, Jodhpur	JdVVNL	
22	Sh. D. D. Agarwal	JVVNL, AVVVNL, JdVVNL	
23	Sh. Ramesh Chandra Sharma, Udaipur	AVVNL	
24	Indian Medical Association	JVVNL, AVVVNL, JdVVNL	
25	Hindustan Zinc Limited	AVVNL	
26	Hastimal Chaurdia, Samta Power, Chittorgarh	AVVNL	
27	BASK Research Foundation	JVVNL, AVVVNL, JdVVNL	
28	Sh. G. L. Sharma	JVVNL, AVVVNL, JdVVNL	
29	Military Engineering Services, Jodhpur	JVVNL, AVVVNL, JdVVNL	

- 1.9 The Commission forwarded the suggestions/comments submitted by the Stakeholders to the respective Discoms for furnishing the reply.
- 1.10 Discoms furnished the reply to Stakeholders as well as to the Commission.
- 1.11 The public hearing in the matter was held through virtual and physical mode on 28.02.2023 and 01.03.2023 & 02.03.2023. The list of persons who made oral submissions during the hearing enclosed at **Annexure-A**.
- 1.12 Post hearing, the Discoms also filed clarification in respect of issues raised by the stakeholders during the hearing.
- 1.13 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.
- 1.14 Discoms prayed to approve the True up of FY 2021-22 and Aggregate Revenue Requirement (ARR), Tariff and Investment Plan for FY 2023-24 as submitted.
- 1.15 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 a common hearing was held in the matter. Therefore, Commission has decided to consider all the petitions together for True Up for FY 2021-22 and Aggregate Revenue Requirement (ARR), Tariff and Investment Plan for FY 2023-24 and dispose them through this common order.
- 1.16 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.
- 1.17 For ready reference, a list of abbreviations used in this order is placed at **Annexure B** of this order.
- 1.18 All energy figures used in this order, unless stated otherwise, are in Million Units (MUs).

- 1.19 For the purpose of representation, figures given in the tables are shown as rounded off. However, for calculation purpose, actual figures have been considered.
- 1.20 This order has been structured in six sections as given under:
  - a) Section 1- Background.
  - b) **Section 2** Stakeholders Comments/suggestions, Petitioners' response and the Commission's observations/views thereon.
  - c) **Section 3** True-up of ARR for FY 2021-22 of the three Discoms.
  - d) Section 4 ARR and Investment Plan for FY 2023-24 of the three Discoms:

In section 4, the Commission has looked into performance of Discoms, Distribution losses, effect of UDAY and Loss Subsidy, 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 estimated sales and revenue for various categories of consumers in accordance with RERC (Terms and Conditions for Determination of Tariff) Regulations, 2019.

e) **Section 5** –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 which have been dealt in the order.

f) **Section 6**- Directives:

In this section, the Commission has considered compliance of directions given in 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:

#### Part I –Issues/Comments related to True-up of FY 2021-22

#### 2.1 Inaccurate information

#### 2.1.1 Stakeholders Comments:

It was submitted that true data have not been disclosed and statement on deviation is incorrect.

## 2.1.2 Petitioners' Response:

Discoms submitted that the accounts of the Discoms are audited by an Independent Auditor, a qualified Chartered Accountant appointed by the Comptroller and Auditor General of India. Thus, the accounts prepared by the Discoms are an accurate statement of the expenditure incurred and revenue earned by the Discoms during FY 2021-22.

#### 2.1.3 Commission's View:

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

### 2.2 Interest on security deposit of Consumers

#### 2.2.1 Stakeholders Comments:

It was submitted that Discoms may provide the details of interest on security deposit of the consumers and how this amount is adjusted in the consumer bills.

## 2.2.2 Petitioners' Response:

Discoms submitted that the details is available in format 3.10 and the same is computed in accordance with the provisions of clause 8.7 of the Terms of Condition of supply.

#### 2.2.3 Commission's View:

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

#### 2.3 Late payment surcharge

#### 2.3.1 Stakeholders Comments:

It was submitted that Discoms may provide the details of late payment surcharge. The late payment surcharge is not a pass through.

## 2.3.2 Petitioners' Response:

JVVNL & JdVVNL have submitted that the details is available in format 3.7. AVVNL submitted the details along with data gap reply.

#### 2.3.3 Commission's View:

The Commission has taken note of the comments of the Stakeholders and reply of Discoms thereto and while allowing the ARR has taken a view in accordance with the provisions of Regulations.

## 2.4 <u>Temporary connection</u>

#### 2.4.1 Stakeholders Comments:

It was submitted that in case of JVVNL & AVVNL information of number of connections and revenue received from temporary connection have not been provided.

## 2.4.2 Petitioners' Response:

The JVVNL & AVVNL submitted the information related to number of connections and revenue received from temporary connection.

## 2.4.3 Commission's View:

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

## 2.5 Sales and Revenue

#### 2.5.1 Stakeholders Comments:

1. It was submitted that different figures of revenue & sales are shown at different places of petition of Discoms.

- 2. Information of current and proposed tariff along with the expected revenue from the same for ensuing years was not provided. Discoms may provide the same.
- 3. In case of JVVNL and JdVVNL, the computation of flat rate sales may be clarified by the Discoms.
- 4. Discoms have not provided the information of sales to Distribution Franchisee (DF), which is essential for distribution losses as well as revenue. Each Discommay provide the same.
- 5. It was submitted that in case of JVVNL and AVVNL while computing energy balance, energy sold to consumers should be taken instead of energy sold to Distribution Franchisee.
- 6. In case of JVVNL, billing rate is either higher or lower than the approved rate. The Discom may clarify the same.

## 2.5.2 Petitioners' Response:

Discoms submitted that the difference in revenue figure is mainly on account
of presentation of revenue considering all components like energy charges,
fuel surcharge, fixed charges, theft and malpractice, miscellaneous
recoveries, adjustment of past billing etc. at one place and the revenue
from energy charges, fixed charges and fuel surcharge only at another
place.

Further, the difference in sales figures is mainly on account of presentation of sales considering the energy provided to DF at input point at one place and energy sales at consumer end at other place.

- 2. Discoms submitted the information pertaining to current and proposed tariff along with the expected revenue from the same for ensuing years in Form 5.3 and 5.4 respectively of the ARR Formats.
- 3. The JVVNL and JdVVNL have submitted that they have furnished the computation of flat rate sales.
- 4. The Discoms submitted that the sales projected for FY 2023-24 are at end consumer level.
- 5. JVVNL and AVVNL submitted the energy sales inclusive of Distribution Franchisee.

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6. The Discoms submitted that Independent Auditors (M/s KPMG) has submitted the report of ABR figures to the Discoms. Once the report is finalised by the Discoms, the same shall be submitted to the Commission.

#### 2.5.3 Commission's View:

The Commission has taken note of the comments of the Stakeholders and reply of Discoms thereto and has considered the issue suitably while doing the true up and along with ARR in subsequent sections.

#### 2.6 Transmission Losses

#### 2.6.1 Stakeholders Comments:

- 1. It was submitted that Transmission losses claimed as 6.99% are on very high side, which should be about 5% as per RVPN losses.
- 2. Break up and calculation of transmission losses into inter and intra losses was sought. Discoms may provide the same.

## 2.6.2 Petitioners' Response:

- JVVNL and AVVNL have submitted that the overall transmission loss of 6.99% as claimed in the True Up Petition for FY 2021-22 is as per the Annual Accounts of the Discom which is duly certified by the statutory auditor and CAG. They have submitted the circle wise actual AT&C losses for FY 2021-22, along with Distribution Franchisee losses.
- 2. The Discoms submitted that a committee has been formed which includes concerned officials from Discoms, RUVNL and RVPNL in order to comply with the directives of the Commission. The committee has carried out a detailed analysis on the same and the findings have been put up before the higher management of Discoms for review and further directions. The same shall be submitted once finalized.

#### 2.6.3 Commission's View:

The Commission has taken note of the comments of the Stakeholders and replies of Discoms thereto and has dealt with this issue of transmission losses under true up analysis section of this order.

#### 2.7 Distribution Losses

#### 2.7.1 Stakeholders Comments:

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- 1. The actual distribution losses of JVVNL and JdVVNL are more than the approved losses for FY 2021-22. Distribution losses should be considered as approved in ARR order.
- 2. The distribution losses of DF (BESL & KEDL) are higher than the JVVNL. Detailed performance review of JVVNL's distribution franchises may be provided.
- 3. It was submitted that circle wise actual AT&C losses for FY 2021-22, along with Distribution Franchisee losses, be intimated by Discoms.

## 2.7.2 Petitioners' Response:

- 1. The JVVNL and JdVVNL submitted that for FY 2021-22 they have achieved distribution loss level i. e. 16.81% & 21.88% respectively which is higher than approved. However, it is worth noting that the same is lower than the Distribution losses of 19.44% and 22.64% achieved during FY 2020-21 respectively. This reduction in losses is mainly on account of loss reduction initiatives taken by the Discoms over the years.
- 2. JVVNL submitted that the energy sales projections have been made considering the end consumer of the Discom. Further, the consumer of the Franchisee continue to be consumer of the Discoms. The energy requirement and procurement cannot be practically arrived at only for the Discom, as the same is based on sales to end consumer. This presents a more realistic approach for making further power procurement projections. The Discom has done the projections based on the methodology adopted by the Commission in the past tariff orders. Other factors affecting the energy sales for various consumer classes have also been considered while projecting the sales.
- 3. Discoms have submitted circle wise losses In format 7.1 and data gap reply for FY 21-22.

#### 2.7.3 Commission's View:

The Commission has taken note of the comments of the Stakeholders and replies of Discoms thereto and has dealt with this issue of distribution losses under true up analysis section of this order.

#### 2.8 <u>Power Purchase</u>

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#### 2.8.1 Stakeholders Comments:

- 1. It was submitted that while approving the power purchase cost, sales plus approved normative distribution and transmission losses should only be considered.
- 2. It was submitted that the PPA's executed by Discoms with RVUNL have not been transferred to Urja Vikas Nigam (RUVNL). Therefore, transaction of power purchase has to be directly undertaken by Discoms themselves.
- 3. It was submitted that RVUN and Discoms both have filed the true up of FY 2021-22. On comparing the two petitions, it was noted that there are difference in energy sent out of various stations of RVUN. Similarly, there is difference in SLDC and Discoms' petitions regarding SLDC charges. Discoms may clarify the same.
- 4. It was submitted that information of roof top solar connections and their capacity for FY 2021-22 may be intimated by Discoms.
- 5. It was submitted that Discoms have not filed the impact of KUSUM Scheme in terms of energy available from KUSUM Scheme, such energy should be added in availability.

## 2.8.2 Petitioners' Response:

- 1. Discoms submitted that in case Commission decides to disallow the excess power purchase made in lieu of excess distribution loss, the same may be done on average variable power purchase rate rather than the average power purchase rate.
- 2. Discoms submitted that in pursuance to the decision of the Government of Rajasthan, Rajasthan Urja Vikas Nigam was incorporated on 4<sup>th</sup> December, 2015 under the Companies Act, 2013. The objectives of the company is 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. As Rajasthan Urja Vikas Nigam Limited (RUVNL) is now fully operational, power purchase requirement, scheduling of power and trading of surplus power is

being done by RUVNL.

- 3. Discoms submitted that power purchase details as highlighted in the True Up section for FY 2021-22 are based on the Annual Accounts of the petitioner, which have been duly certified by the statutory auditor. Hence no question arises on the sanctity of the data as presented in the true up.
- 4. The Discoms submitted the details of category wise rooftop solar installation.
- 5. Discoms submitted that under Component C (pump level solarization) of KUSUM scheme, power generated from the solar PV systems installed for solarization of pumps will be used for consumption by farmers. The excess energy generated shall be injected into Discoms' grids and farmers shall be compensated by Discoms. Therefore, it becomes imperative to include the impact of the same in agriculture sales' projections.

#### 2.8.3 Commission's View:

The Commission has taken note of the comments of the Stakeholders and replies of Discoms thereto and has dealt with this issue of power purchase in true up analysis section of this order.

## 2.9 Fixed Assets and Depreciation

## 2.9.1 Stakeholders Comments:

- 1. Gross Fixed Assets has been claimed as per audited accounts. The Commission may consider the GFA as per approved normative balances.
- 2. Discoms have not completely complied with Commission's direction on Fixed Assets Register. Therefore, the Commission may disallow 50% of deprecation and no further addition be allowed.

## 2.9.2 Petitioners' Response:

- 1. The Discoms submitted that the increase in addition to fixed assets is primarily due to meeting the increased demand of consumers and augmentation of the system to improve the quality and reliability of power supply.
- 2. The Discoms submitted that the details of the assets of Discoms have been captured in the Fixed Assets Register (FAR). FAR of JVVNL has been updated

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till 31.03.2022 and of AVVNL & JdVVNL till 31.03.2021 and also submitted to the Commission.

#### 2.9.3 Commission's View:

The Commission has taken note of the comments of the Stakeholders and replies of Discoms thereto and has dealt with this issue of depreciation in true up analysis section of this order.

# 2.10 <u>Interest on term and Working Capital Loan</u>

#### 2.10.1 Stakeholders Comments:

- 1. It was submitted that interest on loan over and above the normative working capital and term loan should not be allowed.
- 2. Interest on UDAY loan may not be allowed as Discoms have failed to achieve the target prescribed under UDAY, which was one of the conditions for sanctioning the loan.
- 3. No interest on APRL account is payable as Discoms while claiming special fuel surcharge have already included in the interest of such payment.
- 4. It was submitted that the interest on term loan is high due to short fall in tariff subsidy from Govt. of Rajasthan.

#### 2.10.2 Petitioners' Response:

- 1. The Discoms submitted that the Interest and Finance charges as claimed in the True Up petition for FY 2021-22 is as per the annual audited accounts of the Discoms, duly certified by the statutory auditor as well as the CAG.
- 2. The Discoms submitted that the Commission in its ARR & Tariff order dated 06.02.2020 for the FY 2019-20 approved interest on UDAY loans to be included for five years beginning from FY 2019-20. Accordingly, the Discoms have claimed the same.
- 3. The Discoms have submitted that the Hon'ble Supreme court has pronounced the order on 25.02.2022 in favour of APRL. The Hon'ble Supreme court in its order has considered the claims towards change in law for domestic coal shortfall as submitted by APRL i.e., Rs. 5475.44 Crore (Corrected Rs. 5475.40 Crore due to rounding off) after taking into account 50% payment of Rs.

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2,426.81 Crore made by Rajasthan Discoms in compliance with the Hon'ble Supreme court interim order dated 29.10.2018. Accordingly, as per the aforesaid judgement, Rajasthan Discoms were liable to pay Rs. 3048.63 Crore (Corrected Rs. 3048.59 Crore due to rounding off) along with interest @ 9 % p.a. (to be compounded annually) from the date on which amount became due till the date of actual payment Rs. 2947.81 Crore upto 23.03.2022. Thus, total amount upto 23.03.2022 payable is Rs. 5996.42 Crore. The payment was to be made within 4 weeks from the date of order i.e., by 24.03.2022. Discoms have paid the aforesaid amount by availing the loan from REC and PFC. Further, Discoms submitted Rs. 5996.42 Crore and interest on loan of Rs. 9.67 Crore (on loan availed for payment of above of Rs. 5996.42 Crore) total of Rs 6006.09 Crore has been booked under the head of exceptional expenses, power purchase and finance charges and on other hand same amount has been booked under exceptional income and Special Fuel Surcharge Income. Therefore, net impact of such revenue from operations and expense is Nil.

4. Discoms submitted that subsidy realized is more than subsidy assessed for the FY 2021-22 and the State Govt., under the Revamped Distribution Sector Scheme is committed towards releasing its outstanding subsidy amount by FY 2024-25.

#### 2.10.3 Commission's View:

The Commission has taken note of the comments of the Stakeholders and reply of Discoms thereto. The Commission has dealt with issue of interest and finance charges under true up analysis section of this order.

## 2.11 O& M and Insurance Charges

#### 2.11.1 Stakeholders Comments:

- 1. It was submitted that while working out the O&M expenses, sales should be considered after excluding distribution franchisee sales.
- 2. It was submitted that as per Regulation 25 of RERC Tariff Regulations, 2019, insurance expenses are admissible only to the extent of actually being incurred.

## 2.11.2 Petitioners' Response:

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- 1. The Discoms submitted that the details of the O&M expenses incurred by the Discoms during FY 2021-22 is submitted in Form 3.2 of the True Up formats and the same is as per the annual accounts of FY 2021-22 duly certified by the statutory auditor.
- 2. The Discoms submitted that the actual Insurance expenses as per the Annual Audited accounts of the Discoms for FY 2021-22 have been claimed in the True up Petition.

#### 2.11.3 Commission's View:

The Commission has taken note of the comments of the Stakeholders and reply of Discoms thereto and has approved the O&M expenses as per norms prescribed in the RERC Tariff Regulations, 2019.

#### 2.12 Terminal benefit

#### 2.12.1 Stakeholders Comments:

It was submitted that Discoms should furnish the certificate of depositing the amount towards terminal benefit fund.

#### 2.12.2 Petitioners' Response:

The Discoms submitted that they have been regularly depositing the amount in accordance with the approval given by the Commission to meet its liability towards terminal benefits and also submitted the proof of deposit.

#### 2.12.3 Commission's View:

The Commission has allowed the expenses towards terminal benefit only to the extent of actual payment made to designated Fund.

## 2.13 Regulatory Assets

#### 2.13.1 Stakeholders Comments:

It was submitted that the Para 8.2.2 of Tariff policy says that the facility of a regulatory asset should be done only as a very rare exception in case of

natural calamity or force majeure conditions.

## 2.13.2 Petitioners' Response:

The Discoms submitted that the Tariff policy is just guiding principle. The matter of Regulatory Assets is state-specific and a multitude of factors like historical background and performance of the Discoms have to be given due consideration while determining the way forward in this regard.

#### 2.13.3 Commission's View:

The Commission has taken note of the comments of the Stakeholders and reply of Discoms thereto. The Commission has dealt with issue of regulatory assets under true up/ARR analysis section of this order.

## 2.14 Agriculture Sales

#### 2.14.1 Stakeholders Comments:

- 1. It was submitted that Discoms have computed the energy sales of flat rate consumes at normative 1945 kWh/year, whereas earlier Commission has considered metered specific consumption to arrive at flat rate sale.
- 2. It was submitted that JVVNL & JdVVNL have not converted all flat rate consumers yet. The Commission may take a suitable action for such non-compliance.

## 2.14.2 Petitioners' Response:

- The JVVNL submitted that the findings of the required study of specific consumption as directed by the Commission has been furnished and JdVVNL submitted that discussion of the study are ongoing and the output of the same shall be shared with the Commission once completed.
- 2. The JVVNL and JdVVNL submitted that they are putting sincere efforts to convert all its agriculture flat consumers to metered category as per the directions of the Commission. The efforts have resulted in considerable year on year reduction in the number of flat rate consumers. They are committed to convert all the flat rate consumers at the earliest.

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#### 2.14.3 Commission's View:

The Commission has taken note of the comments of the Stakeholders and reply of Discoms thereto. The Commission has dealt with issue of flat rate agriculture sales under true up and ARR analysis section of this order.

# Part II –Issues/Comments related to Aggregate Revenue Requirement (ARR) and Investment Plan of FY 2023-24

## 2.15 General

## 2.15.1 Stakeholders' Suggestions/Comments:

- 1. It was submitted that while shut down of industrial feeders, industries faces production and financial losses, Discoms also loses revenue. Discoms should establish "Ring Main System" in all industrial areas.
- 2. It was submitted that level of technological intervention is very lower in Discoms. There is poor progress in IT implementation, ERP etc. Commission may look into the matter and direct the Discoms to ensure IT/ERP implementation.
- 3. It was submitted that the Discom may provide details of security deposits of permanently disconnected consumer and clarify whether these amounts have been adjusted or not.
- 4. It was submitted that in the high theft prone areas all post of employees/officers should be filled up.
- 5. It was submitted that in Rajsamand there are hundreds of marble gang saw machines but there is frequent tripping problem due to which their business is hampered. Therefore, this problem should be rectified.
- 6. It was submitted that RVPN carry out its all technical work as per approved technical manual. JdVVNL should also make such type of manuals to carry out technical work.
- 7. It was submitted that there should be full recovery of outstanding amount from Govt. Departments.
- 8. It was submitted that Discoms are required to institute a quality control system for purchasing good quality material.

9. It was submitted that electricity consumers have witnessed outages recently due to non supply of electricity by generators due to shortages of coal. There should be a special cell for monitoring generation of electricity.

## 2.15.2 Petitioners' Response:

1. JVVNL & JdVVNL have submitted that work of "Ring Main Feeders" in industrial area is under progress. AVVNL submitted that in their industrial area distribution loses are not more than 5%, this indicates uninterrupted power supply to consumers.

AVVNL also submitted that Industrial consumer are important source of revenue in Discoms area. At feeder level to check the supply, Discom has developed a feedback system in which regular feedback is being taken from public representative/ consumers and if any adverse feedback is received that feeder is checked through MRI and if it is established that supply is less, then the remedial measures are taken.

- 2. AVVNL submitted that SCADA/DMS for Ajmer town has been implemented under RAPDRP Part-A. Discoms are in the process of implementing ERP under the RDSS.
- 3. During the hearing Discoms submitted that the security amount is adjusted for permanently disconnected consumer.
- 4. Discom submitted that for such areas circle wise nodal officers have been appointed.
- 5. Discom submitted that information of SAIFI and SAIDI is provided every quarter to the Commission, which reflects Discom's performance parameters. Discom keep watch on the system and resolve such problem immediately.
- 6. JdVVNL submitted that as per CEA Safety Regulations various training and safety guidelines is provided to all engineers and technical persons.

#### 2.15.3 Commission's View:

The Commission has taken note of the comments of the Stakeholders and reply of Discoms thereto. The Commission has observed that JVVNL & JdVVNL are working on Ring Main System. Therefore, AVVNL is also directed to

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establish "Ring Main System" for uninterrupted power supply in industrial areas.

#### 2.16 Multi Year Tariff

# 2.16.1 Stakeholders' Suggestions/Comments:

It was submitted that there should be Multi Year Tariff (MYT) for all Power Companies i.e. RVUN, RVPN, Discoms, so that the Industries remain sure on power cost.

## 2.16.2 Petitioners' Response:

The Discoms submitted that the Commission issued the Multi Year Tariff Regulations for the control period from FY 2019-20 to FY 2023-24 dated 10<sup>th</sup> May 2019. Accordingly, the Discoms had filed the MYT Petition for the remaining part of the control period. However, due to the unfortunate event of COVID-19 Commission has issued Tariff Order for two years only i.e. FY 2020-21 and FY 2021-22.

#### 2.16.3 Commission's View:

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

## 2.17 Safety and training

# 2.17.1 Stakeholders' Suggestions/Comments:

- It was submitted that due care and attention should be given for training of personal regarding safety so that fatal accidents can be minimized. For safety, Discoms should provide regular training to their staff as per CEA safety regulations. Further, guarding and earthing should be provided on the lines.
- 2. It was submitted that in Jodhpur Discom safety equipment such as earthling rods etc. have not been provided since last 12 years to the staff, which is essential for their safety. Discom should provide the same.

## 2.17.2 Petitioners' Response:

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- 1. Discoms submitted that they have been following CEA safety Regulations and providing regular training to their staff for which a safety officer has also been nominated.
- 2. Discom submitted that they have already instructed their circle SEs to provide guarding/fencing and earthing within 6 months. Discom regularly maintaining their equipment's and lines.

#### 2.17.3 Commission's View:

The Commission has taken note of the comments of the Stakeholders and reply of Discoms thereto. Commission directs that all Discoms should ensure availability of safety equipments with their staff.

## 2.18 Energy Accounting

## 2.18.1 Stakeholders' Suggestions/Comments:

It was submitted that the information of energy accounting as per BEE regulations have been analysed by the stakeholders and found that Discoms has reported negative T&D losses in some circles. Discoms may clarify the same.

## 2.18.2 Petitioners' Response:

Discom submitted that the reason behind negative T&D losses is due to feeder meter reading are taken manually. The same shall be corrected when on all the feeders AMR meters are installed.

#### 2.18.3 Commission's View:

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

## 2.19 Prompt payment Incentive

## 2.19.1 Stakeholders' Suggestions/Comments:

It was submitted that in case of AVVNL, electricity bills are being served with much delay that there is no time left for the consumers to be eligible for availing prompt payment incentives.

## 2.19.2 Petitioners' Response:

AVVNL submitted that the prompt payment incentive of 0.15% on energy charges and fixed charges is allowed on the next bill where the payment is received before 7 days from the due date of the bill. Furthermore, consumers are eligible for incentive of 0.35% in case of payment is made 10 days before the due date of the bill. Furthermore, multiple modes of payment are available to the consumers to ensure payment before due date of the bill.

#### 2.19.3 Commission's View:

The Commission has taken note of the comments of the Stakeholders and reply of Discoms thereto. Discoms are directed to ensure timely delivery of bills to consumers so that they can get an opportunity of receiving prompt payment incentive. SMS be also sent to consumers as per Regulation 10.3 of RERC (Electricity Supply Code and Connected Matters) Regulations, 2021.

# 2.20 <u>Compliance of Directives</u>

## 2.20.1 Stakeholders' Suggestions/Comments

- 1. It was submitted that JVVNL may provide latest update on compliance of Commission directives.
- 2. The Commission directives have not been complied with by the Discoms.

## 2.20.2 Petitioners' Response

- 1. The Discoms submitted that the updated compliance on various directions issued by Commission was filed along with ARR and Tariff petition for FY 24 and also with the reply to data gaps as observed by the Commission.
- 2. Discoms submitted that they have furnished a detailed point-wise statement on the compliance of directives issued by the Commission.

#### 2.20.3 Commission's View:

The Commission has taken note of the comments of the Stakeholders and reply of Discoms thereto. The Commission has reviewed Compliance of Directives in section 6 of this order.

#### 2.21 Renewable Energy

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## 2.21.1 Stakeholders' Suggestions/Comments:

It was submitted that instead of promoting RE power it is being discouraged by adopting some unreasonable billing practices such as:

- a) Urban Cess & Fuel Surcharge are being charged on the imported units instead of net units consumed i.e. imported units minus exported units.
- b) As per Government of Rajasthan Solar Policy, applicable from 18-12-2019, no ED is to be charged for seven years, but it is being charged at the rate of 60 paisa per unit.
- c) Earlier net exported units upto 100 units were being carried forward and adjusted in the next month bill which is not considered now.
- d) Any net exported units (even 1 unit) is being charged at the highest slab rate of Rs 7.95 per unit. Thus total cost per unit charged i.e. fixed and energy charges becomes more than the cost of supply to Discom.
- e) Cost of solar generation at LT level will be much cheaper than generated on Mega Watt capacities and transmitted through EHT System. Discom should remove these demoting factors so that rooftop solar factors are encouraged which will be beneficial for both Discoms and consumer.
- f) Discoms are paying Rs. 2.17/unit on export, whereas Discoms are purchasing power @ Rs. 3.0/unit from generators. To promote Roof Top Solar, this rate should be increased.
- g) It was submitted that RESCO model should be promoted for solar generation.

## 2.21.2 Petitioners' Response:

The Discoms submitted that:

- a) Urban Cess and Fuel Surcharge are levied on the purchase of power from Discom only.
- b) As per the notification issued by Finance Dept. (GoR) dated 10<sup>th</sup> July 2019, the provision of ED not being charged for seven years as per the Solar policy was only applicable till 31.03.2020 and ED is to be charged w.e.f. 01.04.2020 on consumption of energy generated.

- c) The net export units are not being carried forward for adjustment in next month bill as per the RERC Grid Interactive Regulations 2021. The rate payable to the net metered consumer is determined as per the Regulations. At present, the rate payable to the net metered consumer is Rs. 2.17/Unit.
- d) As per the existing provisions, the net exported units are being charged as per the rate applicable to the highest slab.
- e) Discoms duly acknowledges the vast solar potential of the State and is putting in its best efforts to promote and tap into the same.

#### 2.21.3 Commission's View:

The Commission has taken note of the comments of the Stakeholders and reply of Discoms thereto while the issue related to charging of ED & UC are governed by various orders of the State Government. Rest of the issues are governed by various Regulations of the Commission. Commission has noted the suggestions and will take an appropriate view while amending the Regulations.

## 2.22 <u>Large Industries</u>

# 2.22.1 Stakeholders' Suggestions/Comments:

It was submitted that for Large Industry category, sales break-up for subcategory (a) Below 1 MVA & (b) 1 MVA & above, may be provided by Discoms.

#### 2.22.2 Petitioners' Response:

The Discoms submitted the desired sales break-up.

#### 2.22.3 Commission's View:

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

## 2.23 Power Purchase

## 2.23.1 Stakeholders' Suggestions/Comments:

1. It was submitted that energy available to the Discoms from RVUN Stations appears to be on lower side as compared to the energy approved by RERC.

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- If such approved availability is considered, there will be no shortage of Power during FY 2023-24.
- 2. It was submitted that Energy Balance figures of JVVNL and Rajasthan as a whole are different at different places in the petition.
- 3. It was submitted that the Power Purchase Cost from RVUN Stations for FY 2023-24, appear to be on lower side since, Commission has approved Return on Equity for FY 2022-23 vide its Order dated 09.11.2022 and the RoE is expected to be allowed for FY 2023-24 also which would result in average increase in tariff of RVUN for FY 2023-24. The Commission may accordingly consider the revised tariff while working out ARR.
- 4. It was submitted that in JVVNL petition, Discom has indicated energy from state generators as 15743 MUs at one place and 52773 MUs at other place. The same may be clarified.
- 5. It was submitted that there is allocation from Costal Gujarat of 380 MW, but no energy availability is considered. Discom may provide the copy of PPA termination, if any.
- 6. It was submitted that as per CEA data, Discom has allocated power from Khurja Super Thermal Power station which is going to be commissioned in FY 2023-24. However, no availability has been considered from this plant. Discoms may clarify the same.
- 7. It was submitted that merit order despatch will optimise the power purchase cost, the maximum benefit of it can be achieved only when the fuel surcharge of each of the generating station on monthly basis is known to schedule power and operate dispatches on daily basis.

## 2.23.2 Petitioners' Response:

- 1. Discoms submitted that the energy quantum to be procured has been projected based on the energy purchase data for FY 2021-22 and the data available till the month of July'22.
- 2. JVVNL submitted that there are no variations in the submitted energy balance for JVVNL and the energy balance table for Rajasthan. The energy balance for Rajasthan reflects the cumulative energy balance for all three Discoms.

- 3. Discoms submitted that they have considered the actual purchase cost for FY 2021-22 & projected the cost for FY 2022-23 and FY 2023-24 from various sources. However, for estimation of cost, a nominal hike of 2% in the fixed charges as well as energy charges has been considered based on the actual increase in the past few years.
- 4. JVVNL submitted that the power purchase considered for state generating plants is 15,743 MUs and the same is reflecting in Table no 41 and at Form 3.1.
- 5. Discom submitted that power purchase from Coastal Gujarat is not projected for both FY 2022-23 and FY 2023-24. The same is as per the actual data which was available upto July 2022, which indicates that there has been no purchase from Coastal Gujarat up till Jul-2022.
- 6. Discoms submitted that there are various plants expected to come up, as per the data available from CEA and analyzed by RUVN, energy availability from these plants is in 'Unsure Category' owing to issues such as land acquisition, pending clearances, non-achievement of financial closure, bidding not started etc. Accordingly, the Discoms have not considered any projections from such plants.
- 7. Discom submitted that they have considered energy procurement based on MoD duly keeping in mind the PLF of that particular station does not exceed normative level. In case the energy requirement is less, the Discom reduces 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%.

#### 2.23.3 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.

#### 2.24 Distribution losses

## 2.24.1 Stakeholders' Suggestions/Comments:

It was submitted that JVVNL has proposed losses of 16%, AVVNL of 12.73% and JdVVNL of 17.50%. The Commission in earlier order clearly mentioned that "till the Discoms achieve the 15% distribution loss, the target losses shall be 15% during the current control period.

## 2.24.2 Petitioners' Response:

The JVVNL and JdVVNL submitted that they have proposed distribution loss of 16.00% and 17.50% respectively for FY 2023-24 as per the trajectory target set under RDSS.

#### 2.24.3 Commission's View:

The Commission has taken note of the comments of the Stakeholders and reply of Discoms thereto and has dealt with the issue of distribution losses in ARR section of this order.

# 2.25 <u>Transmission Losses and Charges</u>

## 2.25.1 Stakeholders' Suggestions/Comments:

- 1. It was submitted that intra state losses should be allowed as per RVPN's ARR order for FY 2023-24 and inter-state transmission losses as claimed in the petition.
- 2. It was submitted that Transmission charges should be considered as decided by the Commission in respect of petitions of RVPNL and SLDC.
- 3. The Transmission charges from RVPN for FY 2023-24, appear to be on lower side, since RERC has approved Return on Equity for FY 2022-23 vide its Order dated 09.11.2022. Now, the RoE is expected to be allowed for FY 2023-24 also, which would result in increase in Tariff of RVPN for FY 2023-24.

## 2.25.2 Petitioners' Response:

- 1. The Discoms submitted that for FY 2023-24, the intra-state and inter-state transmission losses of 3.80% and 3.51% respectively have been considered as approved in order dated 01.09.2022 of the Commission.
- 2. The Discoms submitted that they have considered a nominal annual escalation of 2% over the actual incurred in FY 2021-22, while projecting the transmission charges for FY 2023-24.

#### 2.25.3 Commission's View:

The Commission has taken note of the comments of the Stakeholders and reply of Discoms thereto and has dealt with the issue of transmission losses and charges in ARR section of this order.

# 2.26 O&M Expenses

# 2.26.1 Stakeholders' Suggestions/Comments:

It was submitted that O&M expenses should be allowed on normative sales, excluding franchisee sales.

## 2.26.2 Petitioners' Response:

The Discoms submitted that energy sales have been projected on end consumer sales basis.

#### 2.26.3 Commission's View:

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

#### 2.27 Terminal Benefit

## 2.27.1 Stakeholders' Suggestions/Comments:

- 1. It was submitted that Discoms are not depositing full amount of terminal benefits as approved by the Commission. Hence, highest amount deposited during last three years, should only be considered for current ARR.
- 2. It was submitted that provision of Rs. 406.25 Crore sought by JVVNL is inadequate and should be at least Rs. 513 Crore as approved for FY 2022-23 by the Commission.

## 2.27.2 Petitioners' Response:

- 1. The Discoms submitted that they have been regularly depositing the amount in accordance with the approval given by the Commission to meet its liability towards terminal benefits.
- The Discom submitted that there is year-wise reducing gap between the amount to terminal benefits as approved by the Commission in its tariff orders Page 27 of 287

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and the amount actually deposited by the JVVNL in the trust associated with terminal benefits.

#### 2.27.3 Commission's View:

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

## 2.28 Insurance

## 2.28.1 Stakeholders' Suggestions/Comments:

Insurance expenses are admissible on actual expenditure basis as per Regulation 25 of RERC Tariff Regulations, 2019.

## 2.28.2 Petitioners' Response:

The Discoms submitted that for FY 2023-24 insurance expenses has been projected in accordance with Regulation 25 of the RERC Tariff Regulations 2019 i.e. 0.2% of the Net Fixed Assets for the year.

#### 2.28.3 Commission's View:

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

#### 2.29 <u>Depreciation</u>

## 2.29.1 Stakeholders' Suggestions/Comments:

It was submitted that Discoms have to provide proper calculation of assets and depreciation.

## 2.29.2 Petitioners' Response:

The Discoms submitted that depreciation has been calculated as per Regulation 22, using Straight Line Method (SLM) at rates specified in Annexure-1 of the RERC (Terms and Conditions for Determination of Tariff) Regulations, 2019.

#### 2.29.3 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 depreciation in ARR section of this order.

## 2.30 Interest and Finance charges

## 2.30.1 Stakeholders' Suggestions/Comments:

- 1. It was submitted that Interest on working capital and term loan should be considered on normative basis.
- 2. It was submitted that Discoms have mentioned approach for the reduction of interest cost in the petition. Discoms may quantify results of savings on interest cost.

## 2.30.2 Petitioners' Response:

- 1. The Discoms submitted that they have projected the Interest on Term Loan and Finance Charges in form 3.7. The Discoms further submitted that the interest on working capital is computed as per the regulation specified in the RERC Tariff Regulations, 2019.
- 2. The Discoms submitted that they have provided the information along with compliance on the directives issued by the Commission.

#### 2.30.3 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 interest on term loan & working capital and finance charges in ARR section of this order.

## 2.31 Wheeling Charges, Cross Subsidy and Additional Surcharge

# 2.31.1 Stakeholders' Suggestions/Comments:

1. It was submitted that Wheeling charges, Additional Surcharge & Cross Subsidy Surcharge charges proposed for FY 2023-24 are very high.

- 2. It was submitted that the total revenue of all the Discoms from CSS, Additional surcharge & Wheeling charges is Rs. 8.12 Crore which is not corresponding to the total Open Access projected as 2685 MUs.
- 3. It was submitted that due to power cut in the State and the Industries are asked to reduce their load / consumption, Discoms are not entitled to collect CSS charges.
- 4. It was submitted that till the Discom ensures 24\*7 supply of the electricity, the Additional Surcharge should not be collected.
- 5. It was submitted that Hon'ble Tribunal held that distribution licensees are not allowed to recover open access charges during a period of mandatory power cuts due to non availability of power, but Discoms are charging.
- 6. It was submitted that allocation of cost of fixed assets are based on Commission's order dated 30.09.2006. Thereafter, the apportionment of GFA of the distribution system should have been based on annual cost additions for 33kV, 11 kV and LT system as per actuals.
- 7. It was submitted that wheeling charges should be worked out with proper voltage level wise apportionment of capital cost of lines & substations to reflect proper wheeling charges.
- 8. It was submitted that the Govt. of India had notified Rules where consumer with contract demand/sanctioned load of 100 kW and above will be eligible for open access to green energy. These provisions will widen the open access base, which may extend to Low voltage system also, if wheeling charges are not correctly worked out, then it will further affect adversely the revenue of the Discoms.
- 9. It was submitted that for the purpose of cross subsidy surcharge, ceiling limit has to be based on the average cost of supply as per Electricity (Amendment) Rules, 2022 instead of applicable tariff.

## 2.31.2 Petitioners' Response:

 The Discoms submitted that the computation of Wheeling Charges, Cross Subsidy Surcharge and Additional Surcharge has been detailed out in the filed petition. The mentioned charges have been computed as per the provisions of the RERC Tariff Regulations, 2019 and as per the methodology adopted by the Commission in its previous tariff orders.

- 2. The Discoms submitted that most of the cost components of the ARR of Discoms 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. It is pertinent to mention that fixed cost components have been increasing every year. The current tariff (fixed charges) approved by the Commission is not reflective of the fixed costs incurred by Discoms. Thus, a major portion of fixed costs are currently being recovered from the revenue generated through energy charges from consumers. Any factor that leads to reduction in energy consumption of consumers would lead to significant under-recovery of fixed costs of Discoms. The financial burden of under-recovery of fixed costs due to non-rationalized tariff structure and stranded capacity of long term PPAs due to open access consumers is recovered through tariffs from other consumers who are availing supply from Discoms. Thus, there is a need to levy additional surcharge from consumers shifting to open access.
- 3. For the cross-subsidizing categories the element of cross subsidy is built-in the Energy Charges payable. Hence in case of any Discom consumer availing open access, CSS should be applicable.
- 4. The Discoms submitted that the Additional Surcharge is computed on the basis of actuals for previous year. So, for instances wherein there was no availability from the generating stations, fixed charges are not payable to them. The same shall reflect when the additional surcharge would be computed for upcoming year and the impact of fixed charges automatically won't be considered. Hence there no burden awing to the same shall be passed on in the Additional Surcharge so computed.
- 5. The Discoms submitted that as per the nature of Wheeling charges, the same is levied on account of the fixed cost associated with the infrastructure built to provide energy to a consumer of the Discom. Hence, the wheeling charges are to be paid by the consumer in case of open access. The justification behind the levy of CSS and Additional Surcharge have also been provided.
- 6. The Discoms submitted that the wheeling charges have been computed as per Regulation 86 of the RERC Tariff Regulations, 2019 and the methodology adopted by RERC in its previous tariff orders. In absence of bifurcation of voltage wise fixed assets, methodology adopted in the RERC tariff order dated 19 September 2006 has been followed.

#### 2.31.3 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 Wheeling, Cross subsidy and additional surcharge in Tariff section of this order. Further, Green Energy Open Access (GEOA) shall be dealt appropriately at the time of framing Regulations.

#### 2.32 Sales and Revenue

## 2.32.1 Stakeholders' Suggestions/Comments:

- 1. It was submitted that sales projection do not show any impact of temporary connection. It should be based on past years average basis.
- 2. It was submitted that in case of JVVNL, Revenue & ABR from Agriculture Flat Rate Supply appears to be incorrect (Rs.3.25/kWh), which may be approx. Rs.6.00/kWh.
- 3. It was submitted that in case of JVVNL, ABR for Large Industry for FY 2023-24 is shown as Rs. 9.13/kWh, which appears to be high as compared to actual Rs.8.26/kWh for FY 2021-22.
- 4. It was submitted that for Agriculture category consumers, Discoms should furnish connected load details.

## 2.32.2 Petitioners' Response:

- The Discoms submitted that the yearly sales considered for making projections for ensuing years includes the sales made to temporary connections also. Hence the impact of sales to temporary connections is automatically included in projected sales.
- 2. The JVVNL submitted that for Agriculture flat rate category, it has set a target of converting more than 50% consumers to the metered category. This correspondingly has reduced the projected connected load by a huge margin also, hence leading to a drop in the revenue projected from this category. Also, as the sales have been projected on the normative specific consumption of 1945 kWh/kW/year the same has not witnessed a major drop as compared (~17%) to the connected load which is reflecting in the low ABR as projected.

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- 3. Jaipur Discom submitted that it has made revenue projections based on the consumer category wise and slab wise projected sales, consumers and connected load for each category along with the existing tariff.
- 4. Discoms submitted that they have furnished connected load details with data gap reply.

#### 2.32.3 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 in ARR section of this order.

#### 2.33 Subsidy

# 2.33.1 Stakeholders' Suggestions/Comments:

It was submitted that ED subsidy for FY 2023-24 has not been projected. Same may be clarified.

## 2.33.2 Petitioners' Response:

The Discoms submitted that there has been no order/confirmation from the State Government regarding retention of ED by the Discoms from FY 2022-23 onwards, accordingly no such amount has been projected.

#### 2.33.3 Commission's View:

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

## 2.34 Revenue from Poles

## 2.34.1 stakeholders' Suggestions/Comments:

- 1. It was submitted that Discoms may provide expected Revenue from Pole rental charges for FY 2023-24.
- 2. It was submitted that recovery of actual rent from Telecom and Cable operators be ensured.

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#### 2.34.2 Petitioners' Response:

- 1. The Discoms submitted that the actual revenue associated with pole rentals for FY 2023-24 shall be submitted at the time of truing up.
- 2. The Discoms submitted that it is putting in its sincere efforts to ensure proper recovery of actual rent from Telecom and Cable operators.

#### 2.34.3 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 in ARR section of this order.

#### 2.35 Revenue surplus/deficit

# 2.35.1 Stakeholders' Suggestions/Comments

It was submitted that proper calculations of revenue surplus/deficit should have been provided.

# 2.35.2 Petitioners' Response:

The Discoms submitted that they have furnished the detail calculation of revenue surplus/deficit.

#### 2.35.3 Commission's View:

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

## 2.36 Other tariff related issues

# 2.36.1 Stakeholders' Suggestions/Comments:

- 1. It was submitted that while proposing certain changes in existing tariff, Discoms have not provided the financial implications in respect of each changes proposed.
- 2. It was submitted that high electricity tariff is one of the biggest challenge faced by the rapidly growing telecom tower industry in India. It is estimated that a significant portion i.e. 30 % of the tower OPEX is towards electricity tariff. Therefore, tariff category of telecom sector should be changed from Non-

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- domestic/Commercial to Industrial category. It was submitted that for 132 KV voltage consumers, current 4% voltage rebate with liability of taking care of its maintenance should be increased to 5%, this will help customer in setting up 132KVA bays & lines and taking care of the same.
- 3. It was submitted that the effective energy charges for LIP consumers are higher as compared to many other States, it should be reduced so that industries remains competitive in Rajasthan.
- 4. It was submitted that excess demand charges may not be charged, if demand exceeds 105% to 110% in 5 times in a month. Present relaxation is given for 1 time only.
- 5. It was submitted that the connection charges (at the time of new connection) should be refunded to consumers.
- 6. It was submitted that the private hospitals, nursing homes, dispensaries, clinics run by the Board of Indian Medical Association (IMA) are providing essential public utility services, therefore their category should be change from Nondomestic to Industrial category.
- 7. It was submitted that Armed forces are consuming electricity for domestic purpose only and the power is not being used for industrial/commercial activity, creation of a special slab for armed forced is justified. The tariff plan should be at par or lower than applicable to domestic consumers.

#### 2.36.2 Petitioners' Response:

- 1. The Discoms submitted that most of the rationalization measures as proposed by the Discoms do not bear any significant financial implication but merely seeks clarifications and slight modifications.
- 2. The Discoms submitted that they do not support the request of the stakeholder for a change of category from Non-domestic/Commercial to Industrial. The Discoms are presently not in a position to lose out on its existing revenue considering the precarious financial situation they are in. The Discoms also submitted that there is no proposal for revision in voltage rebate in the ARR and Tariff Petition for FY 2023-24 and requests the Commission to consider only the submitted proposals.
- 3. The Discoms submitted that the suggestion does not hold any merit considering the already precarious financial health of the Discom and the huge level of accumulated Regulatory Assets which needs to be liquidated.

- 4. Discoms submitted that there is no such proposal for revision in excess demand charges in the ARR and Tariff Petition for FY 2023-24.
- 5. Meter security and fixed charges are levied at the time of new connections out of which meter security is refundable. However the fixed charges are on account of laying of cables/wires, labour and development of system etc.
- 6. Discoms submitted that the purpose of hospitals run by private persons, or an association of private persons is not the same as government hospitals. Healthcare services run and maintained by the Government or agencies of the Government cater to the common man who cannot afford treatment in private hospitals. Private healthcare services cater to a category of patients completely different to those patients seeking healthcare from government healthcare services. Government hospitals work on no-profit no-loss basis and impact most of the medical facilities either free of cost or at subsidized rates. Thus, there is no parity between government hospitals/nursing homes/clinics and those run by private individuals. Therefore, such proposals impacting the financial condition of the Discoms should not be accepted.
- 7. The JdVVNL submitted that the Commission may take a prudent view with regards to change in categorization of Armed forces from Non Domestic to Domestic Category.

#### 2.36.3 Commission's View:

- 1. The Commission has taken note of the comments of the Stakeholders and reply of Discoms thereto.
- 2. Request of change in tariff category of Telecom Sector from Non-domestic/Commercial to Industrial category and request of IMA for change in category from Non-domestic to Industrial category is not being considered in view of Discoms submission.
- 3. Further regarding creation of a special slab for armed forces Discoms are directed to consider the submission of armed forces and file suitable proposal, if need be with the next tariff petition.

#### 2.37 ToD Rebate

#### 2.37.1 Stakeholders' Suggestions/Comments:

1. It was submitted that as per Commission order dated 24.11.2021, ToD rebate

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and surcharge was 15% & 5% respectively. Thereafter, Discoms have proposed reduction in ToD rebate to 10%, but Commission vide its order dated 01.09.2022 has reduced it to 7.5%. Therefore, rebate during off peak hours should be restored to 15%. Further, Commission may also consider to allow further rebate of 5% during off peak hrs. for shifting of load from peak hours to off peak hrs.

2. It was submitted that timing of off peak load for the purpose of ToD rebate may be fixed from 22.00 to 6.00 hrs.

# 2.37.2 Petitioners' Response:

Discoms submitted that the Commission in its Tariff Order for FY 2022-23 dated 01.09.2022 had revised the ToD rebate from 15% to 7.5%. The same was finalized after considering the existing power crisis scenario wherein the Discoms had to resort to purchase of short-term power at rates as high as Rs. 17/unit, while providing high level of ToD rebate at the same time.

#### 2.37.3 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 in tariff section of this order.

#### 2.38 Net Energy Charges

## 2.38.1 Stakeholders' Suggestions/Comments:

- 1. It was submitted that there is no ambiguity in the present provision of net energy charges. Commission has defined the charges after taking consideration of all aspects.
- 2. It was submitted to continue with current practice of ToD rebate on Gross Energy Charges, as adoption of effective energy charges discourage consumers to shift their consumption in off-peak hours.

## 2.38.2 Petitioners' Response:

The Discoms have requested to impart clarity regarding levy of ToD rebate/surcharge, whether the same should be levied on gross energy charges or effective energy charges.

#### 2.38.3 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 in tariff section of this order.

#### 2.39 Levy of Base FSA of Fuel Surcharge Adjustment (FSA)

# 2.39.1 Stakeholders' Suggestions/Comments:

- 1. It was submitted that the MoP has notified Electricity (Amendment) Rules, 2022 defining the procedure for monthly recovery of Power Purchase Cost by Distribution Licensee for which the Commission is to specify a price adjustment formula. Till such a methodology and formula is specified by the Commission, the Commission may take an action in this regard, therefore, the proposal of Discoms may not be considered.
- 2. It was submitted that the special fuel surcharge should not be imposed.
- 3. It was submitted that for calculating the fuel surcharge, the Commission cannot go beyond the procedure defined in the Tariff Regulations, 2019. Therefore, Commission may not accept the proposal of the Discoms for levy of base FSA.
- 4. It was submitted that FSA can be recovered on monthly basis, however, there should not be any provision of recovering from consumer thereafter.
- 5. It was submitted that some methodology should be developed to recover the fuel surcharge on monthly basis so that consumers can come to know it cost impact timely.

# 2.39.2 Petitioners' Response:

- 1. The Discoms submitted that the petition was filed on 30.11.2022 subsequently the electricity rules (amendments) 2022 were published on 29.12.2022.
- 2. The Discoms submitted that Base FSA can be defined as a constant minimum rate of fuel surcharge which shall be levied on a monthly basis in the electricity bills of consumers. Determination of base FSA is proposed to be as per the actual average of FSA that was levied during previous 4 quarters of the year for which the accounts have been duly audited and finalized. Discoms shall be approaching the Commission for the computation and levy

of fuel surcharge on monthly basis in future and the same shall be taken up as per the Commission's directions.

#### 2.39.3 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 in tariff section of this order.

# 2.40 <u>Modification in fixed charges for consumers under LT-1 domestic category</u> with demand more than 50 KVA

## 2.40.1 Stakeholders' Suggestions/Comments:

It was submitted that Discoms have not provided any financial implications of modification in fixed charges for consumers under LT-1 domestic category with demand more than 50 KVA.

# 2.40.2 Petitioners' Response:

The Discoms submitted the details of financial implications of modification in fixed charges for consumers under LT-1 domestic category is as under:

	JVVNL	AVVNL	JDVVNL
No. of consumers presently affected	1288	2472	1
Fixed charged levied during the period	Rs. 0.19Cr.	Rs.2.08 Cr.	Rs.0.00028 Cr.
	(April to Nov-22)	(April to Nov-22)	(April to Oct-22)
Additional revenue, if fixed charges levied as per proposal	Rs. 5.51Cr.	Rs.16.95 Cr.	Rs.0.0010 Cr.
	(April to Nov-22)	(April to Nov-22)	(April to Oct-22)

#### 2.40.3 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 in tariff section of this order.

## 2.41 <u>Amendment in seasonal factories Clause</u>

## 2.41.1 Stakeholders' Suggestions/Comments:

It was submitted that by deleting the clause of charging 25% of normal rate of fixed charges during off seasonal period would mean Discoms wants to claim

full fixed charges for all the 12 months of the year and thus not giving any status of seasonal factories.

# 2.41.2 Petitioners' Response:

The Discoms submitted that the rationale behind the proposal for amendment in seasonal factories clause is that fixed charges are paid to Generation Companies according to the total demand of Discom. Fixed charges are leviable on each and every running electricity connection whether the energy is consumed or not. It is evident that allowing rebate in fixed charges to the seasonal industries is a direct loss to Distributions Companies. Therefore, Discoms have made the said proposal.

#### 2.41.3 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 in tariff section of this order.

## 2.42 <u>Amendment in part I (L.T Tariff) in Domestic service</u>

# 2.42.1 Stakeholders' Suggestions/Comments:

It was submitted that if the proposal of Discoms is accepted then those consumers, who are bound to take supply on H.T and if they keep the contract demand below 50 KVA will also be entitled to obtain this rebate which is not correct.

#### 2.42.2 Petitioners' Response:

The Discoms submitted that the consumers eligible for HT supply and having supply as well as metering on HT side are requesting to allow this rebate. This rebate was introduced to incentivize those consumers having a contract demand below 50 KVA and metering on LT Side to take the supply on HT Side.

#### 2.42.3 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 in tariff section of this order.

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#### 2.43 Modification in the definition of Rebate for New H.T Connections

# 2.43.1 Stakeholders' Suggestions/Comments:

- 1. It was submitted that when there is no increase in new industries in past years in this respect it will be worthwhile to remove this clause forever.
- 2. It was submitted that many large industries are coming in Rajasthan from last few years and they are struggling to establish themselves after COVID. Now everything has been normalized and at this juncture industries wants to continue this rebate for at least a year minimum.
- 3. The Discoms' proposal is not justified. To settle a new industry, it takes almost 3 to 5 years. Therefore, it should be atleast 5 years instead of one year.

# 2.43.2 Petitioners' Response:

The Discoms submitted that there is no substantial increase in new industries in line with the years before introducing this rebate. More so there is no increase in tariff of HT-LIP consumers since last two years. Therefore, it is preferable to modify this clause and the period of this rebate should be changed to one year from date of release of connection (and not from 01.04.19) and afterwards consumers shall be eligible for incremental rebate. It is further submitted that still there is considerable benefit for the HT industries in the form of incremental consumption rebate even after the new industry rebate period gets over.

## 2.43.3 Commission's View:

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

## 2.44 <u>Amendment in power factor clause</u>

# 2.44.1 Stakeholders' Suggestions/Comments:

It was submitted that Discoms have proposed to serve notice for disconnections only ones that is not justified, it should be at least 3 times.

#### 2.44.2 Petitioners' Response:

The Discoms submitted that if power factor falls below 0.70, Discoms loses on Energy & Fixed charges if connections are disconnected without giving any notice, further it is not possible for Discoms to disconnect the supply repeatedly, therefore, Discoms has proposed modification in power factor clause.

#### 2.44.3 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 in tariff section of this order.

# 2.45 Investment Plan

# 2.45.1 Stakeholders' Suggestions/Comments

- 1. It was submitted that Discoms have not provided the details of substations in terms of numbers and transformation capacity.
- 2. It was submitted that the Cost benefit ratio of schemes has not been provided for any scheme. Discoms may provide the same.
- 3. It was submitted that the number of new connections, their sales of energy and revenue receipt has not been provided. Discoms may provide the same.
- 4. It was submitted that, it is a condition that in respect of grant provided in schemes, the same shall not be considered for tariff purposes.
- 5. It was submitted that in case of JVVNL, cost of constructions of office building cannot be a capital expenses but is a part of O&M expenses as has been decided in the case of RVPNL and as such necessary capital expenditure sought for be disallowed by the Commission.
- 6. It was submitted that funding under RDSS scheme is conditional one, in case due performance are not achieved, the total capital expenditure has to be disallowed by the Commission.
- 7. It was submitted that so far cost of metering equipments are concerned the same are part of O&M expenses, these may not be allowed.
- 8. It was submitted that feeder segregation is important for better load management, however, Discoms have not furnished status of implementation of feeders segregation schemes.

## 2.45.2 Petitioners' Response:

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- 1. The Discoms submitted that the requisite details pertaining to substations in terms of numbers and transformation capacity has been shown in Form 2 of the submitted Investment Plan formats.
- 2. The Discoms submitted that the schemes have been subjected to prudent cost benefit analysis and evaluated for as per the guideline prescribed in the RERC Investment Approval Regulations, 2006.
- 3. The Discoms submitted that information pertaining to the number of connections along with associated energy sales and corresponding revenue has been captured and submitted in the ARR Formats.
- 4. The Discoms submitted that the scheme wise details of grants have be submitted in Form 3 of the Investment Plan formats.
- 5. JVVNL submitted that various division offices and sub-division offices of Discom have been sanctioned by govt. of Rajasthan, with the same falling under the category of essential services for public utility and facility. A stable office with proper amenities and working conditions are a must for the proper functioning of any Discom. Hence, it becomes important to allot budgets for such civil works associated with building of these offices.
- 6. The Discoms submitted that RDSS is a conditional scheme and the support from Government shall be provided in the form of grants on successful completion of the allotted targets.
- 7. The Discoms submitted that the cost associated with metering module under RDSS has not been included in the Investment Plan and the same be claimed as per actual expenditure at the time of truing up.
- 8. Discoms submitted that feeder segregation activity is covered under RDSS.

#### 2.45.3 Commission's View:

The Commission has taken note of the comments of the Stakeholders and reply of Discoms thereto and has dealt with the issue under Investment Plan section of this order.

# Section -3: Analysis of True Up of Discoms for FY 2021-22

- 3.1 Discoms have submitted petitions for truing up of ARR on the basis of audited accounts as follows:
  - (i) JdVVNL FY 2021-22
  - (ii) JVVNL -FY 2021-22
  - (iii) AVVNL -FY 2021-22

#### Analysis of True Up of ARR for FY 2021-22- JdVVNL

# Sale of Energy

- 3.2 The Discom has indicated total sale of 23174.86 MUs including 1272.74 MUs sales to flat rate category and 11980 MUs for agriculture metered category (including defective meters). It has been observed that at the beginning of the year, connected load of flat rate consumers was 668881 kW and after taking into account conversion of flat rate consumers to metered category the closing connected load became 654366 kW and Discom has filed flat rate sales considering specific consumption of 1945 kWh/kW/year.
- 3.3 Assessment of Flat rate and Defective meters consumers: In the true up order for FY 2020-21, dated 14.07.2022, for computing the sales of flat rate, the Commission considered the specific consumption of agriculture metered category including defective meters, the average of which was lower than the 1945 kWh/kW/year for JdVVNL and AVVNL, the Commission also directed Discoms that in future years the Commission may consider further reduction on this account.
- 3.4 In the ARR order dated 24.11.2021, Discoms were 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. Discoms were also directed to 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. However, no such proposal has been furnished by Discom.
- 3.5 Further, in the ARR order dated 1.09.2022, the Commission has viewed the non conversion of flat rate consumer seriously and directed JVVNL and JdVVNL to convert balance flat rate consumers by 31st March 2023, positively. Further,

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Commission observed that during FY 2021-22, Discoms have reported large number of consumers with defective meters in agriculture category where energy is being assessed on the norms applicable for Flat Rate consumers and energy assessment against these defective meters is disproportionately higher as compared to Agriculture Consumers with working meters.

3.6 Post hearing, the Discom has also filed the detail of number of working meters, defective meters, their connected load and sales of such consumers as under:

Particulars	Consumers	Connected Load (KW)	Energy Sold (MU)
Ag. Working Meters	203090	2580041	3631
Ag Defective Meters	187145	4297204	8349
Total Ag Metered	390235	6877245	11980

- 3.7 It is observed from the above data that Discom has continuously reporting the huge number under defective meters which is close to 50% of total consumers under this category, this is a matter of serious concern, whereas as per RERC (Electricity Supply Code and Connected Matters) Regulations, 2021, no meter shall be allowed to remain defective for more than 2 billing cycle. In Commission's opinion huge number of defective meters for very long period is a bad practice, defy all purpose of energy audit and a back door practice of continuing flat rate consumers. Despite provisions in the regulations and order for conversion, the Discom is neither able to convert flat rate consumers nor able to reduce number of defective meters. The Commission has viewed this practice seriously and is of the opinion that Discoms are duty bound to keep the meters in healthy condition and any such practice of keeping the meter defective is to be discouraged.
- 3.8 Further, in view of above directions and data submitted by Discom, for assessing the sales for FY 2021-22 for consumers with defective meters, Commission has considered average connected load, the Specific consumption of 1407 kWh/kW/year of working meters for 10 months and Specific consumption of 1945 kWh/kW/year for 2 months, the average for 12 months works out to be 1497 kWh/kW/year. Accordingly, the sale for consumers with defective meters is assessed as 6432 MUs against Discom claim of 8349 MUs. Thus, the Commission disallowed 1917 MUs in defective meters sales on account of higher specific consumption of huge no. of defective meters.

- 3.9 Further, the sales of flat rate consumers have also been worked out based on average connected load and by considering 12 months average specific consumption 1497 kWh/kW/year used for computing the defective meter sales as above, accordingly, the sales approved for flat rate category shall be 990.34 MUs as against 1272.74 MUs filed for flat rate consumers. Therefore, the Commission disallowed 282.40 MUs sale under flat rate category.
- 3.10 Assessment of Losses: The Commission has noted that it has prescribed the target losses in its ARR Order based on sales to end consumers and any consideration of sales to franchisee at input level will show reduction in losses whereas revenue accounted by the Discom already stands reduced due to lower rate at input level. As the franchisee is acting on behalf of the licensee, the Discom should ensure that franchisee also functions in an efficient manner and also make adequate investment so that impact of working of franchisee should be reflected in overall efficiency improvement and Discoms are able to achieve target loss level based on end consumer sales.
- 3.11 It is further observed that the sale reported by Discom is inclusive of sale of power of 789.50 MUs to the Distribution Franchisee (DF). Whereas DF has sold 680.23 MUs to the end consumer. In accordance with view taken in previous true-up order, Commission for the purpose of calculating distribution losses accepts the sales of energy to end consumer only, in view of above, after disallowing sales of defective meters, flat rate and consideration of sales of DF at consumer level the sales for FY 2021-22 is works out as 20865.93 MUs. Accordingly, the distribution loss if back calculated comes out to be 29.66% as against 21.88% indicated by the Discom.

#### **Power Purchase Cost**

- 3.12 Power purchase cost approved by Commission for FY 2021-22 was Rs. 12597 Crore vide ARR order dated 24.11.2021. For the purpose of truing up, JdVVNL has claimed Rs. 15294.12 Crore as power purchase cost (including Short Term Power Purchases, Transmission & SLDC charges).
- 3.13 The Discom petitioned that it has purchased 33032.01 MUs out of which it has sold 1138.19 MUs through exchange.
- 3.14 Details of power purchase cost as submitted by Discom is given in table below:

Table 1: Power Purchase Cost submitted by JdVVNL for FY 2021-2022

Sr.	Particulars	Units (MU)	Amount (In	Average
No.			Crore)	Rate
	Energy petitioned by Discom			
	Total Energy Purchased by Discom			
1	(A)	33032.01	13499.57	4.09
	Less: Purchase From Short term			
2	sources(B)	2123.22	992.47	4.67
	Balance Energy from approved			
3	sources C= (A-B)	30908.79	12507.10	4.05
	Add: Transmission and SLDC charges			
4	(D)		1794.54	
	Total Power Purchase Cost claimed			·
5	(A+D)		15294.12	

- 3.15 The Discom submitted it has achieved distribution Losses of 21.88% as against a target of 15%.
- 3.16 The Commission has worked out the power purchase requirement based on the approved distribution losses, transmission losses and sales as approved above.
- 3.17 The Discom has furnished total transmission losses (inter and intra state) in MUs terms without bifurcation into interstate and Intra state transmission losses. Despite direction of Commission, Discoms have not furnished the breakup of Transmission losses into intra state and interstate Losses hence Commission has considered the intra state losses as 3.80% based on RVPN True up petition for FY 2021-22 and Inter State Losses based on 52 weeks Average of All India transmission Losses from NRLDC Website and remaining excess interstate losses have been disallowed.
- 3.18 Accordingly, Inter State losses have been worked out as 359.94 MUs. The stakeholders have consistently pointing out that transmission losses mentioned by the Discoms are on higher side. Discoms though stated to have formed a Committee but that Committee didn't carry out any study. The Commission has viewed it seriously and Discoms are again directed to keep a separate account of interstate and intrastate losses and give bifurcation while filing next true up petitions, failing which the Commission will be constrained to take penal action apart from disallowing the excess transmission losses.
- 3.19 Details of gross energy requirement worked out on the basis of sales and losses as indicated in foregoing para is given in the table below:

Table 2: Gross Energy Requirement of JdVVNL for FY 2021-22

(MUs)

Sr. No.	Particulars	Approved as per Order Dated 24.11.2021	Actual/Au dited	Restated Level	Normativ e Calculati on
1	Gross Energy Requirement	27768	33032.01	33032.01	27015.96
2	Less:- Sale Through Exchange	0	1138.19	1138.19	1138.19
3	Net Energy Requirement	27768	31893.82	31893.82	25877.77
4	Inter State Transmission Loss (MU)	292	1212.15	1055.85	359.94
5	Energy Availability at RVPN (MU)	27476	30681.70	30837.98	25517.83
6	Intra State Transmission Loss(%)	3.31%	3.31%	3.80%	3.80%
7	Intra State Transmission Loss(MU)	909	1015.56	1171.84	969.68
	Energy Requirement at				
8	Distribution Periphery (MU)	26566	29666.13	29666.13	24548.15
9	Distribution Loss (%)	15.00%	21.88%	29.66%	15.00%
10	Distribution Loss (MUs)	3985	6491.27	8800.21	3682.22
11	Energy Sales (MUs)	22582	23174.86	20865.93	20865.93

- 3.20 It is observed that the Discom has purchased 6016.06 MUs in excess due to increase in distribution loss over the target given by the Commission, consideration of sale of power to end consumer of DF, consideration of sale of defective meters using specific consumption of working meters and higher transmission losses.
- 3.21 As per Regulation 75(5) of RERC Tariff Regulations, 2019, the losses on account of distribution licensees' failure to achieve the target set by the Commission be shared in the ratio of 50:50 between the distribution licensee & consumers.
- 3.22 It is further noted that during previous years and in the year under consideration, Discoms have made substantial investment in various loss reduction schemes with an objective of reduction of losses but still losses of Discoms are not as per trajectory set by the Commission vide its earlier tariff orders. Discoms are not able to bring in requisite improvement in metering, billing & collection activities etc. The Discom in the current petition and earlier petitions has proposed no tariff hike and submitted that they will bridge their gap by reduction in losses and improvement in efficiency. Therefore, in Commission's view, the consumers should not be burdened on account of continuous non achievement of targets by Discoms despite every year being allowed requisite investment. Therefore, the Commission has decided not to allow sharing on account of failure to achieve the targeted losses as done in the earlier orders and Discoms shall have to bear the burden of excess losses and meet the same in future years by improving their working.

- 3.23 Accordingly, the Commission allows energy requirement of 27015.96 MUs only based on targeted losses.
- 3.24 Discom has submitted the total power purchase cost of Rs. 13499.57 Crore including the provision for banking of Rs. 14.13 Crore. In view of decision taken in the previous True-up orders, the Commission has not considered the provision for banking cost of Rs. 14.13 Crore as banking has been considered as cost neutral and only considered the transaction cost.
- 3.25 It is observed that in power purchase format, Discom has shown service charges to RUVNL of Rs. 12.76 Crore. Therefore following the last year's order approach, the Commission has not considered the service charges to RUVNL, these are to be met by Discom from O&M expenses. Accordingly, the Commission has considered the total power purchase cost of Rs. 13472.67 Crore.
- 3.26 The Discoms have submitted that the Hon'ble Supreme court has pronounced the order on 25.02.2022 in favour of APRL. The Hon'ble Supreme court in its order has considered the claims towards change in law for domestic coal shortfall as submitted by APRL i.e., Rs. 5475.44 Crore (Corrected Rs. 5475.40 Crore due to rounding off) after taking into account 50% payment of Rs. 2,426.81 Crore made by Rajasthan Discoms in compliance with the Hon'ble Supreme court interim order dated 29.10.2018. Accordingly, as per the aforesaid judgment, Rajasthan Discoms were liable to pay Rs. 3048.63 Crore (Corrected Rs. 3048.59 Crore due to rounding off) along with interest @ 9 % p.a. (to be compounded annually) from the date on which amount became due till the date of actual payment Rs. 2947.81 Crore upto 23.03.2022. Thus, total amount upto 23.03.2022 payable was Rs. 5996.42 Crore. The payment was to be made within 4 weeks from the date of order i.e., by 24.03.2022.
- 3.27 Discoms have paid the aforesaid amount by availing the loan from REC and PFC. Further, Discoms submitted Rs. 5996.42 Crore and interest on loan of Rs. 9.67 Crore (on loan availed for payment of above of Rs. 5996.42 Crore) total of Rs 6006.09 Crore has been booked under the head of exceptional expenses, power purchase and finance charges and on other hand same amount has been booked under exceptional income and Special Fuel Surcharge Income. Therefore, net impact of such revenue from operations and expense is Nil.
- 3.28 It is observed that the JDVVNL has claimed Rs. 42.58 Crore under power purchase, Rs. 155.86 Crore under carrying cost / interest towards APRL and an interest liability of Rs. 3.42 Crore on the loans availed by the Discom to meet the APRL liability.

- 3.29 It is further observed by the Commission that against the above power purchase and interest & finance charge totaling to Rs. 201.86 Crore, Discom has filed income of Special fuel surcharge of Rs. 201.86 Crore. Therefore, net impact of such revenue from operations and expense claimed by Discom is Nil. As such same amount is being considered in cost and income. The Commission vide order dated 1.09.2022 has examined the issue of special fuel surcharge of APRL and directed the Discoms to utilize the receipt on account of special FSA for repayment of loan taken by them for the purpose. Discoms were also directed to create a separate account head for this purpose and report the status of amount recovered as well as repayment of loan in each True up petition for consideration of the Commission. At the end of five years' period the Discoms shall file a detailed statement showing under recovery/over recovery from the special FSA, if any, which will be appropriately adjusted in true up of that year.
- 3.30 Details of power purchase cost as approved by the Commission is given in table below:

Table 3: Power Purchase Cost of JdVVNL as approved for FY2021-22 (Rs. in Crore)

	• •		•	
Sr.		Units		Average
No.	Particulars	(MU)	Amount	Rate
	Energy approved by Commission:			
1	Total Energy Purchased by Discom (A)	33032.01	13472.67	4.08
2	Less: Disallowed short term sources (B)	2123.22	992.47	4.67
3	Total Energy from approved sources (C=A-B)	30908.79	12480.21	4.04
4	Less: Disallowed approved sources (D)	3892.83	1571.83	4.04
5	Power Purchase Cost Allowed E=(A-B-D)	27015.96	10908.38	
6	Add: Transmission and SLDC charges (F)		1794.54	
7	Total Power purchase cost allowed (E+F)		12702.92	

- 3.31 While disallowing the excess purchase of 6016.06 MUs by Discom, the Commission has first considered the power purchase of 2123.22 MUs from short term sources (UI, Exchange and Other) and rest 3892.83 MUs from long term sources at average power purchase rate.
- 3.32 The Discom submitted that any disallowance in power purchase cost be done at the average variable cost of power purchase instead of APPC. Disallowing the power purchase cost of the Discom by multiplying the quantum of disallowed energy by the APPC, resulting in the disallowance of Fixed Costs payable to the generators by the Discom, which the Discom is ought to pay to the generators as per the PPA.

- 3.33 With regard to above submission of Discom, the Commission has already dealt with this issue in the true-up order for FY 2018-19 & 2019-20 where Commission has not considered the submission of Discom in the aforesaid order. Further, Discom through review petitions has also raised this issue again wherein Commission vide order dated 24.05.2022 stated that "in the instant petitions, Discoms have been only rearguing the case and seeking revision of Commission's orders without pointing out any error apparent on the face of the record. Therefore, the same matter can't be reviewed again".
- 3.34 Since this matter has already been dealt by Commission in the earlier orders, therefore, the Commission is not examining this issue again.
- 3.35 Discom has submitted an expense of Rs. 1794.54 Crore as Transmission and SLDC charges which have been allowed as per Discom Submission by the Commission. Accordingly, the total power purchase cost including transmission and SLDC charges for FY 2021-22 is Rs. 12702.92 Crore.

#### Operations and Maintenance (O&M) Expenses

- 3.36 The O&M expenses approved by the Commission for FY 2021-22 vide Tariff order dated 24.11.2021 were Rs. 1721 Crore including terminal benefit liability of Rs. 555 Crore. For the purpose of true up, JdVVNL has claimed Rs. 1544.86 Crore as O&M expenses (including terminal benefits based on actuarial valuation of Rs. 610.04 Crore).
- 3.37 Regulation 82 of RERC (Terms & Conditions of Determination of Tariff) Regulations, 2019 provides for O&M expenses for the first year of the Control Period (i.e., FY 2019-20) as under:
  - a) Employees expenses: Rs. 0.48/ per unit of sale
  - b) A&G Expenses: Rs. 0.065/ per unit of sale
  - c) R&M Expenses: R&M Expenses for each year (n) of Control Period: k x GFAn-1 x (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)th year;

'ER' means the escalation rate as specified in Regulation 24;

'n' is the year for which R&M expenses is to be determined.

- 3.38 Normative O&M expenses allowed at the commencement of the Control Period (i.e. FY 2019-20) under these Regulations shall be escalated at the rate of 3.63% per annum for each year of the Control Period.
- 3.39 Capitalization of O&M expenses has been considered as per actual percentage submitted by Discoms.
- 3.40 As the O&M expenses of distribution area of DF are borne by the distribution franchisee (DF), therefore the normative O&M expenses have been calculated by duly deducting the sales of distribution franchisee from the total sales
- 3.41 Details of normative O&M expenses as allowed are given in table below:

Table 4: O&M Expenses of JdVVNL for FY 2021-22

(Rs. in Crore)

Sr. No.	Particular	
1	Energy Sales approved by Commission excluding sales by DF (in MU)	
2	Normative Employee cost for FY 2021-22 (Rs. 0.515)/unit	
3	Normative A &G expenses (Rs. 0.069/unit)	
4	Normative R&M expenses {K*Avg GFA(n-1)*(1+ER)}	
5	Less: Proportionate Employee Cost Capitalized	
6	Less: Proportionate A &G cost capitalized (A&G)	
7	Total O&M Expenses Allowed after True Up	1121.09

#### **Terminal Benefit**

3.42 The Commission had approved Rs. 555 Crore towards terminal benefit liability vide its tariff order dated 24.11.2021. JdVVNL submitted that they have deposited a sum of Rs. 245.50 Crore as additional contribution towards terminal benefit liability to designated trust. Accordingly, as per the practice followed by the Commission in earlier True Up orders, the terminal benefit

- liability to the extent of actual amount of Rs. 245.50 Crore deposited by the JdVVNL has been considered.
- 3.43 It has been observed over the period that Discom's actual deposition towards terminal benefit is on lower side against the approved in ARR order. The Commission again shows its concern regarding non funding of terminal benefit appropriately and again advises the top management of Discom & State Government to ensure appropriate funding towards terminal benefit liability so as to meet the liability of the Discom on this account.

## Depreciation

- 3.44 The depreciation approved by Commission for FY 2021-22 was Rs. 611 Crore vide Tariff order dated 24.11.2021 whereas the Discom has claimed Rs. 999.38 Crore as depreciation.
- 3.45 It is observed that Rs. 652.70 Crore has been shown towards terminal benefit expenses and out of total employee cost capitalization of Rs. 153.84 Crore, the proportionate terminal benefit capitalization is Rs. 42.66 Crore. The Discom must have added the aforesaid terminal benefit capitalization to assets addition during FY 2021-22. As the Commission in above paras has already considered and allowed the terminal benefit without capitalization, therefore, the Commission has deducted the capitalization of terminal benefit from the assets addition during FY 2021-22.
- 3.46 The Commission has worked out Depreciation as under:
  - a) The closing balance of depreciable assets for the previous year approved by the Commission in the true up order for FY 2020-21 has been considered as the opening balance for FY 2021-22. The same has been reduced by amount of assets deduction as per audited accounts.
  - b) Addition to capitalization for current year has been considered as per audited accounts after below mentioned adjustment.
  - c) The amount of Capitalization towards terminal benefit has been considered as per Discom submission.
  - d) Consumer Contribution has been considered based on Audited Accounts and Grants have been considered as discussed below.

- e) The average depreciation rate as per Annual Audited Accounts has been considered for FY 2021-22.
- 3.47 Grant under DDUGJY, IPDS, R-APDRP and Saubhagya: Discom has consistently been asked to submit detail of scheme wise equity, grant and loans. Commission is allowing the investment under central sponsored schemes, and as per the provision of these scheme, Discom is also expected to meet the desired targets and efficiency level. The purpose of the direction of the Commission was to ensure efficiency of investment and to ensure that the Discom has performed according to the targets of that scheme and its impact is not passed on the consumer by way of non receipt of grant. It is observed that during FY 2021-22, under central sponsored scheme such as DDUGJY, R-APDRP, IPDS and Saubhagya scheme JDVVNL has incurred Rs. 147.37 Crore and in post hearing submission Discom has indicated Rs. 118.92 Crore as grant receivable towards such works, whereas as per audited accounts of Discom Rs. 201.39 Crore has been shown as grant received during FY 2021-22. The difference of grant ought to be received and actually received has been considered as notional grant by the Commission. Accordingly, excess grant considered by the Commission is Rs. 82.47 Crore.
- 3.48 As the Commission has increased the grant figure by notional grant in last year true up order therefore, the excess grant has been reduced from the total grant figure in this order.
- 3.49 It is made clear that the Commission will not pass on the interest burden to consumers for the additional borrowings taken against the shortfall in the grant/equity to be received as per funding pattern approved in Schemes.
- 3.50 Grant on release of New Agriculture Connection under RE Works: It is observed that during FY 2021-22, Discom has released 19209 Nos. of new agriculture connections. During previous year true up exercise it was 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 Discom.

- 3.51 It is observed that the RERC (Electricity Supply Code and Connected Matters), Regulations, 2021, specify the charges to be paid by a consumer who apply for a connection. The said regulations also specify that supply in the matter of agriculture consumers such as application for supply, connection release priority, increase in connected load, shifting of connections, restoration of supply etc. shall be governed by the policy directives issued by the State Government from time to time under section 108 of the Electricity Act, 2003 so far as it is not inconsistent with the provisions of the Act. Therefore, in compliance of Government of Rajasthan Directions under Section 108 of Electricity Act 2003, Discoms issues the Agriculture policy, which specify the procedure and charges to be paid by farmers for agriculture connection. On comparison of charges for new connection under supply code (for all consumers other than agriculture) and agriculture policy (for farmers), it is observed that as per Supply Code Regulations, the consumers are required to pay cost of line as well as plant for release of connection, however as per agriculture policy only a small portion of total cost is recovered from agriculture consumers and rest is borne by the Discoms. This tantamount to shifting of burden of cost of release of agriculture connection to other category of consumers, who on the other hand are paying the charges for releasing of their connection as per Regulations.
- 3.52 In this context, Commission observed that in Hon'ble APTEL judgment dated 19.9.14 in Appeal No. 207 of 2013, the APTEL held that the State Commission in discharge of its function under the Electricity Act, 2003, has to be guided by the directions of the State Government under Section 108 of Electricity Act, 2003, but the same are not mandatory and binding upon the State Commission.
- 3.53 Further, it is observed that despite all efforts, Discoms are still not able to recover their full cost from tariff and an accumulated gap still exist. Further, in the public interest at large, Commission cannot burden the other category consumers of such subsidization of Ag consumers. Therefore, the Commission has considered aforesaid 50% amount as grant which otherwise would have been paid by consumer as consumer contribution to Discoms. Further, Commission in the previous order has already clarified that 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, the consumer of Discoms would have been paying this amount.
- 3.54 The Commission as per post hearing submission of Discom has considered average expenses of Rs. 325000 per connection and consumer contribution of Rs. 50000 per connection. The 50% of the difference of per connection expenses and consumer contribution of the above shall be Rs. 137500 per connection. Based on this the total grant from government towards release of 19209 new agriculture connections during the year works out to be Rs. 264.12 Crore.
- 3.55 The Commission has considered this amount as additional grant, Discom may obtain this amount from the State Government. It is observed that Discoms vide letter dated 21.11.2022 have also approached the Government for recovery of aforesaid grant of last year, which has not been realized till date, the Discoms are directed to realize this amount from Government, as the burden of non realization of grant from government could not be passed on the other consumers at large.
- 3.56 Accordingly, the Commission 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 next true up petition.
- 3.57 Discoms are required to indicate any liability to be discharged by government or to be paid by government such as tariff subsidy, capital subsidy, grants towards consumer contribution, any liability arising due to government directives and policy directives etc., as receivable in their audited accounts separately. The Commission finds that amount of grant towards consumer contribution receivable against release of agriculture connection, has not been accounted for. In view of above, Commission in the previous year True up order directed Discoms to account for amount of grant towards consumer contribution receivable against release of connection to certain categories from Govt. or any other state or central scheme under separate head of account from FY 2021-22 onwards. Further, if Discoms raise any loan due to nonpayment of subsidy/grant by government, the interest liability on such loan shall not be passed on to the consumer of the State. Discoms should comply with same.

- 3.58 **Fixed Assets Register (FAR):** With regard to FAR, Discom has submitted that the FAR for FY 2020-21 have been submitted in compliance of Commission directions and Tariff Regulations.
- 3.59 The Commission appreciates the efforts of Discom towards preparation of FAR upto 2020-21. Accordingly, request of JDVVNL to approve the amount deducted in the previous True Up orders from FY 2017-18 to FY 2020-21 to the tune of Rs. 153.92 Crore, has been considered by the Commission.
- 3.60 It is observed that JDVVNL has not filed the FAR for FY 2021-22, therefore, the Commission continue to disallows 10% of depreciation for FY 2021-22 on account of non compliance of Commission's directives for preparation of Fixed Assets Register. On furnishing the Fixed Assets Register to the satisfaction of Commission, Discoms may request to consider to allow the aforesaid disallowed depreciation.
- 3.61 It is also noted that AVVNL & JVVNL have also prepared the fixed assets register and requested to release the amount deducted under the head. However, It is observed that in the above FAR filed that the Discoms have not filed the information of voltage wise assets and the reconciliation of same with scheme wise capitalization, further in compliance to Commission directives, the Discoms submitted that till date accounts are being prepared manually and field offices neither maintain voltage wise physical quantity of assets nor scheme wise assets. The above details can be maintained only after an effective implementation of ERP which facilitates the recording of assets voltage wise, and details of scheme/end use is entered when material is issued from the stores. Further, Discoms also submitted that its in the process of ERP implementation, once the same is successfully implemented, the required digitization of the assets register shall be completed.
- 3.62 It is further observed that during the hearing of the instant petition, the Discoms have submitted that for power purchase, inventory, loss reduction and capital expenditure management & monitoring, the ERP is important tool. Further, AVVNL submitted that it has implemented material management module which is a part of ERP. The Commission in past, many times directed the Discoms to make a time bound program clearly showing milestones and responsibilities of various officers regarding implementation of

ERP. However, sincere efforts are not seen, it is therefore the Commission directs Discoms that they must plan implementation of ERP System, which will not only helps Discoms in better planning of power purchase, inventory and capital expenditure but also reduces the losses and improve the productivity of expenditure incurred and efficiency of human resources deployed for such purpose. Serious actions are required to be taken by Discoms for implementation of ERP. The Commission has decided to withhold 1% of total approved ARR amounting to Rs. 184.41 Crore of JDVVNL on this account and directs the Discom to effectively implement the ERP system for power purchase, inventory, loss reduction and capital expenditure planning and monitoring etc. After satisfactory implementation of ERP the Discom may request to consider to allow the aforesaid disallowed amount.

3.63 Details of depreciation charges allowed for FY 2021-22 are given in table below:

Table 5: Depreciation charges of JdVVNL for FY 2021-22

(Rs. in Crore)

Sr.		
No.	Particular	Amount
1	Depreciable assets at the beginning of the year (closing balance of True up FY 2020-21)	11416.65
2	Less: Deductions as per audited accounts	65.00
3	Capitalization during the year	1355.55
4	Less Capitalization towards terminal benefit	42.66
5	Less: Capital Outlay financed by Consumer Contribution and grant	974.83
6	Depreciable assets added during the year (3-4-5)	338.06
7	Closing balance of GFA (1-2+6)	11689.71
8	Average depreciable assets during the year	11553.18
9	Average depreciation rate	5.24%
10	Depreciation Allowed after True UP	605.37
11	Approved Depreciation after reduction of 10% due to non submission of fixed assets register as detailed in foregoing paras	544.83

3.64 The amount added back on account of preparation of Fixed Asset Register has been considered as expenditure in the final table while allowing the ARR.

## Interest and Finance Charges and Interest on Working Capital

3.65 The interest & finance charges approved by Commission for FY 2021-22 were Rs. 2674 Crore including interest on working capital as per the ARR order

- dated 24.11.2021. For the purpose of true up, JdVVNL has claimed Rs. 3489.74 Crore as interest and finance charges including interest on working capital.
- 3.66 The interest and finance charges have been worked out by considering the following:
  - a) The closing balance of long term loans for previous year approved by the Commission in its True up order for FY 2020-21 has been considered as opening balance of long term loans for FY 2021-22.
  - b) Equity and consumer contribution have been considered on the basis of actual as per audited accounts. Grants have been considered as discussed in preceding paras.
  - c) Addition to long term loans during the year has been worked out by reducing the total capitalization by the amount of consumer Contribution, capital grants and equity received during the year and capitalization towards terminal benefit.
  - d) Repayment has been treated equal to the depreciation allowed for FY 2021-22.
  - e) Interest rate has been worked out as per Regulation 21 (5) of RERC Tariff Regulations, 2019 based on the information of term loan submitted by the Discom.
  - f) Interest on payments made to APRL Ltd. has been considered as discussed below.
  - g) Finance charges and interest on security deposit of consumers are allowed as per actual. The Commission has not considered the delayed payment charges of power purchase and penalty on statutory dues.
- 3.67 With regard to Unfunded Gap, in the last true up order for FY 2020-21, the Commission has approved the unfunded gap of Rs. 18563.50 Crore till 31.03.2021. The same has been considered.

- 3.68 Further, as discussed earlier, JdVVNL has claimed Rs. 42.58 Crore under power purchase, Rs. 155.86 Crore under carrying cost / interest towards APRL and an interest liability of Rs. 3.42 Crore on the loans availed by the Discom to meet the APRL liability, the Commission has observed that against such expenses of totaling to Rs. 201.86 Crore, Discom has also filed income of special fuel surcharge of Rs. 201.86 Crore. Therefore net impact of such expenses and revenue claimed by Discom is Nil. As such same amount is being considered in cost and income.
- 3.69 Commission has allowed interest and finance charges as per the methodology explained in the above Para. The details are given in table below:

Table 6: Interest and Finance Charges of JdVVNL for FY 2021-22 (Rs. in Crore)

Sr. No.	Particular	Amount			
1	Opening balance of Long term Loan (LTL) ( closing balance of True up FY 2020-21)	4066.32			
2	Add: Capitalization during the year	1355.55			
3	Less: Capital Outlay financed by Equity	151.97			
4	Less: Capital Outlay financed by Consumer Contribution and grant	974.83			
5	Less: Capitalization towards terminal benefit	42.66			
6	Addition to LTL for Capital Outlay {2-(3+4+5)}	186.09			
7	Less: Repayments equal to depreciation	605.37			
8	Closing balance of LTL (1+6-7)	3647.04			
9	Average LTL	3856.68			
10	Add: Revenue Gap recognized for previous year after loan taken over under UDAY	18563.50			
11	Total Long Term Loan Balance to be considered for allowing interest for FY 2021-22 (9+10)	22420.18			
12	Average Interest rate of LTL	11.10%			
13	Interest Charges on LTL and revenue gap	2487.66			
14	carrying cost / interest to APRL Ltd.	155.86			
15	Interest on loan for payment to APRL Ltd.	3.42			
16	Finance Charges-As per actual	195.70			
17	Total Interest and Finance Charges Allowed after True UP (13+14+15+16)	2842.65			

## Interest on working capital

3.70 The Commission has approved the interest on working capital on normative basis as per Regulation 27 of RERC Tariff Regulations, 2019. In accordance

with Regulation 27 of RERC Tariff Regulations, 2019, for the calculation of gain or loss on account of variation in interest rate, the Commission has considered the difference on account of interest rate submitted by Discom and normative interest rate allowed by the Commission. The details are given below:

- a) O&M expenses as approved for FY 2021-22 have been considered for the purpose of calculation of working capital requirement.
- b) Maintenance spares have been considered @15% of operation and maintenance expenses specified in Regulation 82.
- c) Receivables have been considered based on the ARR after the true up of FY 2021-22.
- d) Amount of security deposit as per audited accounts has been taken.
- e) The normative rate of interest on working capital has been taken as 300 basis points higher than the average Base Rate (1 year MCLR) of State Bank of India prevalent during first six months of the year previous to the relevant year.
- 3.71 Details of Interest on working capital are given in table below.

Table 7: Interest on Working Capital of JdVVNL for FY 2021-22 (Rs. in Crore)

Sr. No.	Particular	Amount considering normative interest rate	Amount considering interest rate submitted by Discom
1	O&M expenses of one month	93.42	93.42
2	Maintenance spares @ 15% of operation and maintenance expenses specified in regulation 82;	168.16	168.16
3	Receivables equivalent to one and a half (1½) months billing of consumers	2275.53	2275.53
4	Less: Security deposit from consumers	798.48	798.48
5	Total working capital requirement(1+2+3-4)	1738.63	1738.63
6	Rate of Interest	10.14%	8.90%
7	Interest on working capital allowed after true-up	176.38	154.79
8	Less: 50% gain arising from variation in Interest rate as per regulation 27 of RERC, 2019	10.79	
9	Net Interest on working capital	165.59	

3.72 It may be seen that gain on account of variation in interest rate is Rs. 21.59 Crore. As per Regulation 27 of RERC Tariff Regulations, 2019 50% of such gain is to be passed on as a rebate in tariff and the licensee is allowed to retain only 50% of such gain. Accordingly, 50% of the gain has been reduced from the amount of interest on working capital worked out on the basis of normative interest rate.

# Interest on Uday Loan FY 2021-22

3.73 The Discom has claimed the interest on UDAY loan for FY 2021-22 of Rs. 488 Crore as approved by the Commission in the ARR and Tariff Order for FY 2021-22. The Commission has considered the same as claimed by the Discom as same being in accordance with Commission's order dated 06.02.2020.

# **Prior Period Expenses**

3.74 JdVVNL has claimed prior period expenses of Rs. 131.46 Crore. The details of prior period expenses as per audited accounts are as follows:

(Rs. in Crore)

Particulars		For the year ended 31st March, 2022	
Prior period expenses/loss:			
Short Prov. for Power Purchase in prev. yr.		84.79	
Operating Exp. of previous year	0.26		
Employees Cost rel. to prev. yr.	27.49		
Depreciation Cost rel. to prev. yr.	5.61		
Int.& other fin.ch.rel.to prev. yr.	(0.36)		
Admin & general expenses	13.67	46.67	
Total		131.46	

3.75 While carrying out the true up of any financial year, the Commission allows the capitalization, operating expenses, employee cost, depreciation, interest and finance charge and administrative and general expenses as per Tariff Regulations. Hence, expenses of Rs. 46.67 Crore on account of above expenses as shown in JdVVNL audited accounts have not been considered as prior period expenses as the Commission has already approved the above expenses in the true up order till FY 2020-21 as per the norms specified in the Tariff Regulations.

- 3.76 Further, Discom has also claimed Rs. 84.79 Crore towards prior period power purchase, the same has been considered as claimed by Discom.
- 3.77 Considering the above, for the purpose of current true up, the Commission has considered the prior period\_expenses of Rs. 84.79 Crore against the JdVVNL claim of prior period expenses of Rs. 131.46 Crore.

#### **Insurance Expenses**

3.78 As per regulation 25 of RERC Tariff Regulations, 2019 actual insurance expenses incurred by the generating company or licensee shall be allowed separately, subject to a ceiling of 0.2% of average Net Fixed Assets for the year. The Commission accordingly has considered the insurance charges of Rs. 1.14 Crore claimed by the Discom.

#### Other Debits

- 3.79 JdVVNL has claimed other debits of Rs. 55.57 Crore. It has been observed that the major item of other debits is the provision for bad and doubtful debts of Rs. 48.26 Crore, bad debts written off dues from consumer of Rs. 0.15 Crore, compensation in case of injury/death of Rs. 6.50 Crore, loss due to theft of fixed assets of Rs. 0.62 Crore, Loss due to shortage on physical verification of stock of Rs. 0.03 Crore.
- 3.80 While carrying out the true up exercise, the Commission has not considered any provision towards bad and doubtful debts. The expenses are allowed only to the extent of bad debts actually written off by the Discom subject to limit stipulated in the Tariff Regulations. Therefore, the Commission has considered the bad debts of Rs. 0.01 Crore actually written off.
- 3.81 Compensation paid towards injury /death of Rs. 6.50 Crore is considered as per actual.
- 3.82 Since the Commission has allowed the insurance charges, therefore the claim on account of loss due to theft of Fixed Assets of Rs. 0.62 Crore is not considered by the Commission.

- 3.83 Further, the Commission has not considered shortage on physical verification of stock of Rs. 0.03 Crore.
- 3.84 The Commission accordingly has considered the other debit of Rs. 6.51 Crore against the Discom's claim of Rs. 55.57 Crore.

#### **Rebate Allowed to Consumers**

- 3.85 The Commission has not considered DPS from consumers as part of Non tariff income. As DPS is not considered as part of Non tariff income the rebate given on this account is also not being considered to be passed on in the ARR.
- 3.86 JdVVNL has shown the rebate allowed to consumers of Rs. 307.80 Crore which is inclusive of LPS/DPS waived of Rs. 238.45 Crore, rebate allowed by the settlement committees of Rs. 11.36 Crore and rebate on account of defective meters of Rs. 7.03 Crore. As per Regulation 36 of RERC Tariff Regulations, 2019, the Commission has not considered the income towards DPS, therefore the expenditure on account LPS/DPS waived of Rs. 238.45 Crore is also not considered by the Commission.
- 3.87 Further, the Commission has also not considered rebate allowed by the settlement committees of Rs. 11.36 Crore and rebate on account of defective meters of Rs. 7.03 Crore.
- 3.88 Hence, Commission has considered the rebate allowed to consumer only to Rs. 50.97 Crore after adjustments as above.

#### **Refund of ROE from RVUNL**

3.89 Commission in its order dated 24.11.2021 approved Rs. (380) Crore towards refund of RoE from RVUN as separate item of ARR. However, as per submission in reply to data gaps, no refund of ROE from RVUNL has been received for FY 2021-22 and Discom has not claimed Refund of RoE from RVUNL for FY 2021-22. Accordingly, same has not been considered for FY 2021-22.

# **Revenue Subsidy received from Government**

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- 3.90 Discom has filed revenue subsidy of Rs. 521.54 Crore which includes Rs. 420.02 Crore of ED subsidy, Rs. 2.48 Crore of Subsidy against compounding charges and Rs. 99.04 Crore Grant from State Govt. GSDP.
- 3.91 Discom submitted that the Fifteenth Finance Commission recommended power sector performance based additional borrowing space of 0.50 per cent of Gross State Domestic Product (GSDP) to States. The additional borrowing is contingent on the state meeting certain condition which includes 50% loss takeover for previous year (FY 20-21) of a Discom by the concerned state as stipulated in UDAY scheme. The financial loss of JdVVNL for FY 2020-21 stood at Rs. 1731.68 Crore. Accordingly, the GoR has taken over 50% of losses of FY 2020-21 amounting to Rs. 865.84 Crore as per aforementioned guidelines. The Discom however submitted that the losses reflected in the Annual Accounts is a sum total of losses which is reflected in Commission order as Regulatory Assets and the losses which was not approved by Commission and were to borne by the Discoms. Accordingly, the revenue gap for FY 2020-21 should be adjusted by the loss takeover only in the proportion that approved losses constituted in the total Discom losses. The portion of losses taken over by GoR which was on account of unapproved losses should be retained by the Discoms as these losses are not passed in ARR.
- 3.92 Discom submitted that the approved Revenue Gap of FY 2020-21 was Rs. 198.07 Crore (before interest on UDAY loan for FY 2019-20 & 2020-21) which is 11.44% of the total Discom loss of Rs. 1731.68 Crore. Accordingly, Rs. 99.04 Crore which is 11.44% of Rs. 865.84 Crore shall be adjusted to arrive at the Net Revenue gap. Accordingly, Discom submitted to consider receipt of Loss subsidy under GSDP of Rs 99.04 Crore against Rs. 865.84 Crore shown in audited accounts.
- 3.93 It is observed that under GSDP scheme, Government of Rajasthan has taken 50% of audited Losses of Discom for FY 2020-21, however, in the true up for FY 2020-21, the Commission has approved loss of Rs. 1174.07 Crore, it would be appropriate that Commission consider the losses approved in true up for such purpose. Therefore, the Commission has considered Rs. 587.04 Crore towards loss subsidy for FY 2020-21, which is lower of 50% of the approved losses of Rs.

- 1174.07 Crore i.e. Rs. 587.04 Crore or actual loss subsidy receipt of Rs. 865.84 Crore.
- 3.94 Accordingly, Commission has considered as Rs. 1009.54 Crore against Discom's claim of Rs. 521.54 Crore.

#### Revenue

- 3.95 Revenue from sale of power, fuel surcharge, Wheeling Charges and Cross Subsidy Surcharge, additional surcharges, sale of power through trading and Prior Period Income as petitioned by Discom has been accepted.
- 3.96 **Fuel Surcharge/Special Fuel Surcharge**: Out of total income from sale of power, the income from fuel surcharge on account of regular fuel surcharge and special fuel surcharge on account of M/s APRL Ltd. as per audited accounts is Rs. 218.46 Crore and Rs. 201.86 Crore respectively, which is considered by the Commission in this Order.
- 3.97 **Non Tariff Income**: During FY 2021-22, Discoms have claimed total non tariff income of Rs. 848.82 Crore including deferred revenue income of Rs. 305.33 Crore and DPS received from consumers of Rs. 307.15 Crore which have been dealt by the Commission as under:
- 3.98 **Delayed Payment Surcharge (DPS)**: The Discom has claimed Delayed Payment Surcharge (DPS) of Rs. 307.15 Crore as part of Non Tariff Income (NTI) and also claimed the same as separate item of expenditure under DPS head.
- 3.99 The regulation 36 of RERC Tariff Regulations, 2019 provides that-

"All revenues including but not limited to transformer rent, income from fixed deposit/ statutory investment(s), income from rent on land/buildings, income from sale of scrap, income from sale of ash/rejected coal, income from advertisement, Interest on advances to suppliers/contractors, etc., shall be considered as Non-Tariff Income:

Provided that Late Payment Surcharge and Interest on Late Payment earned by the Generating Company or the Licensee shall not be considered under Non-tariff Income."

- 3.100 In accordance with Regulation 36 of RERC Tariff Regulations, 2019 the Commission has not considered Delayed Payment Surcharge (DPS) of Rs. 307.15 Crore as Non Tariff income. Further, since the Commission is not considering the DPS under Non Tariff Income the separate claim of DPS of Rs. 307.15 Crore as expenditure is also not considered by the Commission in this order.
- 3.101 **Deferred Revenue Income**: Discom has stated that in their accounting policies consumer contribution for service connection & line, capital grants and subsidies received towards cost of capital assets have not been reduced from the cost of assets. The same has been treated as Deferred Revenue Income which is being amortized/written off in 25 years from the year of its receipt. The depreciation pertaining to such fixed assets is fully charged to revenue.
- 3.102 However, while computing the depreciation, the Commission has reduced the capitalization amount funded by the consumer contribution, capital grant and subsidy received during the year. Therefore, the Commission has not considered the depreciation benefit on such assets and consequently deferred revenue of Rs. 305.33 Crore is also not considered.
- 3.103 Accordingly, Commission has considered the non tariff income of Rs. 236.34 Crore during FY 2021-22.

# Revenue Gap/Surplus

3.104 Based on above discussions and data provided by JdVVNL, prayer of Discom for True-up of the expenditure and revenue for FY 2021-22 based on the actual performance and for approval of the revenue gap of Rs. (3782.29) Crore for the year has not been accepted as petitioned. The Commission has approved the same to the extent shown in following table.

Table 8: Summary of True up of JdVVNL for FY 2021-22 (Rs. in Crore)

	<del>-</del>		<del>-</del>	_
Sr.	Particulars	As per ARR	As per	Approved
No.	raniculais	order dated	petition	After truina

		24.11.2021		up
1	Revenue			
2	Sale of power	16022.00	16792.93	16792.93
3	Fuel Surcharge	0.00	420.31	420.31
4	Non-tariff income and other income	203.00	848.82	236.34
	Wheeling charges, Cross Subsidy	55.00	0.89	
5	Surcharge and additional surcharge			0.89
6	Sale of power through trading	0.00	398.02	398.02
7	Prior Period Income	0.00	8.34	8.34
8	Total Revenue, A	16280.00	18469.32	17856.83
9	Expenditure			
10	Power purchase Cost	12597.00	15294.12	12702.92
11	O & M Expenses			
12	Employee cost	905.12	609.84	880.10
13	A&G expenses	122.88	106.71	102.95
14	R&M expenses	138.00	218.28	138.05
15	Terminal Benefits	555.00	610.04	245.50
16	Insurance Expenses	23.00	1.14	1.14
17	Depreciation	611.00	999.38	544.83
18	Interest & finance charges	2458.00		2842.65
19	Interest on working capital	167.00	3456.20	165.59
20	Interest on Consumer Security Deposit	49	33.54	33.54
21	Interest on Uday Loan FY 21-22	488.00	488.00	488.00
22	Prior period expenses	0.00	131.46	84.79
23	Other debits	0.00	55.57	6.51
24	Rebate allowed to consumers	0.00	307.80	50.97
25	Refund of ROE from RVUNL*	(380.00)	0.00	0.00
	Refund of Depreciation amount	,		
	deducted in previous years on account			
26	of non-submission of FAR	0.00	153.92	153.92
27	Total Expenditure, B	17733.00	22466.00	18441.44
28	Surplus/deficit, C = (A-B)	(1453.00)	(3996.68)	(584.61)
	Revenue subsidies received from State	407.00	521.54	1009.54
29	Government D	407.00	321.34	1007.34
	Add: Delayed payment surcharge			
30	considered as part of NTI E	0.00	307.15	0.00
	Revenue gap for FY 2021-22, F	(1046.00)	(3782.29)	424.93
31	=(C+D+E)	(1040.00)	(3702.27)	424.73
	Deduction of account of non	0.00	0.00	184.41
32	implementation of ERP (1% of ARR) G	0.00	0.00	104.41
33	Revised revenue Gap/surplus H =(F+G)	(1046.00)	(3782.29)	609.35
	Gap worked out as per last true up	0.00	(18563.50)	(18563.50)
34	order,I	0.00	(10000.00)	(10000.00)
	Cumulative Revenue Gap to be carried	0.00	(22345.79)	(17954.15)
35	forward, H+I	0.00	(22040./7)	(17704.13)
36	Cumulative Revenue Gap till FY 2021-22		(32961.94)**	(17954.15)

<sup>\*</sup> No refund of ROE from RVUNL has been received for FY 2021-22. Thus, Discom has not claimed Refund of RoE from RVUNL for FY 2021-22.

<sup>\*\*</sup>As per audited accounts

#### Analysis of True Up of ARR for FY 2021-22 – JVVNL

#### Sale of Energy

- 3.105 The Discom has indicated total sale of 26534.11 MUs including 273.50 MUs sales to flat rate category and 8826.15 MUs for agriculture metered category (including defective meter). It has been observed that at the beginning of the year, connected load of flat rate consumers was 152167 kW and after taking into account conversion of flat rate consumers to metered category the closing connected load became 140616 kW and considering specific consumption 1945 kWh/kW/year, the sales of flat rate have been filed. It has been observed that flat rate sales of 273.50 MUs are within the limit of normative specific consumption, i.e., 1945 kWh/kW/year as specified by the Commission. The specific consumption of working Agriculture meters has been shown as 1948 kWh/kW/year. Accordingly, the Commission has considered the specific consumption of flat rate as per Discom's submission.
- 3.106 The Commission has noted that it has prescribed the target losses in its ARR Order based on sales to end consumers and any consideration of sales to franchisee at input level will show reduction in losses whereas revenue accounted by the Discom already stands reduced due to lower rate at input level. As the franchisee is acting on behalf of the licensee, the Discom should ensure that franchisee also functions in an efficient manner and also make adequate investment so that impact of working of franchisee should be reflected in overall efficiency improvement and Discoms are able to achieve target loss level based on end consumer sale.
- 3.107 It is further observed that the above sale is inclusive of sale of power of 1480.42 MUs to the Distribution Franchisee (DF). Whereas DF has sold 1213.86 MUs to the end consumer. In accordance with view taken in previous true-up order, Commission for the purpose of calculating distribution losses accepts the sales of energy to end consumer only i.e. 1213.86 MUs. Keeping in view allowed sales of 26267.55 MUs, the distribution loss comes out to be 17.65% as against 16.81% indicated by the Discom.

#### **Power Purchase Cost**

- 3.108 Power purchase cost approved by Commission for FY 2021-22 was Rs.14886 Crore vide ARR order dated 24.11.2021. For the purpose of truing up, JVVNL has claimed Rs. 16582.88 Crore as power purchase cost (including Short Term Power Purchases and Transmission & SLDC charges).
- 3.109 The Discom has petitioned that they have purchased 35698.25 MUs out of which they have sold 1406.41 MUs through exchange.
- 3.110 Details of power purchase cost as submitted by Discom is given in the table below:

Table 9: Power Purchase Cost as submitted by JVVNL for FY 2021-22

Sr. No.	Particulars	Units (MU)	Amount (in Crore)	Average Rate
	Energy petitioned by Discom			
1	Total Energy Purchased by Discom (A)	35698.25	14445.50	4.05
2	Less: Purchase From Short term (B)	2623.57	1086.74	4.14
3	Balance Energy from approved Sources C= (A-B)	33074.68	13358.77	4.04
4	Add: Transmission and SLDC charges (D)		2137.37	
5	Total Power Purchase Cost claimed E (A+D)		16582.88	

- 3.111 The Discom submitted that they have achieved distribution Losses target of 16.81% as against a target of 15%.
- 3.112 The Commission has worked out the power purchase requirement based on the approved distribution losses, transmission losses and sales actually made to the end consumers as approved above.
- 3.113 The Discom has furnished total transmission losses (inter and intra state) in MUs terms, therefore, to segregate the same, the Commission has used the intra state losses of 3.80% based on RVPN true up petition for FY 2021-22 and the interstate transmission losses based on 52 Weeks average of All India transmission Losses as discussed in previous paras. Discom is again directed to keep a separate account of interstate and intrastate losses and give bifurcation while filing next true up petitions. Failing which the Commission will be constrained to take penal action apart from disallowing the excess transmission losses.

3.114 Details of gross energy requirement worked out on the basis of sales and losses as indicated in foregoing Para is given in the table below:

Table 10: Gross Energy Requirement of JVVNL for FY 2021-22 (MUs)

Sr. No.	Particulars	Approved as per Order Dated 24.11.2021	Actual/Audi ted	Restated Level	Normative Calculation
1	Gross Energy Requirement	32706	35698.25	35698.25	33969.98
2	Less:- Sale Through Exchange	0	1406.41	1406.41	1406.41
3	Net Energy Requirement	32706	34292	34291.84	32563.58
4	Inter State Transmission Loss (MU)	361	1303.44	1303.44	439.88
5	Energy Availability at RVPN (MU)	32346	32988.40	33156.43	32123.70
6	Intra State Transmission Loss (%)	3.31%	3.31%	3.80%	3.80%
7	Intra State Transmission Loss(MU)	1071	1091.92	1259.94	1220.70
8	Energy Requirement at Distribution Periphery (MU)	31275	31896.48	31896.48	30903.00
9	Distribution Loss (%)	15%	16.81%	17.65%	15.00%
10	Distribution Loss (MUs)	4691	5362.37	5628.94	4635.45
11	Energy Sales (MUs)	26584	26534.11	26267.55	26267.55

- 3.115 It is observed that the Discom has purchased 1728.27 MUs in excess due to increase in distribution loss over the target given by the Commission, consideration of sale of power to end consumer of DF and higher transmission losses.
- 3.116 As discussed in earlier paras, the Commission does not wish to burden the consumer on account of Discom inefficiency, especially when Commission is allowing full investment as claimed by Discoms in previous years, the Discom in the current petition and earlier petitions has proposed no tariff hike and submitted that they will bridge their gap by reduction in losses and improvement in efficiency. As such, the Commission disallows 100% of such excess purchase, i.e. 1728.27 MUs from actual purchase of 35698.25 MUs and accordingly purchase of energy allowed shall be 33969.98 MUs.
- 3.117 In view of discussion made earlier in this order, banking transactions are considered as cost neutral and no provision towards notional cost of banking is considered for true up of power purchase cost.

- 3.118 Discom has submitted the total power purchase cost of Rs. 14445.50 Crore including provision for banking of Rs. 11.05 Crore, however, the Commission has not considered the provision for banking cost and considered only the transaction cost. Further, as discussed earlier, the service charges to RUVNL of Rs. 15.77 Crore are not considered by Commission. Accordingly, the Commission has considered the power purchase cost of Rs. 14418.68 Crore.
- 3.119 It is observed that the JVVNL has claimed Rs. 52.63 Crore under power purchase, Rs. 192.59 Crore under carrying cost / interest towards APRL and an interest liability of Rs. 3.71 Crore on the loans availed by the Discom to meet the APRL liability.
- 3.120 It is further observed by the Commission that against the above power purchase and interest & finance charge totaling to Rs. 248.93 Crore, Discom has filed income of Special fuel surcharge of Rs. 248.93 Crore. Therefore, net impact of such revenue from operations and expense claimed by Discom is Nil. As such same amount is being considered in cost and income.
- 3.121 Details of power purchase cost as approved by the Commission is given in the table below:

Table 11: Power Purchase Cost of JVVNL as approved for FY 2021-22 (Rs. In Crore)

Sr.	Positive Leave	Units	A 1	Average
No.	Particulars	(MU)	Amount	Rate
	Energy approved by Commission:			
1	Total Energy Purchased by Discom (A)	35698.25	14418.68	4.04
2	Less: Disallowed short term and unapproved sources (B)	1728.27	715.88	4.14
3	Total Energy from approved sources (C=A-B)	33969.98	13702.80	4.03
4	Less: Disallowed approved sources (D)	0.00	0.00	0
5	Power Purchase Cost Allowed E=(A-B-D)	33969.98	13702.80	
6	Add: Transmission and SLDC charges (F)		2137.37	
7	Total Power purchase cost allowed G= (E+F)		15840.17	

3.122 While disallowing the excess purchase of 1728.27 MUs by Discom, the Commission has considered the power purchase of 1728.27 MUs from short term sources (UI, Exchange and Other).

3.123 Transmission and SLDC charges of Rs. 2137.37 Crore as submitted by Discom have been allowed by the Commission. Accordingly, the total power purchase cost including Transmission and SLDC charges is Rs. 15840.17 Crore.

# Operations and Maintenance (O&M) Expenses

- 3.124 The O&M expenses approved by the Commission for FY 2021-22 were Rs. 1989 Crore including Terminal Benefit liability of Rs. 635 Crore vide Tariff order dated 24.11.2021. For the purpose of true up, JVVNL has claimed Rs. 1433.94 Crore as O&M expenses (including staff terminal benefits based on actuarial valuation of Rs. 193.16 Crore).
- 3.125 The Commission has worked out the normative O&M expenses as per the methodology explained in earlier part of this order.
- 3.126 Details of normative O&M expenses as allowed are given in table below:

Table 12: O&M Expenses of JVVNL for FY 2021-22 (Rs. in Crore)

<u> </u>	2. 0 4 2. 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Amount	
Sr. No.	Particulars		
1	Energy Sales approved by Commission excluding sales by DF (in MU)	25053.69	
2	Normative Employee cost for FY 2021-22 (Rs. 0.515/Unit)	1291.47	
3	Normative A &G expenses (Rs. 0.069/unit)	174.89	
4	Normative R&M expenses (kxGFAn-1x(1+ER))	197.79	
5	Less: Proportionate Employee Cost Capitalized	228.37	
6	Less: Proportionate A &G cost capitalized (A&G)	40.80	
7	Total O&M Expenses Allowed after True Up	1394.98	

#### **Terminal Benefit**

- 3.127 The Commission had approved Rs. 635 Crore towards Terminal Benefit liability vide its tariff order dated 24.11.2021. However, JVVNL submitted that they have deposited a sum of Rs. 647.06 Crore as additional contribution towards terminal benefit liability. Accordingly, the terminal benefit liability to the extent of actual amount of Rs. 647.06 Crore deposited by JVVNL has been considered by the Commission.
- 3.128 As Discussed in previous paras Commission advises the top management of Discom & State Government to ensure appropriate funding towards terminal benefit liability so as to meet the liability of the Discom on this account.

## **Depreciation**

- 3.129 The depreciation approved by Commission for FY 2021-22 was Rs. 809 Crore vide Tariff order dated 24.11.2021 and Discom has claimed Rs. 1044.75 Crore as depreciation.
- 3.130 It is observed that Rs. 234.66 Crore has been shown towards terminal benefit expenses and out of total employee cost capitalization of Rs. 207.48 Crore, the proportionate terminal benefit capitalization is Rs. 41.50 Crore. The Discom must have added the aforesaid terminal benefit capitalization to assets addition during FY 2021-22. As the Commission in above paras has already considered and allowed the terminal benefit without capitalization, therefore, the Commission has deducted the capitalization of terminal benefit from the assets addition during FY 2021-22.
- 3.131 **FIP:** It is observed that JVVNL has filed the additional capitalization under FIP of Rs. 3.36 Crore, the Commission in the earlier Investment Plan Order has not considered investment under feeder Improvement Schemes and directed the Discoms to meet out the expenditure under O&M head. Thus the additional capitalization to the extent of Rs. 3.36 Crore is not considered by the Commission in this Order.
- 3.132 Grant under DDUGLY, R-APDRP-A, and AMI (Smart Metering) IPDS & NSGM,: Discom has consistently been asked to submit scheme wise equity, grant and loans. Commission is allowing the investment under central sponsored schemes, and as per the provision of these schemes, Discom is also expected to meet the desired targets and efficiency level. The purpose of the direction of the Commission was to ensure efficiency of investment and to ensure that the Discom has performed according to the targets of that scheme and its impact is not passed on the consumer by way of non receipt of grant. It is brought to the notice of Commission that Discoms are not able to get the full grant as envisaged under various schemes. It is observed that during FY 2021-22, under central sponsored scheme such as DDUGLY, R-APDRP-A and AMI (Smart Metering) IPDS & NSGM JVVNL has incurred Rs. 317.74 Crore. Discom has indicated Rs. 340.41 Crore as grant receivable towards such works, whereas as per audited accounts of Discom Rs. 227.46 Crore has been shown as grant received during FY 2021-22. The difference of grant ought to be received and actually received has been considered as notional grant

- by the Commission. Accordingly, additional grant considered by the Commission is Rs. 112.95 Crore.
- 3.133 It is made clear that the Commission will not pass on the interest burden to consumers for the additional borrowings taken against the shortfall in the grant/equity to be received as per funding pattern approved in Schemes.
- 3.134 Grant on release of New Agriculture Connection under RE Works: It is observed that during FY 2021-22, Discom has indicated release of 19152 Nos. of new agriculture connections. In the previous year true up exercise it was 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 as grant to Discom.
- 3.135 The Commission as per additional submission of Discom has considered average expenses of Rs. 209750 per connection and consumer contribution of Rs. 18750 per connection. The 50% of difference of per connection expenses and consumer contribution of the above shall be Rs. 95500 per connection. Based on this the total grant from government towards release of 19152 new agriculture connection during the year work out to be Rs. 182.90 Crore.
- 3.136 As Discussed earlier in this order, the Commission has considered this amount as additional grant, Discom may obtain this amount from State Government.
- 3.137 **Two Block Supply:** It is observed JVVNL has incurred expenditure towards Two block supply of Rs. 18.35 Crore as per Rajasthan Government decision for supply to Agriculture consumers is being arranged in two blocks in day time instead of three blocks supply (as being done in preceding years). Since the Discom has incurred the aforesaid expenditure in compliance to GoR direction. Therefore, the sources of this expenditure have been considered as additional grant from GoR. The Discom may also obtain this amount from State Government.
- 3.138 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 next true up petition.
- 3.139 **Fixed Assets Register (FAR):** With regard to FAR, Discom submitted that the FAR for FY 2021-22 have been furnished in compliance of Commission directions and Tariff Regulations.
- 3.140 The Commission appreciates the efforts of Discom towards preparation of FAR upto 2021-22. Accordingly, request of JVVNL to approve the amount deducted in the previous True Up orders from FY 2017-18 to FY 2020-21 to the tune of Rs. 217.54 Crore, has been considered by the Commission.
- 3.141 Further, as discussed earlier, the Commission directs JVVNL to plan implementation of ERP System, which will not only help Discom in better planning of power purchase, inventory and capital expenditure but also reduces the losses and improve the productivity of expenditure incurred and efficiency of human resources deployed for such purpose. Serious actions are required to be taken by Discoms for implementation of ERP. The Commission has decided to withhold 1% of total approved ARR amounting to Rs. 228.60 Crore of JVVNL on this account and directs the Discom to effectively implement the ERP system for power purchase, inventory, loss reduction and capital expenditure planning and monitoring etc. After the satisfactory implementation of ERP the Discom may request to consider allowing the aforesaid disallowed amount.
- 3.142 The Commission has followed the methodology given earlier in the order for the calculation of depreciation being allowed.
- 3.143 Details of depreciation charges allowed for FY 2021-22 are given in table below:

Table 13: Depreciation Charges of JVVNL for FY 2021-22 (Rs. in Crore)

Sr. No.	Particulars	Amount
1	Depreciable assets at the beginning of the year (closing balance of True up FY 2020-21)	16214.84
2	Less: Deductions as per audited accounts	327.87
3	Capitalization during the year	1722.99
4	Less Capitalization towards terminal benefit	41.50
5	Less: Capital Outlay financed by Consumer Contribution and grant	961.38

6	Depreciable assets added during the year (3-4-5)	720.11
7	Closing balance of GFA (1-2+6)	16607.08
8	Average depreciable assets during the year	16410.96
9	Average depreciation rate	4.81%
10	Depreciation Allowed after True UP	789.40

3.144 The amount added back on account of preparation of fixed asset register has been considered as expenditure in the final table while allowing the ARR.

# Interest and Finance Charges and Interest on Working Capital

- 3.145 The interest & finance charges approved by Commission for FY 2021-22 were Rs. 2657 Crore including interest on working capital as per the ARR order dated 24.11.2021. For the purpose of true up, JVVNL has claimed Rs. 3324.20 Crore as interest and finance charges including interest on working capital.
- 3.146 Further, as discussed earlier, JVVNL has claimed Rs. 52.63 Crore under power purchase, Rs. 192.59 Crore under carrying cost / interest towards APRL and an interest liability of Rs. 3.71 Crore on the loans availed by the Discom to meet the APRL liability, the Commission has observed that against such expenses of totaling to Rs. 248.93 Crore, Discom has also filed income of special fuel surcharge of Rs. 248.93 Crore. Therefore net impact of such expenses and revenue claimed by Discom is Nil. As such same amount is being considered in cost and income.
- 3.147 Interest and finance charges have been calculated as per the methodology explained earlier. The details are given in table below:

Table 14: Interest and Finance Charges of JVVNL for FY 2021-22 (Rs. in Crore)

Sr. No.	Particulars	Amount
1	Opening balance of Long term Loan (LTL) ( closing balance of True up FY 2020-21)	6769.53
2	Add: Capitalization during the year	1722.99
3	Less: Capital Outlay financed by Equity	137.41
4	Less: Capital Outlay financed by Consumer Contribution and grant	961.38
5	Less Capitalization towards terminal benefit	41.50
6	Addition to LTL for Capital Outlay {2-(3+4+5)}	582.70
7	Less: Repayments equal to depreciation	789.40
8	Closing balance of LTL (1+6-7)	6562.83

9	Average LTL	6666.18
10	Add: Revenue Gap recognized for previous year after loan taken over under UDAY	17931.55
11	Total Long Term Loan Balance to be considered for allowing interest for FY 2021-22 (9+10)	24597.73
12	Average Interest rate of LTL	10.75%
13	Interest Charges on LTL and revenue gap	2643.86
14	carrying cost / interest to APRL Ltd.	192.59
15	Interest on loan for payment to APRL Ltd.	3.71
16	Finance Charges-As per actual	175.09
17	Total Interest and Finance Charges Allowed after True UP (13+14+15+16)	3015.25

- 3.148 It has been observed that the Average rate of interest for JVVNL is 11.72% which is much higher as compared to 10.69% & 11.10% of AVVNL and JdVVNL respectively. In post hearing submission JVVNL has filed revised rate of interest of term Loan and working capital loan accordingly, the Commission considered the revised interest rate as filed by the JVVNL.
- 3.149 The Commission has approved the interest on working capital as per Regulation 27 of RERC Tariff Regulations, 2019 and considering additional working capital requirement as prayed by Discom. The details of Interest on working capital are given in table below:

Table 15: Interest on Working Capital of JVVNL for FY 2021-22 (Rs. in Crore)

Sr. No.	Particular	Amount considering normative interest rate	Amount considering interest rate submitted by Discom
1	O&M expenses of one month	116.25	116.25
2	Maintenance spares @ 15% of operation and maintenance expenses specified in regulation 82;	209.25	209.25
3	Receivables as per above para	2811.54	2811.54
4	Less: Security deposit from consumers	1575.68	1575.68
5	Total working capital requirement(1+2+3-4)	1561.35	1561.35
6	Rate of Interest	10.14%	8.37%
7	Interest on working capital allowed after true-up	158.40	130.75
8	Less: 50% gain arising from variation in Interest rate as per regulation 27 of RERC, 2019	13.82	
9	Net Interest on working capital	144.57	

3.150 It may be seen that gain on account of variation in interest rate is Rs. 27.65 Crore. As per Regulation 27 of RERC Tariff Regulations, 2019, 50% of such gain

is to be passed on as a rebate in tariff and the licensee is allowed to retain only 50% of such gain. Accordingly, 50% of the gain has been reduced from the amount of interest on working capital worked out on the basis of normative interest rate.

# Interest on Uday Loan FY 2021-22

3.151 The Discom has claimed the interest on UDAY loan for FY 2021-22 of Rs. 520 Crore as approved by the Commission in the ARR and Tariff Order for FY 2021-22. The Commission has considered the same as claimed by the Discom as same being in accordance with Commission's order dated 06.02.2020.

## **Prior Period Expenses**

3.152 JVVNL has claimed prior period expenses of Rs. (201.06) Crore. The detail of prior period expenses as per audited accounts are as follows:

(Rs. In Crore)

Particulars	For the year ended 31st March 2022	
Prior period expenses/loss		
Prior Period Adjustment of Power Purchase		(234.13)
Employee cost	2.46	
Depreciation	77.34	
Interest & Other Financial Charges	(45.13)	
Administration & General Expense	(1.61)	33.07
Total	(2)	

- 3.153 While carrying out the true up of any financial year, the Commission allows the Employee cost, depreciation, interest and finance charges and administrative and general expenses as per Tariff Regulations. Hence, expenses of Rs. 33.07 Crore on account of above expenses as shown in JVVNL audited accounts is disallowed as prior period expenses as the Commission has already approved the above expenses in the true up order till FY 2020-21 as per the norms specified in the Tariff Regulations.
- 3.154 Further, Discom has also claimed Rs. (234.13) Crore towards prior period power purchase, the same has been considered as claimed by Discom.

3.155 Considering the above, for the purpose of current true up, the Commission has considered the prior period expenses of Rs. (234.13) Crore against the JVVNL claim of prior period expenses of Rs. (201.06) Crore.

# **Insurance Expenses**

3.156 As per regulation 25 of RERC Tariff Regulations, 2019 actual insurance expenses incurred by the generating company or licensee shall be allowed separately, subject to a ceiling of 0.2% of average Net Fixed Assets for the year. The Commission accordingly has considered the insurance charges of Rs. 1.16 Crore claimed by the Discom.

#### Other Debits:

- 3.157 JVVNL has claimed other debits of Rs. 232.28 Crore. It has been observed that major item of other debits are provision for bad and doubtful debts-others of Rs. 173.49 Crore, loss on sale of fixed assets of Rs. 23.46 Crore, loss on valuation of inventory of Rs. 19.50 Crore, loss due to theft of fixed assets of Rs 3.43 Crore, compensation in case injury/death of Rs. 6.23 Crore, loss due to impairment of PPE of Rs. 5.92 Crore, loss on obsolete store of Rs. 0.15 Crore and loss due to exchange rate variation of Rs. 0.09 Crore.
- 3.158 While carrying out the true up exercise, the Commission has not considered any provision towards bad and doubtful debts. The expenses are allowed only to the extent of debts actually written off of Rs. 2.19 Crore by the Discom subject to limit stipulated in the Tariff Regulations. Therefore, the Commission has not considered bad debts provision.
- 3.159 Since the Commission has allowed the insurance charges, therefore the claim on account of loss due to theft of Fixed Assets of Rs. 3.43 Crore is not considered by the Commission.
- 3.160 Compensation to outsider paid of Rs. 5.89 Crore and compensation to employee of Rs. 0.34 Crore, loss on sale of fixed assets of Rs. 23.46 Crore, loss due to impairment of PPE of Rs. 5.92 Crore, and loss on obsolete store of Rs. 0.15 Crore are considered as per actual.
- 3.161 The Commission has not considered loss on valuation of Inventory amount to Rs. 19.50 Crore and deferred revenue expense written off of Rs. 0.003 Crore.

3.162 Accordingly, the Commission has considered the other debit of Rs. 38.04 Crore against the Discom's claim of Rs. 232.28 Crore.

#### **Rebate Allowed to Consumers**

- 3.163 JVVNL has shown the rebate allowed to consumers of Rs. 628.33 Crore which is inclusive of LPS/DPS waiver of Rs. 212.04 Crore and rebate of defective meters of Rs. 8.47 Crore. As per Regulation 36 of RERC Tariff Regulations, 2019, the Commission has not considered the income towards DPS, therefore, the expenditure on account of waiver of LPS/DPS of Rs. 212.04 Crore is also not considered by the Commission. Further, Discom has shown rebate of Defective meter of Rs. 8.47 Crore which is also not considered in this order as it is the duty of the Discom to keep the meters correct and replace defective meters within the specified time.
- 3.164 Hence commission has considered the rebate allowed to consumer only to Rs. 407.82 Crore after adjustments as above.

#### **Refund of ROE from RVUNL:**

3.165 Commission in its order dated 24.11.2021 approved Rs. (470) Crore towards refund of RoE from RVUN as separate item of ARR. However, as per submission in reply to data gaps, no refund of ROE from RVUNL has been received for FY 2021-22 and Discom has not claimed Refund of RoE from RVUNL for FY 2021-22. Accordingly, same has not been considered for FY 2021-22.

#### Revenue Subsidy received from Government

- 3.166 Discom has filed revenue subsidy of Rs. 682.53 Crore which includes Rs. 590.38 Crore of ED subsidy, Rs. 17.15 Crore of Subsidy against compounding charges and Rs. 75.00 Crore Loss subsidy from State Govt. under GSDP scheme.
- 3.167 Discom submitted that the approved Revenue Gap of FY 2020-21 was Rs. 150 Crore. (before interest on UDAY loan for FY 2019-20 & 2020-21) which is 22.70% of the total Discom loss of Rs. 660.75 Crore. Accordingly, Rs. 75 Crore, which is

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- 22.70% of Rs. 330.38 Crore. shall be adjusted to arrive at the Net Revenue gap. Accordingly, Discom has considered loss subsidy of GSDP scheme of Rs. 75 Crore against Rs. 330.38 Crore shown in audited accounts.
- 3.168 It is observed that under GSDP scheme, Government of Rajasthan has taken 50% of audited Losses of Discoms for FY 2020-21. It would be appropriate that Commission consider the true up approved losses for such purpose. Therefore, the Commission has considered Rs. 330.38 Crore towards loss subsidy for FY 2020-21, which is lower of 50% of the approved losses of Rs. 1189.90 Crore i.e. Rs. 594.95 Crore or actual loss subsidy receipt of Rs. 330.38 Crore.
- 3.169 Accordingly, Commission has considered subsidy of Rs. 937.95 Crore against Discom's claim of Rs. 682.53 Crore.

#### Revenue

- 3.170 Revenue from sale of power, fuel surcharge, Wheeling Charges, Cross Subsidy Surcharge, additional surcharge, sale of power through trading and Prior Period Income as petitioned by Discom has been accepted.
- 3.171 Fuel Surcharge/Special Fuel Surcharge: Out of total income from sale of power, the income from fuel surcharge i.e. on account of regular fuel surcharge and special fuel surcharge on account of M/s APRL as per audited accounts is Rs. 351.12 Crore and Rs. 248.93 Crore respectively, which is considered by the Commission in this Order.
- 3.172 Non-Tariff Income: During FY 2021-22, Discom has claimed total non tariff income of Rs. 1141.29 Crore including deferred revenue income of Rs. 275.80 Crore and DPS received from consumers of Rs. 502.05 Crore, which have been dealt as under:
- 3.173 Delayed Payment Surcharge (DPS): The Discom has claimed Delayed Payment Surcharge (DPS) of Rs. 502.05 Crore as part of Non Tariff Income (NTI) and also claimed the same as separate item of expenditure under DPS head.

- 3.174 In accordance with Regulation 36 of RERC Tariff Regulations, 2019 the Commission has not considered Delayed Payment Surcharge (DPS) of Rs. 502.05 Crore as Non Tariff income and accordingly has also not considered separate item of expenditure under DPS head.
- 3.175 Deferred Revenue Income: Discoms have stated that in their accounting policies consumer contribution for service connection & line, capital grants and subsidies received towards cost of capital assets have not been reduced from the cost of assets. The same has been treated as Deferred Revenue Income which is being amortized/written off in 25 years from the year of its receipt. The depreciation pertaining to such fixed assets is fully charged to revenue.
- 3.176 However, while computing the depreciation, the Commission has reduced the capitalization amount funded by the consumer contribution, capital grant and subsidy received during the year. Therefore, the Commission has not considered the depreciation benefit on such assets and consequently deferred revenue is of Rs. 275.80 Crore is not considered.
- 3.177 Accordingly, Non Tariff Income of Rs. 363.44 Crore is considered in this order.

#### Revenue Gap/Surplus

3.178 Based on above discussions and data provided by JVVNL, the prayer of Discom for True-up of the expenditure and revenue for FY 2021-22 based on the actual performance and for approval of the revenue gap of Rs. 1704.49 Crore for the year has not been accepted as petitioned. The Commission has approved the same to the extent shown in following table:

Table 16: Summary of True up of JVVNL for FY 2021-22 (Rs. in Crore)

Sr. No.	Particulars	As per order dated24.11.2 021	As per petition	Approved After truing up
1	Revenue			
2	Sale of power	20691.00	19567.75	19567.75
3	Fuel Surcharges	0.00	600.06	600.06
4	Non-tariff income and other income	277.00	1141.29	363.44
5	Wheeling charges, Cross Subsidy Surcharge and additional surcharge	78.00	3.82	3.82
6	Sale of power through trading	0.00	491.82	491.82

7	Prior Period Income	0.00	94.32	94.32
8	Total Revenue, A	21046.00	21899.06	21121.21
9	Expenditure			
10	Power purchase Cost	14886.00	16582.88	15840.17
11	O & M Expenses			
12	Employee cost	1002.00	772.66	1063.10
13	A&G expenses	155.00	163.16	134.09
14	R&M expenses	197.00	304.96	197.79
15	Terminal Benefits	635.00	193.16	647.06
16	Insurance Expenses	32.00	1.16	1.16
17	Depreciation	809.00	1044.75	789.40
18	Interest & finance charges	2421.00		3015.25
19	Interest on Working Capital, Interest on Free Loan and Interest on Bonds	134.00	3246.52	144.57
20	Interest on Consumer Security Deposit	102.00	77.68	77.68
21	Interest on Uday Loan FY 21-22	520.00	520.00	520.00
22	Prior period expenses	0.00	(201.06)	(234.13)
23	Other debits	0.00	232.28	38.04
24	Rebate allowed to consumers	0.00	628.33	407.82
25	Refund of ROE from RVUNL (2021-22)*	(470.00)	0.00	0.00
	Refund of Depreciation amount			
	deducted in previous years on account			
26	of non-submission of FAR	0.00	217.54	217.54
27	Total Expenditure, B	20423.00	23784.02	22859.55
28	Surplus/deficit, C = (A-B)	623.00	(1884.97)	(1738.34)
	Revenue subsidies received from State			
29	Government <b>D</b>	751.00	682.53	937.95
	Add: Delayed payment surcharge			
30	considered as part of NTI <b>E</b>	0.00	502.05	0.00
31	Revenue gap for FY 2021-22, F =(C+D+E)	1374.00	(1704.49)	(800.39)
	Deduction of account of non			
32	implementation of ERP (1% of ARR) G	0.00	0.00	228.60
33	Revised revenue Gap/surplus H =(F+G)	1374.00	(1704.49)	(571.79)
34	Gap worked out as per last true up order,I	0.00	(17931.55)	(17931.55)
0.5	Cumulative Revenue Gap to be carried		(10/0/07)	(10500 65)
35	forward, H+I	0.00	(19636.04)	(18503.35)
36	Cumulative Revenue Gap till FY 2021-22	1 f EV 0001	(29096.90)**	(18503.35)

<sup>\*</sup> No refund of ROE from RVUNL has been received for FY 2021-22. Thus, Discom has not claimed Refund of ROE from RVUNL for FY 2021-22.

<sup>\*\*</sup>As per audited accounts

## Analysis of True Up of ARR for FY 2021-22- AVVNL

## Sale of Energy

- 3.179 The Discom has indicated total sale of 19987.54 MUs including 321.88 MUs sales to flat rate category and 6127.74 MUs for agriculture metered category (including defective meter). It has been observed that at the beginning of the year, connected load of flat rate consumers was 278015 kW and after taking into account conversion of flat rate consumers to metered category the closing connected load became 165491 kW and Discom has filed flat rate sales considering specific consumption of 1945 kWh/kW/year.
- 3.180 Post hearing, the Discom has also filed the detail of number of working meters, defective meters, their connected load and sales of such consumers as under:

Particulars	Consumers	Connected Load (KW)	Energy Sold (MU)
Ag. Working Meters	422234	2214531	2809.74
Ag. Defective Meters	152795	1708089	3318.00
Total Ag. Metered	575029	3922620	6127.74

- 3.181 It is observed from the above data that Discom is reporting the huge number under defective meters which is close to 27% of total consumers under this category, this is a serious concern, whereas as per RERC (Electricity Supply Code and Connected Matters) Regulations, 2021, no defective meter shall be allowed to remain for more than 2 billing cycle.
- 3.182 In view of above directions and data submitted by Discom, for computing the defective meters sales for FY 2021-22, Commission has considered average connected load, the Specific consumption of 1269 kWh/kW/year of working meters for 10 months and Specific consumption of 1945 kWh/kW/year for 2 months, the average for 12 months works out to be 1381 kWh/kW/year. Accordingly, the sale to consumers with defective meters work out to be 2360 MUs against Discom's claim of 3318 MUs. Thus, the Commission disallowed 958.31 MUs in sales on account of higher specific consumption of defective meters as compared to working meters.
- 3.183 Further, the sale of flat rate consumers have also been worked out based on average connected load and by considering 12 months average specific consumption 1381 kWh/kW/year used for computing the defective meter sales as above, accordingly, the sales approved for flat rate category shall be 306.35. MUs as against 321.88 MUs filed for flat rate consumers. Therefore, the Commission disallowed 15.54 MUs sale under flat rate category

- 3.184 The Commission has noted that it has prescribed the target losses in its ARR Order based on sales to end consumers and any consideration of sales to franchisee at input level will show reduction in losses whereas revenue accounted by the Discom already stands reduced due to lower rate at input level. As the franchisee is acting on behalf of the licensee, the Discom should ensure that franchisee also functions in an efficient manner and also make adequate investment so that impact of working of franchisee should be reflected in overall efficiency improvement and Discoms are able to achieve target loss level based on end consumer sale.
- 3.185 It is further observed that the above sale is inclusive of sale of power of 536.67 MUs to the Distribution Franchisee (DF). Whereas DF has sold 487.47 MUs to the end consumer. In accordance with view taken in previous true-up order, Commission for the purpose of calculating distribution losses accepts the sales of energy to end consumer only, in view of above, after disallowing sales of defective meters, flat rate and consideration of sales of DF at consumer level the sales for FY 2021-22 is work out to be as 18964.49 MUs, accordingly, the distribution loss comes out to be 17.20% as against 12.73% indicated by the Discom

#### **Power Purchase Cost**

- 3.186 Power purchase cost approved by the Commission for FY 2021-22 was Rs. 10505 Crore vide ARR order dated 24.11.2021. For the purpose of truing up, AVVNL has claimed Rs. 11988.34 Crore as power purchase cost (including Short Term Power purchases and Transmission & SLDC charges).
- 3.187 The Discom has petitioned that they have purchased 25571.41 MUs out of which they have sold 947.85 MUs through exchange.
- 3.188 Details of power purchase cost submitted by Discom are given in the table below:

Table 17: Power purchase cost submitted by AVVNL for FY 2021-22

Sr. No.	Particulars	Units (MU)	Amount (in Crore)	Average Rate
	Energy petitioned by Discom			
1	Total Energy Purchased by Discom (A)	25571.41	10552.56	4.13
2	Less: Purchase From Short term sources (B)	1768.16	733.35	4.15
3	Balance Energy from approved Sources C= (A-B)	23803.25	9819.21	4.13
4	Add: Transmission and SLDC charges (D)		1435.79	
5	Total Power Purchase Cost claimed E=(A+D)		11988.34	

- 3.189 The Discom submitted it has achieved Distribution losses of 12.73% as against a target of 15%, Commission appreciate the Discom to achieve target distribution losses for FY 2021-22.
- 3.190 The Commission has worked out the power purchase requirement based on the approved distribution losses, transmission losses and sales approved above.
- 3.191 The Discom has furnished total transmission losses (inter and intra state) in MUs terms, therefore, to segregate the same, the Commission has used the intra state losses of 3.80% based on RVPN true up petition for FY 2021-22 and the inter state transmission losses based on 52 weeks Average of All India Transmission Losses as discussed in previous paras. Discom is again directed to keep a separate account of interstate and intrastate losses and give bifurcation while filing next true up petitions. Failing which the Commission will be constrained to take penal action apart from disallowing the excess transmission losses.
- 3.192 Details of gross energy requirement worked out on the basis of sales and losses as indicated in foregoing Para is given below in table:

Table 18: Gross Energy Requirement of AVVNL for FY 2021-22 (MUs)

	10: Closs Energy Redolicilien Clift Vitte Cliff 2021 22				(11103)
Sr. No.	Particulars	Approved as per Order Dated 24.11.2021	Actual/Audi ted	Restated Level	Normative Calculatio n
1	Gross Energy Requirement	23159	25571.41	25571.41	24440.08
2	Less:- Sale Through Exchange	0	947.85	947.85	947.85
3	Net Energy Requirement	23159	24623.56	24623.56	23492.23
4	Inter State Transmission Loss (MU)	243	935.95	815.29	299.75
5	Energy Availability at RVPN (MU)	22916	23687.61	23808.26	23192.48
6	Intra State Transmission Loss (%)	3.31%	3.31%	3.80%	3.80%
7	Intra State Transmission Loss(MU)	759	784.06	904.71	881.31
8	Energy Requirement at Distribution Periphery (MU)	22158	22903.55	22903.55	22311.17
9	Distribution Loss (%)	15.00%	12.73%	17.20%	15.00%
10	Distribution Loss (MUs)	3324	2916.01	3939.06	3346.68
11	Energy Sales (MUs)	18834	19987.54	18964.49	18964.49

3.193 It is observed that the Discom has purchased 1131.33 MUs in excess due to consideration of sale of power to end consumer of DF, consideration of sale of defective meters using specific consumption of working meters and high transmission losses.

- 3.194 As discussed in earlier paras, the Commission does not wish to burden the consumer on account of Discom inefficiency. As such, the Commission disallows 100% of such excess purchase, i.e. 1131.33 MUs from actual purchase of 25571.41 MUs and accordingly purchase of energy allowed shall be 24440.08 MUs.
- 3.195 In view of discussion made earlier in this order, banking transactions are considered as cost neutral and no provision towards notional cost of banking is considered for true up of power purchase cost.
- 3.196 Discom has submitted the total power purchase cost of Rs. 10552.56 Crore including provision for banking of Rs. 10.32 Crore and provision for RPO obligation of Rs. 101.85 Crore. However, the Commission has not considered the provision for banking cost & RPO and considered only the transaction cost. As far as penalty based on RPO is concerned same will be considered, if any, based on order issued by the Commission on the petition to be filed by RREC. Further, as discussed in earlier paras, the service charges to RUVNL of Rs. 10.63 Crore are not considered by Commission. Accordingly, the Commission has considered the power purchase cost of Rs. 10429.74 Crore.
- 3.197 It is observed that the AVVNL has claimed Rs. 35.47 Crore under power purchase, Rs. 129.80 Cr. under carrying cost / interest towards APRL and an interest liability of Rs. 2.54 Cr. on the loans availed by the Discom to meet the APRL liability.
- 3.198 It is further observed by the Commission that against the above power purchase and interest & finance charge totaling to Rs. 167.81 Crore, Discoms has filed income of Special fuel surcharge of Rs. 167.81 Crore. Therefore, net impact of such revenue from operations and expense claimed by Discom is Nil. As such same amount is being considered in cost and income.
- 3.199 Details of power purchase cost as approved by the Commission is given in the table below:

Table 19: Power Purchase Cost of AVVNL as approved for FY 2021-22

(Rs. In Crore)

Sr. No.	Particulars	Units (MU)	Amount	Average Rate
	Energy approved by Commission:			
1	Total Energy Purchased by Discom (A)	25571.41	10429.74	4.08
2	Less: Disallowed short term sources (B)	1131.33	469.22	4.15
3	Total Energy from approved sources (C=A-B)	24440.08	9960.51	4.08
4	Less: Disallowed approved sources (D)	0.00	0.00	0.00

5	Power Purchase Cost Allowed E=(A-B-D)	24440.08	9960.51	
6	Add: Transmission and SLDC charges (F)		1435.79	
7	Total Power purchase cost allowed G= (E+F)		11396.30	

- 3.200 While disallowing the excess purchase of 1131.33 MUs by Discom, the Commission has considered the power purchase from short term sources (UI, Exchange and Other).
- 3.201 Transmission and SLDC charges of Rs. 1435.79 Crore as per Discom submission have been allowed by the Commission. Accordingly, the total power purchase cost including transmission & SLDC charges for FY 2021-22 is Rs. 11396.30 Crore.

# Operations and Maintenance (O&M) Expenses

- 3.202 The O&M expenses approved by the Commission for FY 2021-22 were Rs. 1603 Crore including terminal benefit liability of Rs. 555 Crore vide ARR order dated 24.11.2021. For the purpose of true up, AVVNL has claimed Rs. 1895.92 Crore as O&M expenses (including terminal benefits of Rs. 743.17 Crore).
- 3.203 The Commission has worked out the normative O&M expenses as per the methodology explained in earlier part of this order.
- 3.204 Details of normative O&M expenses as allowed are given in table below:

Table 20: O&M Expenses of AVVNL for FY 2021-22 (Rs. in Crore)

Sr. No.	Particulars	Amount
1	Energy Sales approved by Commission excluding sales by DF (in MU)	18477.03
2	Normative Employee cost for FY 2021-22 (Rs. 0.515/unit)	952.45
3	Normative A &G expenses (Rs. 0.069/unit)	128.98
4	Normative R&M expenses ( k x GFAn-1 x (1+ER))	131.59
5	Less: Proportionate Employee Cost Capitalized	139.59
6	Less: Proportionate A &G cost capitalized (A&G)	15.07
7	Total O&M Expenses Allowed after True Up	1058.36

#### **Terminal Benefit**

3.205 The Commission had approved Rs. 555 Crore towards terminal benefit liability vide its tariff order dated 24.11.2021. AVVNL submitted that they have deposited a sum of Rs. 326 Crore as additional contribution towards terminal benefit liability. Accordingly, the terminal benefit liability to the extent of actual amount of Rs. 326 Crore deposited by the AVVNL has been considered by the Commission.

3.206 As Discussed in previous paras, Commission advises the top management of Discom & State Government to continue ensure appropriate funding towards terminal benefit liability so as to meet the liability of the Discom on this account.

## **Depreciation**

- 3.207 The depreciation approved by Commission for FY 2021-22 was Rs. 567 Crore vide ARR order dated 24.11.2021 and Discom has claimed Rs. 880.64 Crore as depreciation charges for the purpose of true up.
- 3.208 It is observed that Rs. 743.17 Crore has been shown towards terminal benefit expenses and out of total employee cost capitalization of Rs. 193.95 Crore, the proportionate terminal benefit capitalization is Rs. 78.53 Crore. The Discom must have added the aforesaid terminal benefit capitalization to assets addition during FY 2021-22. As the Commission in above paras has already considered and allowed the terminal benefit without capitalization, therefore, the Commission has deducted the capitalization of terminal benefit from the assets addition during FY 2021-22.
- 3.209 Grant under DDUGJY, R-APDRP, IPDS, and Saubhagya: Discom has consistently been asked to submit scheme wise equity, grant and loans. Commission is allowing the investment under central sponsored schemes and as per the provision of these schemes, Discom is also expected to meet the desired targets and efficiency level. The purpose of the direction of the Commission was to ensure efficiency of investment and to ensure that the Discom has performed according to the targets of that scheme and its impact is not passed on the consumer by way of non-receipt of grant. It is brought to the notice of Commission that Discoms are not able to get the full grant as envisaged under various schemes. It is observed that during FY 2021-22, under central sponsored scheme such as DDUGJY, R-APDRP, IPDS and Saubhagya, scheme AVVNL has incurred Rs. 147.91 Crore and in post hearing submission Discom has indicated Rs. 66 Crore as grants receivables towards such works, whereas as per audited accounts of Discom Rs. 246.17 Crore has been shown as grant received during FY 2021-22. The difference of grant ought to be received and actually received has been considered as notional grant by the Commission. Accordingly, reduction in grant considered by the Commission is Rs. 180 Crore.

- 3.210 It is made clear that the Commission will not pass on the interest burden to consumers for the additional borrowings taken against the shortfall in the grant/equity to be received as per funding pattern approved in Schemes.
- 3.211 Grant on release of New Agriculture Connection under RE Works: It is observed that during FY 2021-22, Discom has released of 31206 Nos. of new agriculture connections. In the previous true up exercise 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 as grant to Discoms.
- 3.212 The Commission as per post hearing submission of Discom has considered an average expenses of Rs. 225000/- per connection and consumer contribution of Rs 25000 per connection. The 50% of difference of per connection expenses and consumer contribution of the above shall be Rs. 100000 per connection. Based on this the total grant from government towards release of 31206 new agriculture connection during the year work out to be Rs. 312.06 Crore.
- 3.213 While dealing with Jodhpur Discom in the earlier paras of this order, the Commission has considered this amount as additional grant, Discom may obtain this amount from State Government.
- 3.214 **Two Block Supply:** It is observed AVVNL has incurred expenditure towards Two block supply of Rs. 46.22 Crore as per Rajasthan Government decision for supply to Agriculture consumers is being arranged in two blocks in day time instead of three blocks supply (as being done in preceding years). Since the Discom has incurred the aforesaid expenditure in compliance to GoR direction. Therefore, the sources of this expenditure have been considered as additional grant from GoR. The Discom may also obtain this amount from State Government
- 3.215 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 next true up petition.
- 3.216 **Fixed Assets Register (FAR):** With regard to FAR, Discom has submitted that the FAR up to FY 2020-21 have been submitted in compliance of Commission directions and Tariff Regulations.

- 3.217 The Commission appreciates the efforts of Discom towards preparation of FAR upto 2020-21. Accordingly, request of AVVNL to approve the amount deducted in the previous True Up orders from FY 2017-18 to FY 2020-21 to the tune of Rs. 134.99 Crore, has been considered by the Commission.
- 3.218 It is observed that AVVNL has not filed the FAR for FY 2021-22 for all circles, therefore the Commission continue to disallow 10% of depreciation for FY 2021-22 on account of non compliance of Commission directives for preparation of Fixed Assets Register. On furnishing the Fixed Assets Register to the satisfaction of Commission, Discoms may request to consider to allow the aforesaid disallowed depreciation.
- 3.219 Further, as discussed earlier, the Commission directs AVVNL to plan implementation of ERP System, which will not only helps Discom in better planning of power purchase, inventory and capital expenditure but also reduces the losses and improve the productivity of expenditure incurred and efficiency of human resources deployed for such purpose. Serious actions are required to be taken by Discoms for implementation of ERP. Since AVVNL has implemented material management module, the Commission has decided to withhold slightly lower amount compared to JdVVNL and JVVNL i.e. 0.90% of total approved ARR amounting to Rs. 149.80 Crore of AVVNL on this account and directs the Discom to effectively implement the ERP system for power purchase, inventory, loss reduction and capital expenditure planning and monitoring etc. After the satisfactory implementation of ERP the Discom may request to consider to allow the aforesaid disallowed amount.
- 3.220 The Commission has followed the methodology given earlier in the order for the calculation of depreciation being allowed.
- 3.221 Details of depreciation charges allowed for FY 2021-22 are given in table below:

Table 21: Depreciation Charges of AVVNL for FY 2021-22 (Rs. in Crore)

	· · · · · · · · · · · · · · · · · · ·	
Sr. No.	Particulars	Amount
	Depreciable assets at the beginning of the year (closing balance of	
1	Tue up FY 2020-21)	10791.60
2	Less: Deductions as per audited accounts	56.66
3	Capitalization during the year	3954.04
4	Less Capitalization towards terminal benefit	78.53

5	Less: Capital Outlay financed by Consumer Contribution and grant	796.46
6	Depreciable assets added during the year (3-4-5)	3079.04
7	Closing balance of GFA (1-2+6)	13813.99
8	Average depreciable assets during the year	12302.79
9	Average depreciation rate	4.71%
10	Depreciation Allowed after True UP	579.98
	Approved Depreciation after reduction of 10% due to non submission	
11	of fixed assets register as detailed in foregoing paras	521.98

3.222 The amount added back on account of preparation of fixed asset register has been considered as expenditure in the final table while allowing the ARR.

# Interest and Finance Charges and Interest on Working Capital

- 3.223 The interest & finance charges approved by Commission for FY 2021-22 was Rs. 1887 Crore including interest on working capital as per the ARR order dated 24.11.2021. For the purpose of true up, AVVNL has claimed Rs. 2486.70 Crore as interest and finance charges including interest on working capital.
- 3.224 Further, as discussed earlier, AVVNL has claimed Rs. 35.47 Crore under power purchase, Rs. 129.80 Crore under carrying cost / interest towards APRL and an interest liability of Rs. 2.54 Crore on the loans availed by the Discom to meet the APRL liability totaling to Rs. 167.81 Crore, the Commission has observed that against such expenses, Discom has also filed income of special fuel surcharge of Rs. 167.81 Crore. Therefore net impact of such expenses and revenue claimed by Discom is Nil. As such same amount is being considered in cost and income.
- 3.225 Interest and finance charges have been calculated as per the methodology given earlier in the order as shown in table below:

Table 22: Interest and Finance Charges of AVVNL for FY 2021-22 (Rs. in Crore)

Sr. No.	Particulars	Amount
	Opening balance of Long term Loan (LTL) (closing balance of true up	
1	2020-21)	3227.86
2	Add: Capitalization during the year	3954.04
3	Less: Capital Outlay financed by Equity	80.00
4	Less: Capital Outlay financed by Consumer Contribution and grant	796.46
5	Less Capitalization towards terminal benefit	78.53
6	Addition to LTL for Capital Outlay {2-(3+4+5)}	2999.04
7	Less: Repayments equal to depreciation	579.98
8	Closing balance of LTL (1+6-7)	5646.92
9	Average LTL	4437.39

10	Add: Revenue Gap recognized for previous year after loan taken over under UDAY	12998.70
11	Total Long Term Loan Balance to be considered for allowing interest for FY 2021-22 (9+10)	17436.09
12	Average Interest rate of LTL	17.436.07
13	Interest Charges on LTL and revenue gap	1864.05
14	carrying cost / interest to APRL Ltd.	129.80
15	Interest on loan for payment to APRL Ltd.	2.54
16	Finance Charges-As per actual	152.33
17	Total Interest and Finance Charges Allowed after True UP (13+14+15+16)	2148.72

3.226 The Commission has approved the interest on working capital as per Regulation 27 of RERC Tariff Regulations, 2019 and considering additional working capital requirement as prayed by Discom. Details of Interest on working capital are given in table below:

Table 23: Interest on Working Capital of AVVNL for FY 2021-22 (Rs. in Crore)

Sr. No.	Particular	Amount considering normative interest rate	Amount considerin g interest rate submitted by Discom
1	O&M expenses of one month	88.20	88.20
	Maintenance spares @ 15% of operation and		
2	maintenance expenses specified in regulation 82;	158.75	158.75
3	Receivables as per above para	2052.87	2052.87
4	Less: Security deposit from consumers	1186.34	1186.34
5	Total working capital requirement(1+2+3-4)	1113.48	1113.48
6	Rate of Interest	10.14%	8.97%
7	Interest on working capital allowed after true-up	112.96	99.85
8	Less: 50% Loss arising from variation in Interest rate as per regulation 27 of RERC, 2019	6.56	
9	Net Interest on working capital	106.40	

3.227 It may be seen that gain on account of variation in interest rate is Rs. 13.11 Crore. As per Regulation 27 of RERC Tariff Regulations, 2019, 50% of such gain is to be passed on as a rebate in tariff and the licensee is allowed to retain only 50% of such gain. Accordingly, 50% of the gain has been reduced from the amount of interest on working capital worked out on the basis of normative interest rate.

## Interest on Uday Loan for FY 2021-22

3.228 The Discom has claimed the interest on UDAY loan FY 2021-22 of Rs. 538 Crore as approved by the Commission in the ARR and Tariff Order for FY 2021-22. The Commission has considered the same as claimed by the Discom as same being in accordance with Commission's order dated 06.02.2020.

## **Prior Period Expenses**

3.229 AVVNL has claimed prior period expenses of Rs. (80.10) Crore. It has been observed that the major item of the prior period expenses is the "Short provisions for power purchase in previous year" of Rs. (102.30) Crore. The details of prior period expenses as per audited accounts are as follows:

(Rs. in Crore)

Particulars	For the year ended 31s March, 2022	
Prior period expenses/loss:		
Short Provisions for Power purchase in previous year		(102.30)
Operating Expenses	18.32	
Employee Cost	0.20	
Depreciation	3.24	
Administrative Expenses	0.45	22.20
Total		(80.10)

- 3.230 While carrying out the true up of any financial year, the Commission allows the operation expenses, employee cost, depreciation, administrative expenses as per Tariff Regulations. Hence, expenses of Rs. 22.20 Crore on account of these as shown in AVVNL audited accounts have not been considered as prior period expenses as the Commission has already approved the above expenses in the true up order till FY 2020-21 as per the norms specified in the Tariff Regulations.
- 3.231 Further, Discom has also claimed Rs. (102.30) Crore towards prior period power purchase, the same has been considered as claimed by Discom
- 3.232 Considering the above, for the purpose of current true up, the Commission has considered the prior period expenses of Rs. (102.30) Crore against the AVVNL claim of prior period expenses of Rs. (80.10) Crore.

## **Insurance Expenses**

3.233 As per regulation 25 of RERC Tariff Regulations, 2019 actual insurance expenses incurred by the generating company or licensee shall be allowed separately, subject to a ceiling of 0.2% of average Net Fixed Assets for the year. The Commission accordingly has considered the insurance charges of Rs. 1.46 Crore claimed by the Discom.

#### Other Debits

- 3.234 AVVNL has claimed other debits of Rs. 85.47 Crore. It has been observed that major item of other debits are the compensation in case of injury/death of Rs. 7.07 Crore, Loss on obsolescence of fixed assets of Rs. 27.59 Crore, loss on theft of assets of Rs. 6.76 Crore, Loss on CPF Trust of Rs. 12.94 Crore, Loss on PMCF Trust of Rs. 6.18 Crore and Bad & doubtful debts provision of Rs 24.93 Crore.
- 3.235 While carrying out the true up exercise, the Commission has not considered any provision towards bad and doubtful debts. The expenses are allowed only to the extent of debts actually written off by the Discom subject to limit stipulated in the Tariff Regulations. Therefore, the Commission has considered the actual bad debts written off of Rs. 4.55 Crore.
- 3.236 Since the Commission has allowed the insurance charges, therefore the claim on account of loss due to theft of Assets of Rs. 6.76 Crore is not considered by the Commission.
- 3.237 Further, compensation paid of Rs. 7.07 Crore and Loss on obsolescence of fixed assets Rs. 27.59 Crore are considered at actual.
- 3.238 Further, Loss on CPF Trust of Rs. 12.94 Crore, Loss on PMCF Trust of Rs. 6.18 Crore are considered at actual.
- 3.239 Accordingly, the Commission has considered the other debit of Rs. 58.32 Crore against the Discom's claim of Rs. 85.47 Crore.

#### Rebate Allowed to Consumers

3.240 AVVNL has shown the rebate allowed to consumers of Rs. 460.43 Crore which is inclusive of LPS/DPS waived of Rs. 38.02 Crore. As per Regulation 36 of RERC Tariff Regulations, 2019, the Commission has not considered the income

- towards DPS, therefore the expenditure on account LPS/DPS waived of Rs. 38.02 Crore has also not been considered by the Commission.
- 3.241 Hence commission has considered the rebate allowed to consumer only to Rs. 422.40 Crore after adjustment as above.

#### **Refund of ROE from RVUNL**

3.242 Commission in its order dated 24.11.2021 approved Rs. (317) Crore towards refund of RoE from RVUN as separate item of ARR. However, as per submission in reply to data gaps, no refund of ROE from RVUNL has been received for FY 2021-22 and Discom has not claimed Refund of RoE from RVUNL for FY 2021-22. Accordingly, same has not been considered for FY 2021-22.

#### Revenue

- 3.243 Revenue from sale of power, other Income, Wheeling Charges, Cross Subsidy Surcharge, Additional Surcharge sale of power through trading and Prior Period Income as petitioned by Discom has been accepted.
- 3.244 Fuel Surcharge/Special Fuel Surcharge: Out of total income from sale of power, the income from fuel surcharge on account of regular fuel surcharge and special fuel surcharge on account of M/s APRL as per audited accounts is Rs. 268.65 Crore and Rs. 167.80 Crore respectively, which is considered by the Commission in this Order.
- 3.245 Non Tariff Income: During FY 2021-22, Discoms have claimed total non tariff income of Rs. 622.05 Crore including deferred revenue income of Rs. 240.21 Crore and DPS received from consumers of Rs. 163.99 Crore, which have been dealt as under.
- 3.246 **Delayed Payment Surcharge (DPS):** The Discom has claimed Delayed Payment Surcharge (DPS) of Rs. 163.99 Crore as part of Non Tariff Income (NTI) and also claimed the same as separate item of expenditure under DPS head.
- 3.247 In accordance with Regulation 36 of RERC Tariff Regulations, 2019 the Commission has not considered Delayed Payment Surcharge (DPS) of Rs. 163.99 Crore as Non-Tariff income and accordingly has also not considered separate item of expenditure under DPS head.

- 3.248 **Deferred Revenue Income**: Discoms have stated that in their accounting policies consumer contribution for service connection & line, capital grants and subsidies received towards cost of capital assets have not been reduced from the cost of assets. The same has been treated as Deferred Revenue Income which is being amortized/written off in 25 years from the year of its receipt. The depreciation pertaining to such fixed assets is fully charged to revenue.
- 3.249 However, while computing the depreciation, the Commission has reduced the capitalization amount funded by the consumer contribution, capital grant and subsidy received during the year. Therefore, the Commission has not considered the depreciation benefit on such assets and consequently deferred revenue of Rs. 240.21 Crore is not considered.
- 3.250 Accordingly, Non-Tariff income of Rs. 217.84 Crore is considered in this Order.

## Revenue Gap/Surplus

3.251 Based on above discussions and data provided by AVVNL, prayer of Discom for True-up of the expenditure and revenue for FY 2021-22 based on the actual performance and for approval of the revenue gap of Rs. 1450.89 Crore for the year has not been accepted as petitioned. The Commission has approved the same to the extent shown in following table:

Table 24: Summary of True up of AVVNL for FY 2021-22 (Rs. in Crore)

Sr. No.	Particulars	As per order dated 24.11.2021	As per petition	Approved After truing up
1	Revenue			
2	Sale of power	14341.00	15091.67	15091.67
3	Fuel Surcharge	0.00	436.46	436.46
4	Non-tariff income and other income	129.00	622.05	217.84
5	Wheeling charges, Cross Subsidy Surcharge and additional surcharge	152.00	3.43	3.43
6	Sale of power through trading	0.00	331.46	331.46
7	Prior Period Income	0.00	16.92	16.92
8	Total Revenue, A	14622.00	16501.99	16097.79
9	Expenditure			
10	Power purchase Cost	10505.00	11988.34	11396.30
11	O & M Expenses			
12	Employee cost	800.36	593.61	812.87
13	A&G expenses	108.64	150.37	113.91
14	R&M expenses	139.00	408.77	131.59
15	Terminal Benefits	555.00	743.17	326.00
16	Insurance Expenses	24.00	1.46	1.46
17	Depreciation	567.00	880.64	521.98

18	Interest & finance charges	1740.00		2148.72
19	Interest on working capital	87.00	2453.12	106.40
20	Interest on Consumer Security Deposit	60.00	33.58	33.58
21	Interest on Uday Loan FY 21-22	538.00	538.00	538.00
22	Prior period expenses	0.00	(80.10)	(102.30)
23	Other debits	0.00	85.47	58.32
24	Rebate allowed to consumers	0.00	460.43	422.40
25	Refund of ROE from RVUNL*	(317.00)	0.00	0.00
	Refund of Depreciation amount deducted			
	in previous years on account of non-			134.99
26	submission of FAR	0.00	134.99	
27	Total Expenditure, B	14808.00	18392.85	16644.21
28	Surplus/deficit, C = (A-B)	(186.00)	(1890.86)	(546.43)
	Revenue subsidies received from State	450.00	400.07	/00.07
29	Government <b>D</b>	459.00	602.97	602.97
	Add: Delayed payment surcharge			0.00
30	considered as part of NTI <b>E</b>	0.00	163.99	0.00
31	Revenue gap for FY 2021-22, F =(C+D+E)	272.00	(1450.88)	56.54
	Deduction of account of non			
32	implementation of ERP (0.90% of ARR) G	0.00	0.00	149.80
33	Revised revenue Gap/surplus H =(F+G)	272.00	(1450.88)	206.34
34	Gap worked out as per last true up order, I	0.00	(12998.70)	(12998.70)
	Cumulative Revenue Gap to be carried	0.00	/1 / / / O F 7 \	(10700.25)
35	forward, H+I	0.00	(14449.57)	(12792.35)
36	Cumulative Revenue Gap till FY 2021-22		(27497.22)**	(12792.35)

<sup>\*</sup> No refund of ROE from RVUNL has been received for FY 2021-22. Thus, Discom has not claimed Refund of RoE from RVUNL for FY 2021-22.

- 3.252 While carrying out the true up the Commission has allowed losses upto the target prescribed by the Commission and disallowed excess transmission and distribution losses. O&M Cost, interest cost and other costs have also been allowed on normative basis.
- 3.253 Commission observe that during FY 2021-22, Discoms have claimed gap of Rs 1704.49 Crore, Rs. 1450.88 Crore and Rs. 3782.29 Crore for JVVNL, AVVNL and JdVVNL respectively against which Commission has approved the (gap)/surplus of Rs (571.79 Crore), Rs. 206.34 Crore and Rs. 609.35 Crore for FY 2021-22, Commission had approved the losses of Rs. 49494 Crore upto FY 2020-21 vide its order dated 14.07.2022 which has been reduced to Rs. 49250 Crore Upto FY 2021-22, the Commission allows the approved unfunded revenue gap upto FY 2021-22 for all Discoms to be carried forward on which carrying cost shall also be allowed. Recovery of this unfunded gap will be considered later appropriately in future ARR.

<sup>\*\*</sup>As per audited accounts

3.254	Discoms should stick to all efficiency parameters and carry out its functions ensuring requisite prudence and make all out efforts to amortize the unfunded gap.

## <u>Section-4: Annual Revenue Requirement and Investment Plan</u>

## 4. Annual Revenue Requirement for FY 2023-24:

- 4.1 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**

- 4.2 Discoms in the petition have worked out the energy sales for FY 2023-24 on the basis of past growth in consumers, connected load and energy sales to forecast the category-wise energy sales. 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 and 7 years based on the historical data. 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.
- 4.3 The Discoms have projected the energy sales for FY 2023-24 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)

4.4 The Discoms have submitted that energy sales for FY 2023-24 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.

- 4.5 For Domestic category, the sales grew at CAGR of 5% for JVVNL & JdVVNL from FY 2013-14 to FY 2020-21. However, in FY 2021-22, the growth increased further owing to people working from home due to COVID pandemic apart from the organic growth. Further sales grew at a CAGR of 6% for AVVNL from FY 2015-16 to FY 2021-22.
- 4.6 For Non-domestic category last five years except FY 2020-21 have shown an increasing trend in the energy sales. For FY 2020-21, the sales for Industrial and Non-Domestic categories were negatively impacted as compared to FY 2019-20 due to disruption in industrial and commercial activity owing to COVID pandemic. However, the sales of this category have shown reasonable growth in FY 22, which provides an optimistic trend for the future years as well.
- 4.7 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.
- 4.8 Discoms submitted that in the tariff order for FY 2019-20 dated 06.02.2020, two new categories were introduced, namely Traction Load and EV charging stations. JVVNL & AVVNL submitted that the Electric Vehicle Charging Stations category has started to witness addition of consumers and is expected to witness a positive growth in the upcoming years. The AVVNL and JdVVNL submitted details of consumers and sales in traction load. Accordingly, the sales have been projected for EV & traction category considering the marginal entry of consumers in this category.

## Energy Sales to Agriculture Metered (M) Consumers

- 4.9 For FY 2023-24, 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

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

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

Table 25: specific consumption for FY 2023-24

Voor	Specific Consumption				
Year	JVVNL AVVNL		JdVVNL		
FY 2023-24	1986	1593	1776		

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

Table 26: Agriculture (M) sales for FY 2023-24 -JVVNL

Particulars	Consumers (Nos.)	Connecte d Load per consumer (kW)	Total Connected Load (kW)	Specific consumpti on (kWh/kW/ year)	Consum ption (Sales) MU
Existing					
consumers	6,41,519	8.18	51,50,849	1,986	10,229
New					
Consumers	76,091	8.18	6,22,491	1,986	618
Add:					
converted					
from flat rate	4,500	8.18	36,814	1,986	37
Total	7,22,110		58,10,154		10,883

Table 27: Agriculture (M) sales for FY 2023-24- AVVNL

Particulars	Consume rs (Nos.)	Connec ted Load per consum er (kW)	Total Connected Load (kW)	Specific consump tion (kWh/kW /year)	Consum ption (Sales) MU
Existing consumers	6,48,292	6.96	44,32,651	1,593	7,061
New Consumers	70,000	6.96	4,86,891	1,593	388
Add: converted	0	0	0	0	0

from flat rate			
Total	7,18,292	49,19,542	7,449

Table 28: Agriculture (M) sales for FY 2023-24 JdVVNL

Particulars	Consum ers (Nos.)	Conne cted Load per consum er (kW)	cted Connected coad Load (kW) coer nsum		Consu mption (Sales) MU
Existing					
consumers	4,84,807	18.01	85,77,179	1,776	15,234
New Consumers	96,058	18.01	17,30,252	1,776	1,537
Add: converted					
from flat rate	4,000	18.01	72,050	1,776	64
Total	5,84,865		1,03,79,482		16,835

# Energy Sales for Agriculture Flat Rate (FR) Consumers

- 4.12 For FY 2023-24 JVVNL and JdVVNL have estimated the energy sales for agriculture flat rate category 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

- 4.13 AVVNL in reply to data gaps submitted that a small number of flat rate agriculture consumers remain, all of which will be converted to metered category by 31.03.2023. Thus, AVVNL has not projected any energy sales to flat rate consumers in FY 2023-24.
- 4.14 For forecasting the connected load per consumer for FY 2023-24 a nominal hike over the actual connected load per consumer of previous year 2021-22 which was 9.20 kW and 19.10 kW for JVVNL and JdVVNL has been considered respectively.
- 4.15 For projecting the sales for agriculture (flat) category for FY 2023-24 JVVNL &

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

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

Table 29: Agriculture (FR) Sales for FY 2023-24 – JVVNL

Particulars	Consumers (Nos.)	Connected Load per consumer (kW)	Total Connecte d Load (kW)	Specific consumpt ion (kWh/kW/ year)	Consumptio n (Sales) MU
Existing	774	0.15	71.000	10.45	000
consumers	7,764	9.15	71,032	1945	233
Less: converted					
to meter	4,500	9.39	42,242	1945	41
Total	3,264		28,790		192

Table 30: Agriculture (FR) Sales for FY 2023-24– JdVVNL

Particulars	Consumers (Nos.)	Connected Load per consumer (kW)	Total Connect ed Load (kW)	Specific consumpt ion (kWh/kW/ year)	Consumptio n (Sales) MU
Existing consumers	30,093	19.08	5,74,095	1945	1199
Less: converted to meter	4,000	19.49	77,947	1945	76
Total	26,093		4,96,148		1123

# Total Energy Sales projected by Discoms:

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

Table 31: Total Energy Sales for FY 2023-24-Discoms' Projection								
Particular	JVVNL	AVVNL	JdVVNL	Total				
Domestic	6,785	5,023	4,659	16,467				
Non-Domestic	2,870	1,687	1,657	6,214				
Public Street Light	233	98	102	434				
Agriculture (Metered)	10,883	7,449	16,835	35,166				
Agriculture (Flat)	192	0	1,123	1,315				
Small Industry	412	278	233	923				
Medium Industry	898	851	770	2,520				
Large Industry	8,733	8,976	3,199	20,908				
Public Water Works (S)	415	367	359	1,141				
Public Water Works (M)	53	35	97	185				

Particular	JVVNL	AVVNL	JdVVNL	Total
Public Water Works (L)	441	420	739	1,600
Mixed Load / Bulk Supply	215	117	392	724
Electric Traction	0	20	4	24
EV	5	0.02	0	5
Total	32,135	25,322	30,168	87,625

## Commission's Analysis

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

- 4.18 For sales projection of FY 2023-24, considering approach followed in order dated 01.09.2022 and submission of the Discoms in the present petition, the Commission has computed the 3, 5 & 7 year CAGR (from FY 2015-16 to FY 2022-23) as under:
- 4.19 Sales to Domestic, Public Street Light, Small Industry, Medium Industry, PWW(S), PWW(M) PWW(L) and Mixed Load have been escalated by 5 year CAGR for all Discoms. However, due to negative or very nominal growth, sales to Medium Industry, PWW (M) of AVVNL and Public Street Light of JdVVNL are escalated at 5%.
- 4.20 Discoms submitted that the sales for Industrial and Non-Domestic categories were negatively impacted as compared to FY 2019-20 due to disruption in industrial and commercial activity owing to COVID pandemic. However, the sales of this category have returned has shown reasonable growth in FY 22, which provides an optimistic trend for the future years as well. Further, it is observed that during hearing, Discoms have submitted that due to shortage of coal various large industrial captive consumers are opting for Discom power in place of open access, which is also justify from the fact that the open access revenue indicated in Annual Accounts for FY 2021-22 is very low. Therefore, in Non domestic and Large industry of all Discoms, Commission has considered sale as submitted by Discoms in their petition.
- 4.21 For Electric traction and EV, the Commission has considered the actual sale from April' 2022 to December' 2022 for FY 2022-23, which is further extrapolated for 12 months, the same has been considered for FY 2023-24.
- 4.22 While computing the aforesaid CAGR the Commission has considered the actual sale from April' 2022 to December' 2022 for FY 2022-23, which is further extrapolated for 12 months for projecting the sale for FY 2023-24. The category wise growth rate and energy sales (excluding franchisee) for FY 2023-24 (except agriculture) are as given in the tables below:

Table 32: Growth Rate and Energy Sale for FY 2023-24 – JVVNL

Particulars	Energy Sales (MU) Provisional		JVVNL	Growth Rate Adopted by	Energy Sale (MU) Approved	
	FY 22-23	3-Year CAGR	5-Year CAGR	7-Year CAGR	Commission	FY 24
Domestic	6625	8.97%	7.64%	7.80%	7.64%	7132
Non-Domestic	2678	5.20%	5.33%	5.88%	as submitted	2616
Public Street Light	164	1.67%	1.78%	1.21%	1.78%	167
Small Industry	405	12.89%	7.81%	4.89%	7.81%	436
Medium Industry	848	2.88%	3.13%	2.84%	3.13%	875
Large Industry	7374	9.34%	8.02%	12.72%	as submitted	8213
Public Water Works (S)	410	0.25%	6.37%	8.78%	6.37%	436
Public Water Works (M)	46	15.88%	4.95%	1.92%	4.95%	48
Public Water Works (L)	354	9.86%	4.62%	6.94%	4.62%	370
Mixed Load / Bulk Supply	186	4.47%	3.47%	4.08%	3.47%	193
Electric Traction	0	0.00%	0.00%	0.00%	as per provisional FY 22-23	0
EV	2	0.00%	0.00%	0.00%	as per provisional FY 22-23	2
Total	19093	0.0070	0.0070	0.0070	22 25	20488

Table 33: Growth Rate and Energy Sale for FY 2023-24 - AVVNL

Particulars	Energy Sales (MU)		JVVNL	Growth Rate Adopted by	Energy Sale (MU) Approved	
	Provisional FY 22-23	3-Year CAGR	5-Year CAGR	7-Year CAGR	Commission	FY 24
Domestic	5115	10.50%	9.28%	8.16%	9.28%	5590
Non-Domestic	1505	7.16%	6.84%	7.18%	as submitted	1560
Public Street Light	95	5.85%	6.45%	3.03%	6.45%	101
Small Industry	289	2.72%	1.06%	0.59%	1.06%	292
Medium Industry	828	-0.60%	-0.11%	0.67%	5.00%	870
Large Industry	8024	26.28%	19.40%	19.61%	as submitted	8877
Public Water Works (S)	397	1.97%	3.73%	6.24%	3.73%	412
Public Water Works (M)	34	0.94%	-6.33%	-2.22%	5.00%	36
Public Water Works (L)	387	10.69%	10.65%	11.91%	10.65%	428
Mixed Load / Bulk Supply	100	1.35%	2.03%	0.83%	2.03%	102
Electric Traction	25	0.00%	0.00%	0.00%	as per provisional FY 22-23	25
EV	0.04	0.00%	0.00%	0.00%	as per provisional FY 22-23	0.04
Total	16800	<u> </u>				18293

Table 34: Growth Rate and Energy Sales FY 2023-24 - JdVVNL

Particulars	Energy Sales (MU)	ind Energy 5	JVVNL	Growth Rate Adopted by	Energy Sale (MU) Approved	
	Provisional FY 22-23	3-Year CAGR	5-Year CAGR	7-Year CAGR	Commission	FY 24
Domestic	4624	10.19%	8.56%	7.69%	8.56%	5020
Non-Domestic	1468	7.15%	6.89%	7.11%	as submitted	1530
Public Street Light	76	-5.41%	-2.07%	-5.91%	5.00%	79
Small Industry	217	2.35%	0.89%	0.00%	0.89%	219
Medium Industry	685	2.71%	2.66%	2.69%	2.66%	703
Large Industry	2491	18.13%	12.98%	11.74%	as submitted	3118
Public Water Works (S)	349	3.36%	4.75%	4.43%	4.75%	365
Public Water Works (M)	96	3.02%	1.74%	-0.24%	1.74%	98
Public Water Works (L)	695	6.14%	8.43%	7.35%	8.43%	754
Mixed Load / Bulk Supply	357	2.20%	1.85%	2.43%	1.85%	364
Electric Traction	28	0.00%	0.00%	0.00%	as per provisional FY 22-23	28
EV	0	0.00%	0.00%	0.00%	as per provisional FY 22-23	0
Total	11086					12278

#### Agriculture Metered (M) consumers

- 4.23 For FY 2023-24, the Commission has accepted Discoms' submissions in respect of number of new consumers and consumers to be converted from flat rate to metered category.
- 4.24 For projecting the sale to metered agriculture consumers connected load and specific consumption as filed for metered category have been considered for existing consumers and for 6 months in case of new consumers and those converted from flat rate for working out their sales for FY 2023-24.
- 4.25 Further, Discoms have projected the impact of KUSUM scheme on agriculture sales. The solar generation of KUSUM scheme to the extent of self consumption by farmer has been reduced from the Agriculture (M) sales. The Commission has considered only 50% of projection made by Discoms in FY 2023-24. The Excess generation have been shown as power purchase under renewable energy.
- 4.26 Accordingly, for FY 2023-24, based on information of connected load, specific consumption and consumers as filed by Discoms, the Commission has worked out

the sale to agriculture metered category for FY 2023-24 as follows:

Table 35: Agriculture (M) sales for FY 2023-24-JVVNL

	I LOGGINER I CONNECTEGI		Specific consumption (kWh/kW/yea r)	Consum ption (Sales) MU	
Existing Consumers	6,41,519	8.18	52,48,187	1,986	10,422
Add: New	0,41,517	0.10	32,40,107		10,422
Consumers	76,091	8.18	6,22,491	1,986	618
Add: converted from flat rate	4,500	8.18	36,814	1,986	37
Less: Impact	4,300	0.10	30,014		37
of Kusum					
Scheme					0.13
Total	7,22,110		59,07,492		11,076

Table 36: Agriculture (M) sales for FY 2023-24-AVVNL

	Consumers (Nos.)	Connected Load per consumer (kW)	Total Connected Load (kW)	Specific consumption (kWh/kW/yea r)	Consump tion (Sales) MU
Existing				1,593	
Consumers	6,48,292	6.96	45,09,249	1,575	7,183
Add: New					
Consumers	70,000	6.96	4,86,891	1,593	388
Add:					
converted					
from flat rate	0	0.00	0	1,593	0
Less: Impact					
of Kusum					
Scheme					2.07
Total	7,18,292		49,96,140		7,569

Table 37: Agriculture (M) sales for FY 2023-24-JdVVNL

	Consumers (Nos.)	Connected Load per consumer (kW)	Total Specific consumpti Connected on (kWh/kW/ year)		Consumption (Sales) MU
Existing Consumers	4,84,807	18.01	87,32,624	1,776	15,510
Add: New Consumers	96,058	18.01	17,30,252	1,776	1,537

	Consumers (Nos.)	Connected Load per consumer (kW)	Total Connected Load (kW)	Specific consumpti on (kWh/kW/ year)	Consumption (Sales) MU
Add:					
converted					
from flat rate	4,000	18.01	72,050	1,776	64
Less: Impact					
of Kusum					
Scheme					0.10
Total	5,84,865		1,05,34,926		17,111

4.27 During FY 2023-24, the Discoms have projected to release 242149 number of new Agriculture connections which is going to impact their sales as well as power requirement. The Commission has accepted the specific consumption filed by Discoms. However, the Commission would like to put a word of caution to Discoms to keep all the meters healthy and working else they may face disallowances during the true up.

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

- 4.28 It is observed that AVVNL has projected conversion of all flat rate consumers to metered category for FY 2023-24, therefore no sales has been projected under flat rate category for FY 2023-24.
- 4.29 The Commission has observed that the JVVNL & JdVVNL have considered the connected load per consumer of 9.15 KW and 19.08 KW respectively for FY 2023-24.
- 4.30 Further, the Commission has found that Discoms have filed the specific consumption of 1945 kWh/kW/year for flat rate consumers.
- 4.31 In view of decision taken in last ARR order dated 01.09.2022. The Commission has considered the data of connected load of existing consumers number of consumers of Flat category as filed by JVVNL and JdVVNL and approved specific consumption of metered category subject to maximum of 1945 kWh/kw/year for computation of sales for flat rate category of FY 2023-24, though the same shall be subject to true up. It is observed that while computing the sale for flat rate category, Discoms have considered the sale to converted consumer for 6 months. The same has been considered by the Commission.

- 4.32 Commission observed that AVVNL has projected complete conversion of flat rate consumers, whereas JVVNL and JDVVNL in Compliance of Commission directives submitted that Inspite of Covid-19 pandemic and the associated frequent restrictions and lockdowns, the Discom managed to reduce the number of flat rate consumers in FY 2021-22. The conversion of remaining flat rate agriculture consumers to metered category is in process. The desired speed of conversion could not be reached due to general resistance and law and order issues. The Discom is making utmost efforts in complying with the Commission's deadline.
- 4.33 It is observed that for many years Commission has been directing Discoms to convert the agriculture flat rate consumers to metered category. However, Discoms could not convert them into metered one and requested for more time for conversion, due to such non-compliance, Commission vide its tariff order dated 01.09.2022 has deducted Rs 10 Crore on this account from the ARR of JVVNL and JdVVNL. Despite of direction to convert all flat rate consumers by 31.03.2023, the JVVNL and JdVVNL have projected flat rate consumers for FY 2023-24 also. The Commission views it seriously again and while showing its strong displeasure towards it, decides to reduce ARR by Rs. 20 Crore each for JVVNL and JDVVNL on this account and Discoms are directed that in next year tariff petition, they should come up with a proposal of abolishing the flat category with a tariff structure that incentivise and motivate the agriculture consumers to keep their meters healthy. In Commission view latest announcement of GoR of free power upto 2000 unit/month for AG consumers do not leave any scope or motivation for consumers to tamper with meters.
- 4.34 Accordingly, the connected load, specific consumption and estimated sales for FY 2023-24 have been approved by the Commission as under:

Table 38: Agriculture (FR) Sales for FY 2023-24 - JVVNL

Particulars	Consumers (Nos.)	Connected Load per consumer (kW)	Total Connecte d Load (kW)	Specific consumptio n (kWh/kW/ye ar)	Consumption (Sales) MU
Existing consumers	7764	9.15	71,032	1945	138
Less: converted to meter	4500	9.15	41,170	1945	40
Total	3264		29862		98

Table 39: Agriculture (FR) Sales for FY 2023-24 – JdVVNL

Particulars	Consumers (Nos.)	Connected Load per consumer (kW)	Total Connecte d Load (kW)	Specific consumpti on (kWh/kW/y ear)	Consumption (Sales) MU
Existing consumers	30093	19.08	574095	1776	1020
Less: converted					
to meter	4000	19.08	76309	1776	68
Total	26093		497786		952

## Energy Sales approved by the Commission for all categories

4.35 With regard to sales projection for Distribution Franchisee (DF) of FY 2023-24, Commission has considered the same approach as discussed above for sale projection of consumer, accordingly, the sale projection for DF consumers for FY 2023-24 is as under:

Table 40: Total Energy Sales of DF approved by the Commission for FY 2023-24 (MU)

Particular	JVVNL	AVVNL	JdVVNL	Total	
Domestic	912	341	453	1707	
Non-Domestic	254	127	126	507	
Public Street Light	27	6	14	47	
Agriculture (Metered)	8	7	39	54	
Agriculture (Flat)	0	0	0	0	
Small Industry	17	8	17	43	
Medium Industry	48	15	53	116	
Large Industry	521	99	81	701	
Public Water Works (S)	2	0	2	4	
Public Water Works (M)	1	1	8	10	
Public Water Works (L)	64	0	15	79	
Mixed Load / Bulk Supply	43	16	60	118	
Total	1897	621	868	3386	

4.36 Based on the approach as discussed in the preceding paragraphs and agriculture metered and flat rate sales, as worked out on the basis of connected load and accepted specific consumption, the energy sales for Discoms including sale to consumers of DF area are being approved as under:

Table 41: Energy Sales approved by the Commission for FY 2023-24 (MU)

Particular	JVVNL	AVVNL	JdVVNL	Total
Domestic	8,044	5,931	5,473	19,448
Non-Domestic	2,870	1,687	1,657	6,214
Public Street Light	194	108	94	396
Agriculture (Metered)	11,084	7,576	17,149	35,810
Agriculture (Flat)	98	-	952	1,050
Small Industry	453	300	236	989
Medium Industry	922	885	756	2,564
Large Industry	8,733	8,976	3,199	20,908
Public Water Works (S)	438	412	367	1,217
Public Water Works (M)	49	37	106	192
Public Water Works (L)	434	428	769	1,631
Mixed Load / Bulk Supply	236	118	423	777
Electric Traction	_	25	28	53
EV	2	0.04	-	2
Total	33559	26483	31209	91251

Note: The above sale is for projection purpose only, Commission will examine the actual figures and consumer mix at the time of True up.

#### Transmission and Distribution losses

#### **Distribution Losses**

#### **Petitioners' Submission**

- 4.37 The Discoms submitted that the collection efficiency of the Discoms was 100% as the State Government released the entire subsidy due to the Discoms during FY 2021-22 and the Discoms were able to collect 100% of the revenue billed from other consumers. Accordingly, the AT&C loss for FY 2021-22 stood at 16.81%, 12.73% and 21.88% for JVVNL, AVVNL & JdVVNL respectively.
- 4.38 The Discoms further submitted that they are focused on reducing its distribution losses. It is pertinent to mention here that the continuous and rigorous efforts of the Discoms in reducing the loss levels has borne fruits as the losses over time have been on decreasing trend except for in FY 21 wherein the losses increased due to the impact of Covid-19 owing to increase in LT sales and decrease in HT sales due to reduced sales in Industrial and NDS category resulting from lockdowns and also reduced vigilance activities. However, inspite of the same, the Discoms have reduced its losses significantly during FY 22 and have brought

them to levels lower than pre-Covid period.

4.39 A few key measures taken by the Discoms for reduction of Distribution losses are:

### Initiative proposed by JVVNL & JdVVNL

## a) Initiatives for Technical Loss Reduction:

a) Network enhancement

Technical losses are mostly due to losses at LT level. To reduce the technical losses, Discoms plans to:

- Improve HT:LT ratio from current 1:0.46 (Deteriorated post DDUGJY & Saubhagya)
- For consumer service line, non-armored cable replacement with armored cable
- Replacement of old/frayed conductors
- DTR Load balancing: Post DT metering, Discoms shall correct balance load of Distribution Transformers by augmenting / adding their capacity in required areas
- Provision of Aerial bunched Cables (ABC) & High Voltage Distribution System (HVDS) in high loss areas.
- b) Feeder Segregation
- Agriculture consumers consume about 40% of total energy, which is amongst highest in the country
- Segregation of agriculture feeders from mixed feeders will ensure:
  - Uninterrupted block hour power supply to Agriculture Consumers
  - Uninterrupted 24 hours supply to rural domestic consumers
  - Avoid misuse/theft of single-phase supply by Agriculture consumers
  - Better system planning and load management leading to reduction in T&D Loss
- Solarizing grid connected Pumpsets under Kusum-C scheme thereby reducing the agriculture consumption and corresponding losses. Also, use of distributed generation under Kusum-A and Kusum-C (feeder level solarization), wherein the generating source is close to the load center, reduces the line losses. Discom plans to install solar plants by utilizing the land available in existing 33 kV substations.

## b) Initiatives for Commercial loss reduction

- a) Metering and energy accounting
- 100% consumer metering done (except for few flat rate agriculture consumers)
- 100% feeder metering and consumer indexing done
- About 70% DT metering has been done. Discom plans to complete 100% DT metering under the Revamped Distribution Sector scheme (RDSS).
- Undertaking feeder wise AT&C loss analysis
- Capturing actual meter reading
- Verification of correct multiplying factor

## b) Vigilance

- Massive drives by vigilance dept. (Vigilance officers, O&M officers, M&P officers) to increase checking, assessment and arrests
- Checking and removal of illegal DTs of the consumers; Checking single phase DT/ supply for agriculture purpose
- Connected load checking of Agriculture connections
- Checking of PDC consumers
- Checking of connections having less than 50 units consumption/month
- Detection of cases of parallel service lines
- Feeder wise report of defective meter, low consumption, parallel service line, service line – AB cable cut, PDC connections service line, meter and DT not removed
- To rule out manipulation and discretionary power of checking officers and for increased transparency, vigilance-mobile app has been developed

#### c) Smart metering

- Installation of smart meters will help in improving billing efficiency and assist in undertaking data analytics
- Discoms are installing smart meters in urban sub-division and all Govt. office falling under these sub-divisions will be covered as part of IPDS and NSGM schemes of Gol.
- For the remaining consumers, the Discoms plans to install smart meters under the RDSS scheme as per phases stipulated in the scheme.

#### d) Use of IT

The Discom plans to continuously leverage IT in order to address the gaps and improve upon the operational and financial efficiency of the organization while improving the customer satisfaction levels. The vision of the Discom is inline with the Central and State Government's vision to provide affordable and

reliable 24x7 Power for all while focusing on the reduction in AT&C losses, improvement in electrical safety and reliability of the network infrastructure and to enhance customer services.

## **Initiative proposed by AVVNL**

a) Mini-Lab to Analyze Actual Reading of Defective Meters

This initiative is intended to ensure that even in cases where the meter is found to be defective, the Discom can record a reading for the consumer.

b) Service Line Bijli Abhiyan

In case of consumers in rural areas, service lines are oftentimes not visible till the consumer's meter or the service line is located within the consumer's premises. This results in a possibility of the meter being tampered with along with theft of electricity. To address this issue, the Managing Director, AVVNL issued directions for Service Line Bijli Abhiyan, an initiative to make service line visible to the Officers of the Discom and reduce probability of meter tampering and theft of electricity.

c) Installation of Meters on Poles

To ensure that meters under various categories, i.e., Service Connection Order (SCO), Meter Change Order (MCO) and Reconnection Order (RCO) are to be installed on the poles to avoid potential theft.

- d) Adoption of high loss 33/11kV GSS to prepare ideal GSS
- e) Checking & Analyzing MRI data of Remote Area Industrial Connections
- f) Special Vigilance Drives during Q-1 and Q-2 of FY 2022-23

## Loss trajectory submitted under RDSS scheme

- 4.40 Discoms submitted that Revamped Distribution Sector Scheme (RDSS) was notified by MoP on 20.07.2021 followed by the detailed guidelines dated 29.07.2021 and amendments from time to time.
- 4.41 The objective of the scheme is to bring down pan-India AT&C losses to 12 15% level, reduce ACS-ARR gap to Zero by 2024-25 and improve reliability and quality of power to consumers.
- 4.42 The Scheme provides for annual appraisal of the DISCOM performance against

- predefined and agreed upon performance trajectories on certain parameters which includes AT&C losses, ACS-ARR gaps, infrastructure upgrade performance, consumer services, hours of supply, corporate governance, etc.
- 4.43 Discoms have to score a minimum of 60% marks in the Result Evaluation Framework along with meeting the pre-qualification criteria as required under the RDSS scheme, to be eligible for receiving funding against the Scheme in that year.
- 4.44 Under the scheme, the Discom have prepared a detailed Action plan for achieving the scheme's objective of bringing down the AT&C losses to 15% by FY 2024-25. The DPR of various activities to be carried out under the scheme has also been prepared in order to achieve the targeted loss reduction.
- 4.45 JVVNL and JdVVNL have requested to approve the Distribution losses trajectory as adopted in RDSS scheme. However, AVVNL has proposed the Distribution Losses lower than as approved in RDSS.
- 4.46 Accordingly, during FY 2023-24, Discoms have projected the following Distribution Losses:

Table 42: Distribution Losses: Projections of Discoms (%)

Year	JVVNL	AVVNL	JdVVNL
FY 2023-24	16.00%	12.73%	17.50%

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

- 4.47 For FY 2023-24, JVVNL, AVVNL and JdVVNL have projected distribution losses at 16.00%, 12.73% and 17.50% respectively. The distribution losses of JVVNL and JdVVNL are on higher side as compared to loss trajectory specified by the Commission for earlier years.
- 4.48 The Commission has observed during the last few years, inspite of clear directives for reduction of Distribution Losses, Jaipur & Jodhpur Discoms were unable to achieve the targets as approved by the Commission. This is also evident from the table given below for the actual Distribution Losses for period FY 2015-16 to FY 2020-21 and FY 2021-22.

Table 43: Distribution Losses of Discoms (%) (As reported by Discoms)

	JVVNL		AVVNL		JdVVNL	
YEAR	Approved	Actual	Approved	Actual	Approved	Actual
2015 – 16	15.19	31.90	16.36	26.75	14.47	23.32

	JVVNL		AVVNL		JdVVNL	
YEAR	Approved	Actual	Approved	Actual	Approved	Actual
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
2021 – 22	15.00	16.81	15.00	12.73	15.00	21.88

- 4.49 From the above table it is observed that none of the Discom has achieved the approved losses in any of the above past 7 years (Except Ajmer Discom for FY 2019-20 & FY 2021-22). It is observed that Discoms are making lot of investment for reducing the AT&C losses but the desired results are not visible.
- 4.50 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.
- 4.51 During the hearing a suggestion was received from some stakeholders to reduce the target for all Discoms to 10% to 12%. Further, MoP has recommended that target should be aligned with target given under RDSS as many SERC's are setting stringent targets. In view of this, the Commission do not accept the suggestion of the stakeholders to set a lower target, however, the target of 15% has been prescribed years back and since then all investments proposed by Discoms for reduction of losses have also been approved by the Commission.
- 4.52 The Commission in earlier years has already set a benchmark of 15% distribution loss and 100% collection efficiency for Discoms, Stakeholders have also requested to not to approve losses higher than that as impact of inefficiency of Discoms will pass on them. As such the Commission do not find any reasons to revise the target set by it. As AVVNL has proposed lower losses, the Commission appreciate and accepts that. Accordingly, the Commission approves the target for distribution losses at 15% for JVVNL & JdVVNL and 12.73% for AVVNL and collection efficiency at 100%.
- 4.53 The summary of proposed distribution losses by Discoms and distribution losses approved by the Commission have been provided below:

## Table 44: Proposed and Approved Distribution Losses (%)

YEAR	JVVNL		AVVNL		JdVVNL	
	Proposed	Approved	Proposed	Approved	Proposed	<b>Approved</b>
FY 2023-24	16.00%	15.00%	12.73%	12.73%	17.50%	15.00%

## **Collection Efficiency**

4.54 The Discoms have projected 100% collection for FY 2023-24. 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 shall be 100%.

#### **Transmission Losses**

- 4.55 The Discoms have filed the Intra-state and Inter-state transmission loss of 3.80% and 3.51% For FY 2023-24 respectively.
- 4.56 The Commission has considered the Intra-state transmission loss of 4.50% as per ARR and Tariff Petition for FY 2023-24 of RVPN.
- 4.57 As regards Inter State Losses, CERC has notified CERC (Sharing of Inter State Transmission Charges and Losses) Regulation, 2020. As per clause 10 of these regulations, transmission losses for ISTS shall be calculated on all India average basis for each week, from Monday to Sunday. The Commission has considered the above and accordingly, has considered the 52 weeks average losses from 07.03.2022 to 05.03.2023 for FY 2023-24 on all central power stations.
- 4.58 In view of above discussions, the levels of transmission losses as proposed by the Discoms and considered by the Commission for FY 2023-24 have been shown in the following table:

Table 45: Levels of Transmission Loss (%)

Particulars	Proposed for FY 2023-24	Approved for FY 2023-24
Intra-State Transmission Losses	3.80%	4.50%
Inter-State Transmission Losses	3.51%	3.54%

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

4.59 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 2023-24 are given in the following table:

Table 46: Energy Requirement for FY 2023-24 (MU)

	3/			
Particulars	JVVNL	AVVNL	JdVVNL	Total

	Proposed	Approved	Proposed	Approved	Proposed	Approved	Propose d	Approved
Estimated Sales	32,135	33,559	25,322	26483	30168	31209	87625	91251
Distribution Loss (%)	16.00%	15.00%	12.73%	12.73%	17.50%	15.00%	15.61%	14.35%
Add: Distribution Loss (MU's)	6,121	5,922	3,694	3,863	6,399	5,507	16214	15293
Energy Required at Discom Periphery	38,256	39,481	29,016	30,346	36,568	36,716	103839	106543
Intra-State Transmission Loss (%)	3.80%	4.50%	3.80%	4.50%	3.80%	4.50%	3.80%	4.50%
Intra-State Transmission Loss (MU's)	1,511	1,860	1,146	1,430	1,444	1,730	4,102	5020
Energy Required at State Periphery	39,767	41,341	30,162	31,776	38,012	38,446	107941	111564
Inter-State Transmission Loss (%)	3.51%	3.54%	3.51%	3.54%	3.51%	3.54%	3.51%	3.54%
Inter-State Transmission Loss (MU's)	492	442	354	317	439	411	1286	1169
Gross Energy Requirement	40,259	41,783	30,518	32,093	38,451	38,857	1,09,227	1,12,733

#### **Power Purchase Cost**

#### **Petitioners' Submission**

- 4.60 The Discoms have submitted that the energy availability for FY 2023-24 is projected on the basis of estimated generation from existing stations and projected generation from new stations. The Discoms submitted that the power purchase quantum applicable for FY 2023-24 for the existing stations has been estimated based on the actual energy received during FY 2022-23 till the month of July 22, subsequently projecting for the remaining part of the year. After analysing the existing power scenario the power purchase has been accordingly projected by the Discoms considering the energy requirement and has also backed down certain plants based on the merit order principles as well as previous trends.
- 4.61 The Discoms also brings to the notice of Commission that, the total power purchase for FY 2023-24 also includes power from short term sources/ energy exchanges which has been considered based on the actuals till July'22 for FY 23 and estimated deficit during FY 24. This is because most of the states across the country were facing an acute power crisis situation due to a gap between the

- demand of power from consumers and the supply available from generators with whom the respective state Discoms have long term power purchase agreements.
- 4.62 The Discoms also mentioned that the Ministry of Power, GoI had also acknowledged the crisis and published a press note regarding the same on 09.10.2021. As per MoP, the major reasons for the crisis are:
  - a) Increase in demand of electricity due to revival of economy post Covid
  - b) Heavy rains in coal mine areas during September 2021 thereby adversely affecting the coal production as well as despatch of coal from mines
  - c) Increase in prices of imported coal to unprecedent high level leading to substantial reduction in power generation from imported coal-based power plants leading to more dependence on domestic coal
  - d) Non-building of adequate coal stocks before the onset of Monsoon.
- 4.63 The Energy Assessment Committee (EAC) of the Discoms has also estimated shortfall in power availability during FY 2022-23 looking at the ongoing coal crisis besides and estimated demand and availability of power in various time blocks during the year.
- 4.64 Thus, looking at the above-mentioned facts, the Discoms requested to approve the submitted power purchase from short term sources FY 2023-24.
- 4.65 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 FY 2022-23 has been considered same as that projected for FY 2021-22. In case the energy requirement is more, the Discoms have 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 2021-22, the Petitioner 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%.
- 4.66 Also, while projecting the power purchase quantum for FY 2022-23 & FY 2023-24, the Discoms have not considered power from five NTPC stations namely Anta, Auriya, Dadri, FGUTTPS-I, FSTPS The same has not been considered as per the Commission's Order dated 28.10.2021 in which the Commission has allowed the Discoms to exit the PPAs due to the expiry of term of these PPAs. Energy procurement from Dholpur power plant has not been considered for FY 23 and FY 24 in the absence of any approved tariff for the plant.
- 4.67 Discoms Further submitted that there are various Central Sector plants expected

to come up, 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, the Discoms have not considered any projections from such Central Sector plants.

## Impact of KUSUM scheme on power purchase projections

- 4.68 Discoms submitted that impact of solar PV plant capacities being added or to be added under Component A and Component C (feeder level solarization) of KUSUM scheme have been considered while projecting power availability of the Discoms.
- 4.69 Discoms submitted that there are a lot of challenges faced in fulfilling the Renewable Purchase Obligation due to infirm nature of such power, lack of sufficient hydel sources which can be operated in integration with renewable sources to absorb the variations in generation from such renewable sources, inverse relation between generation from renewable sources and demand in the state of Rajasthan, financial burden on the Discoms, etc. It is very much important to note that the state already has sufficient tied up capacity. Many such stations are likely to be commissioned in near future. This will lead to increasing stranded capacity. The situation will only be worsened if more capacity is to be tied up in order to meet the increasing RPO obligations.
- 4.70 Summary of the power purchase quantum and cost as submitted by Discoms are as under:

Table 47: Power Purchase (MU) and Cost (Rs. Cr.) for FY 2023-24 submitted by Discoms

	JVV	/NL	A۷۱	/NL	JdV	VNL	Rajasth	nan
Particulars	Total Energ Y (MU)	Total Cost of Energy Receiv ed (Rs. Crore)	Total Energ Y (MU)	Total Cost of Energy Receiv ed (Rs. Crore)	Total Energ Y (MU)	Total Cost of Energy Receiv ed (Rs. Crore)	Total Energy (MU)	Total Cost of Energ y Recei ved (Rs. Crore)
Power from sources other than RVUNL (Net	225.42	10/07	10055	710/	051.40	001.4	70.450	07007
of surplus)	28562	10627	19955	7196	25142	9214	73659	27037
Power from								
RVUNL sources	15743	6786	10677	4602	13659	5888	40079	17276

	JVV	/NL	A۷۱	/NL	JdV	VNL	Rajasth	nan
Particulars	Total Energ Y (MU)	Total Cost of Energy Receiv ed (Rs. Crore)	Total Energ Y (MU)	Total Cost of Energy Receiv ed (Rs. Crore)	Total Energ Y (MU)	Total Cost of Energy Receiv ed (Rs. Crore)	Total Energy (MU)	Total Cost of Energ y Recei ved (Rs. Crore)
Transmission								_
Charges		2058		1395		1785		5238
Total Power								
Purchase	44304	19471	30632	13193	38801	16887	113737	49551

## Commission's Analysis

- 4.71 While estimating energy availability and power purchase cost for FY 2023-24, the Commission has considered the generation in MUs and cost in Rs. Crore from State and Central generating units based on the eight months actual data for FY 2022-23 as per additional information filed for FY 2022-23 by the Discoms, which is further extrapolated for 12 months. For projection of energy availability for FY 2023-24, 2% escalation over FY 2022-23 has been considered.
- 4.72 For 2023-24, for plants other than NPCIL, RVUN and JSW (Energy) Barmer (Formely Known as Rajwest Ltd.) the Commission has considered eight months (till Nov. 2022) energy availability and fixed charges for FY 2022-23 which is further extrapolated for twelve months and 2% escalation over FY 2022-23 for projection of FY 2023-24. Further, the rate of energy charges has been considered as per actuals of FY 2022-23. For NPCIL, RVUN and JSW (Energy) Barmer the Commission has considered cost on the basis of latest available relevant orders.
- 4.73 It is observed that in response to data gap replies, Discoms have submitted that new plants such as RAPP 7, Tehri PSP, Parvati HEP II, Subansiri and Khurja shall be commissioning during FY 2023-24. However, during hearing Discoms further submitted that there are some slippages in commissioning date of aforesaid plants, therefore, Discoms are not likely to purchase power from aforesaid plants during FY 2023-24. In View of above submission of Discoms Commission has not considered capacity addition of aforesaid plants in power purchase computation of FY 2023-24. Actual impact on power purchase cost, if any from these sources will be considered at the time of true up.
- 4.74 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 as per GoR, Energy Department, notification dated 01.03.2023, in the ratio of 37.76%, 27.12% and 35.12% respectively, except that 100% allocation of RFF share has been considered for JVVNL.

# Energy Availability and Cost for FY 2023-24 RVUN Stations

- 4.75 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 as per actual purchase from April' 2022 to November' 2022, i.e. eight Month of FY 2022-23, which is further extrapolated for 12 months with 2% escalation to project the availability for FY 2023-24.
- 4.76 The energy availability of supercritical units i.e. SSCTPS Unit no. 8 and CSCTPP Unit no. 5-6 has been considered as per actual availability, further energy availability of SSCTPP Unit no. 7 has been considered equivalent to Unit no. 8. The fixed and energy charges of SSCTPS (Unit 7-8) for FY 2023-24 have been considered as per RVUN order dated 03.02.2021 for FY 2020-21. The fixed and energy charges for the RVUN plants and CSCTPP(Unit 5-6) are as per RVUN Tariff order(s) dated 09.11.2022.
- 4.77 Tariff of Mini/Micro (MMH) plants have been considered as per Regulation 57 of RERC Tariff Regulations, 2019.
- 4.78 For the purpose of computing fixed charges of RVUN Stations, actual availability (provisional) of FY 2022-23 has been considered by the Commission. There may be a situation that Discoms may have to purchase higher quantum of energy from these plants due to higher power requirement or shortfall in any other sources. The actual impact will be considered in true up. The Discoms while making power purchase should strictly follow the Merit Order Dispatch. The Discoms are also directed to monitor the availability of these plants and pay fixed charges in accordance with provision of RERC Tariff Regulations.
- 4.79 The energy availability and cost of RVUN's generating stations as considered by the Commission have been shown in the table below:

Table 48: Energy Availability (MU) and Cost (Rs. In Cr.)- RVUN Stations for FY 2023-24

Station	Energy Availability (MU)	Cost (Rs. In Cr.)
KTPS(1 to 7)	7170	2923

Station	Energy Availability (MU)	Cost (Rs. In Cr.)
STPS(1 to 6)	6252	3152
SSCTPS (7)	3053	1454
SSCTPS (8)	3053	1417
CTPS (1-4)	5138	2352
CSCTPP (5&6)	7288	2992
RGTP(1,2 & 3)	1356	557
KaTPP#1 &2	5378	2615
MAHI	222	61.01
MAHI MMH	0.43	0.18
MANGROL	1.51	0.63
STPS MMH	0.21	0.09
Total RVUN	38911	17524

## Lignite based projects

- 4.80 The lignite based projects include Giral Lignite Power Limited, JSW Energy (Barmer) and Neyveli Lignite Corporation Limited.
- 4.81 For Giral Unit 1 & 2, Commission has not determined any tariff for FY 2023-24 as these Units are not functioning for long period of time.
- 4.82 For Neyveil Lignite, the Commission has considered the energy availability and Fixed charges for FY 2023-24 based on the eight months actual for FY 2022-23, which is further extrapolated for 12 months with 2% escalation over FY 2022-23 for projection of FY 2023-24.
- 4.83 For JSW (Energy) Barmer the Commission has considered the energy availability for FY 2023-24 based on the eight months actual for FY 2022-23, which is further extrapolated for 12 months with 2% escalation over FY 2022-23 for projection of FY 2023-24. The fixed charges for FY 2023-24 are as per JSW (Energy) Barmer Interim tariff order of FY 2020-21 dated 23.04.2020 and energy charges has been considered as per additional submission of Discoms.
- 4.84 The energy availability and total power purchase cost for Lignite based projects have been summarized in the table below:

Table 49: Energy Availability (MU) and Cost (Rs. In Cr.)- Lignite Plants for FY 2023-24

Station	Energy Availability (MU)	Cost (Rs. In Cr.)
JSW (Energy) Barmer	6540	2747
GLTPP	0	0
Neyveli Lignite Corporation Ltd.	1442	498

Station	Energy Availability (MU)	Cost (Rs. In Cr.)
Total	7982	3245

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

- 4.85 The energy availability of NPCIL has been considered based on the eight months actual purchase for FY 2022-23, which is further extrapolated for 12 months with 2% escalation over FY 2022-23 for projection of FY 2023-24.
- 4.86 The Cost of NPCIL power plants has been considered as per DAE notification dated 22.03.2018.
- 4.87 The energy availability and total power purchase cost for NPCIL plants have been summarized in the table below:

Table 50: Energy Availability (MU) and Cost (Rs. In Cr.)- NPCIL for FY 2023-24

Station	Energy Availability (MU)	Cost (Rs. In Cr.)
NPCIL	2522	874

## Partnership Projects (PP)

- 4.88 The energy availability and fixed charges of partnership projects have been considered based on the eight months actual for FY 2022-23, which is further extrapolated for 12 months with 2% escalation over FY 2022-23 for projection of FY 2023-24.
- 4.89 Energy availability and total power purchase cost for partnership projects have been summarized in the table below:

Table 51: Energy Availability (MU) and Cost (Rs. In Cr.)- Partnership Projects for FY 2023-24

Station	Energy Availability (MU)	Cost (Rs. In Cr.)
Partnership Projects	3238	139

#### NTPC, NHPC & Others

- 4.90 The energy availability and fixed charges of NTPC & NHPC and others have been considered based on the eight months actual for FY 2022-23, which is further extrapolated for 12 months with 2% escalation over FY 2022-23 for projection of FY 2023-24.
- 4.91 The energy availability and total power purchase cost for NTPC, NHPC and other plants have been summarized in the table below:

Table 52: Energy Availability (MU) and Cost (Rs. In Cr.)- NTPC & NHPC and Other Generating Stations for FY 2023-24

NTPC & NHPC and Other Generating Stations					
Station	FY 2023-24				
Sidiloff	Energy Availability	Cost			
NTPC Stations	12317	4946			
NHPC Stations	2083	661			
Others	20931	8784			
Sjvnl-Nathpa-Jhakri	701	155			
Rampur	198	81			
Tehri Hydro	251	96			
Koteshwar	108	50			
Tala	53	12			
NVVN Bundled Power(Solar)	411	440			
NVVN Bundled					
Power(Thermal)	2077	808			
Coastal Gujarat	369	348			
Adani Power Rajasthan Ltd.	8800	4518			
Sasan Power Ltd.	2875	401			
Karcham Wangtoo	583	155			
DB Power	2372	910			
Maruti	916	295			
Teesta	598	319			
SKS	432	124			
R.F.F.	187	72			
Total	35330	14391			

- 4.92 While projecting the power purchase quantum for FY 2023-24, the Discoms have not considered power from five NTPC stations namely Anta GTPS, Auriya GTPS, Dadri GTPS, FGUTTPS Unit 1 and FSTPS. The same has not been considered as per the Commission's Order dated 28.10.2021 in which the Commission has allowed the Discoms to exit the PPAs due to the expiry of term of these PPAs.
- 4.93 Accordingly, Commission has not considered the energy availability and cost from these stations, which are subject to true up during FY 2023-24.

## Non-Conventional Energy Sources

4.94 The Commission has taken the availability from non-conventional energy sources to the extent of RPO requirement, i.e., 9.40% for wind, 10.50% for Solar, 1.10% for Bio-mass and 0.66% for HPO for FY 2023-24 as per the RERC (Renewable Energy Obligation) (Seventh Amendment) Regulations, 2021 dated 14.12.2021 as

amended from time to time.

- 4.95 Commission in its Regulations has also provided flexibility to the Discoms in meeting their RPO. According to the RPO Regulations, on achievement of non-Solar RPO Compliance to the extent of 80% and above remaining shortfall if any, can be met by excess solar energy purchased beyond specified solar RPO for that particular year and vice-versa.
- 4.96 While projecting energy availability from Biomass power projects, as per the RPO Regulations, there will be an additional requirement of around 750 MU of Biomass power for FY 2023-24 in addition to the approx. 397 MU available during the previous year. As no new Biomass plant is likely to commission in FY 2023-24, no additional Biomass power is likely to be available during FY 2023-24. Therefore, it is imperative that the shortfall may be met through solar power. Commission is of the view that considering the solar potential of the State and its price and availability during the day hours, to maximize the benefits of solar power, Discoms may procure solar power to make up this additional energy requirement of Biomass approx. 750 MUs as also allowed under the RPO Regulations.
- 4.97 As per the Regulations requirement of solar power to meet Solar RPO is 11695 MU (including makeup of 750 MUs of non-solar RPO), out of this 917.92 MUs will be met through Roof Top Solar (RTS) for the purpose of meeting RPO. Balance approx. 10777 MUs will be met through 175 MUs from KUSUM Component-A, 25 MUs from KUSUM Component-C and 9827 MUs (Net of RTS solar power availability) through large scale solar power projects.
- 4.98 To compute the cost for FY 2023-24, the actual per unit cost of FY 2022-23 has been considered, further the additional units during FY 2023-24 for Solar and Wind, have been considered at Rs. 2.25/ unit (including trading margin of 7 paisa), Rs. 2.85/unit (including trading margin of 7 paisa) respectively. Further, to make up shortfall in biomass power, additional units of solar power during FY 2023-24 have also been considered at Rs. 2.25/unit (including trading margin of 7 paisa/unit). Further, rate of Rs. 3.14/unit has been considered for purchase of solar power under KUSUM Component-A and Rs. 2.89/unit for purchase under KUSUM Component-C Feeder Level Solarization, It is observed that though the solar power is abundantly available in the State, however, Discoms have not tied up sufficient capacity and have not fully utilized the potential. Discoms should make all efforts to purchase solar power available in the State.
- 4.99 The energy availability and total power purchase cost from non-conventional energy sources have been summarized in the table below:

Table 53: Energy to be purchased (MU) and Cost (Rs. in Cr.)- Wind, Solar & Biomass for FY 2023-24

	FY 2023-24			
Station	Energy to be purchased (MU)	Cost (Rs. in Cr.)		
Wind Farms	9799	4895		
Solar				
(After accounting for availability from RTS)	10945	2906		
Biomass	397	308		
Solar in lieu of Biomass (for makeup of non-				
solar RPO)	750	169		
Total	21891	8277		

- 4.100 It is observed that Commission has specified the Hydro Power Obligation (HPO) of 0.66% for the Discoms for the FY 2023-24. However, there will be no significant procurement of energy from eligible hydro capacity commissioned after 08.03.2019 by the Discoms. Therefore, looking to this small fraction, Discoms may procure solar power to make up the shortfall as per the provisions of RPO Regulations.
- 4.101 The actual RPO Compliance would be reviewed based on the Petition filed by Discoms in accordance with the RERC (Renewable Energy Certificate and Renewable Purchase Obligation Compliance Framework) Regulations, 2010 as amended from time to time.
- 4.102 Hydro Power Purchase Obligation (HPO): Rajasthan Electricity Regulatory Commission (Renewable Energy Obligation) (Seventh Amendment) Regulations, 2021 state that:
  - "Hydro Power Purchase Obligation (HPO) shall be met from the power procured from eligible large hydro power projects including pump storage projects having capacity more than 25 MW (LHPs) commissioned on and after 08.03.2019 and upto 31.03.2030 in respect of 70% of the total generated capacity for a period of 12 years from the date of commissioning. Free power to be provided as per the agreement with the State Government and that provided for Local Area Development Fund (LADF), shall not be included within this limit of 70% of the total generated capacity."
- 4.103 In view of above, Discoms shall ensure the compliance of the above Regulation during FY 2023-24 and submit the information for Hydro Power Purchase Obligation compliance separately alongwith true up petition.

#### **Short term Sources**

- 4.104 Discoms submitted that they needs to resort to power exchange when:
  - (i) In certain time blocks when there is energy shortage due to non-availability of power from long term tied up sources due to planned or unplanned shutdown of generating station, unavailability of transmission network, coal related issues etc.
  - (ii) When the cost of power from exchange is cheaper than the variable cost of some of the tied-up long term sources. In such cases in order to optimize the overall power purchase cost, the Discom backs-down the costlier power plant and purchases power from exchange.
- 4.105 The Discoms submitted that while the Rajasthan state is expected to be in deficit in various time blocks especially during the day-time depending on the season, in certain blocks, it is expected to have surplus power. This is due to unique characteristic of the state of significant intra-day and intra-season variation in demand
- 4.106 The Discoms submitted that sale and purchase of power through exchange is a dynamic process. The market clearing prices in exchange are dependent on the bids submitted by buyers and other sellers and the power available in the entire market. It is important to note that the Petitioner has no control over the mentioned factors. With the increasing surplus energy across the nation, the market prices are further expected to reduce. It is important to note that the rates discovered in the exchange for selling of surplus power are lower than the variable cost payable to generators by the Petitioner.
- 4.107 During the current financial year till July'22 also, the Discoms have had to resort to short-term power purchase with an average purchase cost of Rs. 6.24/unit. However, for projecting the short-term power purchase cost for FY 24 the Discoms has considered the purchase rate of Rs. 4.22/unit as approved by the Commission in its previous tariff order. The rate of sale of surplus energy on exchange has been considered as Rs. 4.22/kWh for FY 23 as per the rate approved by the Commission in its tariff order dated 01.09.2022.
- 4.108 Considering the aforementioned scenario is an exceptional event which is beyond control of the petitioners, it is requested that the short-term power purchase be allowed by the Commission.
- 4.109 Regulation 9 (1) (e) of the RERC Tariff Regulations, 2019 specifies that variation in power purchase expenses for the distribution licensee is a "uncontrollable factor".

- 4.110 After considering the energy available to Discoms based on their respective allocated shares, the Commission has estimated a surplus/shortfall in energy availability for FY 2023-24.
- 4.111 It is observed that Discoms are facing several challenges in ensuring power supply to consumers with minimal disruptions for which it had to resort to purchase power from power exchanges at high prices. It is pertinent to note that Commission has taken cognizance of situation wherein the Rajasthan Discoms may have to resort to short term power purchase, which shall be taken into consideration under MYT Regulation 78(6). Commission has indicated a ceiling tariff for procurement of short-term power at Rs. 4.22/unit in the ARR Order for FY 2022-23. As observed, the Discoms had to resort to procure power at costs which may be higher than the ceiling limit mandated by the Commission to meet with the electricity demands of the State consumers. Furthermore, in accordance with Rajasthan Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2019, under Regulation 78(6)(d) Discoms may carry out power procurement at a rate higher than the ceiling rate as approved by the Commission under unforeseen circumstances/ emergency conditions that hamper network stability. The Commission estimated the Rajasthan state to be in shortfall of 2859 MU for FY 2023-24. In that situation, the Regulation 78(6) provides that the Commission shall indicate a tariff for procurement of short term power. In view of above submission of Discoms regarding availability of costlier power the Commission deems it proper to fix the rate of short term purchase for the purpose of Regulation 78 (6) equivalent to variable cost of STPS i.e. Rs. 4.22 per/unit.
- 4.112 The energy requirement for Discoms has been calculated based on sales estimated in this order and normative losses. There may be a situation when Discoms may have to purchase higher quantum of energy due to higher sales, losses or shortfall in generation from other sources.
- 4.113 The Discoms while making power purchase should strictly follow the Merit Order Dispatch. The Discoms are also directed to monitor the availability of plants and pay fixed charges in accordance with provisions of appropriate regulations.

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

4.114 Based on the above, the summary of source wise breakup of power purchase quantum and cost for FY 2023-24 as considered by the Commission for the three Discoms is given in the table below and details are given at **Annexure-D**:

Table 54: Energy Availability (MU) and Cost for FY 2023-24

(Rs. in Crore)

		FY 2023-24							
Station	٦٧	JVVNL		NL	JdV\	/NL	Toto	al	
	Units	Cost	Units	Cost	Units	Cost	Units	Cost	
NTPC	4651	1867	3340	1341	4326	1737	12317	4946	
NHPC	786	250	565	179	731	232	2083	661	
NPCIL	952	330	684	237	886	307	2522	874	
Tehri +Koteshwar+Tal a	156	60	112	43	145	56	412	158	
RVUN/ State Generation	14693	6617	10553	4753	13666	6154	38911	17524	
Shared Projects	1223	52	878	38	1137	49	3238	139	
NCES	8266	3125	5937	2245	7688	2907	21891	8277	
Nathpa Jhakri and rampur	340	89	244	64	316	83	899	236	
Others Stations	9599	3967	6760	2797	8754	3623	25113	10387	
NVVN Bundled	939	471	675	338	874	438	2488	1248	
Total	41604	16829	29747	12035	38522	15585	109874	44449	
Less/add: Short Term	178	75	2346	990	335	141	2859	1207	
Net Power Purchase	41783	16904	32093	13025	38857	15727	112733	45656	

## **Transmission Charges**

#### **Petitioners' Submission**

- 4.115 The Discoms have considered a nominal annual escalation of 2% over that as incurred in FY 2021-22, while projecting transmission charges for FY 2022-23 and 2023-24.
- 4.116 The details of the PGCIL, RVPN, RLDC and SLDC charges submitted by Discoms have been summarized in the table below:

Table 55: Transmission Charges & SLDC Charges for FY 2023-24 (Rs. in Crore)

	Discoms' submission					
Particulars	JVVNL	AVVNL	JdVVNL	Total		
PGCIL Charges	880	597	764	2241		
RVPN, POC and Others Charges	1165	790	1011	2966		
RLDC Charges	1	1	1	3		
SLDC Charges	11	8	10	29		
Total Transmission Charges	2058	1395	1785	5238		

## Commission's Analysis

4.117 The Commission has considered the RVPN and SLDC charges for FY 2023-24 as per RVPN ARR and Tariff order dated 09.11.2022 for FY 2022-23.

- 4.118 Further, the Commission has considered PGCIL & RLDC charges for FY 2023-24 as per filing of Discoms.
- 4.119 The transmission & SLDC charges approved by the Commission for FY 2023-24 are as under:

Table 56: Transmission Charges approved by the Commission for FY 2023-24 (Rs. in Crore)

			(	<b>-</b> ,			
Particulars		APPROVED					
	JVVNL	AVVNL	JdVVNL	Total			
PGCIL Charges	880	597	764	2241			
RVPN Charges	1295	930	1204	3428			
RLDC Charges	1	1	1	3			
SLDC Charges	9	6	8	24			
Total Transmission Charges	2185	1534	1977	5696			

### **Investment Plan for FY 2023-24**

4.120 The Discoms have proposed investment under various projects/schemes to be executed along with the proposed targets in FY 2023-24 as detailed below:

Table 57: Proposed Capital Expenditure for FY 2023-24

(Rs. in Crore)

Sr.	Name of schemes	Proposed for F.Y. 2023-24			
No.		JVVNL	AVVNL	JdVVNL	TOTAL
	Plan Work				
1	Sub-Transmission & Distribution	805.29	400.00	850.39	2,055.68
2	Rural Electrification Works	2,364.53	1930.00	3,170.16	7,464.69
3	RAPDRP-A	0.81	0	0	0.81
4	AMI (Smart Metering) (IPDS &	18.42	0	0	18.42
	NSGM)				
5	RDSS	1,303.00	1168.37	1,842.00	4,313.37
6	Administrative building works in	32.80	0	0	32.80
	newly created divisions and				
	sub-divisions offices				
7	E-Power IT(OWN funded)	1.08	0	-	1.08
8	DDUGJY (Post Saubhagya)	0	0	200.00	200.00
9	Others(IT Implementation and	-	0	60.00	60.00
	KUSUM-C)				
	TOTAL*	4525.93	3498.37	6122.55	14,146.85

\*Note: JVVNL in its petition has shown capital expenditure of Rs. 4383.26 Crore net of consumer contribution of Rs. 142.67 Crore in RE works.

4.121 To execute the above work, the Discoms have proposed the funding from

## following sources:

Table 58: Source wise details of funding for FY 2023-24

<u> 1apie 28: 20</u>	lable 58: Source wise details of funding for FY 2023-24							
Sr.No.	Sources of funding	JVVNL	AVVNL	JdVVNL	Total			
1	Loan	2,076.59	1505.24	2,417.95	5,999.78			
2	Grant	781.68	701.02	1,420.20	2,902.90			
3	Equity	1,524.79	1117.10	1,385.20	4,027.09			
4	Consumer Contribution	142.67	175.00	900.00	1,217.67			
	Total	4525 93	3498 37	A122 55	14 144 85			

- 4.122 The proposed Capital Investment Plan is based on the philosophy focused on the following areas:
  - (a) Creation of new sub-transmission and distribution network to meet the increasing demand within the area of supply of Discoms.
  - (b) Strengthening of the existing sub-transmission and distribution network to cope up with the growing demand and connectivity to the new areas under development.
  - (c) Rural electrification to create distribution infrastructure in villages and release electricity connections in villages
  - (d) Scaling up of IT infrastructure and strengthening of IT backbone to improve the efficiency, capacity and reliability of distribution network.
  - (e) Demand side management for efficient and optimum utilisation of distribution network capacity.
- 4.123 Discoms submitted that the proposed Capital Investment Plan incorporates the basis and details pertaining to the budget allocation under various schemes, associated targets and sources of funding.
- 4.124 Discoms submitted that the capital investment planning plays a pivotal role in efficiency improvement of the Discoms. The growing number of consumers, load and per capita consumption, burdens the existing networks resulting to frequent outage and energy spillages. Therefore, the Capital Investment Plan requires to be planned appropriately.
- 4.125 The Discoms submitted that they are making concerted efforts for strengthening of distribution network. This will curb down the system spillages, improve efficiency and ensure sustainability against the revenue gap of the previous years.

#### Sub Transmission and Distribution Infrastructure Works:

4.126 The Discoms have proposed a total investment of Rs. 2055.68 Crore in FY 2023-24 for sub transmission and distribution infrastructure works. The Discoms wise

(Da :- Cuara)

proposed investment and physical targets are provided below:

Table 59: Proposed Investment and physical target for sub-transmission & distribution works in FY 2023-24

Sr.	Name of Schemes	Proposed Investment & Physical targets for F.Y. 2023-24					
No.		Units	JVVNL	AVVNL	JdVVNL		
1	Sub- Transmission & Distribution						
a.	Proposed Investment	(Rs. in Crore)	805.29	400	850.39		
l-	22/11/////	MVA	450	200	1977		
b.	33/11 KV S/s	Nos.	30	50	310		
C.	33 KV Lines	KMs	660	300	2480		

4.127 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 projects 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 and delegation of powers (DOP) given to the field offices.

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

4.128 Discoms have proposed a total investment of Rs. 7464.69 Crore in FY 2023-24 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 60: Discom wise proposed investment for RE works in FY 2023-24

Sr.	Name of Schemes	Proposed Investment & Physical targets for F.Y. 2023-24					
No.		Units	JVVNL	AVVNL	JdVVNL		
1	Rural Electrification						
I	Works						
~	Proposed	(Rs. in					
a.	Investment	Crore)	2,364.53	1,930.00	3,170.16		
h	Domestic	Nos					
b.	connection rural	Nos.	150000	100000	100000		
	Agriculture Pump	Nos.					
C.	Set RE	1405.	76091	70000	96058		

#### R-APDRP-A:

- 4.129 JVVNL has proposed an investment of Rs. 0.81 Crore in FY 2023-24 under RAPDRP-Part A. 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 Head Quarter, installation of Modems for Meter Data Acquisition System etc.
- 4.130 The Discom wise proposed investments are provided in the table given below:

Table 61: Discom wise proposed investment in FY 2023-24 (Rs. in Crore)

		Proposed investment for FY 2023-24			
Sr. No.	Name of schemes	JVVNL	AVVNL	JdVVNL	
1	R-APDRP- Part A	0.81	0	0	

#### **Smart Metering:**

- 4.131 JVVNL has proposed a total investment of Rs. 18.42 Crore in FY 2023-24 under Smart Metering Scheme.
- 4.132 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.

#### Administrative office building works for newly created divisions and sub-divisions

4.133 JVVNL has proposed a total investment of Rs. 32.80 Crore in FY 2023-24 under

- Administrative office building.
- 4.134 Various division offices and sub-division offices of Japiur Discom have been sanctioned by govt. of Rajasthan, with the same falling under the category of essential services for public utility and facility.
- 4.135 At present these offices are running in a temporary arrangement since their sanction year i.e. since FY 2018-19 to FY 2021-22. A stable office with proper amenities and working conditions are a must for the proper functioning of any office. Hence, it becomes all the more important to allot budgets for such civil works associated with building of these offices.

## E-Power IT Project

- 4.136 JVVNL has proposed a total investment of Rs. 1.08 Crore in FY 2023-24 under E-Power IT Project.
- 4.137 JVVNL submitted that E-Power IT Project is initiative taken up for development and implementation of software modules i.e. web based desktop application and android based mobile application as well.
- 4.138 JVVNL submitted that in order carry out the various works under IT projects, a MoU has been signed between the Rajasthan Discom and NIC, for which the work order has also been placed upon NIC.

#### DDUGJY Post Saubhagya Yojna

4.139 JdVVNL proposed an investment of Rs. 200 Crore under DDUGJY Post Saubhagya Yojna scheme.

Table 62: Discom wise proposed investment for DDUGJY Post Saubhagya in FY 2023-24

Çr.	Name of		Proposed in F.Y. 2	ovestment fo 023-24	or
No.		Units	JVVNL	AVVNL	JdVVNL
1	DDUGJY Post Saubhagya	(Rs. in Crore)	-	-	200

#### **REVAMPED DISTRIBUTION SECTOR SCHEME**

4.140 Discoms have proposed a total investment of Rs. 4313.37 Crore in FY 2023-24 - under Revamped Distribution Sector Scheme.

- 4.141 The Central Government has approved a Revamped Distribution Sector Schemea 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.
- 4.142 The Revamped Distribution Sector Scheme has the following parts:

#### Part A – Metering & Distribution Infrastructure Works:

- Facilitating in installing prepaid smart meters for all consumers excluding agriculture consumers along with associated AMI, communicable meters for DTs & Feeders, ICT including Artificial Intelligence (AI), Machine Learning (ML), etc. based solutions for power Sector and a unified billing and collection system.
- Distribution infrastructure works as required for strengthening and modernizing the system as well as measures for loss reduction. The infrastructure strengthening works will include separation of Agriculture feeders to enable implementation of the KUSUM scheme, Aerial Bunch cables and HVDS for loss reduction, replacement of HT/LT lines as required, construction of new/ upgradation of substations, SCADA and DMS system etc. Each DISCOM/ State will draw up the scheme according to its requirement with the end objective of reducing losses and ensuring 24 x 7 supply.
- Part B Training & Capacity Building and other Enabling & Supporting Activities: Supporting and enabling components, such as Nodal Agency fee, enabling components of MoP (communication plan, publicity, consumer awareness, consumer survey and other associated measures such as third party evaluation etc.), up-gradation of Smart Grid Knowledge Centre, training and capacity building, awards and recognitions etc.

**Objectives:** The objectives of the scheme are to:

- Improve the quality, reliability and affordability of power supply to consumers through a financially sustainable and operationally efficient Distribution Sector.
- Reduce the AT&C losses to pan-India levels of 12-15% by 2024-25.
- Reduce ACS-ARR gap to zero by 2024-25. The state-wise targets for each year will depend on their current levels of AT&C losses and ACS-ARR gap.

#### Modernisation & System augmentation:

- The work of construction of conventional as well GIS substations shall be executed under this part along with associated 33 KV and 11 KV line works in load centres, anticipating present load and future load growth. Similarly, work of Augmentation and additional Power Transformers at existing 33/11 KV Sub Stations shall also be carried out under Modernization.
- 4.143 Summary of metering works proposed to be undertaken by the Rajasthan Discoms under the RDSS scheme are as shown below:

Metering (in Nos)	Jaipur Discom	Ajmer Discom	Jodhpur Discom	Total
Consumer (Other than Agri.)	4762643	5432231	4080848	14275722
Distr. Transformers (DT)	111346	155453	167809	434608
Feeder & Boundary	5799	11007	10322	26593
Total	4879788	5598691	4258979	14736923

4.144 Estimated outlay proposed by the Rajasthan Discoms under RDSS is as shown below:

(Rs in Cr)

Discom	Metering		Loss Reduction	Modernization& System augmentation	PMA	Total Outlay	
	Phase -	Phase -II	Total				
JVVNL	1466.74	1815.36	3282.10	3662.00	2473.80	104.34	9522.24
AVVNL	827.29	2835.81	3663.11	2770.06	2628.52	94.72	9156.40
JdVVNL	1103.98	1773.40	2877.37	3835.55	2874.90	111.44	9699.26
Total	3398.01	6424.56	9822.58	10267.61	7977.22	310.50	28377.90

- 4.145 Regarding the metering component under RDSS, Discoms submitted that the Rajasthan Discoms need to install prepaid smart meters for all consumers (other than agriculture) in phases. Also, the MoP has mandated installation of Prepaid Smart Meters in phases (as per timelines stipulated under RDSS scheme) for all Discoms irrespective of the participation of the Discoms in the RDSS scheme.
- 4.146 The MoP has recommended implementation of Smart Metering in TOTEX (Total Expenditure) mode through PPP. Under this mode, a single agency will be contracted for supplying, maintaining and operating the metering infrastructure for the purpose of meter related data and services to the DISCOM. It will make both capital and operational expenditure under DBFOOT (Design Build Fund Own

- Operate & Transfer) or similar modes and will be paid for a portion of its capital expenditure initially and the remaining payment over the O&M period.
- 4.147 Accordingly, expenditure associated with metering component of RDSS has not been considered as a part of the total Capital Investment Plan. The Discoms submitted that they will file the details of such operational expenditure on Smart Meters at the time of Truing up of relevant year.
- 4.148 The RDSS component wise expenditure plan proposed for FY 2023-24 is as under:

Table 63: RDSS Component wise expenditure plan for FY 2023-24 (Rs in Cr)

Sr. No	Particulars	JVVNL	AVVNL	JdVVNL	Total
1	Loss Reduction Works	1,216.40	1,112.08	1,792.00	4,120.48
2	RMS and Other IT/OT Works	86.40	56.29	50.00	192.69
	Total*	1,302.80	1,168.37	1,842.00	4,313.17

Note: \* Total expenditure under RDSS for FY24 is INR 1302.80 Cr., INR 1168.37 Cr , INR 1842 Cr. for JVVNL, AVVNL & JdVVNL respectively. However, for the purpose of capital investment, expenditure attributed towards the Smart Metering component (INR 246.28 Cr) , (INR 439.92 Cr) , (INR 195 Cr) for JVVNL, AVVNL & JdVVNL respectively has not been included, as it is to be implemented on Total Expenditure (TOTEX) mode.

## IT implementation and Kusum -C:

4.149 JdVVNL has proposed Rs. 60 Crore for IT implementation and Kusum -C.

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

4.150 The capital expenditure in past years and the envisaged plan of FY 2023-24 is as under:

Table 64: Actual capital expenditure in past years and investment proposed for FY 2023-24 (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	2021-22 (ACTUAL)	1692	1416	1307	4415
6	2022-23 (PROPOSED)	3279	2904	5251	11434
7	2022-23 (APPROVED)	2922	2584	4188	9693
8	2023-24 (PROPOSED)	4526	3498	6123	14147

4.151 For investment approval, Commission has relied on Hon'ble APTEL judgment in appeal no. 84 of 2006, which has been discussed in subsequent paras.

- 4.152 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.
- 4.153 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."
- 4.154 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.
- 4.155 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.

- 4.156 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 RAPDRP, Saubhagya, DDUGJY IPDS and RDSS etc. 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.
- 4.157 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:

Annual plan=k\*GFA \*[(1+inflation rate)\*(1+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

4.158 Based on above formula, the ceiling limit for FY 2023-24 works out to be as under:

Table 65: Ceiling Limit for investment plan for FY 2023-24 (Rs. in Crore)

Sr. No.	Particulars	JVVNL	AVVNL	JdVVNL	Total
1	GFA closing figure of 2022-23 (as	27482.55	23604.33	23800.03	74886.91
	per tariff petition)-Rs. Crores				

2	K	1.30	1.30	1.30	1.30
3	Sale for FY 23(MU) as per petition	29244.85	23082.58	26011.62	78339.05
4	Sale for FY 24(MU) as per petition	32134.93	25322.26	30168.19	87625.38
5	Growth rate for sale (%)	9.88%	9.70%	15.98%	11.85%
6	Inflation (%)	15.38%	15.38%	15.38%	15.38%
7	Annual Plan ceiling -Rs. Crores	9568.11	8154.37	10462.66	28185.13

- 4.159 In view of above table, the total Investment proposed by Discoms are within ceiling Limit. However, Commission in compliance to aforesaid Hon'ble APTEL Judgement confine himself to exercising prudent check on Investment proposal as under:
- 4.160 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. In the last order dated 24.11.2021 the Commission directed 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. Further, Commission has also directed to issue internal guidelines for field officer indicating steps to exercise prudence while proposing/executing investments. It is observed that Discoms have formed the committee to conduct the Special Audit. However, Discoms have submitted that the report of Special Audit is under process, the Commission reiterates its directions to submit special audit report and also directs Discoms to issue internal guidelines for field officer indicating steps to exercise prudence while proposing/executing investments.
- 4.161 It is observed that against the planned allocation, JVVNL, AVVNL & JdVVNL have incurred approx. 80%, 68% and 35% respectively during FY 2022-23 (till Jan' 2023) under ST&D head. It is observed that AVVNL & JdVVNL is lagging behind the targets. Accordingly, Commission allows 90% of the projected capital expenditure plan under Sub-Transmission & Distribution of Rs. 805.29 Crore, Rs. 400.00 Crore and Rs. 850.29 Crore respectively.
- 4.162 Rural Electrification Works: In this scheme every year the Discoms proposes the

capital expenditure for release of new connection for domestic category in rural areas and for agriculture pump sets. It is observed that during FY 2023-24, the physical target sets for agriculture pump set are high as compared to FY 2021-22 as under:

Particulars	FY 2021-22	FY 2022-23	FY 2023-24
JVVNL			
Domestic Connections Rural	1,40,000	1,50,000	1,50,000
Energisation of wells	24,577	71,207	76,091
AVVNL			
Domestic Connections Rural	102701	100000	100000
Energisation of wells	30245	70000	70000
JDVVNL			
Domestic Connections Rural	52320	115000	100000
Energisation of wells	22466	90137	96058

4.163 Accordingly, the higher capital expenditure has been proposed for FY 2023-24 by the Discoms as compared to FY 2021-22 as under:

Particular	2021-22	2022-23	2023-24
JVVNL	640	2,079	2365
AVVNL	682	1,930	1,930
JdVVNL	805	2,988	3,170

- 4.164 The Commission while allowing sales has considered the addition of no. of agriculture connection as proposed by Discoms. As regards the financing of the same the Commission is of the view that for FY 2023-24, extremely high No. of connection have been proposed to be released as compared to FY 2021-22 and outlay on this has also increased 3 to 4 times. This is coupled with the fact that additional expenditure has also been proposed in ST&D scheme for strengthening of the system. The Commission in this order in the true up section, considered 50% cost as grant. As has been pointed out earlier, the AG consumers are being charged under the Government Policy and cost of such large scale release of connections if passed on to other consumers will adversely affect them even though they have paid cost of release of their connection. On the other hand Discoms have not proposed any tariff hike for agriculture or other category of consumers, in such conditions such amount cannot be passed on to other category of consumers. As this is done in compliance of announcement of the State Government, the Commission is of the view that the 100% cost except consumer contribution should be funded by the grant and on this basis the Commission allows the target of release of Agriculture connection as proposed.
- 4.165 It is also observed that during FY 2022-23 (till Jan' 2023) against the planned allocation JVVNL, AVVNL and JdVVNL have incurred approx. 81%, 58% and 38% respectively. It is observed that under this scheme also AVVNL and JdVVNL are

lagging behind the targets. Further, looking to the past trend of achievement in physical targets, it is likely that some slippages will be there. Accordingly, the Commission has considered the 80% of the proposed investment to be incurred during FY 2023-24. However, the Commission will consider the actual cost at the time of true up.

- 4.166 RDSS: Discoms have proposed a substantial amount of capital investment under Revamped Distribution Sector Scheme 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. The Scheme has the following parts –
  - A. Metering, Component II: Distribution Infrastructure Works, Component III: Project Management
  - B. Training, Capacity Building and other Enabling & Supporting Activities
- 4.167 RDSS being an ambitious scheme, which will help Discoms in reducing both technical and commercial losses and improve operational efficiencies of Discoms. It is observed that during FY 2022-23 upto Jan' 2023, against the planned allocation, JVVNL has incurred only 0.20%, whereas AVVNL and JdVVNL have not incurred any amount under this scheme. The Commission expresses its displeasure against such under performance by Discoms. Accordingly, the Commission considered only 60% of proposed capex under the scheme for during FY 2023-24. Discoms are directed to achieve the target set under RDSS and fulfill all conditions and reap maximum benefit of RDSS.
- 4.168 It is observed that the metering is an important part of RDSS scheme. Discoms have almost included all the consumers in RDSS scheme for metering purpose. However, at the time of true up, the Commission will consider the actual expenditure made.
- 4.169 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, Network strengthening and implementation of ERP system, etc.
- 4.170 It has been observed that centrally sponsored scheme comprises funding from Gol/GoR and the resources of Discoms as per funding pattern of the schemes. Release of funds under the schemes from Gol/GoR is subject to the fulfilment 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.
- 4.171 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 reiterated many times 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 it is willing to consider any additional amount spent on training of employees and for compliance of Safety Regulations.
- 4.172 It is observed that the Discoms have not proposed any specific investment on account of compliance of safety Regulation. The Discoms may 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 2022-23 and also furnish separate proposal towards safety Compliance, if need be, in ARR for FY 2024-25.
- 4.173 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 earthling 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.
- 4.174 Investment proposal in R-APDRP-A, DDUGJY, AMI (Smart Metering) (IPDS &NSGM), Post Saubhagya, Administrative building works in newly created divisions and sub-divisions offices & E-Power IT(OWN funded) schemes, IT Implementation and KUSUM-C has been considered as proposed by Discoms.
- 4.175 As per RERC (Investment Approval) Regulations, 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.

- 4.176 In previous orders, the Commission has directed the Discoms to submit the Fixed Assets Register. This year in data gap reply the JVVNL has submitted FAR upto 31.03.2022 and AVVNL & JDVVNL has submitted FAR upto 31.03.2021. The Commission appreciates the efforts of Discoms in making Fixed Asset Register. It is observed that during the hearing of the instant petition, the Discoms have submitted that for power purchase, inventory and capital expenditure management & monitoring, the ERP is important tool. It is therefore, directed that all three Discoms must plan and implementation of ERP System, which will not only helps Discoms in better planning of power purchase, inventory and capital expenditure but also reduces the losses and improve the productively of expenditure incurred and efficiency of human resources deployed for such purpose.
- 4.177 Though this year the investment plan proposed by the Discoms is high as compared to FY 2021-22 because of release of high agriculture connection but the Commission has approved the plan considering 100% grant from the state government for release of agriculture connection, as these are being taken up in compliance to budget announcement. Accordingly, this will not impact consumers of other categories or even tariff of agriculture category. The same shall be examined at the time of true up.
- 4.178 In the light of the position discussed above, the Commission considers it appropriate to allow the investment in respect of Discoms as under:

Table 66: Approved investment plan for FY 2023-24 (Rs. in Crore)

Sr.	Name of schemes	Approved	for F.Y. 202	23-24	-
No.		JVVNL	AVVNL	JdVVNL	TOTAL
	Plan Work				
1	Sub-Transmission & Distribution	724.76	360.00	765.35	1,850.11
2	Rural Electrification Works	1,891.62	1544.00	2,536.13	5,971.75
3	RAPDRP-A	0.81	0		0.81
4	AMI (Smart Metering) (IPDS & NSGM)	18.42	0		18.42
5	RDSS	781.80	701.02	1,105.20	2,588.02
6	Administrative building works in newly created divisions and sub-divisions offices	32.80	0		32.80
7	E-Power IT(OWN funded)	1.08	0		1.08
8	DDUGJY (Post Saubhagya)		_	200.00	200.00
9	Others(IT Implementation			60.00	60.00

and KUSUM-C)				
TOTAL	3451.30	2605.02	4666.68	10,723.00

# Capitalization Petitioners' Submission

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

Table 67: Capital Expenditure and Capitalization proposed for FY 2023-24 (Rs. in Crore)

FY 2023-24							
Particulars	JVVNL	AVVNL	JdVVNL	Total			
Capital Expenditure	4383	3498	6123	14004			
Capitalization	4198	3380	5509	13087			

## Commission's Analysis

- 4.180 Following the methodology adopted in ARR order for FY 2022-23, the Commission has considered 80% of the proposed capitalization in this ARR order for FY 2023-24.
- 4.181 The Commission has approved investment plan of Rs. 10723 Crore against a proposal of Rs. 14146.85 Crore and accordingly Capitalisation has been considered as Rs. 10470 Crore for FY 2023-24.

Table 68: Projected Capitalization approved by the Commission for FY 2023-24 (Rs. in Crore)

FY 2023-24							
Particulars	ars JVVNL AVVNL JdVVNL Total						
Capitalization	3358	2704	4407	10470			

# Operation and maintenance Expenses Petitioners' Submission

- 4.182 Discoms have estimated O&M expenses based on the O&M norms specified in RERC Tariff Regulations, 2019.
- 4.183 The Operation and Maintenance (O&M) expenses comprise of Employee expenses, Repair and Maintenance (R&M) expenses and Administration and General (A&G) expenses.
- 4.184 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.

- 4.185 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.
- 4.186 The O&M expenses projected by Discoms for FY 2023-24 have been summarized below:

Table 69: Operation and Maintenance Expenses for FY 2023-24 (Rs. in Crore)

Particulars	JVVNL	AVVNL	JdVVNL	TOTAL
Employee Costs	1779	1402	1670	4851
Administrative & General Costs	241	190	226	657
Repairs & Maintenance Costs	343	275	271	890
Total O&M Costs	2363	1867	2167	6397
Less:Expenses to be Capitalized	385	340	323	1048
Net O&M Costs charged to				
revenue	1979	1527	1843	5349

Installation of Smart Meters under TOTEX mode and its impact on O&M expenses

- 4.187 The Discoms had filed a separate petition before the Commission for allowing the expenses incurred in the execution of smart metering works under RDSS, over and above the current normative O&M expenses.
- 4.188 Subsequently, the Commission issued order dated 21.10.2022, directing the Discoms to submit all relevant details including actual amount of payment made to AMISP, saving in various components of O&M cost and benefit derived from implementation of smart metering under TOTEX mode along with the true up petition of relevant year for consideration of the Commission. Accordingly, the details of such operational expenditure on Smart Meters shall be submitted by at the time of Truing up of relevant year.

### Commission's Analysis

- 4.189 Commission has allowed O&M expenses in accordance with Regulation 82 of RERC Tariff Regulations, 2019.
- 4.190 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 x GFAn-1 x (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.

- 4.191 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.
- 4.192 It is observed that many stakeholders submitted that while working out the O&M expense, the sales should be excluding DF sales. Therefore, in view of above comments of stakeholder and view taken by the Commission in the last ARR 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. For projecting normative O&M expenses sale of Distribution franchisee i.e. JVVNL 1897 MUs, AVVNL of 621 MUs and JdVVNL of 868 MUs for FY 2023-24 respectively have not been considered. Commission has considered the sales (excluding sale by DF) allowed for FY 2023-24 for projecting normative O&M expenses.
- 4.193 Capitalized O&M expenses have been considered in the same ratio as projected by Discoms.
- 4.194 O&M expenses approved by the Commission for Discoms for FY 2023-24 have been summarized below:

Table 70: Operation and Maintenance Expenses approved for FY 2023-24

(Rs. in Crore)

			1	
Particulars	JVVNL	AVVNL	JdVVNL	TOTAL
Employee Costs	1753	1432	1680	4864
Administrative & General Costs	237	194	227	659
Repairs & Maintenance Costs	212	174	151	538
Total O&M Costs	2202	1799	2058	6060
Less: Expenses to be Capitalized	358	328	307	993
Net O&M Costs charged to revenue	1844	1472	1751	5067

4.195 With regard to Smart Meters under TOTEX mode it has been observed that Discoms had filed a separate petition on dated 29.07.2022 to allow expenditure incurred in execution of Smart metering works over and above normative O&M expenses. Further, Commission in the aforesaid petition has issued order dated 21.10.2022, directing the Discoms to submit all relevant details including actual amount of payment made to AMISP, saving in various components of O&M cost and benefit derived from implementation of smart metering under TOTEX mode along with the true up petition of relevant year. Accordingly, the details of such operational expenditure on Smart Meters shall be examined in Truing up of relevant year.

# Terminal Benefit Expenses Petitioners' Submission

- 4.196 For determination of terminal benefits liability, the Discoms have 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.
- 4.197 Discoms have estimated the contributions based on the average of the last 4 years i.e. FY 2018-19 to FY 2021-22 assuming a nominal hike of 3% that will be made towards terminal benefits for FY 2022-23 and FY 2023-24.
- 4.198 Terminal benefit liability submitted by the Discoms for FY 2023-24 has been tabulated below:

Table 71: Terminal Benefit Expenses for FY 2023-24

(Rs. in Crore)

Particulars	JVVNL	AVVNL	JdVVNL	TOTAL
Terminal Benefit Expense	406	788	635	1829

# Commission's Analysis

4.199 The Commission has considered terminal benefit expenses for FY 2023-24 as submitted by Discoms. However, the Commission shall allow the payment made towards actuarial valuation liability in the true up of FY 2023-24 only to the extent of funds actually transferred to the designated Fund.

Table 72: Terminal Benefit Expenses for FY 2023-24

(Rs. in Crore)

Approved							
Particulars JVVNL AVVNL JdVVNL TOTAL							
Terminal Benefit Expense	406	788	635	1829			

4.200 It is observed by the Commission that during FY 2021-22, JVVNL has deposited the amount towards terminal benefit which is higher than the amount allowed in the ARR for FY 2021-22. However, the AVVNL and JdVVNL have deposited 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 shows its serious concern regarding the continuous default in depositing the requisite amount by Discoms. Accordingly, Commission directs the Discoms that they should deposit the amount atleast equivalent to approved by the Commission in

future and also make a plan to meet their liability towards terminal benefit.

## Interest on Loans and Finance Charges & Lease rental

#### **Petitioners' Submission**

- 4.201 The Discoms submitted that closing balance of the normative loan for FY 2021-22 has been considered as the opening loan balance for FY 2022-23. The total capitalisation during the year (or additions to GFA) has been reduced by the grant amount, arrived at by proportioning it on the basis of grants against the proposed capital investment plan. The remaining capitalisation has been considered to be funded through equity and loans, which are again proportioned on the basis of equity and loans proposed against the Investment Plan for the year. The loan portion has been considered as addition to long term loans during the year.
- 4.202 Discoms submitted that in accordance with the Regulation 21 of the RERC (Terms and Conditions for Determination of Tariff), the loan repayment has been considered, equal to the depreciation charged for the year. The closing normative loan is considered after deducting repayment for the year. Similarly they have computed the Interest on Loan for FY 2023-24.
- 4.203 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 10.75% (as per additional submission), 10.69% and 11.10% for JVVNL, AVVNL and JdVVNL respectively.
- 4.204 The Discoms have submitted that they have considered interest on security deposit for FY 2023-24 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 1st April 2022, which is in accordance with the RERC norms.
- 4.205 Discoms have projected the finance charges or other borrowing cost for FY 2023-24 estimated to increase by 5% per annum from actual of previous year.

### Interest on unfunded revenue gap for past years

4.206 Discoms submitted that average unfunded gap for FY 2022-23 is arrived at by considering the opening balance for FY22, additions during the year and closing balance. The same approach has been considered for FY 2023-24.

4.207 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 2021-22 available with the Discoms.

## Interest on Loans taken-over by GoR under UDAY

- 4.208 The Commission, in the Tariff Order for FY 2019-20 dated 6th February 2020, had approved the total interest on UDAY for the JVVNL, AVVNL and JdVVNL as Rs. 2599 Crore, Rs. 2690 Crore and Rs. 2439 Crore respectively to be recovered over a period of 5 years in equal installments viz. Rs 520 Cr., Rs. 538 Cr. and Rs. 488 Cr. for JVVNL, AVVNL and JdVVNL respectively to be recovered each year till FY 2023-24.
- 4.209 Accordingly, the interest charges and finance charges for FY 2023-24 have been summarized in the table below:

Table 73: Interest and Financing Charges for FY 2023-24 (Rs. in Crore)

Table 70: Interest and Intalienty Charges	10111 = 0=0		7	· III CIOIC)
Particulars	JVVNL	AVVNL	JdVVNL	Total
Opening balance of LTL (A)	6803	6617	8006	21426
Capitalization (B)	4198	3380	5509	13087
Capital expenditure financed by Equity				
(C)	1460	1079	1653	4193
Capital expenditure financed by				
Consumer Contribution and grants (D)	749	846	1298	2893
Receipt of LTL for Capital expenditure				
E=(B-C-D)	1989	1454	2558	6001
Principal Repayment(F)	1360	1139	1341	3841
Closing balance of LTL, G=(A+E-F)	7432	6932	9223	23587
Average LTL, H=(A+G)/2	7118	6775	8615	22507
Average Interest rate of LTL (%)(I)	11.72%	10.69%	11.10%	
Interest Charges on LTL, J=(HXI)	834	724	956	2514
Interest on Security Deposit (K)	95	56	50	200
Finance Charges & Lease Rental (L)	193	168	204	565
Gross Interest Charges, M=(J+K+L)	1122	948	1209	3279
Interest Expenses Capitalized (N)	64	370	90	524
Total Interest & Financing Charges (O)	1058	578	1119	2755
Average unfunded Gap	19652	13714	23278	56644
Interest on Carry Forward Revenue Gap,				
Q=(PXI)	2303	1466	2583	6352
Interest on loan taken over UDAY, X	520	538	488	1546
Total Interest & Financing Charges after				
interest on carry forward Gap (O+Q+X)	3881	2582	4190	10653

### Commission's Analysis

4.210 The interest and finance charges have been calculated by the Commission

considering the following:

- a) The closing balance of long-term loans for FY 2021-22 in this true up order has been considered by the Commission as the opening balance for FY 2022-23.
- b) For the capitalization, capital expenditure financed by equity, capital expenditure financed by consumer contribution and grants and receipt of long term loan for capital expenditure for FY 2022-23 have been considered as per order dated 01.09.2022 and principal repayment for FY 2022-23 has been considered equal to deprecation for FY 2022-23 to arrive at the opening balance of loan of FY 2023-24.
- c) Capitalization for FY 2023-24 has been considered as discussed in foregoing paragraphs. Since only 80% capitalization has been allowed by the Commission, consumer contribution and grants have also been taken to the extent of 80% of the total projection by the Discoms.
- d) The long-term loans required for capitalization during the FY 2023-24 have been reduced by the amount of consumer contribution, capital grants and equity projected for the year.
- e) Repayment for FY 2023-24 has been considered equal to the depreciation allowed by the Commission.
- f) Unfunded Gap- For computing the carrying cost, the unfunded gap upto FY 2021-22 has been considered as per above true up order for FY 2021-22. Further during FY 2023-24 the aforesaid unfunded loss has been considered after adjustment of surplus /gap as determined in ARR order for FY 2022-23 dated 01.09.2022.
- g) The weighted average interest rate has been considered at 10.75% as per additional submission by JVVNL, 10.69% and 11.10% as claimed by AVVNL and JdVVNL respectively.
- h) Finance charges and interest on security deposit has been considered as submitted by Discoms.
- i) 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 06.02.2022 and accordingly considered the 1/5<sup>th</sup> of the amount for FY 2023-24 as claimed by Discoms.
- 4.211 **Grant on release of New Agriculture Connection under RE Works:** Discoms has indicated release of 76091, 70000 & 96058 nos of new agriculture connections in their ARR.
- 4.212 The Commission while allowing sales has considered the addition of no. of agriculture connection as proposed by Discoms. As regards the financing of the

same the Commission is of the view that for FY 2023-24, extremely high no. of connection have been proposed to be released as compared to earlier year and outlay on this has increased 2 to 3 times, this is coupled with fact additional expenditure has also been proposed in ST&D scheme for strengthening of the system. As this is done in compliance of announcement of the State Government, as discussed earlier, the Commission is of the view that the 100% cost except consumer contribution should be funded by the grant from the State Governement.

- 4.213 Further, the Discoms in the post hearing additional submission filed the per connection cost of Rs. 209750, Rs. 225000 and 325000 with consumer contribution of Rs. 18750, Rs. 25000 and Rs. 50000 per consumer for JVVNL, AVVNL and JdVVNL respectively. Accordingly, the grant works out to be Rs. 1453.34 Crore, Rs. 1400 Crore and Rs. 2641.60 Crore for JVVNL, AVVNL and JdVVNL respectively.
- 4.214 The Commission has considered this amount as additional grant, Discoms may obtain this amount from the State Government.
- 4.215 The Commission in absence of detailed information has worked out the figure of grant on normative basis, in case of any discrepancy; Discoms may come up with actual figure of applicable grant and may request for recalculating the impact of grant during true up petition of respective year.
- 4.216 Based on the above, the approved interest and finance charges (with respect to the assets capitalized) approved for FY 2023-24 for the three Discoms have been summarized in the tables below:

Table 74: Interest and Finance Charges approved by the Commission for FY 2023-24 (Rs. in Crore)

FY 2023-24								
Particulars	JVVNL	AVVNL	JdVVNL	Total				
Opening balance of LTL (A)	6390	5223	3697	15309				
Capitalization (B)	3358	2704	4407	10470				
Capital expenditure financed by Equity (C)	479	272	377	1128				
Capital expenditure financed by Consumer Contribution and grants (D)	1762	1797	3152	6710				
Receipt of LTL for Capital expenditure E=(B-C-D)	1118	635	879	2631				
Principal Repayment(F)	882	688	697	2267				
Closing balance of LTL, G=(A+E-F)	6626	5169	3879	15674				
Average LTL, H=(A+G)/2	6508	5196	3788	15491				
Average Interest rate of LTL (%)(I)	10.75%	10.69%	11.10%					

699	555	420	1675
95	56	50	200
193	168	204	565
987	779	674	2440
56	305	50	411
931	475	623	2030
17848	11507	19368	48724
1918	1230	2149	5298
520	538	488	1546
3370	22/13	3240	8873
	95 193 <b>987</b> 56 <b>931</b> 17848	95     56       193     168       987     779       56     305       931     475       17848     11507       1918     1230       520     538	95     56     50       193     168     204       987     779     674       56     305     50       931     475     623       17848     11507     19368       1918     1230     2149       520     538     488

# **Interest on Working Capital**

### **Petitioners' Submission**

4.217 Discoms estimated their working capital requirement for FY 2023-24 as per Regulation 27(1) (3) of the RERC Tariff Regulations, 2019 and the same has been tabulated below:

Table 75: Interest on Working Capital for FY 2023-24 (Rs. in Crore)

Particulars	JVVNL	AVVNL	JdVVNL	Total
O&M expenses (as per norms)	163	127	154	444
Maintenance Spare (as per				
norms)	293	229	277	799
Receivables (as per norms)	3,165	2,491	2,676	8,332
Less: Security deposit of				
Consumers	1,579	1,317	888	3,784
Total Working Capital	2,042	1,530	2,218	5,791
Interest Rate (%)	10.97%	10.97%	10.97%	10.00%
Interest on Working Capital	224	168	243	635

4.218 Discoms submitted that they have considered rate of interest as per the average Base Rate (1-year MCLR) for first six months of the year previous to the relevant year plus 300 basis points.

## Commission's Analysis

4.219 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 10.38% for FY 2023-24.
- 4.220 Accordingly, the interest on working capital considered by the Commission is as under:

Table 76: Interest on Working Capital approved by the Commission for FY 2023-24

(Rs. in Crore)

Description	JVVNL	AVVNL	JdVVNL	Total
O&M expenses (as per norms)	154	123	146	422
Maintenance Spare (as per norms)	277	221	263	760
Receivables (as per norms)	3198	2458	3010	8666
Less:				
Security deposit of Consumers	1579	1317	888	3784
Total Working Capital	2050	1484	2531	6065
Interest Rate (%)	10.38%	10.38%	10.38%	10.38%
Interest on Working Capital	213	154	263	630

## **Depreciation**

#### **Petitioners' Submission**

- 4.221 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).
- 4.222 The depreciation has been determined by applying applicable depreciation rates on the average balance of opening and closing Gross Fixed Assets.
- 4.223 The Discoms have submitted the following Depreciation for FY 2023-24:

Table 77: Depreciation for FY 2023-24

(Rs. in Crore)

Particulars	JVVNL	AVVNL	JdVVNL	Total
Depreciation	1360	1139	1341	3841

## Commission's Analysis

- 4.224 Commission has considered depreciation based on the following consideration:
  - a) The closing balance of depreciable assets allowed in the true up order for FY 2021-22 has been considered by the Commission as the opening balance for FY 2022-23.
  - b) The capitalization during the year, capital expenditure financed by consumer contribution & grants and depreciable assets added during the Year for FY 2022-23 has been considered as per order dated 01.09.2022 to arrive at the opening balance of FY 2023-24
  - c) Commission has considered 80% of the amount proposed by Discoms as capitalization and capital expenditure financed by consumer contribution & grants during FY 2023-24 respectively.
  - d) Depreciable assets for FY 2023-24 have been reduced by the amount of consumer contribution and capital grants projected for the year.
  - e) Average depreciation rate has been considered as per true up order for FY 2021-22, in which average depreciation rate are approved at 4.81%, 4.71% and 5.24% for JVVNL, AVVNL and JdVVNL respectively.

# **Fixed Asset Register:**

- 4.225 The issue of fixed assets register has been discussed earlier in this order and Discoms are required to comply with Commission's directive in this regard. In this ARR order the Commission has not made any deduction on account of non furnishing of fixed assets register in the desired format. However, if the Discoms do not comply with direction of Commission, it may consider to deduct a suitable amount from depreciation while doing true up for future years.
- 4.226 Depreciation allowed by the Commission for each of the three Discoms have been tabulated below:

Table 78: Depreciation allowed by the Commission for FY 2023-24

(Rs. in Crore)

Particulars	JVVNL	AVVNL	JdVVNL	TOTAL
Depreciable Assets at the				
beginning of the Year (A)	17533	14150	12673	44356
Capitalization during the year (B)	3358	2704	4407	10470
less: Consumer Contribution and				
Capital Grants during the year (C)	1762	1797	3152	6710
Depreciable Assets added during				
the Year D=(B-C)	1597	907	1256	3759
Depreciable Assets at the end of	19130	15057	13928	48115

the Year (E= (A+D))				
Average Depreciable Assets during				
the Year (F=(A+E)/2)	18331	14603	13301	46235
Average Depreciation Rate (G)	4.81%	4.71%	5.24%	
Depreciation (FXG)	882	688	697	2267

# **Insurance Expenses**

#### **Petitioners' Submission**

4.227 Discoms have estimated the Insurance expenses for FY 2023-24 on the basis of net fixed assets subject to the ceiling specified in Regulation 25 of the RERC Tariff Regulations, 2019.

Table 79: Insurance Expenses - Discoms submission for FY 2023-24 (Rs. in Core)

Particulars	JVVNL	AVVNL	JdVVNL	Total
Insurance Expenses	39	34	35	108

# Commission's Analysis

- 4.228 Commission has allowed Insurance expenses in accordance with Regulation 25 of RERC Tariff Regulations, 2019.
- 4.229 To compute the insurance expenses on average Net Fixed Assets (NFA) as per aforesaid regulation, the Commission has considered the following:
  - i. The closing balance of Net Fixed Assets allowed in true up order for FY 2021-22 is considered as opening balance for FY 2022-23 and closing balance of FY 2022-23 considered as opening balance for FY 2023-24
  - ii. The capitalization as discussed in above Para's have been added and depreciation for FY 2023-24 has been deducted from the above opening balance to arrive at closing balance.
- 4.230 Accordingly, the following insurance expenses have been computed on the average NFA.

Table 80: Insurance Expenses Approved for FY 2023-24

(Rs. in Crore)

Particulars	JVVNL	AVVNL	JdVVNL	Total
Insurance Expenses	35	28	25	88

#### Rebate allowed to Consumer

4.231 Discoms have not projected any rebate to consumers for FY 2023-24.

## Commission's Analysis

4.232 Commission has dealt with rebate allowed to consumer under revenue head of this order.

# **Return on Equity**

#### **Petitioners' Submission**

- 4.233 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".
- 4.234 Discoms submitted that considering the additional burden on the consumers, 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

4.235 It is observed that Discoms have not claimed RoE on Equity base. Therefore, the Commission has not allowed Return on Equity for FY 2023-24.

## Non-Tariff Income and Wheeling Charges

#### Petitioners' Submission

- 4.236 Discoms submitted that for FY 2023-24 the non-tariff income (excluding Delayed Payment Surcharge) has been projected as per the norms in RERC (Terms and Conditions for Determination of Tariff) Regulations 2019.
- 4.237 Income from wheeling charges, cross subsidy surcharge and additional surcharge have been considered based on actuals of FY 2021-22, the same cost parameters have been projected and summarised below:

Table 81: Non-Tariff Income for FY 2023-24 (Rs. in Crore)

Particulars	JVVNL	AVVNL	JdVVNL	Total
Interest on loans and advances to				
employees	0	0	5	5
Interest and other income from				
investments and deposits	8	6	0	14
Gain on sale of assets			27	27
Income from sale of scrap	52	86	17	154
Income from deferment of Govt.				
Grants & Subsidies	334	265	0	599

Particulars	JVVNL	AVVNL	JdVVNL	Total
Rebate for early payment	23	8	0	31
Income from rent on land/building	0.09	0		0.09
Other miscellaneous receipts	111	122	482	715
Total	527	486	531	1545

Income from wheeling charges, cross subsidy Surcharge and Additional Surcharge					
FY 2023-24					
Particulars	JVVNL	AVVNL	JdVVNL	Total	
Income from Wheeling Charges	2	1	1	4	
Cross Subsidy Surcharge	0	1	0	2	
Additional Surcharge	2	1	0	3	
Total	4	4	1	9	

# Commission's Analysis

- 4.238 The Commission has considered the non-tariff income for FY 2023-24 excluding Deferred Income (JdVVNL has shown the deferred income from Govt. of Rs. 327 Crore) under other miscellaneous receipts.) It is further observed that the Discoms have not clearly indicated rental income from use of Discoms assets mainly for laying for various types of cables on poles. Whereas the Commission assess that there is high potential of rental income from cables and poles specially in view of the Discoms latest order where they have allowed various type of cables on the poles. Therefore, the Commission has considered additional income of Rs. 150 Crore towards rental income of cable and poles under miscellaneous receipts from three Discoms during FY 2023-24 towards this head. Accordingly, the miscellaneous receipts during FY 2023-24 have been considered as Rs. 538 Crore.
- 4.239 Further the Commission has considered wheeling charges, Cross Subsidy Surcharge and additional Surcharge and other income 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 82: Non-Tariff Income for FY 2023-24

Table 02. Non-Talli income for 11 2025		(K3. III CIOIE)		
Particulars	JVVNL	AVVNL	JdVVNL	Total
Interest on loans and advances to				
Employees	0	0	5	5
Interest and other income from				
investments and deposits	8	6	0	14
Gain on sale of assets	0	0	27	27
Income from sale of scrap	52	86	17	154
Income from deferment of Govt.				
Grants & Subsidies	0	0	0	0

(Rs in Crore)

Rebate for early payment	23	8	0	31
Income from rent on land/building	0.09	0	0	0.09
Other miscellaneous receipts	167	163	208	538
Total	250	262	257	770

Income from wheeling charges, cross subsidy Surcharge and Additional Surcharge				
FY 2023-24				
Particulars	JVVNL	AVVNL	JdVVNL	Total
Income from Wheeling Charges	2	1	1	4
Cross Subsidy Surcharge	0	1	0	2
Additional Surcharge	2	1	0	3
Total	4	4	1	9

4.240 It is observed that many of the stakeholders have raised the issue of disproportionate revenue and units billed of open access, therefore the Commission directs the Discoms to file the voltage wise/ category wise break-up of number of units billed under open access and corresponding revenue collected under each head i.e. wheeling, CSS and Additional surcharge with the next true up petition for FY 2022-23 along with reasons for deviation if any.

# Aggregate Revenue Requirement

#### **Petitioners' Submission**

4.241 The Annual Revenue Requirement for FY 2023-24 proposed by the three Discoms have been given in the table below:

Table 83: Summary of ARR for FY 2023-24 – Discoms' submission (Rs. in Crore)

		FY 2023-24				
	Partio days	JVVNL	AVVNL	JdVVNL	Total	
Sr.	Particulars				Submissi	
No		Submission	Submission	Submission	on	
1	Power Purchase Expenses	17,414	11,798	15,102	44,313	
2	Transmission charges					
	PGCIL	880	597	764	2,241	
	RVPN	1,165	790	1,011	2,966	
	RLDC	1	1	1	3	
	SLDC	11	8	10	29	
	Operation & Maintenance					
3	Expenses	1,979	1,527	1,843	5,349	
4	Terminal Benefits	406	788	635	1,829	
5	Interest and Finance Charges	1,058	578	1,119	2,755	
6	Interest on Working Capital	224	168	243	635	
7	Interest of Regulatory assets	2,303	1,466	2,583	6,352	
8	Depreciation	1,360	1,139	1,341	3,841	
9	Insurance Expenses	39	34	35	108	

		FY 2023-24				
	Particulars	JVVNL	AVVNL	JdVVNL	Total	
Sr.	ranicolais				Submissi	
No		Submission	Submission	Submission	on	
10	Interest on Uday Loan	520	538	488	1,546	
	Aggregate Revenue					
11	Requirement	27,361	19,431	25,175	71,967	
12	Less: Non Tariff Income	527	486	531	1,545	
	Less: Income from wheeling					
13	charges	2	1	1	4	
14	Less: Cross Subsidy Surcharge	0	1	0	2	
15	Less: Additional Surcharge	2	1	0	3	
	Net Aggregate Revenue					
16	Requirement from Retail Tariff	26,829	18,942	24,643	70,413	

# Commission's Approval

4.242 Commission has approved the ARR for FY 2023-24 based on the items of expenditure discussed in the preceding sections and the same has been summarized in the table below:

Table 84: Summary of ARR for all the three Discoms for FY 2023-24– Approved by Commission (Rs. in Crore)

Sr.	Particulars	FY 2023-24			
No.		JVVNL	AVVNL	JdVVNL	Total
		Approved	Approved	Approved	Approved
1	Power Purchase Expenses*	16,904	13,025	15,727	45,656
2	Transmission charges				
	PGCIL	880	597	764	2,241
	RVPN	1,295	930	1,204	3,428
	RLDC	1	1	1	3
	SLDC	9	6	8	24
	Operation & Maintenance				
3	Expenses	1,844	1,472	1,751	5,067
4	Terminal Benefits	406	788	635	1,829
5	Interest and Finance Charges	931	475	623	2,030
6	Interest on Working Capital	213	154	263	630
7	Interest of Regulatory assets	1,918	1,230	2,149	5,298
8	Depreciation	882	688	697	2,267
9	Insurance Expenses	35	28	25	88
10	Interest on Uday Loan	520	538	488	1,546
11	Aggregate Revenue Requirement	25,838	19,933	24,335	70,106
12	Less: Non Tariff Income	250	262	257	770
13	Less: Income from wheeling charges	2	1	1	4
14	Less: Cross Subsidy Surcharge	0	1	0	2
15	Less: Additional surcharge	2	1	0	3

Net Aggregate Revenue				
16 Requirement from Retail Tariff	25,584	19,667	24,077	69,328

<sup>\*</sup>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**

- 4.243 Discoms have projected the revenue based on energy sales forecasts for FY 2023-24 and the applicable retail tariff as per the RERC's Tariff Orders.
- 4.244 The revenue in FY 2023-24 from existing tariff as per Discoms' submission is as under:

Table 85: Revenue from existing tariff for FY 2023-24– Discoms' submission

(Rs. in Crore)

	FY 2023-24				
Particular	JVVNL	AVVNL	JdVVNL	Total	
Domestic	5440	3955	3727	13122	
Non-Domestic	3234	1852	1801	6886	
Public Street Light	193	98	107	399	
Agriculture (Metered)	6396	4401	9998	20795	
Agriculture (Flat)	62	0	667	730	
Small Industry	320	233	198	751	
Medium Industry	801	753	712	2266	
Large Industry	7973	7881	2899	18754	
Public Water Works (S)	285	264	238	787	
Public Water Works (M)	42	29	80	151	
Public Water Works (L)	359	335	613	1306	
Mixed Load / Bulk Supply	207	111	365	683	
EV	3	0	0	3	
Railway traction	0	20	0	20	
Total	25316	19931	21405	66653	

# Subvention and Subsidy

# Petitioners' Submission

4.245 Discoms have submitted that the State Government used to provide subvention against ED and subsidy against compounding charges. However, going forward, no subvention against ED shall be provided by the State Govt. hence no such

projections have been for same are included in the current petition.

4.246 Discoms have shown Subsidy against compounding charges and other subsidies and loss subsidy under FRBM scheme for FY 2023-24 as under:

Table 86: Subvention and subsidy for FY 2023-24

(Rs. in Crore)

FY 2023-24					
Particular	JVVNL	AVVNL	JdVVNL	Total	
Subsidy against compounding charges & Other subsidies	19	34	3	56	
Loss Subsidy under FRBM Scheme			2778	2778	
Total	19	34	2781	2834	

<sup>\*</sup>**Note**: JdVVNL submitted that Government of Rajasthan, as a part of scheme for enhancement of FRBM limit, shall take over 90% of the loss for the year 2023-24.

#### **Revenue Deficit**

4.247 The revenue deficits submitted by Discoms for FY 2023-24 at the existing tariff have been provided in the table below:

Table 87: Revenue Deficit/Surplus at existing tariff for FY 2023-24 (Rs. in Crore)

Particulars	JVVNL	AVVNL	JdVVNL	Total	
Particulars	FY 2023-24				
Net Aggregate Revenue Requirement					
(A)	26,829	18,942	24,643	70,413	
Revenue from Existing tariff (B)	25,316	19,931	21,405	66,653	
Revenue From Trading Income B1	1,707	49	148	1,903	
Subsidy against compounding					
charges and other subsidies (C)	19	34	3	56	
Deficit for the Year	012	1 070	2 007	1 000	
D= (A-B-C)	213	1,072	-3,087	-1,802	
Loss Subsidy under FRBM Scheme			2,778	2,778	
Net Profit/(Loss)	213	1,072	-309	976	

# Commission's Analysis:

#### Revenue

- 4.248 Commission has calculated the category wise revenue from existing tariff at tariff approved in order dated 01.09.2022 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 computed 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.
- 4.249 The estimated revenue at existing tariff for different consumer categories for all

the three Discoms for FY 2023-24 have been summarized in the table below:

Table 88: Revenue from Existing Tariff for FY 2023-24 Approved by the Commission

(Rs. in Crore)

	FY 2023-24			
Particular	JVVNL	AVVNL	JdVVNL	Total
Domestic	5604	4241	3903	13748
Non-Domestic	2919	1750	1693	6362
Public Street Light	142	97	81	320
Agriculture (Metered)	6522	4484	10200	21206
Agriculture (Flat)	63	0	669	732
Small Industry	337	241	189	767
Medium Industry	786	766	670	2222
Large Industry	7101	7498	2803	17402
Public Water Works (S)	286	285	268	839
Public Water Works (M)	39	29	80	149
Public Water Works (L)	308	341	625	1274
Mixed Load / Bulk Supply	190	100	343	633
EV	1	0	0	1
Railway Traction	0	23	22	45
Total	24299	19854	21547	65700
add DF income	1200	362	595	2156
less: Rebate*	435	562	214	1211
Total	25064	19654	21927	66646

<sup>\*</sup>Rebate: ToD rebate, incremental rebate etc.

# Subsidy

4.250 As discussed in the true up section, the Government of Rajasthan has taken 50% of audited Losses of Discom for FY 2020-21. Further, GoR, as part of the abovementioned scheme has provided an undertaking to the GoI for taking over of future losses of the Discoms as per the following trajectory:

2022-2023	2023-2024	2024-2025	2025-2026 onwards
60% of the loss for	75% of the loss	90% of the loss	100% of the loss for
the year 2021-22	for the year	for the year	the year 2024-25 &
	2022-23	2023-24	onwards

4.251 It is observed that as per post hearing submission of Discoms, during FY 2021-22, the Government of Rajasthan has taken 60% of audited Losses of JVVNL and

- JdVVNL for FY 2021-22 of Rs. 33.65 Crore and Rs. 1765.05 Crore respectively. As per methodology adopted for losses of FY 2020-21, in true up for FY 2021-22, the Commission has considered lower of subsidy received or 60% of approved losses in for FY 2021-22.
- 4.252 Accordingly, in case of JVVNL Commission has considered lower of subsidy received of Rs. 33.65 Crore or 60% of approved True up losses for FY 2021-22 i.e. 60% of Rs. 902.17 Crore (before subsidy impact of 330.38 Crore) and as JDVVNL has approved true up surplus during FY 2021-22, therefore, loss subsidy is considered as NiL.
- 4.253 Based on above working, for FY 2021-22, Commission has considered the loss subsidy of Rs. 33.65 Crore for JVVNL and NiL for JdVVNL.
- 4.254 Further, for FY 2022-23, in the absence of actual audited data and information of losses to be taken over for FY 2022-23, the Commission has considered 75% of Losses approved in the ARR order dated 01.09.2022. It is observed that in the aforesaid ARR order, only JdVVNL had loss of Rs 1414 Crore. Accordingly, the Commission has considered 75% of such loss i.e. Rs 1060.50 Crore in the current ARR order as a provisional loss taken over, which is subject to true up based on actual data.
- 4.255 Further, for FY 2023-24, the Commission has considered Loss subsidy of 90% of Losses approved in the current ARR order as per commitment of GoR under FRBM, which is subject to true up based on actual data.

#### **ARR** and Revenue

4.256 Considering the ARR and Revenue at existing tariff as determined by the Commission, subsidy & subvention as shown by the Discoms in their petition, the revenue surplus for all the three Discoms for FY 2023-24 at the existing tariff has been worked out.

Table 89: Revenue Deficit/Surplus at existing tariff for FY 2023-24 Approved by the Commission (Rs. in Crore)

Partio days	JVVNL	AVVNL	JdVVNL	Total
Particulars		FY 202	23-24	
Net Aggregate Revenue				
Requirement (A)	25584	19,66	7 24,0	77 69,328
Revenue from Existing tariff (B)	25064	19,65	4 21,9	27 66,646
Subsidy against compounding				
charges and other subsidies (C)	19	3	4	<b>3 56</b>
(Gap) /Surplus	-501	2	1 -2,1	-2,627

D= (A-B-C)				
Loss Subsidy under FRBM Scheme				
For FY 21-22	33.65			34
For FY 22-23			1,061	1,061
For FY 23-24	451	0	1,932	2,383
Less : Reduction on account of non conversion of Flat rate consumers	20	0	20	40
(Gap)/Surplus	4	21	866	891

## Section- 5 Tariff Proposals and Approved Tariff

# 5.1 Tariff proposal for FY 2023-24

- 5.1.1 Discoms projected an ARR of Rs. 70413 Crore and net surplus of Rs. 977 Crore after receipt of Govt. subsidy and loss subsidy under FRBM at existing tariff for FY 2023-24.
- 5.1.2 Commission in section 4 has worked out ARR for the three Discoms wherein after disallowing excess losses beyond approved trajectory and considering other costs on normative basis, the Commission has determined the net ARR as Rs. 69328 Crore with a net surplus of Rs. 891 Crore at existing tariff for FY 2023-24 taking all Discoms together.
- 5.1.3 In view of Discoms' request of no increase in tariff and determination of surplus position of ARR at Rajasthan level by the Commission during FY 2023-24, the Commission has not made any increase in tariff.
- 5.1.4 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 in addition to what is presently being given and also consider to assign low cost PPAs to Jodhpur Discom so as to wipe out the disparity in these Discoms. Jodhpur Discom can also use cheaper solar power available in abundance in its area to use it to supply to farmers during day time in a distributed manner. Other Discoms should also attempt to derive the maximum benefits from the Distributed Energy Resources so as to reduce the losses and avoid unnecessary expenditure in network.
- 5.1.5 Discoms have proposed certain rationalization measures which are discussed hereunder.
- 5.1.6 There are other proposals in the petition of Discoms which requires consideration of the Commission i.e. wheeling charges, Cross subsidy surcharge and additional surcharge etc. which are discussed after below mentioned Tariff rationalization measures.

## **Tariff Rationalisation Proposal**

# a. Levy of Base FSA

- 5.1.7 The Discoms submitted that based on the demand-supply scenario and other associated parameters like change in fuel cost, tax rates, transportation costs etc. the actual variable charges tend to vary from the Commission approved rates. Fuel Surcharge Adjustment (FSA) is a tariff provision that basically permits the concerned companies to regularly adjust the variable price of electricity in order to reflect the fluctuations in the cost of fuel, or purchased power used to supply electricity.
- 5.1.8 Presently, Rajasthan Discoms recover Fuel surcharge from its consumers as per Regulation 88 of the RERC (Terms and Conditions for Determination of Tariff Regulations, 2019 on quarterly basis.

Quarter wise fuel Surcharge levied (Rs. /Unit)

		ge levieu (ks. / offil)	
S. No.	Financial Year	Quarter	Fuel Surcharge Adjustment recovered (Rs. /Unit)
1.	2018-19	Apr'18 to June'18	Not recoverable
2.	2018-19	July'18 to Sept'18	0.19
3.	2018-19	Oct'18 to Dec'18	0.37
4.	2018-19	Jan19 to March'19	0.37
5.	2019-20	Apr'19 to June'19	0.55 - Jaipur Discom 0.52 - Jodhpur Discom 0.37 - Ajmer Discom
6.	2019-20	July'19 to Sept'19	0.27
7.	2019-20	Oct'19 to Dec'19	0.39
8.	2019-20	Jan'20 to March'20	0.30
9.	2020-21	Apr'20 to June'20	0.28
10.	2020-21	July'20 to Sept'20	Not recoverable
11.	2020-21	Oct'20 to Dec'20	0.07
12.	2020-21	Jan'21 to March'21	0.16
13.	2021-22	Apr'21 to June'21	0.33
14.	2021-22	July'21 to Sept'21	0.24
15.	2021-22	Oct'21 to Dec'21	0.21
16.	2021-22	Jan'22 to Mar'22	0.09

- 5.1.9 As can be observed from the table above, barring a couple of quarters, FSA has been regularly applicable on the consumers of the state. The application of FSA, however, has not been without its own set of issues and limitations.
- 5.1.10 The Multi Year Tariff Regulations were issued by the Hon'ble Commission with a view to provide the consumers of the State with a sense of certainty and stability over a period of five years, with respect to the applicable rates of electricity in the State.

- 5.1.11 In an ideal scenario, having a MYT regime, gives the consumers a clarity regarding the applicable electricity rates which provides them with an upper hand in planning their future expenditure in a more efficient manner. However, having the fuel surcharge computed and levied on a quarterly basis, leading to increased unplanned energy charges, defeats the primary purpose of having such a MYT regime in place.
- 5.1.12 For consumers who have to plan their electricity expenses in advance looking into their business and working budget requirements, an increase in electricity bills owing to the impact of quarterly levy of fuel surcharge can adversely impact their planning and schedules.
- 5.1.13 Hence, considering the challenges faced by the consumers as detailed above, concept of determining and levying a base FSA is proposed to overcome the mentioned issue. Base FSA can be defined as a constant minimum rate of fuel surcharge which shall be levied on a monthly basis in the electricity bills of the consumers.
- 5.1.14 Proposal of levying a Base FSA, may be determined as per the actual weighted average of FSA that was levied during all four quarters of the previous year. Subsequently, the Fuel Surcharge shall be computed on a quarterly basis based on the existing formula as approved by RERC. Any variation on account of such quarterly computation may accordingly be adjusted from the Base FSA as approved.
- 5.1.15 Thus, in view of above Discoms proposed to introduce the concept of determining and levying a base FSA.
- 5.1.16 Further, post hearing Discoms submitted that average FSA calculation for FY 2023-24 is Rs. 0.22/unit as fuel surcharge recovered for Jan 2022 to March 2022 is Rs. 0.12/unit.
- 5.1.17 Stakeholders welcomed the proposal of Discoms and submitted that it is their long pending demand that FSA be recovered on monthly basis even on a provisional basis, so that consumer can come to know its impact on their cost timely and also get benefitted by paying lower and known amount per month instead of paying a higher amount all of a sudden.

#### Commission's View

5.1.18 The Discoms have submitted a proposal for the determination and levy of Base FSA in their ARR and Tariff Petitions for FY 2023-24. Base FSA can be defined as a

- constant minimum rate of fuel surcharge which shall be levied on a monthly basis in the electricity bills of the consumers.
- 5.1.19 Presently, Rajasthan Discoms, compute and levy the Fuel Surcharge as per Regulation 88 of the RERC (Terms and Conditions for Determination of Tariff) Regulations 2019, on a quarterly basis as fuel surcharge.
- 5.1.20 Although, the out flow due to additional Variable cost is incurred by the Discoms on monthly basis (on account of payment made to power generators), it is recovered from the consumers only on quarterly basis. Such delay in recovery of cost incurred by the Discoms creates cash flow constraints, which considering the high financing cost of the Discoms results into a double blow.
- 5.1.21 The Discoms have also submitted that in an ideal scenario, having a MYT regime, gives the consumers a clarity regarding the applicable electricity rates which provides them with an upper hand in planning their future expenditure in a more efficient manner. For consumers who have to plan their electricity expenses in advance looking into their business and working budget requirements, an increase in electricity bills owing to the impact of quarterly levy of fuel surcharge can adversely impact their planning and schedules.
- 5.1.22 Commission also notes that the Ministry of Power (MoP) on 29<sup>th</sup> December, 2022 issued the Electricity (Amendment) rules, 2022. Rule 14 of the same which deals with Fuel Surcharge and its timely recovery is reproduced as under:
  - "14. Timely recovery of power purchase costs by distribution licensee.-The Appropriate Commission shall within ninety days of publication of these rules, specify a price adjustment formula for recovery of the costs, arising on account of the variation in the price of fuel, or power purchase costs and the impact in the cost due to such variation shall be automatically passed through in the consumer tariff, on a monthly basis, using this formula and such monthly automatic adjustment shall be trued up on annual basis by the Appropriate Commission..."
- 5.1.23 It can be clearly observed that the contention of the above-mentioned rules is also the timely recovery of FSA on a monthly basis by the Discoms so as to ensure timely recovery of cost and improve cash flow across the whole energy chain.
- 5.1.24 The Discoms have proposed that the Base FSA may be determined as per the actual weighted average of FSA that was levied during all four quarters of the previous year. Subsequently, the Fuel Surcharge may be computed as per the formula approved by RERC. Any variation on account of such quarterly

- computation may accordingly be adjusted from the Base FSA as approved in the future monthly bills. The proposal of the Discoms has been received in a positive light by the consumers also.
- 5.1.25 Accordingly, the Commission deems it appropriate to approve the determination and levy of Base FSA based on actual weighted average of FSA that was levied during all four quarters of the previous year on the monthly bills of the consumers on a provisional basis and subsequently, the Fuel Surcharge shall be computed on a quarterly basis as per Regulation 88 of the RERC Tariff Regulations, 2019 and any variation observed on account of such quarterly computation may accordingly be adjusted from the Base FSA.

# b. Modification in fixed charges for consumers under LT-I domestic category with demand > 50 kVA

- 5.1.26 The Discoms submitted that in case the consumer in LT Domestic category has a single connection with a demand more than 50 KVA, the consumer is eligible for availing supply at 11 kV or above. Additionally, the Tariff Schedule specifically mentions that the billing in such cases shall be done as per the Rate of Charges specified for LT-1 Domestic category.
- 5.1.27 The fixed charges under LT-1 Domestic category have been determined based on individual connection. Thus, it is pertinent to note that a consumer (especially hostels), fulfilling all the criteria as specified under LT-1 Domestic category having demand more than 50 KVA, can avail supply at 11 kV. However, the fixed charges for such a consumer would be billed monthly per connection. As a result, such a consumer cannot be appropriately charged for use of electricity.
- 5.1.28 The Discoms submitted that they have to periodically undertake network enhancement measures and incur huge network cost to maintain quality supply to meet the demands of domestic consumers. However, the present mode of recovery of such network costs (fixed costs in nature) through the fixed charges based on per connection per month is not reflective of the costs incurred on the network. This results in under recovery of the fixed cost incurred by the Discoms.
- 5.1.29 Therefore, Discoms made a proposal to introduce demand-based billing for fixed charges for such consumers akin to Domestic HT category.

#### Commission's View

5.1.30 It is observed that these consumers, even though they are connected on 11kV but are covered and billed under LT schedule.

5.1.31 Regulation 4.1 of RERC (Supply code and connected matters regulations), Regulation, 2021 specify supply voltages has been specified on the basis of connected load/sanctioned load/contracted demand as under:-

<u>Category of</u> <u>Consumer</u>	<u>Character of Service</u>	
a) Domestic/ Non- Domestic/	i) Connected Load up to 5 kW	i) LT Single phase or three phase at the option of the consumer
Mixed Load	ii) Connected Load above 5 kW but contract/ actual demand remains up to 50 kVA	LT Three phase
	iii) Connected Load above 5 kW and contract/ actual demand more than 50 kVA but up to 2500 kVA	iii) HT 11k∨
	iv) Contract/ actual demand above 2500 kVA but up to 8000 kVA	iv) HT 33kV
	v) Contract/ actual demand above 8000 kVA	v) EHT 132 kV or above
	XX	

- 5.1.32 From above, Commission observes that as per Supply code Regulations, such consumers are eligible for availing supply at 11kV or above and since such consumers are connected at HT and using the HT infrastructure of Discoms these are essentially HT consumers and should be covered and billed under HT schedule.
- 5.1.33 Therefore, the Commission directs the Discoms to shift such consumers to schedule "Domestic Category (HT-1)" and make the suitable Changes in the tariff booklet accordingly. This will also benefit these consumer by way of applicability of lower energy charges as applicable to HT consumers.

### c. Amendment in seasonal factories clause

5.1.34 The Discoms submitted that seasonal Factories means factories which by virtue of their nature of production can work only during a part of the year continuously upto maximum period of 8 (eight) months, such as Ice Factories, Cold Storage & Ice Factories, Ginning & Pressing Factories, Oil Mills, Oil Refining Units, Rice Mills, Bricks Manufacturing Industries, Soft Drinks Industries, Milk Dairies producing only ghee and/or Skimmer Milk Powder but excluding dairies also producing liquid milk, Sugar Mills (Provided no other including the distillery, is supplied power from that connection), and such other factories as may be

approved by the Managing Director, Discoms from time to time, subject to the following conditions:-

- i. The seasonal period and off seasonal period in case of new industry during first year shall be treated for the purpose of billing as notified at the time of release of connection. The seasonal period of maximum eight months for subsequent years shall be as notified at time of release of connection, which can be modified by one month's notice prior to commencement of season.
- ii. Seasonal period shall be based on the notice from the consumer at least one month prior to commencement of Season. In absence of any such notice, after completion of their off seasonal period (minimum four months), the seasonal period will be treated as commenced from that month for continuous eight months. However, seasonal consumer can pre-pone his seasonal period by 1 (one) month by making a request in writing, but such request shall be entertained only once in a span of three years.
- iii. During the off seasonal period, for a minimum of four months in a year, Fixed Charges shall be charged at 25 % of normal rate of Fixed Charges while Energy Charges shall be charged on actual consumption basis.
- iv. Consumption during any month in the off-seasonal period shall not exceed 25 % (twenty five percent) of the average monthly consumption of preceding seasonal period. In case it exceeds such limit during any month of the off- seasonal period then the total energy consumption during that month shall be charged at one and a half times of the normal rate of energy charges in addition to off-seasonal fixed charges.
- 5.1.35 The Discoms submitted that as per prevailing provision it is required at the end of consumer to pay energy charges only on the consumption of energy. If there is no use of electricity nothing is payable against energy charges.
- 5.1.36 The Discoms submitted that Fixed charges are paid to Generation Companies according to the total demand of Discom. Fixed charges are leviable on each and every running electricity connection either the energy is consumed or not. It is evident that allowing rebate in fixed charges to the seasonal industries is a direct loss to Distributions Companies. Therefore, the Discoms proposed to delete this clause.

# Commission's View

5.1.37 Commission observes that Stakeholders apprehend that by deleting the clause of charging 25% of normal rate of fixed charges during off seasonal period would mean that they will have to pay full fixed charges for all the 12 months of

- the year and thus there will not be any difference between seasonal factory & normal factory.
- 5.1.38 The Commission observes that the seasonal industry run their industries only during the seasonal period and pays fixed charges for the period in a season and during off season(maximum 4 months) they are supposed to limit their consumption to 25% of average monthly consumption of preceding seasonal period. There is a provision of penal charges, if a consumer exceeds the limits of consumption of 25% during off seasonal period, on both energy and fixed charges.
- 5.1.39 As period of off season is well known to the Discoms in advance and provisions are available for recovery of penal charges in case of excess use, the Commission agrees with the stakeholders submission that this proposal would render the provision of seasonal Factories inefficacious and accordingly the Commission is not inclined to accept the Discoms' proposal of deleting the clause of relief given to seasonal industry.

## d. Net energy charges

5.1.40 The Discoms submitted that as per present Tariff for Supply of Electricity conditions, there is a conflict regarding allowing/levying Power Factor Rebate/Surcharge, Excess Demand Surcharge, ToD Surcharge and Prompt Payment Rebate. In case of Power Factor Rebate/Surcharge, RERC, while determining the Tariff for Supply of Electricity vide its Tariff Order dated 24.11.2021 laid down the following principle:

"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.

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."

- 5.1.41 Accordingly, as per above, the power factor rebate/surcharge is to be levied/paid on effective energy charges i.e., the energy charges minus various rebates. The Audit has raised an observation regarding the levy of ToD Rebate/Surcharge stating that both power factor rebate/surcharge and ToD rebate/surcharge are being paid/recovered as a percentage of energy charges.
- 5.1.42 Currently, ToD rebate/surcharge is being levied on gross energy charges instead of effective energy charges. It was stated by Audit that the ToD rebate/surcharge which is also levied as a percentage of energy charges should be levied on effective energy charges since the consumer effectively paying lower energy charges cannot claim ToD rebate/surcharge on higher energy charges.
- 5.1.43 Therefore, the Discoms approached the Commission to impart clarity regarding the levy of such ToD rebate/surcharge, whether the same should be on gross energy charges or effective energy charges.

#### Commission's View

- 5.1.44 Commission observes that with regard to ToD rebate/surcharge, the Stakeholders submitted that there is no ambiguity in the present provision, therefore the Commission should continue with current practice of ToD rebate on Gross Energy Charges, as adoption of effective energy charges discourage consumers to shift their consumption to off-peak hours.
- 5.1.45 The Commission in petition No. 2055/2022 filed by M/s Shree Cement Limited in the matter for contravention of directions contained in RERC Order dated 24.11.2021 while dealing with manner of calculation of power factor surcharge/incentive noted as under:-
  - 28 In Commission's view the ToD mechanism, though called by various names, in essence, is a price signal to the consumers to shift their load from/to particular time blocks and the ToD mechanism finally affects the energy charges to be paid by the consumer. Accordingly, argument of the respondent that for the purpose of allowing power factor rebate one part of ToD mechanism (ToD surcharge) is a penalty and other part of ToD mechanism (ToD rebate) is a part of tariff, does not hold water.
  - 29. In view of the foregoing discussions, the Commission orders that the intent and direction of the Commission given vide tariff Order dated 24.11.2021 is clear and should be followed in letter and spirit and power factor rebate/surcharge shall be calculated by the Discom in the manner provided in para 32 of the tariff order dated 24.11.2021 i.e. on the energy charges arrived at after availing all rebate/surcharge and bill of the consumer, be revised accordingly.

5.1.46 The Commission in its ARR and Tariff Order for FY 2022-23 dated 01.9.2022 had approved the following ToD tariff structure:

Off-peak hours	Rebate on Energy Charges (EC)	
12 am to 6 am (6 hours)	7.5%	
Peak hours	Surcharge on Energy Charges (EC)	
6 am to 10 am (4 hours)	5%	

5.1.47 As observed by the Commission ToD tariff is a price signal which as per tariff order is clearly linked to Energy Charges i.e. the tariff for energy determined by the Commission. It is the power factor rebate/surcharge which is to be calculated by the Discom on the energy charges arrived at after availing all rebate/surcharge. Accordingly, in view of the Commission, present provision is unambiguous and practice of calculating the ToD rebate/surcharge on the Energy Charges as per tariff determined by the Commission should be continued.

# e. Amendment in PART-I (L.T. TARIFF) in Domestic service (Schedule DS/LT-I)

- 5.1.48 The Discoms submitted that as per Existing Clause in Note: (xiii) "If a Consumer under this schedule is provided High Tension Supply with metering provided on HT side, a rebate of 7.5% on the Energy charges under this schedule will be given. However, Discom may at its discretion, provide metering equipment on Low Voltage side of consumer's transformer and in such cases 3%(three percent) of recorded consumption shall be added to cover transformation losses, thereafter rebate@ 7.5% on Energy Charges be allowed."
- 5.1.49 The Discoms submitted that the consumers eligible for HT supply and having supply as well as metering on HT side are requesting to allow this rebate. This rebate was introduced to incentivise those consumers having a contract demand below 50 KVA and metering on LT Side to take the supply on HT Side.
- 5.1.50 To bring in more clarity, the following amendment has been proposed:

"If a Consumer under this schedule having a contract demand up to or below 50 KVA, is provided High Tension Supply with metering provided on HT side, a rebate of 7.5% on the Energy charges under this schedule will be given. However, Discom may at its discretion, provide metering equipment on Low Voltage side of consumer's transformer and in such cases 3% (three percent) of recorded consumption shall be added to cover transformation losses, thereafter rebate@ 7.5% on Energy Charges be allowed."

#### Commission's View

5.1.51 Commission observes that the proposal of Discoms provides more clarity in the provision and removes the confusion regarding rebate for the consumers provided with HT supply by way of separate dispensation for location of meter on LT and HT side. The Commission, accordingly, accepts the proposal of the Discoms and Discoms are directed to make the suitable Changes in the tariff booklet.

## f. Amendment in power factor clause

5.1.52 The Discoms submitted that the existing clause in Tariff is as under:

"If the average power factor falls below 0.70 (70%), the installation shall be disconnected and will not be reconnected till the consumer undertakes to improve the power factor to the satisfaction of the Discom within time prescribed..."

- 5.1.53 Discoms submitted that it has been observed that due to heavy penalty of power factor almost all the consumers are maintaining their power factor, but some time consumers are not able to use the motive load and thus they are unable to maintain power factor.
- 5.1.54 In such type of cases, if Discoms disconnects the supply of consumers, then it will result in loss to Discoms not only for energy charges but also for fixed charges. It is also not possible for Discom to disconnect the supply frequently in the case where the consumer is not able to maintain power factor due to genuine issue(s), which leads to unnecessary engagement of Discom's manpower.
- 5.1.55 Therefore, The Discoms proposed the following provision.

"If the average power factor falls below 0.70 (70%), a notice should be served upon to the consumer and if consumer fails to maintain their power factor to the satisfaction of Nigam than Nigam may, if it thinks fit, that consumer is not maintaining the power factor even after using of motive load then the supply of consumer shall be disconnected and will not be reconnected till the consumer undertakes to improve the power factor to the satisfaction of the Discom within time prescribed"

#### Commission's View

5.1.56 The Commission observes that stakeholders requested that notice for disconnection be given 3 times instead of once as proposed by Discoms. The Commission observes that in such cases Discom is also levying and collecting

the power factor surcharge. As improvement of power factor requires installation of capacitors or dynamic compensation /power factor correction, it may take some time for the consumer to purchase/install the required equipment and study its impact on consumer's system. Therefore, in the consumer's interest, Commission directs that notice for disconnection be served upon to the consumers 3 times in the interval of 30 days each and only after lapse of 15 days of last notice, the Discom should resort to disconnection. The Discoms proposal is accepted by the Commission with the above observation. Accordingly, the Commission directs the Discoms to make the suitable Changes in the tariff booklet.

#### a. Modification in the definition of Rebate for New HT Connections

- 5.1.57 The Discoms submitted that the existing clause for Rebate for New HT Connections is:
  - "A rebate of Rs. 0.55/unit and Rs. 0.85/unit in energy charges is applicable for new connection taken from 1st April, 2019 onwards for the consumption recorded, by a new unit set up by a manufacturing enterprise by making a new investment in fixed assets for MIP (HT) and LIP consumers respectively. This rebate shall be effective after issuance of this order, prospectively, till further order of the Commission. The newly setup manufacturing unit is required to furnish the certificate of date of commencement from the District Industries Center (DIC) as a proof of commencement of commercial operation."
- 5.1.58 The Discoms submitted that the very basic purpose of this rebate, which was introduced along with incremental consumption rebate in the Tariff Order for FY 2019-20 dated 06.02.2020 was to attract the new industries. The existing industries shall get incremental consumption rebate with respect to their consumption in the previous year.
- 5.1.59 The Discoms submitted that while the base year of the incremental consumption rebate was modified (changed to previous year consumption) in the Tariff Order for FY 23 dated 01.09.22, the new industry rebate continues to be applicable for industries setup after 01.04.19. Discoms submitted that there is no substantial increase in new industries in line with the years before introducing this rebate. More so, there is no increase in tariff of HT-LIP consumers since last two years. Therefore, it is preferable to modify this clause and the period of this rebate should be changed to one year from date of release of connection (and not from 01.04.19) and afterwards consumers shall be eligible for incremental rebate.

5.1.60 The Discoms proposed the following provision in the Modification in the definition of Rebate for New HT Connections.

## Rebate for New HT Connections.

"A rebate of Rs. 0.55/0.85 unit in energy charges is applicable for new connection for first twelve months from the date of release of new connection. The consumption recorded, by a new unit set up by a manufacturing enterprise by making a new investment in fixed assets for MIP (HT)/LIP consumers is eligible for this rebate."

#### Note:-

- 1. This rebate is not applicable for the Govt. Connections and Public Sector Undertakings.
- 2. This rebate shall not be applicable for connections obtained by virtue of change in ownership in existing connection or by re-connection.
- 3. New connection on the permanently disconnected premises shall only be eligible for such rebate, if, the application for new service connection on such premises is received not before the expiry of six months from the date of its permanent disconnection by same owner.

### Commission's View

- 5.1.61 It is observed that new industrial units setup after 01.04.2019 are availing the new industry rebate from 01.04.2019 onwards. The Commission in its Order dated 06.02.2020 stated that the rebate shall continue to prevail till further order of the Commission. The Commission vide its order dated 01.09.2022 also directed Discoms to review rebate structure and methodology and file suitable proposal with ARR petition.
- 5.1.62 Commission observes that COVID period is already over and industrial consumption has also picked up during last two years and moreover, no tariff increase has been made in ARR for FY 2021-22, FY 2022-23 & FY 2023-24. Commission further observes that there is also a provision of incremental consumption rebate of Rs. 0.85/unit and Rs.0.55/unit for MIP(HT) and LIP category respectively for incremental consumption considering the preceding year as the base year.
- 5.1.63 It is observed that any rebate cannot go on perpetually. Therefore, from the date of applicability of this order, the new industry rebate shall be available only for 12 months from the date of release of new connection and thereafter such

- consumer may continue to avail the benefit of incremental consumption rebate.
- 5.1.64 Accordingly, the Commission accepts the above proposal of Discoms and directs the Discoms to make the suitable changes in the tariff booklet. The Commission would also like to clarify that the change in rebate as above shall be applicable prospectively only after issue of this order.

## ToD rebate and surcharge

5.1.65 The Commission in its ARR and Tariff Order for FY 2022-23 had approved the following ToD tariff structure:

Off-peak hours	Rebate on Energy Charges (EC)
12 am to 6 am (6 hours)	7.5%
Peak hours	Surcharge on Energy Charges (EC)
6 am to 10 am (4 hours)	5%

- 5.1.66 The Discoms during the hearing and in post hearing submissions, submitted that Commission has introduced ToD rebate to balance the load curve. However, the scenario seems to be on reverse side, as it is observed from the data that instead of having surplus power during off peak hours, Discoms are facing power shortage and buying power at higher tariff, which may be due to shortage of coal throughout India. Also, the envisaged load shifting is not taking place and only the continuous running industries are availing the benefits of ToD rebate being provided.
- 5.1.67 Discoms further submitted that they had entered into banking arrangement with UPPCL for meeting the power deficit during the Rabi Season (December-2022 to March-2023) and is under obligation to return this power to UPPCL during the period between April-2023 and September-2023. This power will be returned during the evening/night hours (8 PM to 5AM), coinciding with the ToD rebate hours
- 5.1.68 Also, the historical actual availability from the State Genco owned units have been much lower than the assured and normative levels. During the last 4 years between FY 20 to FY 23, weighted average availability was only 66% for State Genco units, while availability during FY 23 (up to Feb-23) is 61%, which translates to 4,425 MW against ex-bus capacity of 7,274 MW.

- 5.1.69 Discoms further submitted that they are passing higher quantum of rebate to consumer and the revenue from surcharge is on lower side, this situation does not seem to be revenue neutral.
- 5.1.70 Discoms submitted that they have studied the existing power demand and supply scenario and are anticipating a crunch in the power availability for the forthcoming months. This is on account of high anticipated demand in summers as also observed in previous years, lower availability from RVUNL, costly power available in exchange etc.
- 5.1.71 Ministry of Power (MoP) on 14.03.2023 also held a high-level meeting with the Forum of Regulators (FoR) regarding the upcoming power crisis situation in the country. Accordingly, directions were issued to the States to prepare for uninterrupted power supply during the upcoming high demand crunch period.
- 5.1.72 The Discoms during the hearing submitted that only the continuous process industries are taking the benefit of ToD mechanism and practically there is no shifting of load and requested the Commission to review the ToD structure. Some of the stakeholders also echoed the concern that ToD mechanism should actually result into shifting of the load and should be revenue neutral. Further, post hearing Discoms have propose the following changes:
  - i. To reduce the off peak hours in which ToD rebate is applicable to 4 hours (2AM to 6AM) from the existing period of 6 hours (12AM to 6AM)
  - ii. To keep the surcharge and rebate at revenue neutral level and accordingly revise the ToD surcharge from 5% to 7.5%.
- 5.1.73 The Commission in its earlier order noted that ideally ToD tariff should be revenue neutral and already envisaged a road map where rebate and surcharge will be equal.
- 5.1.74 The Commission has appointed M/s Prayas (Energy Group), Pune for conducting independent study of ToD tariff design in Rajasthan which is yet to submit a report. The ToD mechanism shall be reviewed by the Commission based on outcome of the report and the actual demand and availability scenario. However, till the results of study are available the Commission in view of the submission of the Discoms and likely shortage scenario during certain time blocks accepts the proposals of Discoms and approves the ToD rebate as under:

Off-peak hours	Rebate on Energy Charges (EC)

2 am to 6 am (4 hours)	7.5%
Peak hours	Surcharge on Energy Charges (EC)
6 am to 10 am (4 hours)	7.5%

- 5.1.75 The Discoms have submitted that the estimated increase in revenue on this account will be Rs. 181 Crore.
- 5.1.76 Except tariff rationalization proposals and ToD tariff as discussed above, the Commission has not made any change in tariff for retail consumers. Accordingly, the tariff determined vide order 01.09.2022 shall continue to prevail during FY 2023-24 except where changed by this order. The category wise tariff is enclosed at **Annexure C**.

# 5.2 Wheeling Charges

- 5.2.1 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 2023-24 in line with the RERC regulations.
- 5.2.2 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 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.
- 5.2.3 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 Vitran Nigam 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."

- 5.2.4 The Discoms have submitted the following assumptions to segregate the assets into voltage levels as shown below:
  - a. Network Statistics as on 31st March 2022 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 2022 have been summarized in following tables.

Table 90: Network Length in KM

S. No.	Lines at Voltage Level (KV)	JVVNL	AVVNL	JdVVNL	Total
1	132	-	-	-	-
2	33	16,567	16,813	25,265	58,644
3	11	187,766	161,204	258,892	607,861
4	LT	159,471	198,569	187,007	545,048
	Total	3,63,804	376,586	471,163	1,211,553

Table 91: Network Transformation Capacity in MVA

S. No	Transform ation Capacity at Voltage Level (KV)	JVVNL	AVVNL	JdVVNL	Total
1	33/11	13,076	10,392	12,018	35,485
2	11/0.4	18,647	17,633	18,499	54,779

- b. The existing distribution network of Rajasthan is a mixture of old and new assets. Also, the Discoms updated fixed asset register upto 31st March 2021 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 2022 in proportion to the cost of voltage wise distribution lines and transformation capacity as determined through cost estimates from Store Rates issued on 1st April 2022.
- 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 92: Average cost of lines

S.No.	Voltago Lovol (kV)	Per Unit Cost (Lakh		
<b>3.NO.</b>	No. Voltage Level (kV)	Rs./Km)		

1	33	12.81
2	11	4.23
3	LT	2.77

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 1st April, 2022.

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 93: Average transformation cost on substation

S.No.	Transformation Capacity (MVA)	Per Unit Cost (Lakh Rs./MVA)
1	33/11 KV	29.54
2	11/0.4 KV	46.26

f. 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 94: Voltage-wise Infrastructure network cost (in Rs lakh)

S No	Line at voltage Level (KV)	JVVNL	AVVNL	JdVVNL	Total
1	132	-	-	-	-
2	33	212,173	215,323	323,571	751,068
3	11	794,252	681,897	1,095,117	2,571,266
4	LT	442,244	550,670	518,605	1,511,519

g. The cost of transformation capacity for three Discoms is summarized as under:

Table 95: Infrastructure transformation capacity cost (in Rs. lakh)

S. No.	Transformation Capacity at Voltage Level (KV)	JVVNL	AVVNL	JdVVNL	Total
1	33/11	386,255	306,957	354,989	1,048,201
2	11/0.4	862,605	815,690	855,781	2,534,076

h. The Discom-wise total infrastructure cost derived on the basis of the above data is as under:

To	Table 96: Total infrastructure cost derived					(in Rs. lakh)
	S.	Network at	JVVNL	AVVNL	JdVVNL	Total

No.	Voltage Level				
1	132 KV Line Only	-	-	-	-
2	33 KV Lines Only	212,173	215,323	323,571	751,068
3	11 KV Lines and 33/11 KV S/S	1,180,507	988,854	1,450,106	3,619,468
4	LT Lines and 11/0.4 KV S/S	1,304,849	1,366,360	1,374,386	4,045,595
То	tal (As per GFA)	2,697,529	2,570,538	3,148,064	8,416,131

i. 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 31st March 2021) as submitted in the ARR and Tariff petition for FY 2022-23. 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 97: Apportionment of original cost of Fixed Assets (in Rs. lakh)

S.No	Network at Voltage Level	JAANI	AVVNL	JdVVNL	Total
1	132 kV	-	-	-	-
2	33 kV	1,780	1,407	1,895	5,082
3	11 kV	9,903	6,463	8,492	24,857
4	LT	10,946	8,930	8,048	27,924
Gr	oss fixed Asset	22,628	16,801	18,435	57,863

- j. Sales Projections for FY 2023-24 for 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:
- k. Apportionment of sales of Rajasthan Discoms for FY-2023-24 is as under:

Table 98: Apportionment of voltage-wise sales- JVVNL

Voltage Level	Whee ling Cost (Rs Cr.)	Inp ut (M U)	Sale (MU)	Loss %	Assets (Rs Cr.)
132 KV		2,249	2,249	0.00%	-
33 KV		2,672	2,571	3.80%	1,780
11 KV	7,020.40	5,285	4,820	8.80%	9,903
LT		28,04 9	22,494	19.80%	10,946
Total		38,25 6	32,135	16.00%	22,628

Table 99: Apportionment of voltage-wise sales- AVVNL

Voltage Level	Wheelin g Cost (Rs Cr.)	Inp ut (MU )	Sale (MU)	Loss %	Assets (Rs Cr)
132 KV		1,773	1,773	0.00%	-
33 KV	F 457.00	2,106	2,026	3.80%	1,407
11 KV	5,457.00	4,165	3,798	8.80%	6,463
LT			17,726	15.49%	8,930
Total		29,017	25,322	12.73%	16,801

Table 100: Apportionment of voltage-wise sales- JdVVNL

Voltage Level	Wheeli ng Cost (Rs Cr.)	Inp ut (MU )	Sale (MU)	Loss %	Assets (Rs Cr.)
220/132 KV		2,112	2,112	0.00%	-
33 KV	7.454.40	2,509	2,413	3.80%	1,895
11 KV	7,454.49	4,962	4,525	8.80%	8,492
LT		26,985	21,118	21.74%	8,048
Total		36,568	30,168	17.50%	18,435

I. 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.

m. 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 101: Wheeling cost allocation into assets at different voltage levels

(Rs. in Crore)

Wheeling Cost Allocation into Assets at different Voltage Levels	JVVNL	AVVNL	JdVVNL
33KV	552	457	766
11KV	3,072	2,099	3,434
LT	3,396	2,901	3,254
Total	7,020	5,457	7,454

n. 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 102: Wheeling cost apportioned on the basis of network usage

(Rs in Crore)

Derived wheeling cost, apportioned on the basis of usage of network	JVVNL	AVVNL	JdVVNL
33KV	41	35	56
11KV	487	348	533
LT	6,492	5,074	6,865
Total	7,020	5,350	7,454

- o. 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.
- 5.2.5 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 103: Proposed Wheeling Charges for FY 2023-24

Table 100: Hoposea Wilceling Charges for the 2020 24	
Wheeling Charges at 132 KV Voltage Level (Rs/kWh)	0.01
Wheeling Charges at 33 KV Voltage Level (Rs/kWh)	0.18
Wheeling Charges at 11 KV Voltage Level (Rs/kWh)	0.95

#### Commission's view:

- 5.2.6 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

- 5.2.7 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.
- 5.2.8 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.
- 5.2.9 Discoms have proposed the wheeling charges of LT Voltage level of Rs. 2.42/kWh for FY 2023-24. However, in reply to data gap the Discoms submitted that they inadvertently proposed wheeling charges at LT level and at present open access consumers are there only in HT category and accordingly submitted proposal for determination of wheeling charges upto 11 KV only. The Commission has accordingly considered the submission for upto 11 KV level only.
- 5.2.10 Discoms have proposed uniform wheeling charges based on the combined figure of three Discoms. Accordingly, the Commission has also determined uniform wheeling charges.
- 5.2.11 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.
- 5.2.12 The Commission has determined the wheeling charges for FY 2023-24 based on ARR for FY 2023-24.
  - a) Based on the approved ARR for FY 2023-24, the wheeling charges as per Regulation 86 of RERC (Terms and Conditions for Determination of Tariff) Regulations, 2019 is as under:

Table 104: Wheeling Charges

(Rs in Crore)

S.	Partioulars	FY 2023-24				
No.	Particulars	JVVNL	AVVNL	JdVVNL	Total	
1	Net Aggregate	25584	19667	24077	6932	

	Revenue Requirement				8
	Cost of Power				4565
2	Purchase	16904	13025	15727	6
	Interest Payable on security deposit of				
3	consumers	95	56	50	200
4	Transmission Charges	2185	1534	1977	5696
5	10% of O&M Expenses	225	226	239	690
	Subtotal	19409	14841	17992	52242
	Wheeling Charges (in				
6	Crores)	6175	4826	6085	17086

- 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 105: Cost of lines and Transformer (Rs. In Lakhs)

<u> </u>	lable 105: Cost of lines and transformer (ks. in Lakhs)						
S.	Network at		FY 202	3-24			
No.	Voltage Level	JVVNL	AVVNL	JdVVNL	Total		
1	132 KV Line Only	-	-	-	-		
2	33 KV Lines Only	212178	215328	323575	751082		
3	11 KV Lines and 33/11 KV S/S	1180509	988868	1450121	3619498		
4	LT Lines and 11/0.4 KV S/S	1304848	1366366	1374364	4045577		
	Total	2697534	2570563	3148060	8416157		
132	2 KV Line Only	-	-	-			
33	KV Lines Only	7.87%	8.38%	10.28%			
11	KV Lines and 33/11 KV						
S/S	S	43.76%	38.47%	46.06%			
LT	Lines and 11/0.4 KV				_		
S/S	S	48.37%	53.15%	43.66%			
Tot	tal	100.00%	100.00%	100.00%			

d) Based on the aforesaid percentage, the assets as on 31st March, 2022 has been segregated at each voltage level as under:

Table 106: Assets Allocation at different Voltage Levels (Rs in Crore)

	JVVNL	AVVNL	JdVVNL
33KV	1,890	1,734	2,027
11KV	10,515	7,962	9,085
LT	11,622	11,002	8,610

e) Further, based on the losses as approved in order dated 01.12.2016 and sales as approved in the instant order has been considered at each voltage level as under:

Table 107: JVVNL sales and losses at each voltage level

Volta	Wheeling Cost in	FY 2023-24				
ge Level	Rs Crore	Input (MU)	Sales (MU)	Losses in %age	Loss (in MU)	Assets (Rs Crore)
132		,			•	•
KV	6175	2349	2349	0.00%	0	0
33 KV		2791	2685	3.80%	106	1890
11 KV		5519	5034	8.80%	486	10515
LT		28822	23492	18.49%	5330	11622
	Total	39481	33559	15.00%	5922	24026

Table 108: AVVNL sales and losses at each voltage level

Volta	Wheeling Cost in	FY 2023-24					
ge Level	Rs Crore	Input (MU)	Sales (MU)	Losses in %age	Loss (in MU)	Assets (Rs Crore)	
132 KV	4826	1854	1854	0.00%	0	0	
33 KV		2203	2119	3.80%	84	1734	
11 KV		4355	3972	8.80%	383	7962	
LT		21934	18538	15.48%	3396	11002	
Total		30346	26483	12.73%	3863	20698	

Table 109: JdVVNL sales and losses at each voltage level

Volta	Wheeling Cost in	FY 2023-24					
ge Level	Rs Crore	Input (MU)	Sales (MU)	Losses in %age	Loss (in MU)	Assets (Rs Crore)	
132		0105	0105	0.007	0		
KV		2185	2185	0.00%	0	0	
33 KV	6085	2595	2496	3.80%	99	2027	
11 KV		5133	4681	8.80%	452	9085	
LT		26804	21847	18.49%	4957	8610	
	Total	36716	31209	15.00%	5507	19722	

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 110: Wheeling cost allocation into assets at different voltage levels(Rs.in Cr.)

Wheeling Cost Allocation into Assets at different Voltage Levels	JVVNL	AVVNL	JdVVNL
33KV	486	404	625
11KV	2702	1857	2803
LT	2987	2565	2656
Total	6175	4826	6085

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 111: Wheeling cost apportioned on the basis of network usage (Rs in Cr.)

Derived wheeling cost, apportioned on the basis of usage of network	JVVNL	AVVNL	JdVVNL
33KV	37	31	47
11KV	434	308	450
LT	5704	4487	5587
Total	6,175	4,826	6,085

- 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.
- 5.2.13 Per unit wheeling charges approved in this order is as under:

Table 112: Per unit Wheeling charges

Wheeling Charges for	FY 2023-24
Wheeling Charges at 132 KV and above Voltage Level (Rs/kWh)	0.01
Wheeling Charges at 33 KV Voltage Level (Rs/kWh)	0.15
Wheeling Charges at 11 KV Voltage Level (Rs/kWh)	0.79

5.2.14 The above Wheeling Charges shall be levied and collected with effect from the date of applicability of this order and remain in force till Wheeling Charges are re-determined by the Commission. Wheeling losses which are in force shall also be continued to remain applicable.

## 5.3 Cross Subsidy Surcharge

5.3.1 The Discoms have projected the cross-subsidy surcharge for FY 2023-24 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."

5.3.2 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 113: Tariff for FY 2023-24** 

Catagony	Tariff (Rs./kWh)				
Category	11 kV	33 kV	132 kV		
LIP	8.82	8.56	8.47		
Mixed Load	9.44	9.16	9.07		

Category	Tariff (Rs./kWh)				
Category	11 kV	33 kV	132 kV		
NDS (HT)	12.21	11.85	11.72		

5.3.3 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 2023-24. The details of the same are provided below:

Table 114: Transmission and Distribution losses considered for cross-subsidy surcharge

Losses	11kV	33kV	132kV
Distribution	12.60%	3.80%	0.00%
Transmission	5.10%	5.10%	5.10%
Total	17.70%	8.90%	5.10%

- 5.3.4 The Discoms submitted that so far 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%.
- 5.3.5 The Discoms submitted that Transmission Cost per unit has been considered as per the projected transmission cost and sales in ARR for FY 2023-24. The aggregate transmission and wheeling cost at different voltage levels has been summarized below:

Table 115: Wheeling and Transmission Costs for FY 2023-24

Discom	Cost per unit (Rs/kWh)	11kV	33kV	132kV
	Wheeling cost	0.95	0.18	0.01
JVVNL Transmission cost		0.64	0.64	0.64
	Total		0.82	0.65
	Wheeling cost	0.95	0.18	0.01
AVVNL	Transmission cost	0.55	0.55	0.55
	Total	1.50	0.73	0.56
	Wheeling cost	0.95	0.18	0.01
JdVVNL	Transmission cost	0.59	0.59	0.59
	Total	1.54	0.77	0.60
	Wheeling cost	0.95	0.18	0.01
Rajasthan	Transmission cost	0.60	0.60	0.60
	Total	1.55	0.78	0.61

5.3.6 The per unit carrying cost of Regulatory Assets (element 'R') for FY 2023-24 has been determined on the basis of approved interest on unfunded gap by the Commission. The summary of carrying cost for FY 2023-24 is summarized below:

Table 116: Carrying Cost of Regulatory Assets for FY 2023-24

Discom	Interest on unfunded gap (Rs. Cr.)	Total Sales (MU)	Carrying Cost (Rs./unit)	
JVVNL	2,303	32,135	0.72	
AVVNL	1,466	25,322	0.58	
JdVVNL	2,583	30,168	0.86	
RAJASTHAN	6,352	87,625	0.72	

5.3.7 Based on the above cost parameters, the cross-subsidy surcharge for FY 2023-24 as submitted by Discoms is as under:

Table 117: Cross Subsidy Surcharge for FY 2023-24 –JVVNL, AVVNL & 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)	Carryin g cost of Regulat ory Assets (Rs./ kWh)	CSS at Existing Tariff (Rs./ kWh)
	132	8.47	3.90	5.10%	0.61	0.72	1.69
LIP	33	8.56	3.90	8.90%	0.78	0.72	1.71
	11	8.82	3.90	17.70%	1.55	0.72	1.76
	132	9.07	3.90	5.10%	0.61	0.72	1.81
Mixed Load-HT	33	9.16	3.90	8.90%	0.78	0.72	1.83
Loud III	11	9.44	3.90	17.70%	1.55	0.72	1.89
	132	11.72	3.90	5.10%	0.61	0.72	2.34
NDS-HT	33	11.85	3.90	8.90%	0.78	0.72	2.37
	11	12.21	3.90	17.70%	1.55	0.72	2.44

#### Commission's view:

# **Computation of Cross Subsidy Surcharge**

5.3.8 Commission has observed that Discoms have submitted uniform proposal for Cross subsidy Surcharge. Therefore, Commission has determined uniform Cross subsidy Surcharge as the tariff for these category is uniform across all the Discoms.

- 5.3.9 Discoms in their petition have submitted the calculation of Cross Subsidy Surcharge for FY 2023-24. The Commission has also determined the ARR for FY 2023-24. Thus, the Commission has determined the Cross Subsidy Surcharge for FY 2023-24 based on ARR for FY 2023-24.
- 5.3.10 For the purpose of computation of Cross Subsidy Surcharge for FY 2023-24, 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 118: Calculation of "T" for FY 2023-24

Particulars	Avg. Realisation (Rs./per Unit) FY2023-24
Non Domestic Category (NDS)	11.15
Bulk Supply for Mixed Load (ML)	9.61
Large Industries (LIS)	8.61

# (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. 4.05/unit for FY 2023-24.

# (3) "L" (is the aggregate transmission, distribution and commercial losses, expressed as percentage applicable to the relevant voltage level):

Commission has considered voltage wise distribution losses as per the Commission's Order dated 01.12.2016. The transmission losses have been considered average of Intra and Inter state transmission losses as per the losses approved in foregoing paras as under:

Table 119: Transmission and Distribution losses considered for FY 2023-24

Losses	11kV	33kV	132KV	
Distribution	12.60%	3.80%	0.00%	

Total	16.88%	8.08%	4.28%
Transmission	4.28%	4.28%	4.28%

(4) "D" (is the aggregate of transmission, distribution and wheeling charges applicable to the relevant voltage level):

Table 120: Transmission, Distribution and Wheeling Charges for 2023-24

Cost per unit (Rs/kWh)	11kV	33kV	132kV
Wheeling cost	0.79	0.15	0.01
Transmission cost	0.62	0.62	0.62
Total	1.41	0.78	0.63

- (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 121: Carrying Cost of Regulatory Assets

Particulars	FY 2023-24	
Interest on unfunded gap	Rs. in Crore	6844
Total Sales	(MU)	91251
Carrying Cost	(Rs./unit)	0.75

(6) "S" (is the surcharge) i.e.,

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

- 5.3.11 The stakeholders have contended that CSS should not be increased.
- 5.3.12 Whereas, many of the stakeholders submitted that CSS should be kept at 20% of average cost of supply as per Electricity (Amendment) Rules, 2022.

- 5.3.13 There is no dispute 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 2023-24. The CSS determined in the order is in accordance with the spirit of the Act on Cross Subsidy Surcharge. The Commission has capped CSS at the rate of 20% of Average Tariff as per Tariff Policy. As this is the last year of current control period, Commission shall review the same for the next control period based on the Regulations framed for the control period, after considering Electricity (Amendment) Rules, 2022.
- 5.3.14 Based on the above discussions, the Cross Subsidy Surcharge payable for FY 2023-24 by the open access consumers works out as below:

Table 122: Cross Subsidy Surcharge for FY 2023-24 as per RERC Tariff Regulations, 2019 (Rs/kWh)

CATEGO RY OF CONSUM ER	VOLTAGE LEVEL	TARIFF (T)	WEIGHTED AVERAGE COST OF POWER (C)	SYSTEM LOSSES (L)	TRANSIMISSION, DISTRIBUTION AND WHEELING CHARGES (D)	PER UNIT COST OF CARRYI NG REGULA TORY 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	11 KV	11.15	4.05	16.88%	1.41	0.75	4.11	2.23	2.23
DOMEST IC	33 KV	10.81	4.05	8.08%	0.78	0.75	4.88	2.16	2.16
SERVICE	132 KV	10.70	4.05	4.28%	0.63	0.75	5.09	2.14	2.14
MIXED	11 KV	9.61	4.05	16.88%	1.41	0.75	2.57	1.92	1.92
LOAD/ BULK	33 KV	9.32	4.05	8.08%	0.78	0.75	3.39	1.86	1.86
SUPPY	132 KV	9.22	4.05	4.28%	0.63	0.75	3.61	1.84	1.84
LARGE	11 KV	8.61	4.05	16.88%	1.41	0.75	1.58	1.72	1.58
INDUSTR IAL	33 KV	8.35	4.05	8.08%	0.78	0.75	2.42	1.67	1.67
SERVICE	132 KV	8.27	4.05	4.28%	0.63	0.75	2.65	1.65	1.65

5.3.15 Accordingly, the Commission determines the following Cross Subsidy Surcharge payable for FY 2023-24 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 123: CSS as Approved by the Commission

Category of Open Access	Voltage Level	Cross Subsidy Surcharge (Rs./Unit)
Consumer	Voltage Level	FY 2023-24
	11 KV	2.23
NON DOMESTIC SERVICE	33 KV	2.16
	132 KV and above	2.14
	11 KV	1.92
MIXED LOAD/ BULK SUPPY	33 KV	1.86
	132 KV and above	1.84
	11 KV	1.58
LARGE INDUSTRIAL SERVICE	33 KV	1.67
	132 KV and above	1.65

5.3.16 The above Cross Subsidy Surcharge shall be levied and collected with effect from the date of applicability of this order and remain in force till CSS is redetermined by the Commission.

## 5.4 Additional Surcharge

5.4.1 The Discoms have submitted the following regarding the additional surcharge.

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 (Terms and Conditions for 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 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."

Accordingly, the computation of additional surcharge for FY 2023-24 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 2021-22.

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 2021-22.

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 2023-24, it has been assumed that the Open Access scenario will remain the same in FY 2023-24 as in FY 2021-22. Therefore, the total Additional Surcharge recoverable for the FY 2023-24 computed above has been spread over the total open access quantum for the FY 2021-22 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.

- 5.4.2 Based on the above submission, the Discoms proposed additional surcharge for FY 2023-24 based on data of FY 2021-22 below.
  - i. Stranded power due to Open Access (MW):

Table 124: Stranded power due to Open Access (MW):

Month	Backdo wn Aggrega ted over 96 Time Blocks	Boxup Aggregated over 96 Time Blocks	Boxup + Backdown aggregated over 96 time blocks	Open Access Aggrega ted over 96 Time Blocks	Backdown due to Open Access Aggregated over 96 Time Blocks
	1	2	3	4	5
	MW	MW	MW	MW	MW
April	1,118,307	3,420,385	4,538,692	2,076,406	1,767,058
May	2,814,958	1,504,250	4,319,208	605,733	520,202
June	1,479,950	533,500	2,013,450	226,255	178,557
July	2,797,103	3,733,525	6,530,628	358,221	356,296
August	815,702	4,516,645	5,332,347	604,260	581,834
September	614,427	1,775,490	2,389,917	341,294	216,323
October	844,567	2,054,120	2,898,687	506,782	479,991
November	1,679,786	2,108,680	3,788,466	872,680	854,451
December	2,202,346	2,589,930	4,792,276	916,827	915,946
January	2,466,211	2,446,170	4,912,381	1,355,366	1,303,178
February	1,685,938	2,148,830	3,834,768	1,131,875	1,127,783
March	776,038	6,481,215	7,257,253	1,746,145	1,673,518
Total	19,295,333	33,312,740	52,608,073	10,741,843	9,975,137

It may be observed that there is continuous stranded capacity over the entire period for which data has been submitted. It has to be noted that stranded capacity may vary in a day, a month and the year depending upon the load conditions and therefore, the overall situation needs to be considered. It is clearly demonstrable through the data that there is stranded capacity occurring on account of the consumers availing open access to source power from sources other than Discoms.

ii. Effective fixed cost of generation stranded (Rs./kWh):

Table 125: Effective fixed cost of generation stranded (Rs./kWh)

	Power		Fixed	
Station	Stranded in FY 2021- 22 (MU)	% of surrender	charges (approved Rs./kWh)	Component of fixed cost
DADRI-CRF	3	0.02%	0.67	0.00
AURIYA-CRF	0	0.00%	0.75	-
ANTA-CRF	0	0.00%	1.50	0.00
DADRI T1	0	0.00%	0.97	-
DADRI T2	129	0.98%	1.44	0.01
UNCHAHAR 2	188	1.43%	1.07	0.02
UNCHAHAR 1	58	0.44%	1.08	0.00
UNCHAHAR 3	106	0.81%	1.35	0.01
UNCHAHAR-4	248	1.89%	1.51	0.03
FARAKKA	17	0.13%	0.82	0.00
MEJA	51	0.39%	1.99	0.01
TANDA II	173	1.32%	1.68	0.02
KAHALGAON 1	30	0.23%	1.05	0.00
KAHALGAON 2	119	0.90%	1.09	0.01
AURIYA-GF	0	0.00%	0.69	0.00
ANTA-GF	1	0.01%	1.51	0.00
DADRI-GF	1	0.01%	0.88	0.00
PTC MCCPL	45	0.34%	1.72	0.01
CGPL	33	0.25%	0.90	0.00
PTC DB POWER	96	0.73%	2.21	0.02
SINGRAULI	90	0.69%	0.66	0.00
RIHAND 1 STPS	33	0.25%	0.84	0.00
RIHAND 2 STPS	27	0.20%	0.71	0.00
RIHAND 3 STPS	29	0.22%	1.44	0.00
Sasan	40	0.31%	0.17	0.00
DHOLPUR	1	0.01%	1.02	0.00
STPS-(I-VI)	6248	47.62%	0.57	0.27
KTPS Unit (I-VII)	2718	20.72%	0.55	0.11
STPS-VII	318	2.42%	2.04	0.05
STPS-VIII	34	0.26%	1.92	0.00
KALISINDH	775	5.91%	1.70	0.10
CHABRA1,2,3,4	416	3.17%	1.19	0.04
ADANI	694	5.29%	1.29	0.07
JSW Energy (Barmer)	251	1.91%	1.70	0.03
CTPP-V,VI	143	1.09%	1.53	0.02
NLC Barsinghsar	5	0.03%	2.31	0.00
Total	13,119	100.00%		0.85

iii. Additional surcharge to be levied in the FY 2023-24:

Table 126: Additional surcharge to be levied in the FY 2023-24

	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	Addition al Surcharg e
	ww	MU	MW	M U	Rs. / kWh	Rs. Cr.
Total	10,741,843	2,685	9,975,137	2,494	0.85	205.41
	onal Surcharge Rec io for the next yea s*10)	-	_	-		0.76

#### **Commission View**

- 5.4.3 The Commission has determined the Additional Surcharge for FY 2023-24 based on data submitted by Discoms.
- 5.4.4 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 2021-22.
- 5.4.5 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.
- 5.4.6 This fixed cost has been considered as per ARR order for FY 2023-24 and in case ARR order of plant for FY 2023-24 is not available, the prevailing order has been considered.
- 5.4.7 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

5.4.8 In view of the above, Additional Surcharge for FY 2023-24 is worked out as below:

i. Calculation of back down due to Open Access (MW):

Table 127: 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	Backdow n due to Open Access Aggregat ed over 96 Time Blocks
	MW	MW	MW	MW	MW
April	1,118,307	3,420,385	4,538,692	2,076,406	1,767,058
May	2,814,958	1,504,250	4,319,208	605,733	520,202
June	1,479,950	533,500	2,013,450	226,255	178,557
July	2,797,103	3,733,525	6,530,628	358,221	356,296
August	815,702	4,516,645	5,332,347	604,260	581,834
September	614,427	1,775,490	2,389,917	341,294	216,323
October	844,567	2,054,120	2,898,687	506,782	479,991
November	1,679,786	2,108,680	3,788,466	872,680	854,451
December	2,202,346	2,589,930	4,792,276	916,827	915,946
January	2,466,211	2,446,170	4,912,381	1,355,366	1,303,178
February	1,685,938	2,148,830	3,834,768	1,131,875	1,127,783
March	776,038	6,481,215	7,257,253	1,746,145	1,673,518
Total	19,295,333	33,312,740	52,608,073	10,741,843	9,975,137

ii. Calculation of effective fixed cost of generation back down:

Table 128: Effective fixed cost of generation back down

Station	Power	% of	Fixed	Component
	Stranded in FY	surrender	charges	of fixed
	2021-22 (MU)		(approved	cost
			Rs./kWh)	(Rs./kWh)
UNCHAHAR 2	188	1.45%	1.12	0.02
UNCHAHAR 1	58	0.45%	1.05	0.00
UNCHAHAR 3	106	0.82%	1.21	0.01
UNCHAHAR-4	248	1.91%	1.64	0.03
FARAKKA	17	0.13%	0.82	0.00
MEJA	51	0.40%	2.04	0.01
TANDA II	173	1.33%	1.47	0.02
KAHALGAON 1	30	0.23%	1.05	0.00
KAHALGAON 2	119	0.91%	1.09	0.01
PTC MCCPL	45	0.35%	1.72	0.01
CGPL	33	0.25%	0.90	0.00
PTC DB POWER	96	0.74%	2.21	0.02
SINGRAULI	90	0.69%	0.66	0.00
rihand 1 Stps	33	0.25%	0.84	0.00
RIHAND 2 STPS	27	0.21%	0.78	0.00
RIHAND 3 STPS	29	0.22%	1.44	0.00

Station	Power Stranded in FY	% of surrender	Fixed charges	Component of fixed
	2021-22 (MU)		(approved Rs./kWh)	cost (Rs./kWh)
Sasan	40	0.31%	0.17	0.00
STPS-(I-VI)	6248	48.12%	0.77	0.37
KTPS Unit (I-VII)	2718	20.94%	0.67	0.14
STPS-VII	318	2.45%	2.04	0.05
STPS-VIII	34	0.26%	1.92	0.00
KALISINDH	775	5.97%	1.68	0.10
CHABRA1,2,3,4	416	3.21%	1.43	0.05
ADANI	694	5.35%	1.05	0.06
JSW (Energy) Barmer	251	1.93%	1.70	0.03
CTPP-V,VI	143	1.10%	1.76	0.02
NLC Barsinghsar	5	0.03%	2.32	0.00
Total	12984	100.00%		0.96

iii. Calculation of Additional Surcharge based on above for FY 2023-24:

Table 129: 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	Addition al Surchar ge
	MW	MU	MW	MU	Rs. / kWh	Rs. Cr.
Total	10,741,843	2,685	9,975,137	2,494	0.96	239.65
Additional Surcharge Recoverable per unit considering same open access scenario for the next year (Rs./kWh) (Total Additional Surcharge/Total Open Access*10)					0.89	

- 5.4.9 In view of the foregoing discussion, the Commission hereby allows of Additional Surcharge at Rs. 0.89/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.
- 5.4.10 The above additional Surcharge shall be levied and collected with effect from the date of applicability of this order and remain in force till additional surcharge is re-determined by the Commission.
- 5.4.11 A few stakeholders during the hearing requested to further reduce cross subsidy surcharge and additional surcharge in line with rules framed by Central Government. The Commission has noted their suggestion. Presently the cross subsidy surcharge and Additional Surcharge have been determined in accordance with the existing RERC (Terms and Conditions for determination of

Tariff) Regulations, 2019 and FY 2023-24 is the last year of current Control period. The Commission will soon be proceeding for framing new Tariff Regulations for the next control period where it will appropriately consider the rules and based on the Regulations will determine cross subsidy surcharge and additional surcharge for the next control period.

# 5.5 Cross Subsidy

- 5.5.1 As per Regulation 89 of RERC (Terms and Conditions for Determination of Tariff) Regulations, 2019, the average cost of supply and realization from a category of consumers shall form the basis of estimating the extent of cross subsidy and determination of tariff for that consumer category.
- 5.5.2 Regulation 89 of RERC (Terms & Condition of Tariff) Regulations, 2019 read with National Tariff Policy makes it evident that average cost of supply has to be the benchmark in assessing cross-subsidy from any consumer category. The National Tariff Policy states that SERC shall notify a road map with a target that tariff are within +/- 20% of average cost of supply. The Commission has also specified in its Tariff Regulations that the Commission shall endeavour to determine the tariff in such a manner that it progressively reflects the average cost of supply and the extent of cross subsidy to any consumer category is within maximum range of +/- 20% of average cost of supply.
- 5.5.3 Average cost of supply for the three Discoms as per ARR and sales considered by the Commission earlier in this order for FY 2023-24 are as under:

Table 130: Average Cost of Supply for FY 2023-24

Particular	JVVNL	AVVNL	JdVVNL	Total
Net ARR (Rs. In Crore)	25,584	19,667	24,077	69,328
Sales (MU)	31662	25862	30341	87,865
AVG. COS (Rs./Unit)	8.08	7.60	7.94	7.89

- 5.5.4 The Average Cost of Supply as filed by Discoms is Rs 8.04 per unit. The Commission has worked out Average Cost of Supply of Rs. 7.89 per unit (excluding DF sales). However, the actual impact will be visible at the time of consideration of true up petition.
- 5.5.5 Based on existing tariff approved by the Commission, the following will be cross subsidy for major categories is as under:

Table 131: Cross Subsidy for FY 2023-24

Cross Subsidy	JVVNL	AVVNL	JdVVNL	Rajasthan
LT-Domestic (LT & HT-1)	-2.75%	-0.24%	-2.01%	-1.79%
Non-Domestic (LT & HT -2)	38.12%	47.45%	39.41%	41.30%
Public Street Light (LT-3)	5.27%	25.11%	28.96%	16.52%
Agriculture (Metered) (LT-4)	-27.13%	-22.09%	-24.88%	-24.83%
Agriculture (Flat) (LT-4)	-20.39%	0.00%	-11.49%	-11.68%
Small Industry (LT-5)	-4.52%	8.73%	8.77%	2.62%
Medium Industrial Service (LT				
& HT -6)	11.23%	15.82%	20.06%	15.06%
Large Industrial Service (HT-				
5)	7.00%	11.08%	13.29%	9.14%
Mixed Load	21.80%	28.51%	18.88%	21.74%
Public Water Works (\$) (LT)	-18.71%	-9.06%	-7.62%	-12.35%
Public Water Works (M)	0.17%	6.78%	3.52%	3.47%
Public Water Works (L)	3.02%	4.60%	4.49%	4.01%

#### 5.6 Revenue Deficit

#### **Submission of Discoms**

5.6.1 Discoms in their petition have shown a combined surplus of Rs. 976 Crore for FY 2023-24.

#### Commission's View

- 5.6.2 The Commission notes the commitment of GoR given to Govt. of India for taking over the losses while seeking additional borrowing limit of 0.5% of GSDP.
- 5.6.3 The Commission also notes that one of important pre-qualification criteria of RDSS Scheme is that the Discoms will have to ensure that no new Regulatory Assets are created in latest tariff determination cycle. Under RDSS, Govt. of Rajasthan shall have the responsibility "To facilitate/enable approval of tariff for the DISCOM in time every year as per regulations and finance Regulatory Assets and Financial Losses.
- 5.6.4 In Commission's view as per the provisions of FRBM scheme read with provision of RDSS scheme, the Regulatory Assets and balance financial losses after takeover are also to be financed by Govt. of Rajasthan.
- 5.6.5 The Commission while approving the Investment Plan has approved proposed Capex. under RDSS Scheme appropriately and is of the clear view that there

- should not be any new Regulatory Assets for the FY 2023-24 onwards and Discoms should ensure to get the full benefit of grant under RDSS from Govt. of India by complying with all its conditions.
- 5.6.6 Commission has approved the combined Surplus of Rs. 891 Crore at existing tariff for FY 2023-24 and after taking impact of new connection rebate of Rs. 57 Crore and impact of additional revenue from HT Domestic category of Rs 17 Crore on account of Modification in fixed charges, ToD of Rs. 181 Crore the combined surplus of Discoms will be Rs. 1146 Crore. If in future years further surplus situation arises, any surplus shall be adjusted against the accumulated revenue gap of previous years.
- 5.6.7 Looking to the above combined surplus, for FY 2023-24 no new Regulatory Assets have been created at Rajasthan level. The Commission would like to mention that the combined unfunded gap for Rajasthan Discoms up to FY 2020-21 as per true up order for FY 2020-21 was Rs 49494 Crore. Further, after considering the Surplus of Rs. 244 Crore during FY 2021-22, combined unfunded gap for Rajasthan Discoms in the above true up section for FY 2021-22 is Rs. 49250 Crore.
- 5.6.8 As per order dated 01.09.2022 the unfunded gap at the end of FY 2022-23 after considering surplus of FY 2022-23 was considered as Rs. 48368 Crore. Unfunded gap considered in this order at the end of FY 2023-24 is 47578 Crore which is subject to true up of FY 2022-23 and FY 2023-24. As such no new Regulatory Assets have been considered over the years.
- 5.6.9 In the true up order for FY 2021-22 and earlier years the Commission noted that the Government of Rajasthan is charging interest on account of UDAY loan and if that is reversed for FY 2019-20 to FY 2023-24 the unfunded gap will be further reduced by Rs. 7730 Crore. As such, the Commission again advises Government of Rajasthan not to charge the interest on UDAY loan and reverse the amount already charged.
- 5.6.10 Further with regard to total unfunded gap of Rs. 47578 Crore the Commission observes as under:
- 5.6.11 MoP recently has issued an advisory requiring State Commissions to comply with the provisions of the Electricity Act, 2003 and the Tariff Policy and lay down a trajectory for recovery of regulatory assets along with carrying cost and to also ensure that no fresh regulatory assets are created.

- 5.6.12 With regard to query related to liquidation of regulatory assets, the Discoms submitted that one of the options for liquidation of Regulatory Assets could be financial support from the State Government through grants/interest free loan to the Discoms but GoR is already providing significant financial support to the Discoms as under:
  - (a) Government of Rajasthan over the years has provided support to Discoms under various schemes and heads namely UDAY scheme in which GoR has taken over Discoms debts to the tune of Rs. 62422 Cr over the last 5 years. Apart from above, GoR has been providing tariff subsidy, equity for capital expenditure, retention of Electricity Duty etc. For FY 2022-23 GoR has budgeted Rs. 24562 Cr. support under various heads. In addition to the above, GoR has also committed to liquidate the outstanding tariff subsidy to the tune of Rs. 17500 Cr. over next 5 years besides support under RDSS scheme and takeover of Discom's losses under FRBM scheme as per trajectory as detailed below:

2022-2023	2023-2024	2024-2025	2025-2026 onwards
60% of the loss for	75% of the loss for	90% of the loss	100% of the loss
· ·	the year 2022-23	for the year	for the year 2024-
the year 2021-22		2023-24	25 & onwards

- (b) Hence GoR already providing considerable financial support to the Rajasthan Discoms and any additional liability on account of liquidation of Regulatory Assets would worsen the already stressed fiscal position of State Government.
- 5.6.13 The Discoms have suggested options for liquidation as under:
  - I. Regulatory Surcharge may be levied in following manner:
    - a) On the consumption of the consumers on per unit basis: it is proposed that a Regulatory Surcharge (Rs. /Unit) may be levied on the consumption of the consumers of the Discoms to liquidate the existing Regulatory Assets. The following option shall provide a plan of liquidation in span of 7 to 12 years.

	Liquidation Period Option I Option II Option III		
Discom			
	(Rs. 0.45/KWh)	(Rs. 0.60/KWh)	(Rs. 0.75/KWh)
JVVNL	10	8	7

AVVNL	10	8	7
JdVVNL	12	10	8

b) On the total bill amount of consumer (% of total revenue) basis: it is proposed that a Regulatory Surcharge may be levied on the bill amount (Energy and fixed charges) of the consumers to liquidate the existing Regulatory Assets. The Delhi Electricity Regulatory Commission also follows the same approach in order to liquidate the existing Regulatory Assets. The following option shall provide a plan of liquidation in span of 6 to 15 years.

Discom	Liquidation Period			
Disconi	Option I (10%)	Option II (12%)	Option III (15%)	
JVVNL	10	8	7	
AVVNL	9	7	6	
JdVVNL	15	12	9	

- II. Regulatory assets may be adjusted against the revenue surplus in future years.
- 5.6.14 The Commission in its order has projected a surplus of Rs. 1146 Crore for 2023-24. In view of above no tariff increase is considered for the current year. Discoms should attempt to bridge the accumulated gap by taking measures for loss reduction, efficiency improvement and cost optimization. As far as the liquidation of Regulatory assets is concerned the Commission has advised the State Govt. to take back the interest of Rs. 7730 Crore charged by it on UDAY loan. Further, 100% losses of FY 2024-25 onwards are being taken up by the Govt. of Rajasthan as such there will not be any Regulatory Asset for any Discom and on the other hand Regulatory surplus arising in any of the Discom will help in reduction of overall Regulatory Assets. To recover the power purchase cost as a pass through, the Commission has introduced system of monthly fuel surcharge which will take care of recovery of incremental power purchase cost during the year itself. Accordingly, a decision to amortize regulatory assets by levying of Regulatory surcharge, tariff increase or further adjustment of regulatory asset against revenue surplus or a combination of these will be taken during successive years.
- 5.6.15 Before parting the Commission would like to mention again that the Commission in future will not increase any unfunded gap or create additional Regulatory Assets. For future years Discoms may request State Government to grant

- additional subsidy in the form of ED retention or any other manner apart from taking 100% losses of Discoms to further reduce regulatory assets.
- 5.6.16 In the Section 6, 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 compliance report of these directives as well as directions given earlier as per the periodicity called for.
- 5.6.17 This tariff order shall come into force from 01.04.2023 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.
- 5.6.18 The petitions stand disposed off accordingly. Copy of this order may be sent to the petitioners, stakeholders, CEA, Rajasthan Renewable Energy Corporation and Government of Rajasthan.

(Dr. Rajesh Sharma) (Hemant Kumar Jain) (Dr. B. N. Sharma)

Member Member Chairman

### **Section 6- Commission Directives**

### Compliance with directives issued under True up order dated 14.07.2022

6.1 The compliance with directives issued under True up order dated 14.07.2022 for FY 2020-21 have been submitted by the Discoms, which have been summarized as below:

S.No.	Directive	Compliance
1.	Apart from uploading PDF copy of signed petition, Discoms should also upload readable PDF and excel formats in future.	JVVNL, AVVNL & JdVVNL: Discoms have adhered to the Commission's directive.
2.	To furnish the Fixed Assets Register indicating information as required under the Regulations.	JVVNL: The desired information has been prepared in the format prescribed by RERC comprising of the following:  1. The asset classification as per the RERC  2. The rate of depreciation was mentioned separately, and rate levied were as per Regulations prescribed by RERC.  3. The assets are classified into a period of 12 years and more  4. Abstract of assets  RERC was prima facie content with the information provided but insisted on following additional disclosures:  a. Date of commissioning of assets instead of year  b. Voltage wise disclosure of assets and c. Scheme wise classification of assets  It is further stated that FAR as on 31.03.2021 have been revised in line with RERC Regulations/directions and are being submitted along with this Petition and further uploaded on Jaipur Discom website.  AVVNL: Discom had previously submitted the Fixed Asset Register (FAR) upto FY 2019-20. However, the Commission was not satisfied with the submission of the Discom.  In view of the modifications sought by the Commission, the Discom has submitted the

desired information with respect to FAR upto FY 2019-20. Furthermore, the Commission, in its Tariff Order for FY 2022-23 dated 01.09.2022 had directed the Discoms to submit the updated FAR within 6 months of the issue of the Tariff Order. The relevant extract is reproduced below: "11. Fixed Asset Register Accordingly, **Discoms should furnish the** complete updated Fixed Asset Register for all circles upto FY 2021-22 in soft copy along with hard copy with executive summary duly reconciled with audited accounts within 6 months from the issue of this order, showing details required **RERC** as per Regulations. Latest progress in this regard should also be submitted alongwith next tariff petition" (emphasis added) **JdVVNL:** The desired information has been prepared in the format prescribed by RERC. It is further stated that FAR for FY 20-21 have been revised in line with **RERC** Regulations/directions being and are submitted. To place the Fixed Assets Register JVVNL: Fixed Assets Register has been placed on the Website of the Discoms. on website of Jaipur Discom. The Discom has uploaded the FAR upto FY 2019-20 on the Discom's website. submission of FAR upto FY 2021-22 in accordance with the directives of the Commission, the Discom will place the updated FAR upto FY 2021-22 on its website. JdVVNL: Discom has adhered to the Commission's directive. The Discoms are directed to keep JVVNL: Scheme The wise the record of scheme wise grant, bifurcated/apportioned equity for the FY 16loan and equity to be received 17 to 20-21 has been provided by the Energy and actually received and report Department, GoR and the same is being the same in next true up and ARR submitted. filing. If need be, separate subheads be created in accounts. In For FY 21-22, Sr. Dy. Secretary, energy case of non-furnishing of the Department has been requested to provide information, MD of Discom should scheme wise equity released for FY 21-22.

take action against the concerned officers.

However, the same is still awaited. The same shall be submitted to the Commission once received from the GoR.

**AVVNL:** the Principal Secretary (W&M), Finance Department and the Deputy Secretary (Energy) has been requested to provide scheme-wise bifurcation of equity released for the period from FY 2016-17 to FY 2021-22. The same shall be submitted to the Commission once received from the GoR.

**JdVVNL:** Sr. Dy. Secretary, energy Department has been requested to provide scheme wise equity released from FY 2016-17 to FY 2021-22. However, the same is still awaited. The same shall be submitted to the Commission once received from the GoR.

Discoms are required to indicate any liability to be discharged by government or to be paid by government such as tariff subsidy, capital subsidy, grants towards consumer contribution, and any liability arising due to government directives and policy directives etc. as receivable in their audited accounts separately. The Commission finds that amount of grant towards consumer contribution receivable against release of agriculture connection, has not been accounted for.

JVVNL, AVNNL & JdVVNL: Discoms submitted that the receivable from the State Government such as outstanding tariff subsidy etc. is shown as receivables in the Balance Sheet under the Assets of the Discoms.

Further, regarding the directive of the Commission to account for grant towards consumer contribution receivable against release of agriculture connection, it is submitted that the GoR is providing equity towards release of agriculture connection which ought not to be treated as grant. Hence, no such grant receivable is being shown in the books of accounts. It is submitted that the Discoms have also preferred a review against the Commission's Order in the APTEL, pending outcome of which the matter shall be taken up with the State Government.

### Commission view:

The Commission has noted the compliance and has taken appropriate view while allowing the truing of ARR.

### Compliance with directives issued under ARR order dated 01.09.2022

6.2 The Commission in its last ARR order dated 01.09.2022 issued certain directives/ measures for improvement in working of the Discoms. The submission of the Discoms on these is summarized below:

DISCOI	coms on these is summarized below:				
S.No.	Directive	Compliance Status			
1.	Voltage wise Losses				
	The Commission directs that sample study of voltage wise losses be carried out for at least 2 nos. 33/11 KV rural	JVVNL & AVVNL: Discoms are in process of carrying out due diligence in order to finalize the sample sub-stations to conduct the study on voltage wise losses by appointing an independent third party. Further progress on the same shall be intimated to the Commission in due course of time.			
	substations by an independent third party and associated lines representing proper	Further more, the Managing Director, AVVNL has appointed CE (IT and M&P) as the Nodal Officer to facilitate the third-party study on voltage-wise losses.			
	sample for each circle.	The Discoms requests the Commission to grant some more time regarding the same.			
	Voltage wise losses for the circle should be extrapolated based on that data and scientific methods. The concerned circle officers shall be made responsible for ensuring that the study is completed in time. Thereafter the losses at	JVVNL, AVVNL & JdVVNL: It is pertinent to note that in accordance with the judgment of Hon'ble APTEL in Appeal No. 102 of 2010, the Tribunal had recognized the difficulty in determining cost of supply to different categories of consumers. However, instead of waiting indefinitely for availability of the requisite data for the study, the Tribunal had suggested a simple method which would take into account the major cost elements. which would be applicable to all the consumers connected at a particular voltage level.			
	Discom's level be projected.  The data report of such study be furnished to the Commission within four months of the order and based on that the Commission may consider fixing voltage wise losses.	According to the said judgment, in the absence of segregated network costs, it would be prudent to work out voltage-wise cost of supply taking into account the distribution losses at different voltage levels. The Discoms have considered the technical distribution losses in the distribution network approved by the Commission for 2006-07. Accordingly, the Discoms have submitted the voltage-wise cost of supply as per the judgement of Hon'ble APTEL in Appeal No. 102 of 2010.			

#### 2. Conversion of Flat Rate Consumers

The Commission directed JVVNL and JdVVNL to convert balance flat rate consumers by 31st March 2023, positively. In case of non-compliance, the Commission may further consider increasing the amount of deduction.

Commission directs Discoms to take action necessary to ensure that all meters remain in working condition and directs all Discoms to restrict the of defective ratio agriculture meters to total meters to maximum 10% within next one year and submit the status of compliance with next ARR/Tariff Petition.

commission The also directs that while working out the consumption of Agriculture consumer with defective meters, Discoms will take the actual specific consumption of consumers having working meters for FY 2022-23 onwards. JVVNL and JdVVNL shall adopt the same specific consumption of working meters for assessina energy for flat rate consumers.

**JVVNL:** Acknowledges the fact that elimination of the unmetered/ flat rate Agriculture consumers is beneficial for the Discoms financial and operational health.

The flat rate consumers of the Discom have been on a decreasing trend as shown below:

Year/ Date	Flat Rate consumers
31.03.21	16,804
31.03.22	12,248

Inspite of Covid-19 pandemic and the associated frequent restrictions and lockdowns, the Discom managed to reduce the number of flat rate consumers in FY 2021-22. The conversion of remaining flat rate agriculture consumers to metered category is in process. The desired speed of conversion could not be reached due to general resistance and law and order issues. The Discom is making utmost efforts in complying with the Commission's deadline.

The Discom is also in the process of bringing down the level of defective meters within 10% along with taking actual specific consumption of working meters while computing consumption of defective agriculture meters. In this regard, necessary directions have also been imparted to the SE(O&M), JVVNL to ensure compliance of the commission's Tariff order for FY 22-23 & the Chairman Discoms order issued vide letter dated 17.10.2022.

**JdVVNL:** Acknowledges the fact that elimination of the unmetered/ flat rate Agriculture consumers is beneficial for the Discoms financial and operational health. The flat rate consumers of the Discom have been on a decreasing trend.

The Discom officials are in continuous process to get consent of farmers with flat-rate connections to convert to flat rate category. For energy accounting, metered transformer have been installed on all the consumers of flat rate category. Category of flat rate to metered may be changed only with consent of the consumer, as per provision of Agriculture Policy.

In spite of Covid-19 pandemic and the associated frequent restrictions and lockdowns, the Discom

managed to reduce the number of flat rate consumers in FY 2021-22. The conversion of remaining flat rate agriculture consumers to metered category is in process and the Discom requests the Commission for some more time.

The Discom is also in the process of bringing down the level of defective meters within 10% along with taking actual specific consumption of working meters while computing consumption of defective agriculture meters. In this regard, necessary directions have also been imparted by the Chairman Discoms.

**AVVNL:** The replacement of defective meters is a continuous process. The Discom has taken necessary action for replacement of defective meters. As on July 2022, the Discom has replaced 24,619 meters in agriculture category.

Despite the stringent target accorded by the Commission, the Discom submitted that sincere efforts will be made by the Discom to bring the proportion of defective meters in agriculture category to 10% in the ongoing financial year as directed by the Commission. In this regard, necessary directions have also been imparted by the Chairman Discoms vide letter dated 17.10.2022.

Additionally, the Discom submitted that it is in the process of bringing down the level of defective meters within 10% along with taking actual specific consumption of working meters while computing consumption of defective agriculture meters.

3. Specific consumption of agriculture category

Discoms to study the specific consumption of agriculture category and submit the report to the Commission.

**JVVNL & JdVVNL:** The study is ongoing and the output of the same shall be shared with the Commission once completed.

### **AVVNL**: AVVNL submitted the following:

- Total number of flat rate consumers as on August 2022 is 455. The Discom is committed to bring the number of flat rate consumers to zero within the current financial year.
- The average specific consumption of OK meters is illustrated in the table below:

SI. No.	Name of Circles	Energy Sales Sanctione for the FY 2021- 22 (Units) Sanctione (kW) for the FY 2021-22		Per KW Consu mptio n
		OK Meter	OK Meter	OK Meter
1	ACC	119235804	82886	1439
2	ADC	102340408	85475	1197
3	Bhilwara	241083150	225174	1071
4	Nagaur	150155893	117895	1274
5	Udaipur	286166610	193519	1479
6	Rajsama nd	86280272	82026	1052
7	Chittorg arh	140212154	69571	2015
8	Pratapg arh	433810263	353990	1225
9	Banswar a	187038623	97867	1911
10	Dungarp ur	331735757	205452	1615
11	Jhunjhun u	379942889	358831	1059
12	Sikar	341635877	266689	1281
	Total	2799637700	2139374	1309

## 4. Medium Term Business Plan

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.

JVVNL, AVVNL & JdVVNL: Discoms are in process of conducting detailed analysis on different aspects and upcoming trends of the state power sector like induction of electric vehicles and its future impact, prosumers etc. Also, RUVNL has been regularly working on analyzing and developing suitable strategies regarding the influx of renewable energy in the State. Aspects like further optimization of capacity charges and study on Battery Storage Systems shall also be explored in detail.

The optimization of capacity charges may incorporated be medium term plan where a resource adequacy study should also be made which captures all type of sources including need for Battery Energy Storage System and pumped hydro Storage.

All Discoms must seriously consider implementing the KUSUM Scheme and furnish a report indicating progress in each subcomponent of KUSUM Scheme and compliance status of directions of the Commission along with next tariff Petition.

The Discoms are working vigorously on the successful implementation of KUSUM scheme. The progress details of the scheme have been captured in the relevant section of the ARR and Tariff Petition.

In order to promote decentralized solar power plants, being developed under PM-KUSUM Component C (Feeder level solarization) at load center having predominantly agriculture load in rural areas, the state government has formulated "Saur Krishi AjivikaYojna" or "SKAY" under PM-KUSUM Component C (Feeder level solarization).

The objective of SKAY is to utilize state's abundant land resources by giving farmers / landowners an opportunity to lease out their barren / unutilized land on pre-fixed lease basis for setting up of solar power plant. Rajasthan Discoms have developed a dedicated online portal where farmers / landowners can register their land for leasing out for setting up solar power plant. Solar power plant developers can also register on the portal to reach out to the registered farmers / landowners.

The portal ("www.skayrajasthan.org.in") will act as a facilitator where interested farmers / landowners and solar power plant developers can collaborate to arrange land for a solar power plant on RESCO mode in the vicinity (preferably within 5 KMs radius) of identified 33/11 kV substations of Rajasthan Discoms as envisaged under PM-KUSUM Component C (Feeder level solarization).

The detailed guidelines of the scheme are mentioned on the Portal – "www.skayrajasthan.org.in".

## 5. Free solar power for Rajasthan Discoms

Commission The exercise of its power under Section 86(2) of the Electricity Act, 2003, advised the State Government recently vide letter dated 30.05.2022 ,that it may examine and consider to notify that Interstate solar power projects supplying JVVNL, AVVNL & JdVVNL: Rajasthan Urja Vikas Nigam Limited (RUVNL), in this regard has approached the State Govt. vide letter no 381 dt 18.10.2022 requesting the State Govt. to explore the possibility of supplying free solar power to the consumers of the State in accordance with the law.

power outside Rajasthan shall supply ten percent (10%) of such electricity free of cost to the State Government for use of the State DISCOMs for supplying it to the consumers of the State or may take up the matter with Central Government to frame rules in this regard.

The Commission directs the Discom to take up the matter with the State Government for issue  $\circ$ f necessary notification regarding 10% free power in accordance with law

### 6. Sub-category wise information

The Discoms are directed file separate information of subcategory wise sales, No. consumers and connected load as per tariff structure approved by the Commission i.e. (a.) Consumers having Billing demand of 1 MVA or more for the billing month and having load factor 50% or more for the billing month and

(b.) Consumers having SCL above 150 HP or having Contract/Maximum Demand above 125 kVA (HT-5)".

The Discoms are also directed to modify their accounting system in **JVVNL**: The direction of the Commission has been complied with. The required sub-category wise information has been included in True Up for FY 2021-22.

The Discom complies with the direction of RERC and updates the accounting system in accordance with Commission's order every time the Commission revises the tariff structure or creates new categories/subcategories.

**AVVNL:** The Discom has submitted separate information of sub-category wise sales, number of consumers and connected load as per the tariff structure approved by the Commission. In pursuance with the directive of the Commission, the Discom has initiated action and the concerned Officers have been directed to initiate action towards modification/creation of new subcategories in MIS.

Once the necessary changes have been incorporated in the MIS, the Discom would be able to submit separate information on sub-category wise sales, number of consumers and connected load as per the directive issued by the Commission.

The Discom submitted that the Discom, in compliance with all directives issued by the Commission to modify the accounting system, updates the accounting system

accordance with Commission's order every time the Commission revises the tariff structure or creates new categories/subcategories.

as an when the Commission revises the tariff structure or creates new categories/sub-categories.

Further Discom have also furnished information with data gap reply.

**JdVVNL:** The direction of the Commission has been complied with. The required sub-category wise information has been submitted.

The Discom complies with the direction of RERC and the billing system is regularly modified in HCL on the basis of change request as and when changes in Tariff and TCOS updated for all categories and sub-categories.

## 7. Implementation of IT and ERP

The Discoms are directed to constitute a high-level committee for problem solving and to look into the progress of IT implementation. Expert from IT sector may also be inducted in that Committee.

**JVVNL, AVVNL & JdVVNL:** The common IT cell of all Discom officers has been constituted by Discoms coordination forum in its 76th meeting held on dt. 21st May 2022. The common IT cell is presently looking into the IT projects including ERP implementation under RDSS schemes.

IT experts from the DOIT&C of the rank of Joint Director are invited / associated in the reviews/meetings of the IT cell.

For ensuring that targets and benchmarks of RDSS are achieved, so that Discoms can avail full grant available to them under RDSS. IT / OT projects, the IT / OT projects have been distributed among three Discoms as under by DCF in the 77th meeting.

It has been brought to of the notice the Commission that under RDSS also, a separate grant is available to Discoms for implementation and cost towards billing module, data management/analytics, Al etc., therefore, the Discoms should ensure that taraets and benchmark of RDSS are achieved. SO that Discoms can avail full grant available to them under RDSS.

Name of IT/OT activities	Tendering process to be done by
1.Revenue management System and     2.Upgradation of ERP System	Jaipur Discom
<ul> <li>3.Cyber Security and implementation of security measures</li> <li>4.Roaster Management and Load Forecasting System for AG- Supply</li> <li>5. Power Transformer Tracking and Health Monitoring System.</li> </ul>	Jodhpur Discom
6. GIS , NA & AM , NMS & EMS System 7. BI, Data Analytics & warehousing	Ajmer Discom

## 8. <u>Voltage wise cost of supply</u>

Discoms are directed to JVVNL, AVVNL & JdVVNL: In accordance with the

submit Voltage wise cost of supply based on actual voltage wise losses and sales in the next year ARR and Tariff Petition for FY 2023-24.

judgment of Hon'ble APTEL in Appeal No. 102 of 2010, the Tribunal had recognized the difficulty in determining cost of supply to different categories of consumers. However, instead of waiting indefinitely for availability of the requisite data for the study, the Tribunal had suggested a simple method which would take into account the major cost elements. which would be applicable to all the consumers connected at a particular voltage level.

According to the said judgment, in the absence of segregated network costs, it would be prudent to work out voltage-wise cost of supply taking into account the distribution losses at different voltage levels. The Discom has considered the technical distribution losses in the distribution network approved by the Commission for 2006-07. Accordingly, the Discom has submitted the voltage-wise cost of supply as per the judgement of Hon'ble APTEL in Appeal No. 102 of 2010 with this ARR petition.

## 9. Reduction in Interest rates

Discoms are directed to continue their efforts to renegotiate with banks and financial institutions (Including REC and PFC) not only for availing the loan at a lower interest rate for scheme sanctioned in current also year but for swapping of existing loans.

**JVVNL:** The JVVNL has been pro-actively making all out efforts for not only availing new loans at lower interest rates but reducing the ROI on ensuing loans facilities as well. The same is evident from the facts mentioned below: -

- 1. PFC has reduced ROI from 10.50% to 10.15% in respect of loans taken under AMR & MTL amounting to Rs.221.75 Crore & 328.43 Crore respectively on the request of JVVNL.
- 2. REC has also reduced ROI from 10.65% to 10.15% in respect of loans taken under MTL and AMI smart metering amounting to Rs. 328.43 Crore & 297.53(109 cr+188.53cr) Crore respectively on the request of JVVNL. Further, REC has also provided a 50bps rebate on all the scheme sanctioned/documented in 2022-23.
- 3. In respect of existing loans as well, a letter from JVVNL has been sent to both REC/PFC requesting them to reduce the ROI to 10.15% as per the present market scenario. However, the case is still pending at the side of REC/PFC.

**AVVNL:** The Discom submitted that at the request of AVVNL, REC vide its letter dated 18.01.2022 reduced the rate of interest from 10.40% to 9.90% by giving benefit of 50 bps on all sanctioned/documented schemes for the

FY 2021-22. Furthermore, for FY 2022-23, REC, vide its letter dated 06.06.2022 has provided interest rebate of 50 bps over the applicable interest rate and reduced rate of interest further to 9.40% against all schemes sanctioned, to be sanctioned, documented/to be documented in the FY 2022-23.

Additionally, PFC vide its letter dated 15.07.2022 has provided interest rebate of 50 bps over the applicable interest rate and reduced its rate to 9.50% against all schemes sanctioned, to be sanctioned/documented/to be documented in FY 2022-23. PFC vide its letter dated 13.07.2022 reduced rate of interest from 10.25% to 9.90% at the request of Chairman, Discoms.

Apart from the above, the Discom submitted that it is making sincere efforts to renegotiate with banks and FIs (including REC & PFC) for availing loans at a lower rate of interest.

**JdVVNL:** JdVVNL submitted that Discom is making all efforts to get the loan from PFC/REC at lower interest. Even for existing loans Discom has been able to get rate of interest to some extent.

### 10. <u>Claim of subsidy from GOR due to directive regarding Bi-Monthly billing</u>

Discoms are directed to compute the impact of additional working capital requirement on the interest of working capital and claim the same from the of Government Rajasthan and furnish the compliance to the Commission with next ARR/Tariff Petition.

**JVVNL:** There is no requirement for claim of subsidy from GoR for loss of interest due to bi-monthly billing as the same is recovered from Loss Reduction subsidy.

**AVVNL:** Regular discussions are being held with Government of Rajasthan regarding the various computed subsidies and the Discom is committed to timely recovery of the same.

As regards the computation of working capital in the ARR Petition, the Discom have claimed interest on working capital on normative basis in accordance with the Tariff Regulations.

**JdVVNL:** the amount of subsidy shall be claimed from finance department in BFC as per the Directions. Further, Discoms have claimed interest on working capital on normative basis in accordance with the Tariff Regulations.

### 11. Formats of documents for placing on website

Discoms should place the files in word /Excel/pdf in readable/searchable

**JVVNL, AVVNL & JdVVNL:** The direction of the Commission has been noted and shall be complied with.

format along with signed copy in PDF format on its websites for convenience of stakeholders.

To invariably place the replies to data gap and other additional submission made by Discom during the proceeding of ARR/tariff and True up petitions on their website

### 12. Fixed Assets Register

Discoms should furnish the complete updated Fixed Asset Register (rate of depreciation, voltage assets. wise the reconciliation of same with scheme wise capitalization and spreading of depreciation over the useful life of the assets after a period of 12 years from date of commercial operation) for all circles up to FY 2021-22 in soft copy along with hard with CODV executive summary duly reconciled with audited accounts within 6 months from the of this issue order. showing details required per RERC Tariff Regulations. Latest progress in this regard should also be submitted along with next tariff petition.

**JVVNL:** The desired information has been prepared in the format prescribed by RERC comprising of the following:

- 1. The asset classification as per the RERC
- 2. The rate of depreciation was mentioned separately, and rate levied were as per Regulations prescribed by RERC.
- 3. The assets are classified into a period of 12 years and more
- 4. Abstract of assets

RERC has prima facie content with the information disclosure but insisted on following additional disclosures:

- a. Date of commissioning of assets instead of year
- b. Voltage wise disclosure of assets and
- c. Scheme wise classification of assets

With respect to above, it has submitted that till date accounts are being prepared manually and field offices neither maintain voltage wise physical quantity of assets nor scheme wise assets. The above details can be maintained only after an effective implementation of ERP which facilitates the recording of assets voltage wise, and details of scheme/end use is entered when material is issued from the stores.

It is further stated that FAR as on 31.03.2021 have been revised in line with RERC Regulations/directions and are being submitted along with the True Up Petition for FY 21-22.

With regard to uploading of FAR, it is stated that the same are being uploaded on the JVVNL's website. (https://energy.rajasthan.gov.in/content/raj/energy-

### <u>department/jaipur-vidyut-vitran-nigam-ltd-</u> <u>/en/downloads/fixed\_asset.html</u>)

**AVVNL:** The Discom submitted that the desired additional information pertaining to the FAR upto FY 2019-20 has been furnished. As directed by the Commission, the Discom shall submit the FAR upto FY 2021-22 as per the specified timelines.

**JdVVNL:** It is submitted that till date accounts are being prepared manually and field offices neither maintain voltage wise physical quantity of assets nor scheme wise assets. The above details can be maintained only after an effective implementation of ERP which facilitates the recording of assets voltage wise, and details of scheme/end use is entered when material is issued from the stores.

It is further stated that FAR for FY 20-21 have been revised in line with RERC Regulations/directions and are being submitted along with the True Up Petition for FY 21-22.

With regard to uploading of FAR, it is stated that the same are being uploaded on the JdVVNL's website.

### 13. Special Audit

To carry the special internal audit in all the circles starting with Circles mentioned in ARR order dated 24.11.2021 to justify the investment made and furnish a detailed report to the Commission along with next ARR and Tariff petition.

Discom should also issue internal guidelines for field officers indicating steps to exercise prudence while proposing/executing investments.

**JVVNL**: In compliance to the Commission's directive, a committee has been constituted vide order No. 3270 dt. 18.10.22. The special internal audit is in under process & the report will be submitted as earliest the audit completed.

**AVVNL:** The Discom submitted the progress as under:

- Discom has issued all necessary directions to the constituted committee to conduct the Special Audit of investment made by Ajmer Discom along with the cost benefit analysis for Ajmer City Circle.
- Currently, the committee is in the process of drafting its report.

The Commission is requested to grant some time in this regard.

**JdVVNL**: In compliance to the Commission's directive, Directions have already been issued to conduct special Internal Audit to justify the investment. It is ensured that

the report will be submitted at the earliest.

In respect to issue the Internal Guidelines to field officers to exercise prudence while proposing/executing Investment, it has submitted that number of circulars/orders at various levels have been issued on time to act prudently while proposing/executing any investment. It is requested that some more time to carry out the study may be granted.

### 14. Reduction of Losses –adoption of circles by MD and Director (Tech)

MDs are directed to furnish the information of Losses and revenue realized in the three (3) circles with highest losses adopted their by MD/Director also indicatina interventions made and outcome in terms of reduction of losses, on quarterly basis to the Commission.

MD of Aimer Discom has informed that they have high Loss taken one 33/11KV GSS as a model and made necessary intervention and converted it into ideal 33/11kv GSS. In view of above action by AVVNL, Commission directs all the Discoms to study the model and issue directions to replicate the model at all GSS.

**JVVNL**: The MD, JVVNL, vide order dated 12.06.2020, had adopted two circles with highest losses viz. Bharatpur and Dholpur circle for reviewing, monitoring and reducing of losses.

It is pertinent to note that these circles are pain areas for the Discoms and historically, had significant high losses. The MD and Director (Technical), Jaipur Discom have been closely and regularly monitoring the progress of various interventions for loss reduction in Frequent these areas. meetings over Video Conferencing (VC) mode combined with physical visits being conducted. The MD and Director (Technical), JVVNL have also been interacting with the field engineers and staff of these sub-divisions so as to increase their motivation levels, thereby pushing them to achieve the desired results.

Jaipur Discom officials are having regular discussions with Ajmer Discom officials regarding the said ideal GSS model and shall be exploring options for replicating the same in Jaipur Discom also.

**AVVNL:** The Managing Director, AVVNL had adopted Nagaur circle for review, monitoring and reduction of losses.

The Discom submitted that historically, Nagaur has been a worrisome area for the Discom. However, after the adoption of Nagaur circle by the Managing Director, AVVNL the situation has shown an improvement, as illustrated in the tables below:

# T&D Loss, AT&C Loss, and Growth in Revenue with HT Consumers

2021-22 iber 2021)			202 22)	2-23	(upto S	eptember
% T&D	%	%	T&D	Loss	% T&D	% AT&C

	Loss	AT&C Loss	Target for FY 22-23	Loss	Loss
Naga	29.30	38.13	21.45	19.19	22.76
Ur Cinala					
Circle					

# T&D Loss, AT&C Loss, and Growth in Revenue without HT Consumers

FY 2021-22 (upto September 2021)			FY 2022-23 (upto September 2022)		
	% T&D Loss	% AT&C Loss	% T&D Loss Target for FY 22-23	% T&D Loss	% AT&C Loss
Nagaur Circle	31.36	40.63	22.50	21.57	25.53

# Shifting of Meter on Pole for Curtailing Theft by Domestic Consumers

Ме	ter Box Tar	get	Pro	gress upt	o 14.10.202	2	
	No. of	No. of	1x4 Met	er Box	1x6 Met	1x6 Meter Box	
	Meter Box (1x4 Type)	Meter Box (1x6 Type)	Utilized Meter Box	No. of Meter s in Box	Utilized Meter Box	No. of Meter s in Box	
Nagaur	19,671	9,294	5,300	16,932	5,057	24,048	

Agriculture Load Enhancement (as on 14.11.2022)

Agriconore Loda Ermaneemem (as on 14:11:2022)				
	Target for	Load Exter	%	
	AG Load	No. of	Load	Achieve
	Extension	Consum	Extend	d in FY
	for FY 23	ers	ed (HP)	22-23
	(HP)			
Nagaur	50,000	16,682	44,631	89.26
Circle				

Special Vigilance Drive of High Value Consumers

Total No. of	Theft	Theft Malpractice/M isuse/Other		Realizati on (Rs.
Drives	Assess ment (Rs. Cr.)	Assessment (Rs. Cr.)	ment (Rs. Cr.)	Cr.)
9	6.08	0.11	6.19	0.02

Progress of Drive for Service Line Visible (as on 14.10.2022)

No. of	No. of	Theft Found (Service
Villages	Service	Line Cut)
Compl	Line	Realizat
eted	Made	Assessme ion (Rs.
	Visible	nt (Rs. Cr.) Cr.)

Nagaur	452	127,006	0.42	0.14
Circle				

Furthermore, as on 14.11.2022, the Discom identified that 151 illegal transformers were lifted during FY 2022-23.

Managing Director, AVVNL is regularly monitoring the developments in Nagaur circle.

Frequent interactions are held with the field engineers and other staff.

**JdVVNL:** The Managing Director, Jodhpur Discom has taken Jodhpur DC & Bikaner DC and the Director (Tech.) had taken Churu (O&M) Circle.

It is pertinent to note that these circles are pain areas for the Discoms and historically, had significant high losses. Discom have been closely and regularly monitoring the progress of various interventions for loss reduction in these areas. Frequent meetings over Video Conferencing (VC) mode combined with physical visits are being conducted. The MD and Director Technical have also been interacting with the field engineers and staff of these sub-divisions so as to increase their motivation levels, thereby pushing them to achieve the desired results. The reduction in AT&C Losses is depicted in table below:

Circle	FY 21 Loss (%)	FY 22 Loss (%)	Reduction in Losses
Jodhpur DC	33.46	33.39	-0.07
Bikaner DC	31.06	29.28	-1.78
Churu	25.24	22.50	-2.74

#### 15. Industrial Feeders

Discoms are directed to submit, along with next tariff petition, the list of industrial feeders with losses more than 5% for FY 2020-21 and 2021-22, name of responsible officer, efforts done by concerned Superintending Engineer

**JVVNL:** Discom submitted that for FY 20-21 and FY 21-22, there are no industrial feeders with loss more than 5%.

**AVVNL:** Discom submitted that for FY 2020-21 and FY 2021-22, there are no industrial feeders with losses more than 5%. The Discom has submitted the feeder-wise loss levels of industrial feeders with losses more than 5% for the FY 2020-21 and FY 2021-22.

**JdVVNL:** Discom Submitted that total 181 number of industrial feeders are there in Jodhpur Discom. Out of

for reduction in losses and action taken as against the concerned officer.

Discoms should also furnish an action plan to ensure that losses are brought down to 5% in all the industrial feeders.

which only two feeders are having more than 5% losses in Jodhpur Zone. The list of Industrial feeder losses in FY 21-22 has submitted.

### 16. Energy Audit

All feeder meters must be maintained properly with accurate reading and if a feeder meter remains defective for more than one billing cycle, necessary action may be taken against the Officer/Official responsible for it. The Discom should furnish compliance report to this effect with next tariff petition.

Discoms are also directed to furnish the report being submitted by it to Bureau of Energy Efficiency (BEE) and place the same on their website and also the analysis of the circle wise energy audit data and subsequent action taken based on that data and result thereof along with next Tariff Petition.

**JVVNL:** The 100% metering target for all 11kv feeders achieved by JVVNL. As on 31.08.22 JVVNL has 9,649 nos of 11 kv feeders out of which 1,088 metering equipment i.e. 11.27% were defective. Defective metering equipment are being changed on priority basis subject to the availability of lab tested meter and CTPT set in the respective O&M circle stores.

Due to the vast area under jurisdiction of the concerning AEn(Protection) as well as depending on the availability of metering equipment there may be some time lag in the replacement of defective metering equipment. During the defective period of feeder meter/CTPT, VCB meter is used for feeder energy.

Status of reports submitted to BEE:

	orares or reports seemined to bee.					
		Unaudited signed copy in hard as well in soft submitted to GM(RRECL) and Director (BEE) vide CE(M&P) letter 05 dt 05.04.2022 for FY 20-21.				
Annual Energy Account	FY 20-21	The Director ,BEE vide CE(M&P) letter 70 dt 08.06.2022 was requested to relax the timeline of 15th June for the first AEA report of FY 2020-21 & permit to furnish the same by 31st Aug 2022.				
		Accredited energy auditor has already been appointed & work order for the same has been				

			issued under TN -17 to M/s ERDA.Further, methodology have been approved and audited energy report is likely to be submitted by 15.11.2022.
			As soon as BEE uploads it on BEE site,same shall be uploaded on website of Nigam
Periodic Energy Account (FY21-	Quarter II (July'21- Sep'21)	Signed copy in hard as well in soft submitted to GM(RRECL) and Director (BEE) vide SE(M&P) letter 1108 dt 06.12.2021.  But BEE raised some queries in this report which were being attended and revised report submitted to BEE& vide CE(M&P-IT) Letter 112 dt 11.07.2022.  Signed copy of the same in hard as well as in soft submitted to	
22)		Quarter 3 (Oct-21 to Dec-21)	General Manager RRECL & Director BEE vide CE(M&P) Letter 415 dt 04.03.2022.  Revised periodic energy account has been sent vide SE(M&P) Letter 248 dt 18.10.2022.
		Quarter 4 (Jan-22 to March-22)	Signed copy in hard as well as in soft submitted to General Manager RRECL & Director BEE vide SE(M&P) Letter 63 dt 27.05.2022
Annual	Energy	FY 2021-22	All periodic Energy

Account	Account report for
Account	Account report for
	Q2,Q3 & Q4 of FY 2021-
	22 has sent as per
	timeline.
	Moreover, periodic
	Energy Account for
	Q1has also compiled for
	the annual energy
	account of FY 2021-22.
	(ii) As per finance
	wing, the accounts duly
	audited are finalised
	recently. As such, the
	annual energy account
	for 21-22 are to be
	audited by the AEA
	accordingly.
	(iii) For appointment of
	Empaneled AEA
	agency with BEE for
	Discom sector for FY
	2021-22.NIT has been
	floated with extended
	due date of opening
	25.11.2022.
	As soon as BEE approve
	these report/revised
	report, same shall be
	uploaded on website of
	Nigam

Periodic	Energy	Quarter 1 (April -22 to June- 2022)	Prepared & soft copy has already been mailed.Signed copy in hard already submitted
	Periodic Energy Account (FY22- 23)	Quarter 2(July-22, to Sep-22)	Scheduled date of submission is 29th Nov 2022, accordingly preparation of report is under progress.

**AVVNL:** AVVNL has achieved 100% metering target for all 11kV feeders in the Discoms area of supply. The Discom submitted that it has taken due cognizance of the directive of the Commission in this regard. As a result of the systems put in place by the Discom, it is submitted that no feeder metering system (CT-PT/meter) remains faulty/inoperative for more than one billing cycle.

The Discom submitted that in compliance to the Bureau of Energy Efficiency (Manner and Intervals for Conduct of Energy Audit in electricity distribution companies) Regulations, 2021, energy accounting report is submitted on quarterly basis. The same has already been placed on the website of the Discom. The status of the reports submitted to BEE is summarized in the table below:

SI.No.	o. FinancialYear Quarter		Details of Report
1	FY 2021-22	July 2021 to September 2021	Signed report submitted to BEE and placed on the website of the Discom.
2	FY 2021-22	October 2021 to December 2021	Signed report submitted to BEE and placed on the website of the Discom.
3	FY 2021-22	January 2022 to March 2022	Signed report submitted to BEE and placed on the website of the Discom.
4	FY 2022-23	April 2022 to June 2022	Signed report submitted to BEE and placed on the website of the Discom.
5	FY 2021-22	Annual Energy Account	The report is being finalized by the Nodal Officer of the Discom. The Discom shall upload the same on the website on submission of the report to BEE.

**JdVVNL:** The Discom acknowledges the importance of proper metering system and is actively working towards ensuring proper and robust metering of 11 kV feeders.

- ➤ JdVVNL's performance vis-à-vis Metering of electricity consumers, DT meters and Feeders have been very robust. As is metering status of JdVVNL is provided below:
- Presently 11690 Nos. of feeders exist in JdVVNL, and out of that 11627 no. feeders are metered and AMR system have been installed at 8511 Nos. feeder. Input energy is being captured via AMR system/through manual CMRI and sold energy of

consumers is being taken through Billing system. > Extent of defective meters: • Approx. 6.14 % of consumer meters are defective. Replacement of Defective meters: Defective meters of Industrial Consumers are replaced within one month while defective meters of other category consumers are replaced within two months. Strict directions have also been imparted to AEN. Protection of all circles regarding defective meters and energy audit of 11Kv feeder communication. The Energy accounting report submitted to Bureau of Energy Efficiency (BEE) by Jodhpur Discom for first quarter of FY-23, i.e., (April'22 - June'22) is submitted. 17. Merit Order Dispatch Discoms to strictly follow JVVNL, AVVNL & JdVVNL: The Discoms submitted that the Merit Order Dispatch. RUVNL makes power purchase on behalf of the The Discoms are also Discoms. It is ensured by RUVNL that the principles of directed to monitor the merit order dispatch are duly followed. availability of generating plants and pay fixed charges in accordance with provision of Regulations of appropriate Commission. 18. 2 Block Supply Discoms are directed to approach the Government of JVVNL.AVVNL& JdVVNL: The Discoms submitted that Rajasthan to provide the Discoms has approached GoR requesting it to provide grant for capital the expenditure associated with 2 block supply scheme expenditure on 2 block in the form of grant as per the directions of the scheme. ylagus The Commission. same shall be examined at the time of true up based on actual data filed by the Discoms. 19. **RDSS** Discoms are directed to JVVNL: Jaipur Discom is very much committed for the achieve the target set successful implementation of the RDSS scheme and under RDSS and fulfill all rigorous works in this regard are being carried out by the conditions and reap maximum benefit of RDSS.

Discom officials.

A dedicated RDSS cell has also been formulated which regularly monitors the progress made in various works being carried out under this scheme. The progress of the scheme is constantly being monitored by the senior management as well.

**AVVNL:** The Discom is making sincere efforts to maximize benefits under the RDSS. In this regard, the Discom is committed to adher to the requirements laid out in the guidelines of the scheme.

In the RDSS, reporting is done by the Nodal Agency (REC) on regular basis. The Discom is regularly submitting requisite information on quarterly basis and as sought by the Nodal Agency/ Ministry of Power. The Discom is in compliance with criteria laid out in the RDSS.

**JdVVNL**: Jodhpur Discom submited that the REC vide their letter no. REC/RDSS/21-22/157 dated 28.03.2022has approved the action plan and Loss reduction DPR of Jodhpur Discom under RDSS.

- DPR for smart metering works with total project cost of Rs. 2,877.36 Cr. With GBS Rs. 492 Cr.
- DPR for infrastructure Loss reduction with total project cost of Rs. 3,230.69 Cr. With GBS of Rs. 1,938 Cr.
- PMA Charges of Rs. 10.79 Cr. For smart metering works and Rs. 48.46 Cr. For infrastructure works -Loss reduction with GBS of Rs. 6.47 Cr. And Rs. 29.08 Cr. Respectively.

In compliance of above,

- Appointment of Project Management (Agency)
- For infra work loss reduction It was proposed that M/s WAPCOS is to be appointed for PMA Works on nomination basis but proposal has been dropped on 27.10.2022.
- Short term NIT has been published on 15.11.2022 and opening of tender proposed on 07.12.2022 and likely to be awarded in Jan. 23'
- Tender for infra works- the tender for loss reduction has been published on 20.10.2022 and opening of all 11 tenders proposed on 07.12.2022. Likely to be awarded in Jan. 23'

Further, the Discom submitted that the compliance will be ensured to achieve the target set under RDSS. The progress of the scheme is constantly being monitored by the senior management as well.

### 20. Revision of Rebate

The Discoms are directed review their ToD rebate and other rebate structure and methodology and file suitable proposal with the next year ARR Petition. The study of ToD rebate and surcharge structure may be carried through reputed out agencies.

JVVNL & JdVVNL: M/s Prayas (Energy Group) has been appointed by the Commission for study on ToD tariff design and The SE(Comml) JVVNL & XEN(RA&C) JDVVNL have been appointed the nodal officer for facilitation of requisite data regarding the same.

Suitable proposals for revision in rebates shall be filed by the Discom along with their ARR and Tariff Petitions whenever deemed necessary.

**AVVNL:** M/s Prayas (Energy Group) has been appointed by the Commission for a study on ToD structure. The Discom submitted that in the present Petition, the Discom has requested the Commission to modify the definition of rebate for new HT connections.

### 21. ToD Tariff

Discoms to appoint nodal officers for providing necessary data and coordinating with M/s Prayas to complete the study the ToD tariff design within the stipulated time frame.

**JVVNL:** The Superintending Engineer (Comml), JVVNL has been appointed as Nodal Officer for providing necessary data on Industrial Consumers to M/s Prayas (Energy Group) for study on ToD Tariff Design.

**AVVNL:** The Discom has appointed SE (Commercial), AVVNL has been appointed as the Nodal Officer for necessary coordination with M/s Prayas (Energy Group)

**JdVVNL:** XEN(RA&C) JDVVNL has been appointed as Nodal Officer for providing necessary data on Industrial Consumers to M/s Prayas (Energy Group) for study on ToD Tariff Design.

### 22. <u>Terminal Benefits</u>

Discoms should deposit the amount of terminal benefits in accordance with approval given by the Commission and also submit a plan to meet their liability towards terminal benefit with next ARR/Tariff Petition. **JVVNL:** Jaipur Discom has deposited a total amount of Rs 791.87 Cr (Rs 144.81 as Regular Contribution and Rs 647.06 Cr as Additional Contribution) to the trust in lieu of Terminal benefits in FY 21-22.The approved terminal benefits for the year was Rs 635 Cr.

Discom shall try its level best to meet out the liability towards terminal benefits in future years also.

**AVVNL:** The Discom submitted that during FY 2022-23, it has paid Rs. 353 Crore towards Superannuation & Gratuity Fund upto 21.10.2022 against the approved amount of Rs. 507 Crore. Furthermore, sincere efforts are

being made by the Discom to cover the deficit towards pension funds as amount is being transferred on daily basis as per availability of fund.

**JdVVNL:** Jodhpur Discom has deposited a total amount of Rs 652.70 Cr (Rs 407.20 as Regular Contribution and Rs 245.50 Cr as Additional Contribution) to the trust in lieu of Terminal benefits in FY 21-22. The approved terminal benefits for the year were Rs 555 Cr. Also, in FY 22-23 Discom hao so far remitted Rs. 208 cr. up to 21.11.2022 towards terminal benefit against the approved amount of Rs. 613 cr. by Commission.

In this regard, the amount shall be transferred on daily basis as per availability of funds to meet the liability towards terminal benefit for which sincere effort are being made by Discom.

Funds are transferred regularly as per the availability/ liquidity position. Discom shall try its level best to meet out the liability towards terminal benefits in future years also.

### 23. Action Plan for Metering

Discoms are directed to ensure that high losses and low collection efficiency area are prioritized keeping in view the practical difficulties and Cost benefit analysis of investment.

Discoms should report the progress, investment made, and benefits/savings accrued from Smart meter initative along with next ARR/Tariff Petition.

Discom to issue guidelines for smooth operationalization of prepaid Metering in the State with the approval of the Commission in accordance with the Supply Code

**JVVNL**, **AVVNL & JdVVNL**: Action plan and DPR for rollout of Smart Metering in Jaipur Discom has been sent to Gol under RDSS and same was approved by REC (Nodal Agency of Gol) vide letter dt 28.03.2022.

As per RDSS guideline the following areas will be taken up on priority for prepaid smart metering of all directly connected meters and AMI in case of other meters (other than agricultural consumers) in the first phase to be completed by December 2023:

- All Electricity Sub-Divisions of AMRUT cities, with AT&C Losses > 15% in the base year.
- Industrial and Commercial consumers.
- All Government offices at Block level and above.
- Other areas with high losses, which shall mandatorily include Electricity Divisions having more than 50% consumers in urban areas and with AT&C losses more than 15% and other Electricity Divisions with AT&C losses more than 25%, in the base year.

Consumers in Electricity Sub-Divisions with more than 50% consumers in urban areas and with AT&C losses of 15% or less; and other Electricity Divisions with AT&C losses of 25% or less in the base year will be covered under second phase i.e., by March 2025.

Regulations.

Benefits of Smart Meter are as under:-

- 1. Reduction in human errors in meter reading and billing
- 2. Power quality measurement
- 3. Better visibility of loading on the power system which helps faster/delayed capacity enhancement and prevention of failure/under-utilization of equipment
- 4. Reduced load on, customer care center and billing centers
- 5. Loss and theft detection
- 6. Improved consumer Satisfaction through
  - a) Error-free bills and no need for visiting billing centers
  - b) Ability to monitor and manage electricity consumption and options to save money

**JVVNL:** Total of 47.62 lakh smart prepaid meters are proposed to be installed by the Jaipur Discom in two phases under RDSS. Further, the tender shall be floated as per Guidelines and Standard Bidding Document provided by REC.

JVVNL have awarded for 4.3 lakh Smart Meters work under NSGM and IPDS, Scheme of Gol in 2018. Total 3.83 lakh Smart Meters have been installed till Sept-22 and total 214.51 Cr. has been released to implementing agency.

**AVVNL:** Total of 54.32 lakh smart prepaid meters are proposed to be installed by AVVNL in two phases under RDSS. Further, the tender shall be floated as per Guidelines and Standard Bidding Document provided by REC.

The Discom submitted that under the IPDS scheme of the Government of India, the Discom has procured 68,673 smart meters at an expenditure of Rs. 8.24 Crore.

#### JdVVNL:

As present, there is no smart meter is installed pre-paid mode in Jodhpur Discom. Smart meters are to be installed in pre-paid mode only under RDSS. guidelines for smooth operationalization of pre-paid metering in Jodhpur Discom are under preparation and shall be submitted to commission through designated committee/office for approval.

### 24. <u>Technical and Financial Audit</u>

Discoms are directed to continue conducting Technical & financial internal audit in a time bound manner for each subdivision and top management should take action on such reports of internal audit.

To prepare a Manual, indicating type of errors, malpractices observed during these audits, procedure to avoid them and provide a copy of the same to the Discoms" officers.

**JVVNL:** The Discom submitted that, the technical and revenue audit are being regularly been carried out by Discom. Position of Technical and Revenue audit conducted during 2021-22 & 2022-23 (upto Sep.21) are as under:

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P□rti□ ulars	Year	No.□of su□- divisions to be audited as per annual plan	Audit conducte d	Undercha rges pointed out/Reco very	Amou nt realize d/verif ied
	2021-22	32 Units	39 Units	16.94 Lac	23.20 Lac
Techni cal Audit	2022-23 (Upto Sep. 22)	24 Units	21 Units	11.26 Lac	0.19 Lac
D	2021-22	126 Units	143 Units	2031.31 Lac	5662. 91 Lac
Reven ue Audit	2022-23 (Upto Sep. 22)	90 Units	50 Units	472.80 Lac	2487. 91 Lac
	2021-22	22 Units	24 Units	754.67 Lac	83.00 Lac
Expen diture Audit	2022-23 (Upto Sep. 22)	24 Units	13 Units	242.94 Lac	47.74 Lacs

### Action taken on the report:

Technical audit: 42 No. & 34 No. Charge sheet/show cause notices have been issued for the technical audit during 2021-22 & 2022-23 (up toSeptember, 2022) respectively. Further, it may also be intimated that out of 210 sub-divisions, approx. 36 (Exact no. are mentioned in above table) different sub-divisions are audited in each financial year by the available audit parties and various complaints are also forwarded by the management to enquire the same with the existing audit parties and accordingly 13 No. & 8 No. enquiries have also been carried out during 2021-22 & 2022-23 (up toSeptember 2022) respectively.

Revenue audit: - Undercharges pointed out along with other irregularities have been intimated to the unit officer to debit the undercharges into concerned consumer account and to furnish reply/compliance of

other irregularities and disciplinary action against 111 No. & 73 No. defaulting officers/officials has also been taken regarding irregularities found during 2021-22 & 2022-23 (up toSeptember 2022) respectively.

Regarding various irregularities pointed out during audit of sub-divisions/circle offices, directions to concerned offices have been issued time to time to avoid such errors compilation Audit Manual of Revenue audit, technical audit & Expenditure audit comprising of directions/orders has been made.

**AVVNL**: The Discom submitted that the Revenue Audit, Expenditure Audit and Technical Audit is being conducted at regular intervals by the Discom. The details of the same is illustrated below for the perusal of the Commission:

### a) Revenue Audit

At present, Revenue Audit is conducted by the Internal Audit wing of the Discom and on outsourcing basis through third-party CA firms/Cost Accountants/Societies. While the Revenue Audit has been completed in all sub-divisions of the Discom, the Audit for FY 2020-21 is currently ongoing. The Discom also anticipates that in half of the sub-divisions of the Discom, Revenue Audit for FY 2021-22 will be completed by 31.03.2023.

Additionally, Revenue Audit conducted during FY 2021-22 and resulted in recovery of Rs. 27.71 Crore through SOSD's. The Discom ensures that any recovery proposed by the Audit is thoroughly verified by Audit Parties/Outsourced firms as per the directions issued in this regard by Sr. AO (IA)/ AO (IA). Any serious irregularities found, if any, will invite an enquiry. The concerned officers of the Discom ensure that such instances are brought to the notice of the Management for necessary action against defaulting Officers/officials.

### b) Expenditure Audit

Expenditure Audit is also conducted at circle level on regular basis. Furthermore, audit of preclosure of major schemes such as RAPDRP/DDUGJY/IPDS/SAUBHAGYA, etc is also conducted by the Internal Audit wing of the Discom. Audit completed during FY 2021-22 resulted in recovery of Rs. 0.69 Crore.

### c) Technical Audit

During FY 2020-21, Technical & Safety Audit was conducted in 20 units/sub-divisions of the Discom which revealed under charges of Rs. 6.67 Crore. The Discom

shall make sincere efforts to conduct Technical Audit in a time-bound manner during the current financial year.

The Discom submitted that the Internal Audit wing of the Discom has developed an Internal Audit manual which being used by all concerned staff of the Discom. Furthermore, the Discoms also issue circulars/orders/guidelines from time to time as found necessary.

**JdVVNL**: With optimum utilization of the available resources Discom is carrying out Revenue and Technical audit of each subdivision. For completion of Revenue audit in time bound manner; at various interval empanelment of CA firms is also made, as a result Revenue Audit of FY 2019-20 for all subdivisions is already completed and Revenue Audit for the FY 2020-21 shall be completed upto March 2023. Further it will be ensured that half of the revenue audit for the FY 2021-22 will also be completed before the end of this FY 2022-23.

Despite acute shortage of staff in Technical Wing, Technical audit of 70 subdivisions has been completed from FY 2020-21 to Current Financial Year 2022-23. Needful efforts are being made to conduct Technical Audit in time bound manner.

Expenditure audit is also being conducted for all the Circle offices and at present all the circle offices audit for the F.Y. 2020-21 is already completed except 1 which would be completed before December2022 and at present Expenditure Audit of various Circles for the F.Y. 2021-22 is also going on.

Necessary efforts are regularly being made for recovery proposed in above audits either from consumers or contractors as the case may be. Shortcomings observed in above Internal Audit Report are forwarded to concerned offices for necessary rectification and recovery, further it has been ensured that such shortcoming/ irregularity shall not occur in future. Any serious irregularity noticed during the Internal Audit then the matter is separately enquired and submitted to Higher Management for necessary disciplinary action against the defaulting Officer/ Officials. In addition of above, Internal Audit Wing is regularly reporting its progress to Director (Fin) and yearly progress to Board of Directors and Audit Committee.

Internal Audit Manual is in existence and same is

followed since the era of RSEB. Further, looking to the changing scenario Jodhpur Discom is regularly issuing various Circulars & Orders to meet out the requisite requirement. List of the Circulars & Orders issued are submitted.

### 25. Third Party Audit

Commission in last ARR order directed Discoms to Carry out a thirdparty audit of material used in various capital investments schemes and retrieval/disposal of old material durina execution of these the schemes. reply furnished by Discoms is not satisfactory, therefore, the Discoms should submit the requisite information including the circle wise details of shortfall of material,

retrieval/disposal of old material during execution of these schemes and action taken. JVVNL: The Discom submitted that 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 M/s. Feedback Infra 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 against TN-356.

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 and also infra created as per REC norms and furnished their reports.

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.

It has also submitted that Nodal Agency REC Ltd. frequently gets inspected 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, headed by the Additional Chief Engineer (Trg.,Saf. & QC) ,JPD,Jaipur, who also check quality of infra of these schemes and intimate defects, if any ,for attending the same.

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.

**AVVNL:** The Discom sbmitted the following:

- Recently, two major schemes of the Central Government; i.e., DDUGJY and SAUBHAGYA attained closure. As per the provisions of the schemes, the Nodal Agency, Rural Electrification Corporation (REC) appointed the REC Quality Monitors (RQM) for evaluation agency for thirdparty concurrence. As regards the DDUGJY, M/s RECPDCL was appointed as the RQM while M/s Cabcon India Ltd was appointed as the RQM for SAUBHAGYA.
- Furthermore, M/s Medhaj Techno Concept Pvt. Ltd. was appointed as the Project Management Agency (PMA) for quality assurance, inspection and monitoring. Inspection of materials and infrastructure created was conducted by the RQM. However, old material was rarely used during the execution of these schemes.
- The defects observed by the RQM are uploaded on the REC Quality Assurance Portal "SAKSHYA" which is diverted to the respective turn-key contractor and compliance of same are back uploaded on the portal. Additionally, REC frequently inspects material and infrastructure to be apprised of the ground reality of works
- It is also 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.

**JdVVNL:** The Discom submitted that DDUGJY and SAUBHAGYA Schemes have been completed recently which are rural electrification schemes of Central Government and REC Ltd., appointed M/s RECPDL for DDUGJY Scheme and Cabcon India Ltd., for

SAUBHAGYA as REC Quality monitors (RQM), i.e., third party concurrence evaluation agency for these schemes. Further, in compliance of guidelines of these schemes, M/s Medhaj Techno Concept Pvt. Ltd., Lucknow has been appointed as Project Management agency (PMA) for quality assurance, inspection and monitoring of these schemes.

The appointed RQM agency conducted inspection of key materials at manufacturer work and also infra created as per REC norms and furnished their reports. Since, these schemes were for new infra creation works, therefore, hardly any old material is retrieved during execution of these schemes.

The defects observed by RQM in infra were uploaded on REC Quality Assurance Portal "SAKSHAYA" which are online diverted to the respective turnkey contractor and compliance of same are back uploaded on portal.

It has also submitted that Nodal Agency REC Ltd. frequently gets inspected material and infra as per their convenience to be aware with the ground reality of works. Further, at Jodhpur Discom level, a quality control wing is also constituted, headed by the Additional Chief Engineer (S&T-CSS) Jodhpur, who also check quality of infra of these schemes and intimate defects, if any ,for attending the same.

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.

### 26. Franchisee

Finalize the report on the performance of the franchisees by independent auditor within 3 months and furnish the same along with next year ARR & Tariff petition and also place the same on the

**JVVNL:** The Discom submitted that, the independent auditor (M/s KPMG) has finalized the ABR figures for FY 2019-20 and FY 2020-21 and submitted the report to the Discom. The report, once approved by the Discom shall be submitted to the Commission.

For the period from April'21 onwards, the independent auditor is in the process of preparing the report. The draft report shall be shared with the Discom by 31<sup>st</sup> Dec'22. Accordingly, as and when the same is finalized

website.

and approved by the Discom, the report shall be submitted before the Commission.

**AVVNL:** The Discom has submitted that the franchisees are working in an efficient manner. The Discom makes sure that the franchisees are operating as per the provisions laid out in the Distribution Franchisee Agreement.

As regards the report on the performance of the franchisees by the independent auditor, the Discom submitted that the report is in the process of finalization. Once the report is approved, the Discom shall submit the same for the perusal of the Commission.

**JdVVNL**: M/s CRISIL Limited, an S&P Global company has provided the audit reports for FY 2019-20. After evaluations Revised Audit Reports are being prepared by M/s CRISIL Limited. Reminder letters are also sent to firm for no further delay.

Discom further submitted that NIT for appointment of independent auditor was published on Date 18/11/2021 under TN-03/21. Bid opening date was 20/12/2021, However, no bids were received. Nine times extension date was given for bid submission. The last date of bid submission was 30/05/2022 and bid opening date was 31/05/2022. No, bid was submitted. Further, the tender was cancelled and new tender number TN/05/22 for independent Auditor for Audit Operation of Distribution Franchisee in Bikaner City was floated on E-proc and SPP PORTAL on dated 12/08.2022 and pre-bid meeting was held on 22.08.2022 but no bidder participated in pre bid meeting the date was extended three times. Only two bidders M/s KPMG and M/s Deloitte India submitted the tender fees. After that the tender was open on 19 oct,2022 as per approval of higher authorities. M/s Deloitte and M/s KPMG has submitted the technical and financial evaluations.

### 27. Skill Training and Development

Discoms are directed to incur at least 1% of total capex on the skill development and training of staff and intimate the same to the Commission in the True up for FY 2022-23.

**JVVNL & AVVNL:** The direction of the Commission has been noted and the intimation regarding same shall be provided along with the True Up for FY 22-23.

**JdVVNL:** The direction of the Commission has been noted and the intimation regarding same shall be provided along with the True Up for FY 22-23.

The expenditure on various trainings held from April 2022

to October 2022 has also submitted.

### 28. <u>Compliance with safety Regulations and High-risk points</u>

Discoms should ensure the compliance of CEA (Measures relating to safety and Electric Supply) Regulations, 2010 and CEA (Safety requirements for construction. operation maintenance and electrical plants and electric lines) Regulations, 2011. Discoms need to spend any additional amount for compliance of the Safety Regulations, the same can be claimed through ARR.

Discoms should analyse the causes of high-risk points and issue guidelines for the rectification of such highrisk points to the field officers.

Apart from Discoms officers, an independent member (outside Discoms) should also be included as member of aforesaid safety committee for examination of accidents.

**JVVNL:** The Discom has always strived its best to 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) Regulations, 2011.

An order was also issued in this regard by the office of MD (Jaipur Discom), directing the Discom officials to strictly comply to the mentioned CEA Regulations. Directions have also been issued to maintain information regarding associated parameters in the prescribed formats. Dy. CE (Training and Safety) has been designated as the Chief Safety Officer in Jaipur Discom.

Discom further submitted that Discom is rigorously working on the rectification of high –risk points and issued directions to comply with the Commissions directive.

**AVVNL:** Ajmer Discom has accorded the highest importance to 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 (CEA Safety Regulations).

Furthermore, the Discom has designated a Chief Safety Officer. Necessary instructions have been issued by the Chief Safety Officer to all Circle Officers to continue compliance with all provisions of the CEA Safety Regulations. Additionally, all AEN (O&M) have been directed to deliberate and discuss ways to reduce electrical accidents with every workmen and technician, followed by "Safety Oath" every Tuesday.

The Discom, has analyzed the causes of high risk points and the same are summarized below for the perusal of the Commission:

- Old conductor & 8 meter pole, guarding point, levelling of land, etc.
- Guarding not provided, titled poles, earthing not provided, loose wire, etc.
- Due to heavy storm and rain, poles get tilted and wires loosen. Furthermore, after lapse of time, earthing gets rusted and requires new earthing

- Damage of earthing of transformer and fencing of transformers in congested areas
- Weather conditions such as heavy rain and winds typically occurring in dense forest area
- Reconstruction of roads and increase in height
- Loose sagging of conductor
- Stray removal
- Construction of houses near/under existing lines.

High risk points are thus urgently identified and attended on priority. Furthermore, Discom Officers regularly take weekly meeting of feeder-in charge to address issues pertaining to high risk points

The Discom would like to apprise the Commission that vide its Order dated 08.04.2009, the office of the Secretary (Administration) has issued instructions for reporting electrical accidents, procedure for conducting enquiry and timely settlement compensation. In this regard, the Discom has set up a Committee comprising of 2 independent members: a) Electrical Inspector/Electrical Inspector Government and b) Police and District Administration Authorities.

Action to be taken by Officers of the Discom in case of accidents has been clearly laid out.

JdVVNL: Discom has always strived its best to 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) Regulations, 2011. From time-to-time various directions are given to Discom officials and Campaigns are organized for Safety of Citizens Campaign details and office orders submitted.

All Engineers and technical helpers are given various trainings at their respective 33/11kv Sub-stations as per CEA (Safety requirements for construction, operation and maintenance of electrical plants and electric lines) Regulations, 2011.

It is further submitted that Discom officials have started the process of identification of such high-risk points. Accordingly, rectification procedures shall be carried out under the supervision of designated officials. A report of identification, rectification and removal of hazardous points upto 21.11.2022 has also been submitted.

### 29. <u>Monetization of Discom's Assets</u>

Discoms are directed to take following action:

Circle wise no of poles and cables be reported along-with their income In case income is shown as zero, the concerned Assistant Engineer should furnish an affidavit within three months of date of issue of this order to the concerned SE that he has checked all his area and no poles or assets are being used by Telecom operators, cable operators etc. or for any other purpose. Concerned SE then depute an internal audit team to verify the claim and take necessary if action some misreporting is found. Concerned SE shall be personally responsible for monitoring the income monetization from of Discoms asset in his circle. Commission will also get such claim verified through independent agency/consultant.

The Discoms may accordingly comply with the directions given vide order dt. 24.11.21. MD's of Discoms are again personally directed to implement the concept of asset monetization and institute a

**JVVNL:** As per Tariff Order dated 24.11.2021, Nigam is allowed for optimum utilization of assets. In view of this, Jaipur Discom has issued an order no. JPR5-1086 dated 18.01.2022 and JPR5-1115 dated 15.11.2022 for use of Discom poles by various agencies for laying of OFC, Coaxial TV Cable/communication cables and annual pole rental charges and security amount has been prescribed in the order.

**AVVNL:** the Discom has issued new accounting codes for recording of transactions related to "Revenue from Use of Poles" and "Revenue from Use of other Assets"..

Furthermore, vide Order dated 17.11.2022, the Discom has revised pole rental charges and interest free security amount for laying of OFC, co-axial TV cables/communication cables on the existing electrical poles of the Discom.

**JdVVNL:** As per Tariff Order dated 24.11.2021, Nigam is allowed for optimum utilization of assets. In view of this, Jodhpur Discom has issued an order no. JU/2021-22/D 1871 dated 24.01.2022 for use of Discom poles by various agencies for laying of OFC, Coaxial TV Cable/communication cables and annual pole rental charges and security amount has been prescribed in the order.

transparent mechanism for identification of the assets, measurement and verification of revenue and create necessary accounting framework and thereafter submit quarterly compliance report in this regard indicating action taken and circle wise revenue realised.

#### 30. Digitalization of Assets Register

The Discoms are directed to Digitalize Assets Register for the purpose of Asset Monetization and assets mapping within 3 months.

**JVVNL & JdVVNL:** The Discoms have submitted that it is in the process of updating the Fixed Assets Register in accordance with the formats desired by the Commission, as elaborated above in the directive regarding FAR.

Further, the Discoms are in the process of ERP implementation. Once the same is successful implemented, the required digitization of the assets register shall be completed.

**AVVNL:** Digital Asset Register was discussed by the Senior Officers of the Discom. In order to ensure compliance with the directive, the Managing Director, AVVNL appointed SE (IT), AVVNL as the Nodal Officer to examine the matter.

#### 31. Parallel Operation Charges

MD of each Discom must personally look into carry out study of parallel operation charges and furnish requisite proposal along with next ARR and Tariff petition.

Discoms have to explore all possible revenue sources as the Commission may not allow any increase in Regulatory Assets in future.

JVVNL, AVVNL & JdVVNL: a Notice Inviting Tender (NIT) for the appointment of a third party to conduct the required study on parallel operation charges has been floated by JVVNL on behalf of the 3 Discoms. The tender (TN-10) with Tender ID (2022\_JVVNL\_305521\_1) has been notified on 16.11.2022. The third party to furnish a draft report within 6 months of appointment.

32. Scheme wise expenditure: grant-equity

Discoms were directed to furnish the scheme wise loan, grant and equity. Discoms should take up the matter with GoR to provide the scheme-wise break up of equity and grant while releasing the funds towards any scheme in future.

**JVVNL:** The office of the Director(F), JVVNL has requested to Sr. Dy. Secretary, energy Department vide letter no.1211/21.09.22,1264/07.10.22 to provide scheme wise equity released for FY 21-22. However, the same is still awaited.

Moreover, The scheme wise bifurcated/apportioned equity for the FY 16-17 to 20-21 has been provided by the Energy Department, GOR.

**AVVNL:** The office of the Director (F), AVVNL, has requested the Principal Secretary (W&M), Finance Department and the Deputy Secretary (Energy) vide letter nos. 2022-23/D.1632 dated 01.06.2022, 2022-23/D.2361 dated 01.07.2022 and 2022-23/D.4198 dated 13.10.2022 to provide scheme-wise bifurcation of equity released for the period from FY 2016-17 to FY 2021-22.

The same shall be submitted to the Commission once received from the GoR.

JdVVNL: The office of the Director (F), JdVVNL has requested Sr. Dy. Secretary, energy Department vide letter NO. JdVVNL /CCOA/CAO(B&R)/AO(Budget)/D.923 to provide scheme wise equity released from FY 2016-17 to FY 2021-22. However, the same is still awaited. The same shall be submitted to the Commission once received from the GoR.

#### 33. Mode of Payments

Discoms to comply with the following regulation of RERC (Electricity Supply Code and Connected Matters) 2021: "In Regulations, respect of energy bill payments, i.e., monthly power supply charges up to and inclusive of Rs 10,000/- or such other limit as may be notified by the Commission from time to time may be made by cash or cheaue or Demand Draft or any electronic mode. Payments above the **JVVNL:** In accordance with the RERC (Electricity Supply Code and Connected Matters) Regulations, 2021, Jaipur Discom has issued Order No. 1482 dated 12.02.2021 (JPR5-1048) and Order No. 1561 dated 8.11.2021 (JPR5-1080).

**AVVNL:** In accordance with the RERC (Electricity Supply Code and Connected Matters) Regulations, 2021, the Ajmer Discom has issued Order No. AJ-821 dated 20.02.2021 and Order No. 2750 dated 02.11.2021.

**JdVVNL:** In accordance with the RERC (Electricity Supply Code and Connected Matters) Regulations, 2021, Jodhpur Discom has issued Order No. JdVVNLIMD/CE(HQ)/SE(RA&C)/JU/2020-211D 2100, dated 26.02.2021.

amount notified shall be made by a cheque or Demand Draft or electronic mode only"

Discoms are also directed to review/withdraw any orders issued by them in contravention to Regulations of the Commission and submit the compliance within one month.

#### 34. <u>Intrastate and inter State Losses</u>

Commission has many times directed the Discoms that thev should file the information of inter and intra state losses separately, however all Discoms have failed to file the same. Therefore, the Commission is takina this matter very seriously and again directs the Discoms to comply with the above Direction in next true up petition positively, otherwise the Commission will take an adverse view of the same.

JVVNL, AVVNL & JdVVNL: A committee has been formed and multiple deliberations have been done regarding the segregation of inter and intra state transmission losses. The findings of the Committee have been put up before the senior management for further suitable action.

#### 35. <u>Agriculture connections in urban areas</u>

Discoms are directed to initiate a drive to check usage of Agriculture connections in urban area and if it is found that Urban Agricultural connections are being used for purpose other agriculture than their category be changed under appropriate

**JVVNL:** The officials from O &M and vigilance wing of the Discom conduct such drives from time to time in order to curb the usage malpractices associated with the consumer of agriculture category in urban areas of the Discom.

**AVVNL:** the Discom has initiated a drive to check the usage of agricultural connections in urban areas.

category and necessary action for malpractice be taken as per provisions of the Act.

The concerned Assistant Engineer should be made responsible to complete this drive by 30th November 2022 and compliance be reported to the Commission along with next ARR/Tariff petition.

**JdVVNL:** The officials of the Discom conduct such drives from time to time in order to arrest the usage malpractices associated with the consumer of agriculture category in urban areas of the Discom.

## 36. <u>Interest on Security Deposit</u>

Discoms are directed to send a communication by email or SMS to the consumer regarding amount of interest on security deposit being credited and adjusted in their bills of July every year.

**JVVNL**: Necessary directions have been issued to intimate consumers on their registered e-mail regarding the amount of security credited and adjusted bills.

**AVVNL & JdVVNL:** The concerned Discom officials are in discussions to implement the Commission's directive by making suitable changes/adjustment in the billing system of the Discom.

#### 37. Details of various debit/credit on the bill

The Discoms are directed to create separate codes for each type of debit or credit and mention amount against each subhead in the bills available online. e.g.

D0001-fuel surcharge-XXXX CR001-Interest on Security Deposit-Rs. XX

D0002-Debit due to audit-XXXX CR0002- other credit-XX

**JVVNL:** Discom has been providing the details of credit /debit in the online bills.

**AVVNL:** As directed by the Commission, vide letter dated 29.09.2022, the Discom has initiated action to create separate codes for each type of debit or credit and mention amount against each sub-head in the bill.

**JdVVNL**: The directive of the Commission has been noted by the Discom and options to implement the same shall be explored.

### **Directives to Discoms:**

The Commission has consistently insisted upon Discoms for improvement in their performance and issued certain directions in previous orders. The Commission has

noted compliance as submitted by Discoms. However, the Commission shows its displeasure with working of Discoms as many of the directions were not specifically complied with and instead of giving a result oriented reply, the submission of the Discoms are limited to issuing of directions to the management. The Commission directs MDs of Discoms to personally look into the status of compliance and furnish pinpointed compliance report of each directive.

Considering the submissions of the stakeholders, discussion in this order, directives issued earlier, compliance of directives furnished by Discoms, the Commission issues following follow up as well as fresh directives to Discoms for compliance and has also issued some useful advice to Govt. of Rajasthan for consideration.

## 1. Bijli Chaupal in rural areas:

Rural electrification, including distribution of electricity is covered under powers, authority and responsibilities of Panchayats under 11th Schedule of the Constitution. In Commission's view there is a need for two way communication between panchayats and the Discoms not only to improve service but also to create an understanding for better load management, reduction of theft etc. Accordingly the Discoms are directed to arrange regular "Bijli Chaupals" in association with Panchayat in rural areas. Wherein they shall take up matters related to consumer awareness programme regarding safety, hours of supply for agriculture, consumer grievance redressal, billing, DSM measures, New schemes etc. and take necessary corrective action as per feed back from the consumers. This will not only create a dialogue with public but also increases the trust for Discoms and consumer will result in better collection & low losses for Discoms.

A team of officers of Discoms should visit Noida and study the intervention made by their distribution company by holding dialogue with farmers regarding issues related to supply hours, billing, metering, collection efficiency, loss reduction etc.

### 2. Principles for day to day working:

Discoms are directed to keep in mind following principles in their day to day working: Standardization, simplification, modernisation, decentralisation, loss reduction, turnaround, Cost optimization, efficiency improvement, and consumer friendly environment.

#### 3. Net Zero and National goal for year 2030 and 2070:

India has set ambitious targets to reduce its carbon emissions in order to combat climate change and promote sustainable development. India's Nationally Determined Contributions (NDCs) under the Paris Agreement include a target of reducing the country's emissions intensity of GDP by 33-35% below 2005 levels by

2030, and a target of achieving 500 GW of renewable energy capacity by 2030. Additionally, India has set a target to achieve net-zero emissions by 2070.

To meet the aforesaid target and promote renewable energy, Discoms are directed to meet the RPO targets notified by the Commission from time to time.

The Solar and Wind power potential at the National Level vis-à-vis State level and its achievement is as follows:

(Figures in GW)

	Potential			Installed capacity		
Resource	All India	Rajasthan	% Share	All India	Rajasthan	% Share
Solar	748.99	142.31	19.00%	63.89	16.35	25.59%
Wind	695.51	127.76	18.36%	41.98	4.68	11.15%
Total	1444.50	270.07		105.87	21.03	

(MNRE, 31.01.2023)

Presently country is having Solar and Wind Potential of around 1444.50 GW out of which around 270.07 GW potential (\*around 18.70%) is available in the Rajasthan State alone. Rajasthan is blessed with abundant Solar and Wind resources and is having potential for being the Renewable Energy Capital of the Country. Rajasthan so far could only harness less than one tenth of its Solar and wind potential. For Rajasthan to become the solar hub of the India, the maximum generation capacity needs to be added specifically from solar power.

#### A. Distributed generation:

The Discoms must aim at purchasing maximum renewable energy be it from large scale plants or decentralised generation. Commission in its earlier orders has stressed on the need of promotion of renewables and need to promote decentralised generation. The decentralised generation offers multipronged benefits viz. flattening of the load curve, reduction in transmission and distribution losses, avoidance of network expansion cost, reduction in average power purchase price of the Discoms etc.

In Rajasthan agriculture category has a major share in consumption. If the Discoms take full benefit of available solar power and schemes like KUSUM they can supply these consumers during the day time and also reduce overall losses and cost of the Discom, Rajasthan though missing its target by large figure is still a National leader in KUSUM A and if efforts are made it can get more benefits from the Central Government for all components of KUSUM i.e., A, B and C.

The Discoms are accordingly directed to chalk out the plan for purchase of distributed renewable energy and take up the matter with the Central Govt. for higher Central Financial Assistance (CFA) under KUSUM Scheme. The State Govt. is also advised to consider if they can provide additional assistance to the Discoms /farmers so as to fast track the solarisation of the grid.

The Commission is concerned about the slow progress in rooftop and KUSUM schemes and the various hurdles /Time delays in various procedures. Therefore, Discoms are directed to remove and mitigate procedural and other problems faced by prosumers, farmers and investors in installation of solar power.

### B. Maximising RE power purchase by the Discoms:

Commission observed that, Rajasthan is blessed with abundant solar and wind resources, has a significant potential for renewable energy generation. It is beyond comprehension that Rajasthan has total installed capacity of 16.35 GW solar generation out of that only 4.79 GW capacity is being purchased by Rajasthan Discom or entities within the State.

Discoms in Rajasthan have traditionally suffered due to high cost of thermal power due to distance from mines and non-availability of hydro power in the State and setting up of plants far from the load centers.

Low cost Renewable energy specially Solar is a boon for Rajasthan which unlike coal can also be used as distributed energy Resources which have benefits of improved reliability and resilience, increased access to the electricity in remote areas and reduction of electricity transmission and distribution losses.

Further, even large scale solar plants are also being installed in Rajasthan the Discom should buy maximum power from them also so as to reap benefits of cost effectiveness and scalability.

The Commission also directs that to fulfil the RPO obligation, the Discoms can initiate action to purchase energy through competitive bidding upto RPO under intimation to the Commission without any prior specific approval for the same and directly approach the Commission for adoption of Tariff.

At present Discoms are not able to fulfill their RPO. However, in Commission's view, to maximize the benefit for the consumer of the State they should even purchase the RE beyond their RPO. As Rajasthan Urja Vikas Nigam Limited (RUVNL) is managing purchase of electricity on behalf of Discom, they are adviced to explore the possibility of engaging themselves in trading of green power either bilateral or through exchange and earn trading margin which can be used to set off power purchase cost of Discoms.

To keep a tab on the progress of Renewable energy capacity addition and capacity contracted by Discoms of Rajasthan, the Discoms are directed to furnish the following information on quarterly basis.

FY:	Quarter:				
	Sc	olar	Wind		
Particular		Capacity		Capacity	
	Capacity	Contracted	Capacity	Contracted	
	Installed	by Discom	Installed	by Discom	
	MW	MW	MW	MW	
At beginning of the FY(1.04)					
Addition during the 1st Quarter					
Addition during the 2 <sup>nd</sup> Quarter					
Addition during the 3 <sup>rd</sup> Quarter					
Addition during the 4th Quarter					
Total at the end of Financial Year					

Further to facilitate faster setting up of RE Projects in the State, the State Government is advised to explore the Land Aggregating Agency owned by Govt. like RIICO which may identify encumbrance free chunks of the land in the State. Such lands may be offered to the solar power developers so as to save time and improve the investment climate in the State.

#### C. RE Skill Development:

When major installed capacity of solar installations is in Rajasthan it requires more skilled persons to install, operate and maintain the same for which there is a need to develop necessary skills in the youth.

The Commission advice State Govt. to direct Rajasthan Renewable Energy Corporation to introduce the concept of Saur Mitra / Vayu Mitra where technically qualified persons are trained and appointed in suitable numbers at all major places in the State so as to:

- (i) Assist prospective prosumers in installation of solar rooftop systems and guide them for resolution of technical and procedural problems.
- (ii) Assist farmers to install plants under various components of KUSUM
- (iii) Assist prospective investors to understand the benefits of investing in RE in the State.

Rajasthan Renewable Energy Corporation may also be directed to create Renewable Skill Development Centres where not only Saur/Vayu Mitra are trained but other unemployed youth is also given hands on training for installation, operation and maintenance of RE plants so that Rajasthan may also become the RE Skill Capital of the country. The existing ITI / Skill development centre may be developed as RE Skill development centre with the help of "Skill Council of Green Jobs", an initiation of Govt. of India aligned to National Skill Development Mission.

### D. Developing Rajasthan as a manufacturing hub:

The Government of India is implementing the Production Linked Incentive (PLI) Scheme under National Programme on High Efficiency Solar PV Modules, for achieving domestic manufacturing capacity of Giga Watt (GW) scale in High Efficiency Solar PV modules, with total outlay of approx. Rs. 24,000 Crore. This Scheme has provision for Production Linked Incentive (PLI) to the selected solar PV module manufacturers for five years post commissioning, on manufacture and sale of High Efficiency Solar PV modules. The PLI tranche II will be implemented by MNRE with SECI as the implementing Agency. SECI has recently allocated PLI for manufacturing of complete value chain – Manufacturing of Polysilicon, Manufacturing of ingots-Wafers, Manufacturing of Solar Cells and Manufacturing of Modules/Fully integrated manufacturing of Thin Film plant/Fully integrated plant of any other technology to the extent of 39600 MW. Rajasthan has the great opportunity to invite these manufacturers in Rajasthan to set their plants here.

With setting up of more and more RE power capacity in the State, more RE manufacturing facilities are to be brought in the State also. To cater this demand OEMs may be attracted to set up such facilities within the State which, in turn, will increase the industrial category consumption. This will lead to increase in revenue to the Discoms and also enhanced GST collections.

The State Government is advised to take appropriate measures to further encourage/promote Renewable Energy equipments manufacturing in the State under RIPS- 2022 Policy. The State Govt. also advise to encourage developers selected under production link manufacturing scheme of Govt. of India to setup manufacturing facilities in the State.

All above will act as a confidence building measures among consumers, farmers and investor, reduces time for creation of new capacity and downtime for installations and also create employment for the youth of the State.

# 4. Road map for EV charging stations:

Electric Vehicles (EV) are now picking up in Rajasthan and it will be a major new type of load for the Discoms. Discoms should study the type of chargers availability, their impact on transformers and system, possibility of integration of Smart charger with Smart Meters so as to introduce ToU tariff where such charger/Meters are installed alongwith other technical interventions required.

Commission vide suo-motu order dated 21.12.2020 in the matter of "Charging Infrastructure, Tariff and other regulatory issues for Electric Vehicles" has directed that Discoms shall initiate the process of setting up of Charging Infrastructure either through themselves or through appropriate model so as to meet the targets given in the revised guidelines notified by Ministry of Power, Discom shall propose Capital Investment Plan for upgrading its network accommodating Charging Infrastructure, Discoms may also encourage other energy companies (like IOCL, HPCL, IGL etc.) to invest in providing a charging network. EV Cells of Discoms shall also conduct a study regarding smart charging features and for implementation of Smart Charging. The Discoms shall install smart meter at all Public Charging Stations etc.

The Discoms are directed to furnish the status of compliance of aforesaid direction along with next ARR and Tariff Petition.

# 5. Flat rate category:

It is observed that for many years Commission has been directing Discoms to convert the agriculture flat rate consumers to meter category. However, Discoms could not convert them into meter one, due to such non-compliance, Commission vide its tariff order dated 1.09.2022 has deducted Rs. 10 Crore on this account from the ARR of JVVNL and JdVVNL. Despite Commission's direction to convert all flat rate consumers by 31st March 2023, Jaipur and Jodhpur Discoms have proposed to continue with flat rate consumers in FY 2023-24 also. In Commission's view continuation of flat rate consumers tantamounts to non-compliance of the Act and Commission's Directions. The Commission as a penal measure has reduced Rs. 20 Crore from ARR of both the Discoms.

The Commission directs the Discoms that in next year tariff petition, they should come up with a proposal of abolishing the flat rate category.

### 6. High percentage of defective meters:

It is observed that Discoms have reported huge number of defective meters under agriculture metered category and the matter is of serious concern for Discoms. The Commission has disallowed the higher sale assessed for defective meter and made it equivalent to sale of working meters. The Discoms instead of complying with directions of the Commission have replied that it's a continuous process and they are making efforts and target given by the Commission to keep atleast 90% Meters in healthy condition is a stringent target.

However, in Commission's view the Discoms are duty bound to keep all the

meters in correct condition and no leeway can be granted to Discoms. The Commission again directs the Discoms to keep all meters in healthy condition and if a meter gets defective same should be replaced within 2 months. The Commission shall not allow higher consumption to be assessed in the garb of defective meters.

#### 7. Fixed Assets Register (FAR):

JVVNL, AVVNL and JdVVNL have submitted the Fixed Assets Registers up to 31.03.2022, 31.03.2021 and 31.03.2021 respectively of all circles to the Commission. Commission has released the amount withheld till 2020-21. However as discussed in earlier paras, due to noncompliance of Commission directives for preparation of Fixed Assets Register by AVVNL and JDVVNL for FY 2021-22, the Commission disallowed 10% of depreciation for FY 2021-22. However, on furnishing the Fixed Assets Register to the satisfaction of Commission, Discoms may request to consider to allow the aforesaid disallowed depreciation.

Further, Commission observed that Discoms have not complied completely with Commission directives. The Discom haves not filed the information of voltage wise assets and the reconciliation of same with scheme wise capitalization. In compliance to Commission directives, the Discom has submitted that till date accounts are being prepared manually and field offices neither maintain voltage wise physical quantity of assets nor scheme wise assets. The above details can be maintained only after an effective implementation of ERP which facilitates the recording of assets voltage wise, and details of scheme/end use is entered when material is issued from the stores.

In compliance to direction of the Commission for digitisation of asset, Discoms submitted that once the ERP is successfully implemented, the required digitization of the assets register shall be completed.

The Commission in last few years at many occasion has directed Discoms for Implementation of IT and ERP, However, this year also the compliance status is limited to making of cells and intimation of non-definitive tender process.

Therefore, the Commission directs Discoms that they must plan and execute implementation of ERP System, which will not only help Discoms in better planning of power purchase, inventory and capital expenditure but also reduces the losses and improve the productivity of expenditure incurred and efficiency of human resources deployed for such purpose.

Further, in view of above, Discoms are directed to update and furnish Fixed Assets Registers on year to year basis alongwith True up petitions and also place the same on website.

#### 8. Claim of subsidy from GOR due to directive regarding Bi Monthly billing:

The Commission has observed that replies of Discoms that they are claiming interest on working capital on normative basis is not acceptable as had the Discoms complied with the direction of the Commission their cash flow would have been much better resultant into better interest rates on loan from Banks/Fl and they would have shared the gain on account of reduction in interest.

Therefore, Discoms are directed to compute the impact of additional working capital requirement and claim the interest on working capital from the Government of Rajasthan and furnish the compliance with next ARR Petition.

### 9. Voltage wise Losses:

Commission observed that the Discoms have not submitted the voltage wise losses and sales. In compliance to Commission directives, JVVNL and AVVNL submitted that Discoms are in process of carrying out due diligence in order to finalize the sample sub-stations to conduct the study on voltage wise losses by appointing an independent third party. Discoms have requested Commission to grant some more time regarding the same.

Considering the request of the Discoms, the Commission again directs the Discoms to conduct sample study of voltage wise losses for at least 2 Nos. 33/11KV urban and 2 Nos. 33/11 KV rural substations by an independent third party and associated lines representing proper sample for each circle. Voltage wise losses for the circle should be extrapolated based on that data and scientific methods. The concerned circle officers shall be made responsible for ensuring that the study is completed in time. Thereafter, the losses at Discoms level be reworked out. The data report of such study be furnished to the Commission within four months of the order and based on that the Commission may consider fixing voltage wise losses.

#### 10. Medium term business plan:

It is observed that in the ARR order dated 01.09.22, Commission directed Discoms to submit medium term business plan, in compliance Discoms submitted that the information of KUSUM scheme has been submitted with petition, however, regarding other issues such as induction of electric vehicles and its future impact, prosumers etc. they are in process of conducting detailed analysis on these

aspects, Discoms further submitted that RUVNL has been regularly working on analyzing and developing suitable strategies regarding the influx of renewable energy in the State. Aspects like further optimization of capacity charges and study on Battery Storage Systems shall also be explored in detail.

Commission observes that the Discoms have not furnished the requisite plan which otherwise would have been much use of the Discoms themselves so as to plan energy purchases, need for system upgradation, planning of Capex, management of finances, Resource adequacy etc.

In view of above, Commission again directs Discoms to 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. The optimization of capacity charges may be incorporated in medium term plan where a resource adequacy study should also be made which captures all type of sources including need for Battery Energy Storage System and pumped hydro Storage.

The plan should also cover an action plan for reduction of losses, efficiency improvement, need for finances and turnaround strategy of Discoms. Such plan should be prepared and be submitted to the Commission within six months from the date of order.

#### 11. Special Audit:

Discoms submitted that they have formed Committees to conduct special audit. However, the report would be submitted as earliest as audit is completed.

The Commission has observed that no concrete action has been taken by Discoms except from giving routine replies. The aim of the direction was to standardise the procedure, however, even after lapse of 1.5 year the direction was not complied with.

Therefore, The Commission again directs Discoms to carry out the special internal audit in all the circles starting with Circles mentioned in ARR order dated 24.11.2021 to justify the investment made and furnish a detailed report to the Commission along with next ARR and Tariff petition. Discom should also issue internal guidelines for field officers indicating steps to exercise prudence while proposing/executing investments. If need be earlier guidelines and procedures be compiled and new comprehensive guidelines keeping in view of prevailing system be prepared and placed on website of the Discom's also.

#### 12. Franchisee:

The Commission in last ARR & Tariff order directed Discoms to finalize the report on the performance of the franchisees by independent auditor within 3 months and furnish the same alongwith next year ARR & Tariff petition and also place the same on the website.

The Commission observed that Discoms have not complied with the above direction. However, Discoms submitted that the report on the performance of the franchisees by independent auditor will be furnished after finalization of the same.

Therefore, The Commission again directs the Discoms to furnish report within 3 months of issues of this order and place the same on the website also.

### 13. Skill Development and Training:

The Commission in last ARR & Tariff order directed Discoms to incur at least 1% of total capex on the skill development and training of staff and intimate the same to the Commission in the True up for FY 2022-23.

As per RERC (Investment Approval) Regulation, 2006 Distribution Licensee can spend up to 1% of its Investment Plan on institutional strengthening.

Therefore, the Discoms are again directed to incur at least 1% of total capex on the skill development and training of staff including training on safety and intimate the same to the Commission alongwith true up of ARR.

#### 14. Monetization of Discom's Assets:

The Commission in last ARR & Tariff order issued directions regarding Monetization of Discom's Assets.

The Commission observed that replies of Discoms are not satisfactory and holds that mere issue of orders or holding of meetings is not enough and the matter calls for serious action at the level of MD and field officers. Accordingly the Discoms are again directed that Circle wise no of poles and cables be reported along-with their income In case income is shown as zero, the concerned Assistant Engineer should furnish an affidavit within three months of date of issue of this order to the concerned SE that he has checked all his area and no poles or assets are being used by Telecom operators, cable operators etc. or for any other commercial purpose. Concerned SE then depute an internal audit team to verify the claim and take necessary action if some misreporting is found.

Concerned SE shall be personally responsible for monitoring the income from monetization of Discoms asset in his circle. Commission will also get such claim verified through independent agency/consultant. The Discoms may accordingly comply with the directions given in the previous orders.

MD(s) of Discoms are again personally directed to implement the concept of asset monetization and institute a transparent mechanism for identification of the assets, measurement and verification of revenue and create necessary accounting framework and thereafter submit quarterly compliance report in this regard indicating action taken and circle wise revenue realised.

#### 15. Intrastate and inter State Losses:

Discoms submitted that a committee has been formed and multiple deliberations have been done regarding the segregation of inter and intra state transmission losses. Discoms further Submitted that the findings of the committee have been put up before the senior management for further suitable action.

Commission has observed that Discoms have replied the same during last year filing and no report on accounting of losses has been submitted.

Therefore, the Commission has viewed this matter of non-compliance very seriously and again directs that Discoms should file the information of inter and intra state losses separately, in next true up petition failing which the Commission will take an adverse view on the same.

#### 16. Implementation of IT and ERP:

Discoms submitted that common IT cell of all Discoms officer has been constituted by Discoms. The common IT cell is presently looking into the IT projects including ERP implementation under RDSS scheme. IT experts from DOIT are also associated in the reviews/meetings of the IT cell.

The Commission notes that the desired progresses not achieved so far and Discoms have been submitting more or less a standard reply.

Commission in the previous ARR order directed Discoms to Digitalize Assets Register for assets mapping, it is observed that Discoms have not complied with the directives. However, in reply to compliance of directive regarding Digitalisation of asset register, JVVNL & JdVVNL have submitted that digitalisation of asset register shall be completed after successful implementation of ERP. The IT implementation is required for Data collection, reporting and analysis which ultimately affect proper decision making and implementation of various projects.

The Commission in this order has withheld an amount upto 1% of ARR for non-implementation of ERP. The Discoms are again directed to look into the progress of IT & ERP implementation. DISCOMs are also directed to integrate FAR with IT and ERP systems. Discoms should also ensure that targets and benchmark of RDSS are achieved, so that Discoms can avail full grant available to them under RDSS.

### 17. Voltage wise cost of supply:

The Commission notes that Discoms are furnishing Voltage wise cost of supply as per decision given in judgment of Hon'ble APTEL in Appeal No. 102 of 2010. The Discoms have considered the technical distribution losses in the distribution network approved by the Commission for FY 2006-07. The Commission shows its displeasure towards non-compliance of direction related to submission of voltage wise Cost of Supply based on a study. Therefore, Discoms are again directed to submit Voltage wise cost of supply based on actual voltage wise losses and sales in the next year ARR and Tariff Petition for FY 2024-25.

#### 18. Consumer Awareness and Compensation:

The RERC (Standards of Performance for Distribution Licensees) Regulations, 2021 provides for compensation provisions to be paid by the Licensee/franchisee to the affected person upon lodging of a claim for compensation, in case of failure of a licensee/franchisee to meet the Guaranteed SoP as specified in these Regulations.

These Regulations also provides mechanism for complaints related to "No Current complaints", "no- current complaint due to meter" and "testing of Meters parameters, wherein, there shall not be a need to file the complaint for compensation purpose and the licensee, based on its records, shall credit the compensation amount in next bill i.e. provide automatic compensation.

The Commission directs that wherever smart meters are installed Discom should start reporting all parameters including above based on smart meters and pay direct compensation immediately. For other consumers also they shall institute a system for direct compensation and report the same in formats being submitted to the Commission as well as alongwith next ARR.

The licensee is required to maintain SAIFI and SAIDI and also need to pay compensation for this as well as the shortfall in other services. The Discoms are required to provide uninterrupted power supply to the Consumers.

These Regulations also provides that in order to create awareness in consumers, the licensee/franchisee shall publish a manual of practice for handling consumer

complaints and wide publicity shall be arranged by the distribution licensee through media, TV, newspaper, website and by displaying in boards at consumer service related offices. The Discoms are directed to furnish the compliance report in this regard.

The Commission is also providing financial & other assistances to the NGOs working for consumer to help to spread awareness among them and to educate them in the field of electricity. To spread the awareness among the electricity consumers financial support has been given by the Commission to the UMAS, Jodhpur, (NGO) for conducting the Consumer Awareness Programmes in Jodhpur and Udaipur. The BASK research foundation, another NGO, have also been asked to conduct six workshops (out of which one has already been conducted in the Commission's premises). The Commission has also given a mandate to M/S Prayas to carry out a study on ToD tariff in Rajasthan which may also be shared with public.

The Commission directs that to spread awareness among consumers Discoms should also start conducting workshops at their level and at least one workshops per year be conducted at each Division level. The information as placed under the tab 'consumer corner' should also be updated regularly. Efforts should also be made to educate the consumers towards their duties also like use of energy efficient devices, switch off power when not required and not to waste energy, regular checking of the meter and in case of any defect is found should report the Discom immediately, reporting of theft of electricity etc. Additionally, the consumer should also participate in the regulatory process like tariff setting process etc. by giving their valuable comments/ suggestions on the petitions

#### 19. ToD tariff:

The Commission had appointed M/s Prayas (Energy Group), Pune for conducting independent study of ToD tariff design in Rajasthan and also directed Discoms to appoint nodal officers for providing necessary data and coordinating with M/s Prayas to complete the study within the stipulated time frame. However, it is observed that M/s. Prayas has intimated that still some data is required to complete the study. Therefore, the Jaipur Discom is directed to act as a nodal agency to be in touch with M/s. Prayas and provide the data/ information on behalf of all Discoms. If some information is required from SLDC/Transmission company same shall also be arranged by Jaipur Discom along with all essential documents within 2 months of this order.

#### 20. Reduction of Losses –adoption of circles by MD:

The Commissions directs that MDs shall continue to furnish the information of Losses and revenue realized in the three (3) circles with highest losses adopted by their MD/Director also indicating interventions made and outcome in terms of reduction of losses and with next year ARR they will give a snapshot of losses of FY 2020-21, FY 2021-22, FY 2022-23 and FY 2023-24(till filing).

### 21. Energy Audit:

The Commission after reviewing the compliance, directs that Discoms shall submit the name of feeder where meter remained defective for more than one billing cycle and details of action taken against the Officer/Official responsible for it.

Discoms should also submit the analysis of circle wise energy audit data and reason for reporting of negative T&D losses in same circles and subsequent corrective action taken based on that data in these circles during FY 2023-24 along with next Tariff Petition.

### 22. Mode of Payments:

Discoms were directed to comply with RERC (Electricity Supply Code and Connected Matters) Regulations, 2021: "In respect of energy bill payments, i.e., monthly power supply charges up to and inclusive of Rs 10,000/- or such other limit as may be notified by the Commission from time to time may be made by cash or cheque or Demand Draft or any electronic mode. Payments above the amount notified shall be made by a cheque or Demand Draft or electronic mode only"

Discoms were also directed to review/withdraw any orders issued by them in contravention to Regulations of the Commission and submit the compliance within one month.

Discoms referred to their orders dated 02.11.21 (AVVNL) and 8.11.21 (JVVNL) and submitted that they are complying with the Regulations. However, in the orders it is observed that XEN (O&M) is given a discretion to accept payment of more than Rs. 20000/- by cheque and DD based on merit of the case. In commission's view the Regulations do not permit such discretion and the high value consumer should not run from pillar to post to deposit the bill. The Discoms are accordingly directed to suitably modify the orders.

#### 23. Interest on Security Deposit:

Discoms were directed to send a communication by email or SMS to the consumer regarding amount of interest on security deposit being credited and adjusted in their bills of July every year. Though the Discoms have furnished the compliance report but from stakeholders response it appears that consumers are not aware about credit of interest in their account.

Accordingly, the Commission directs that in July while the Discoms credit the interest they should also issue a press release in major newpapers and at the same time inform the consumer through e-mail and SMS about credit of Interest on Security Deposit.

### 24. Bifurcation of Cross Subsidy Surcharge and Additiona Surcharge:

The Commission directs the Discoms to file the voltage wise/ category wise breakup of number of units billed under open access and corresponding revenue collected under each head i.e. wheeling, CSS and Additional surcharge with the next true up petition for FY 2022-23 along with reasons for deviation if any.

### 25. Merit Order Dispatch:

The Discoms while making power purchase should strictly follow the Merit Order Dispatch. The Discoms are also directed to monitor the availability of these plants and pay fixed charges in accordance with provision of RERC Tariff Regulations.

#### 26. Terminal benefit:

Commission directs the Discoms that they should deposit the amount atleast equivalent to approved by the Commission in future and also make a plan to meet their liability towards terminal benefit

#### Other Directives:

- **27.**AVVNL is directed to establish Ring main System for uninterrupted power supply in Industrial Area.
- **28.** Regarding creation of a special slab for Armed forces Discoms are directed to consider the submission of Armed forces and file suitable proposal, if need be with the next tariff petition.
- **29.**Commission observes that during proceeding it emerged that there is no instant online sharing of power purchase data among RUVNL and Discoms and because of this sometime Discoms are not able to monitor power purchase or workout the

fuel surcharge on regular basis. Therefore, Discoms are directed to get an online system developed in association with RUVNL for instant sharing of data related to power purchase i.e. power scheduling, short term purchase, wheeling and payment related matters etc.

**30.** The Discoms are directed to file a suitable proposal for determination of Green Tariff in accordance with provision of Rule 4(2)(C)(c)of Green Energy Open Access Rules, 2022 along with next tariff petition or separately.

#### Commission's Advice(s) to State Government:

During previous years the Commission has issued certain advices to the State Government, the Commission based on proceedings of this order and the working of ARR and Tariff deems fit to give few more advices to the Government and also repeat some of the advices given earlier.

- 1. The State Government, as the principal owner of the Discoms, is advised to constitute a task force to monitor performance of Discoms and to take corrective measure to improve their operational efficiency and financial management.
- 2. The Government of Rajasthan is advised to discontinue the subsidy being provided to flat rate consumers and also ask Discoms to propose for abolition of flat Rate Tariff.
- 3. The Government of Rajasthan may start Voluntary Disclosure Scheme (VDS) to increase the load of agricultural power connections in rural areas. The consumers at times tend to install higher HP motors to water their fields than the permissible load causing overloading of transformers and ultimately breakage of machinery and financial loss to the electricity department. The Government may make such scheme lucrative for more participation.
- 4. It is observed that while paying the tariff subsidy, grant towards capital works and loss subsidy under other schemes etc. to Discoms, there has been a delay by Government in payment of such subsidy & grants, which causes financial burden on the Discoms and deteriorate the financial position of Discoms. Therefore, the Government of Rajasthan is advised to pay the subsidy and grant due to Discoms on time, further carrying cost may also be paid on such dues by Government to Discoms.
- 5. The Government of Rajasthan (GoR) has approved participation of Discoms in RDSS and to take maximum benefit of the Scheme it is imperative that the State

fulfills the Pre-Qualification Criteria. The Commission accordingly again advises the Government of Rajasthan (GoR) to ensure:

- (i) That DISCOMs do not create new Regulatory Assets in latest tariff determination cycle, the Government should undertake to give additional subsidy to each Discom so as Regulatory Assets are not created for any of the Discom.
- (ii) 100% payment of subsidy for the previous year and advance payment of subsidy up to current period in line with section 65 of EA, 2003 and wipe out the remaining subsidy amount by the end of the project period.
- (iii) All Government Departments/ Attached Offices/ Local Bodies/ Autonomous Bodies/ Boards/Corporations have made 100% payment of current electricity dues.
- 6. Till FY 2023-24 the Commission has allowed additional interest burden of Rs. 7730 Crore due to additional interest being charged by Govt. on UDAY loans. All this has added to Regulatory Assets of the Discom. The Government of Rajasthan (GoR) may consider to waive off the additional interest being charged by it on UDAY loans so that the Regulatory Assets are reduced to that extent and its impact on consumers will also be reduced.
- 7. The Government may suitably reallocate PPAs or provide additional subsidy to Jodhpur Discom 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.
- **8.** State Government, as per Section161 (2)(b) of the Electricity Act, 2003 may ask the Electrical Inspector or any other agency to inquire and report to it (i) cause of accident and (ii) the manner and extent to which the rules and regulations pertaining to safety are being complied by the Discoms or any other utility. State Government may also monitor the compliance of CEA Safety Regulations and issue necessary directions to Discoms & Electrical Inspector whenever required for ensuring safety.
- 9. GOR may provide cheap land and facilitate Discoms by providing additional financial assistance under feeder solarization of KUSUM C and work out innovative model to handle plants under KUSUM C as feeder level monitoring units/ profit centres.
- **10.** The Govt. may allow Discoms to continue to retain Electricity Duty FY 2023-24 onwards over and above the loss subsidy. This will help the Discoms to curtail their accumulated losses and also reduce the Regulatory Assets.

- 11. The Commission advises State Govt. to direct Rajasthan Renewable Energy Corporation to introduce the concept of Saur Mitra / Vayu Mitra where technically qualified persons are trained and appointed in suitable numbers at all major places in the State so as to:
  - (i) Assist prospective prosumers in installation of solar rooftop systems and guide them for resolution of technical and procedural problems.
  - (ii) Assist farmers to install plants under various components of KUSUM
  - (iii) Assist prospective investors to understand the benefits of investing in RE in the State.
- 12. Rajasthan Renewable Energy Corporation may also be directed to create Renewable Skill Development Centres where not only Saur/Vayu Mitra are trained but other unemployed youth is also given hands on training for installation, operation and maintenance of RE plants so that Rajasthan may also become the RE Skill Capital of the country. For the existing ITI / Skill development centre, centres may be developed as RE Skill development centre withhold of "Skill Council of Green Jobs", an initiation of Govt. of India aligned to National Skill Development Mission.
- **13.**The State Government is advised to take appropriate measures to encourage/promote Renewable Energy equipments manufacturing in the State under RIPS- 2022 Policy. The State Govt. may ecourage manufactures of Solar equipment including selected under Production Link Incentive (PLI) Scheme of Govt. of India to setup manufacturing facilities in the State.
- **14.** Further to facilitate faster setting up of RE Projects in the State, the State Government is advised to explore the Land Aggregating Agency owned by Govt. like RIICO which may identify encumbrance free chunks of the land in the State. Such lands may be offered to the solar power developers so as to save time and improve the investment climate in the State.

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# Annexure A

Sr. No.	Name
1	Sh. Bhaskar A. Sawant, Chairman Discoms for Petitioners
2	Sh. A K. Gupta, Advisor Energy, GoR for Petitioners
3	Sh. R. N. Kumawat, Managing Director, JVVNL for Petitioner
4	Sh. N. S. Nirwan, Managing Director, AVVNL for Petitioner
5	Sh. Pramod Tak, Managing Director, JdVVNL for Petitioner
6	Sh. D. D. Agarwal
7	Sh. Bhavnesh Chandra Mathur for Samta Power Jodhpur.
8	Major Nadeem Khan, MES, Jodhpur.
9	Sh. Dhananjay Gawanday for Cellular Operators Association of India, New Delhi.
10	Sh. P. N. Bhandari for Bharti Hexacom Limited.
11	Sh. Vipul Tripathi for Indus Towers Limited.
12	Sh. Prateek Agarwal for Councel of Energy, Environment & Water, New Delhi.
13	Sh. D. S. Agarwal for Rajasthan Textile Mills Associataion.
14	Sh. D. S. Agarwal
15	Sh. Ravi Sharma for Marble Gangsaw Association.
16	Sh. Y. K. Bolia for Udaipur Chambers for Commerce & Industry.
17	Sh. Varun Kaushik for RVTKA Jalore.
18	Sh. Ajay Yadav for REAR Renewable Energy Association.
19	Sh. Satwek Mishra for Bask Research Foundation.
20	Sh. G. L. Sharma
21	Sh. V. K. Gupta
22	Sh. B. M. Sandhya for Samta Power.
23	Sh. Rahul Katta for Indian Medical Association.
24	Sh. Mahendra Singh for Zone-54 Vikas Samiti, Mansarovar
25	Sh. Y. K. Bolia
26	Sh. D. P. Chirania
27	Sh. Aditya Kumar Singh for Hindustan Zinc Limited.
28	Sh. Aditya Swaroop for Reliance Jio Infocom Limited.
29	Sh. Mansoori Ayub
30	Sh. Rajaram Yadav for SBF Ispat Private Limited

# Annexure- B

List of abbrevi	<u>iations</u>	
A&G	<u> </u> :	Administrative and General Expenses
AMR	:	Automatic Meter Reading
APTEL	:	Appellate Tribunal for Electricity
APRL	:	Adani Power Rajasthan LTD.
ARR	:	Aggregate Revenue Requirement
AT & C	:	Aggregate Technical and Commercial
AVVNL	:	Ajmer Vidyut Vitran Nigam Ltd.
BEE	:	Bureau of Energy Efficiency
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
EMS	:	Energy Management System
ERP	:	Enterprise Resource Planning
EV	:	Electric Vehicle
FR	:	Flat Rate
FRBM	:	Fiscal Responsibility and Budget Management
FY	:	Financial Year
GIS	:	Geographic Information System
GFA	:	Gross Fixed Assets
GoR	:	Government of Rajasthan
GLTPP	:	Giral Lignite Thermal Power Plant
HPO	:	Hydro Power Purchase Obligation
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
		<u>'</u>

List of abbrevia	ıtions	
LED	:	Light Emitting Diode
LT	:	Low Tension
LTL	:	Long-Term Loans
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
PMA	:	Project Management Agency
POC	:	Parallel Operation Charges
PP	:	Partnership Projects
PPE	:	Pant, Property & Equipment
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
RDSS	:	Revamped Distribution Sector Scheme
RERC	:	Rajasthan Electricity Regulatory Commission
RGGVY	:	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

List of abbrevia	List of abbreviations			
R&M	:	Repairs & Maintenance		
SCL	:	Sanctioned Connected Load		
SERC	:	State Electricity Regulatory Commission		
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		

# **Approved Tariff for FY 2023-24**

#### **Annexure C**

#### **Tariff for Retail Consumers**

#### **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 c	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			

<sup>\*</sup>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**

Do	omestic 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				
(ii)For consumption above 50 units and upto 150 units per month	Rs. 6.50/ unit	Rs. 230/ connection / month			

#### **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			
(ii)For consumption above 50 units and upto 150 units per month	Rs. 6.50/ unit	Rs. 275/ connection / month		
(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 30				
	Energy Charges			
(i) For consumption upto first 50 units per month	Rs. 4.75/ unit	Rs. 345/ connection / month		

Domestic Category				
Particulars	ıriff			
General Domestic-3 (Consumption above 300 and upto 500 units/month)				
	Energy Charges	Fixed Charges		
(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**

Domestic Category				
Particulars Approved Tariff General Domestic-4 (Consumption above 500 units/month)				
(i) For consumption upto first 50 units per month	Rs. 4.75/ unit			
(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	Rs. 400/ connection / month		
(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		
Approved Tariff		

	Energy Charges	Fixed Charges
Consumption upto first 100 units per month	Rs. 7.55 /unit	
Consumption above 100 units and upto 200 unit per month	Rs. 8.50 /unit	Rs. 300/ connection / month

(NDS-Type 3)

Non-Do	mestic Category	
Particulars	Approved Tariff	
LT-NDS(LT-2)		
Type 3 (Consumption above	ve 200 units and upto 500 units/m	onth)
	Energy Charges	Fixed Charges
Consumption upto first 100 units per month	Rs. 7.55 /unit	
Consumption above 100 units and upto 200 unit per month	Rs. 8.50 /unit	Rs. 380/ connection / month
Consumption above 200 unit and upto 500 unit per month	Rs. 8.85 /unit	

(NDS-Type 4)

Non-D	omestic Category	
Particulars	Approved Tariff	
LT-NDS(LT-2)		
Type 4 (Consum	nption above 500 units/month)	
	Energy Charges	Fixed Charges
Consumption upto first 100 units per month	Rs. 7.55 /unit	
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	Rs. 460/ connection / month
Consumption above 500 unit per month	Rs. 8.95 /unit	

### NDS Above 5 kW of SCL

Non-Domestic Category			
Particulars	Approved Tariff		
NDS above 5 KW of SCL (LT-2)			
	Energy Charges	Fixed Charges	
Consumption upto first 100 units per month	Rs. 7.55 /unit		
Consumption above 100 units and upto 200 units per month	Rs. 8.50 /unit	Rs.135/ KW of SCL / month	
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

HT-NDS (HT-2)	Approved Tariff	
For contract demand over 50 kVA	Energy Charges	Fixed Charges
All units	Rs. 8.85 /unit	Rs.270/ kVA of Billing Demand per month

**PUBLIC STREET LIGHTING (LT-3)** 

Particulars	Approved Tariff	
Public Street Lighting	Energy Charges	Fixed Charges
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)

<b>Particulars</b>		Approved Tariff	
	Me	tered (AG/MS/LT-4)	
Agricultu	re Supply	Energy Charges	Fixed Charges
(i) General (getting suppl	y in block hours)	Rs. 5.55 /unit	Rs.30 per HP per Month of SCL
(ii)All others not covered getting supply more than	` '	Rs. 7.10 /unit	Rs.60 per HP per Month of SCL
	Flat/ u	nmetered (AG/FR/LT-4)	<del>-</del>
(i)General (getting supply	in block hours)	Rs. 745/ HP /Month	Rs.30 per HP per Month of SCL
(ii) All others not covered getting more than block	under items (i) above and 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					
ranicolars	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 F Demand above 125 kVA	IP or having Contract/Maximum
Voltage Level	Energy Charges	Fixed Charges
11 kV	7.300	
33 kV	7.081	Rs. 270 per KVA of Billing Demand
132 kV	7.008	per month
220 kV	6.935	
<del>-</del>	onsumer having Billing demand of 1 1 load factor 50% or more for the bill	<del>_</del>
Voltage Level	Energy Charges	Fixed Charges
11 kV	6.300	
33 kV	6.111	Rs. 270 per KVA of Billing Demand
132 kV	6.048	per month

5.985

#### **MINIMUM ENERGY CHARGES\***

220 kV

Voltage Level	Energy Charges
11 kV	6.000
33 kV	5.820
132 kV	5.760
220 kV	5.700

<sup>\*</sup>No other voltage rebate shall be applicable for Large Industrial category

ELECTRIC VEHICLE CHARGING STATION (LT-8 and HT-6) (Approved Tariff)

Category		Energy Charges	Fixed Charges
	Public charging station (LT-8)	Rs. 6.00/ unit	Rs. 40/ HP/ month of sanctioned connected load

<sup>\*</sup>No other voltage rebate shall be applicable for Large Industrial category.

Public charging station (HT-6) Rs. 6.00/ unit Rs. 135/kVA/Month	Public charging station (HT-6)	Rs. 6.00/ unit	Rs. 135/kVA/Month
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# ToD Rebate and Surcharge (Applicable on Large Industries and Electric Vehicle Charging Stations)

Off peak hours	Rebate on EC
2 am - 6 am (4 hours)	7.5%
Peak hours	Surcharge on EC
6 am to 10 am (4 hours)	7.5%

TRACTION LOAD (HT-7) (Approved Tariff)

Category	Energy Charges	Fixed Charges
Traction load (HT-7)	Rs. 5.70/ unit	Rs. 135/kVA/Month

### Other Tariff:

Wheeling Charges for	FY 2023-24
Wheeling Charges at 132 KV and above Voltage Level (Rs/kWh)	0.01
Wheeling Charges at 33 KV Voltage Level (Rs/kWh)	0.15
Wheeling Charges at 11 KV Voltage Level (Rs/kWh)	0.79

# **Cross Subsidy Surcharge**

Category of Open Access Consumer	Voltage Level	Cross Subsidy Surcharge (Rs./Unit) FY 2023-24				
	11 KV	2.23				
NON DOMESTIC SERVICE	33 KV	2.16				
	132 KV and above	2.14				
	11 KV	1.92				
MIXED LOAD/ BULK SUPPY	33 KV	1.86				
	132 KV and above	1.84				
	11 KV	1.58				
LARGE INDUSTRIAL SERVICE	33 KV	1.67				
	132 KV and above	1.65				

# **Additional Surcharge**

Additional Surcharge (Rs./kWh)	0.89

# **General Note:**

1. All existing provisions which are not modified by this order, shall continue to be in force.

# Annexure D

Power purchase details for FY 2023-24

Power purchas	Rajastho			JVVNL				AVVN	IL			JdVVN	L		
	Net Gener ation (MU)	Total Ann al Fixe d char ges (Rs. Cr.)	Vari able Cost (Rs./ unit	Net Gener ation (MU)	Total Ann al Fixe d char ges (Rs. Cr.)	Vari able Cost (Rs. Cr)	Total Cost JVVN L (Rs. Cr.)	Net Gen erati on (MU )	Total Ann al Fixe d char ges (Rs. Cr.)	Vari able Cost (Rs. Cr)	Total Cost AVV NL (Rs. Cr.)	Net Gen erati on (MU)	Total Ann al Fixe d char ges (Rs. Cr.)	Vari able Cost (Rs. Cr)	Tota I Cos t JdV VNL (Rs. Cr.)
NTPC															
FGUTTPS -II	188	28	4.72	71	11	33	44	51	8	24	32	66	10	31	41
FGUTPP III	132	19	4.67	50	7	23	30	36	5	17	22	46	7	22	28
FGUTPP IV	337	85	4.35	127	32	55	88	91	23	40	63	118	30	51	81
K.H.S.T.P.S. I	131	18	3.97	49	7	20	26	35	5	14	19	46	6	18	24
K.H.S.T.P.S. & II	635	82	3.84	240	31	92	123	172	22	66	88	223	29	86	114
RHIND STPS	622	54	1.51	235	20	35	56	169	15	25	40	218	19	33	52
RIHAND II	799	55	1.68	302	21	51	71	217	15	36	51	281	19	47	66
RIHAND III	917	118	1.64	346	45	57	101	249	32	41	73	322	42	53	94
SINGUARLI	2219	139	1.63	838	53	137	189	602	38	98	136	779	49	127	176
KHPS-I	447	95	2.45	169	36	41	77	121	26	30	55	157	33	39	72
NCTPS 1D	975	121	5.03	368	46	185	231	264	33	133	166	342	43	172	215
NCTPS 2	2	0	31.62	1	0	3	3	1	0	2	2	1	0	3	3
Singuarli- Hydel	7	4	5.04	3	2	1	3	2	1	1	2	3	2	1	3
TANDA-II STPS	488	89	4.10	184	34	76	109	132	24	54	78	172	31	70	102
NTPC BHADLA-II (Solar)	435	0	5.00	164	0	82	82	118	0	59	59	153	0	76	76
NTPC NSM-BUNDLED(Solar)	1498	0	4.52	566	0	256	256	406	0	184	184	526	0	238	238
NTPC NSM- BUNDLED(Thermal)	2165	280	2.52	818	106	206	311	587	76	148	224	760	98	191	290
NTPC - MEJA	321	76	3.11	121	29	38	66	87	21	27	48	113	27	35	62
Total NTPC	12317	1262		4651	477	1391	1867	3340	342	999	1341	4326	443	1294	1737
NHPC															
TANAKPUR HEP	65	13	1.70	24	5	4	9	18	3	3	6	23	4	4	8
SALAL HEP	122	9	1.74	46	3	8	11	33	2	6	8	43	3	7	11
CHAMERA-I	488	43	1.14	184	16	21	37	132	12	15	27	171	15	20	35
CHAMERA-II	170	17	1.01	64	6	6	13	46	5	5	9	60	6	6	12
CHAMERA-III	147	29	1.97	56	11	11	22	40	8	8	16	52	10	10	20
URI HEP	276	26	1.29	104	10	13	23	75	7	10	17	97	9	13	22
URI HEP II	192	38	3.02	72	14	22	36	52	10	16	26	67	13	20	34
DHOLIGANGA	169	19	1.23	64	7	8	15	46	5	6	11	59	7	7	14
DULHASTI	299	56	2.74	113	21	31	52	81	15	22	37	105	20	29	48
PARBATI III	97	33	1.54	37	13	6	18	26	9	4	13	34	12	5	17
SEWA II	58	18	2.84	22	7	6	13	16	5	4	9	20	6	6	12
Total NHPC	2083	299		786	113	137	250	565	81	98	179	731	105	127	232
SJVNL															
Nathpa-Jhakri	701	72	1.18	265	27	31	59	190	20	22	42	246	25	29	54

Rampur	198	40	2.09	75	15	16	31	54	11	11	22	70	14	15	28
Total SJVNL	899	112		340	42	47	89	244	30	34	64	316	39	44	83
IPP/UMPP															
NEYVELI LIGNITE CORPORATION LTD	1442	327	1.19	544	124	65	188	391	89	46	135	506	115	60	175
ARAVALI POWER CO PVT	0	0		0	0	0	0	0	0	0	0	0	0	0	0
NVVN BUNDLED POWER(Solar)	411	0	10.70	155	0	166	166	111	0	119	119	144	0	154	154
NVVN BUNDLED POWER(Thermal)	2077	323	2.34	784	122	183	305	563	88	132	219	729	113	170	284
COASTAL GUJARAT	369	140	5.66	139	53	79	132	100	38	57	94	129	49	73	122
ADANI POWER RAJASTHAN LIMITED	8800	1188	3.78	3323	449	1257	1706	2387	322	903	1225	3091	417	1169	1587
SASAN POWER LTD	2875	45	1.24	1086	17	134	151	780	12	97	109	1010	16	125	141
PTC DB	2372	516	1.66	896	195	149	343	643	140	107	247	833	181	138	319
KARCHAM WANGTOO (PTC)	583	72	1.41	220	27	31	58	158	20	22	42	205	25	29	54
PTC Maruti	916	156	1.52	346	59	53	111	248	42	38	80	322	55	49	104
PTC (TEESTA)	598	145	2.91	226	55	66	121	162	39	47	87	210	51	61	112
SKS	432	0	2.88	163	0	47	47	117	0	34	34	152	0	44	44
TOTAL IPP/UMPP	20874	2912		7882	1100	2229	3329	5661	790	1601	2391	7331	1023	2074	3096
NPCIL															
NAPP	263	0	2.99	99	0	30	30	71	0	21	21	92	0	28	28
RAPP-I &II	795	0	3.34	300	0	100	100	216	0	72	72	279	0	93	93
RAPP-III &IV	772	0	3.34	292	0	98	98	209	0	70	70	271	0	91	91
RAPP-V & VI	691	0	3.92	261	0	102	102	187	0	74	74	243	0	95	95
Total NPCIL	2522	0		952	0	330	330	684	0	237	237	886	0	307	307
Others															
TEHRI	251	44	2.07	95	17	20	36	68	12	14	26	88	16	18	34
KOTESHWAR	108	24	2.39	41	9	10	19	29	7	7	14	38	8	9	18
TALA THROUGH PTC (BHUTAN)	53	0	2.27	20	0	5	5	14	0	3	3	19	0	4	4
Total Others	412	68		156	26	34	60	112	19	24	43	145	24	32	56
STATE GEN. & OTHER															
RVUN															
KTPS(1 to 7)	7170	496	3.39	2707	187	917	1104	1944	134	658	793	2518	174	853	1027
STPS(1 to 6)	6252	514	4.22	2361	194	996	1190	1696	139	716	855	2196	180	927	1107
SSCTPS (7)	3053	622	2.73	1153	235	314	549	828	169	226	394	1072	219	292	511
SSCTPS (8)	3053	585	2.73	1153	221	314	535	828	159	226	384	1072	205	292	498
CTPS (1-4)	5138	786	3.05	1940	297	591	888	1393	213	425	638	1804	276	550	826
CSCTPP (5&6)	7288	1264	2.37	2752	477	652	1130	1977	343	468	811	2560	444	607	1051
RGTP(1,2 & 3)	1356	161	2.92	512	61	149	210	368	44	107	151	476	57	139	196
KaTPP#1 &2	5378	1027	2.95	2031	388	600	987	1458	278	431	709	1889	361	558	918
MAHI	222	61	0.00	84	23	0	23	60	17	0	17	78	21	0	21
MAHI MMH	0	0	4.16	0	0	0	0	0	0	0	0	0	0	0	0
MANGROL	2	0	4.16	1	0	0	0	0	0	0	0	1	0	0	0
STPS MMH	0	0	4.16	0	0	0	0	0	0	0	0	0	0	0	0
Total RVUN	38911	5516		14693	2083	4534	6617	10553	1496	3257	4753	13666	1937	4217	6154
GLTPP	0	0	0.00	0	0	0	0	0	0	0	0	0	0	0	0
JSW Energy (Barmer)	6540	1112	2.50	2469	420	617	1037	1774	302	443	745	2297	390	574	965
SHARE PROJECTS															

BBMB (BHAKRA, DEHAR&PO NG	2683	0	0.52	1013	0	52	52	728	0	38	38	942	0	49	49
CHAMBAL	555	0	0.00	210	0	0	0	151	0	0	0	195	0	0	0
Total Shared Projects	3238	0		1223	0	52	52	878	0	38	38	1137	0	49	49
R.F.F.	187	0	3.85	187	0	72	72	0	0	0	0	0	0	0	0
NCES															
Wind Farms	9799	0	5.00	3700	0	1848	1848	2657	0	1327	1327	3441	0	1719	1719
Solar	10945	0	2.66	4133	0	1097	1097	2968	0	788	788	3844	0	1021	1021
Biomass	1147	0	4.15	433	0	180	180	311	0	129	129	403	0	167	167
Total NCES	21891			8266	0	3125	3125	5937	0	2245	2245	7688	0	2907	2907
Total	109874	11281		41604	4260	12569	16829	29747	3059	8976	12035	38522	3962	11623	15585
Short Term	2859	0	4.22	178		75	75	2346		990	990	335		141	141
Net	112733	11281		41783	4260	12644	16904	32093	3059	9966	13025	38857	3962	11765	15727