# Order on

## True up for FY 2021-22
## Annual Performance Review for
## FY 2022-23
## &
## ARR for FY 2023-24
## Uttarakhand Power Corporation Ltd.

**March 30, 2023**

**UTTARAKHAND ELECTRICITY REGULATORY COMMISSION**

**Vidyut Niyamak Bhawan,**

**Near I.S.B.T., P.O. Majra, Dehradun – 248171**

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# UTTARAKHAND ELECTRICITY REGULATORY COMMISSION

**Petition No.: 52 of 2022**

**In the Matter of:**

Petition filed by Uttarakhand Power Corporation Limited for True Up of FY 2021-22, Annual Performance Review for FY 2022-23 and ARR & Tariff for FY 2023-24.

**AND**

**In the Matter of:**

Uttarakhand Power Corporation Limited

Urja Bhawan, Kanwali Road, Dehradun …Petitioner

**Coram**

| | |
|---|---|
| **Shri D.P. Gairola** | **Member (Law) / Chairman (I/c)** |
| **Shri M.K. Jain** | **Member (Technical)** |

**Date of Order: March 30, 2023**

Section 64(1) read with Section 61 and 62 of the Electricity Act, 2003 (hereinafter referred to as "the Act") requires the Generating Companies and the Licensees to file an application for determination of tariff before the Appropriate Commission in such manner and along with such fee as may be specified by the Appropriate Commission through Regulations.

In accordance with the relevant provisions of the Act, the Commission had notified Uttarakhand Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2011 (hereinafter referred to as "UERC Tariff Regulations, 2011") for the first Control Period from FY 2013-14 to FY 2015-16, Uttarakhand Electricity Regulatory Commission (Terms and Conditions for Determination of Multi Year Tariff) Regulations, 2015 (hereinafter referred to as "UERC Tariff Regulations, 2015") for the second Control Period from FY 2016-17 to FY 2018-19 and Uttarakhand Electricity Regulatory Commission (Terms and Conditions for Determination of Multi

Year Tariff) Regulations, 2018 (hereinafter referred to as "UERC Tariff Regulations, 2018") for the third Control Period from FY 2019-20 to FY 2021-22 specifying therein terms, conditions and norms of operation for licensees, generating companies and SLDC.

The Commission had issued the Orders on approval of Business Plan and Multi Year Tariff for the above referred Control Periods from FY 2013-14 to FY 2021-22 based on the above referred Tariff Regulations and had also carried out the Annual Performance Review and truing up for the years under the three Control Periods.

Further, in accordance with the relevant provisions of the Act, the Commission had notified Uttarakhand Electricity Regulatory Commission (Terms and Conditions for Determination of Multi Year Tariff) Regulations, 2021 (hereinafter referred to as "UERC Tariff Regulations, 2021") for the fourth Control Period from FY 2022-23 to FY 2024-25 specifying therein terms, conditions and norms of operation for licensees, generating companies and SLDC.

In compliance with the provisions of the Act and Regulation 10 of UERC Tariff Regulations, 2021, Uttarakhand Power Corporation Limited (hereinafter referred to as "UPCL" or "Licensee" or "Petitioner") filed a Petition (Petition No. 52 of 2022 hereinafter referred to as the "Petition") giving details of its revised projections of Annual Revenue Requirement (ARR) for FY 2023-24 based on the true up of FY 2021-22 and Annual Performane Review (APR) of FY 2022-23 on December 15, 2022.

The Petition filed by UPCL had certain infirmities/deficiencies which were informed to UPCL vide Commission's letter no. UERC/6/TF-669/2022-23/2022/1140 dated December 19, 2022 and UPCL was directed to rectify the said infirmities in the Petition and submit certain additional information necessary for admission of the Petition. UPCL vide its letter no. 3344/UPCL/RM/B-26 dated December 26, 2022 submitted most of the information sought for admission of the Petition by the Commission. Based on the submission dated December 26, 2022 made by UPCL, the Commission vide its Order dated December 28, 2022 provisionally admitted the Petition for further processing with the condition that UPCL shall furnish any further information/ clarifications as deemed necessary by the Commission during the processing of the Petition within the time frame, as may be stipulated by the Commission, failing which the Commission may proceed to dispose of the matter as it deems fit based on the information available with it.

This Order, accordingly, relates to the APR Petition filed by UPCL for true up for FY 2021-22, APR for FY 2022-23 and ARR for FY 2023-24 and is based on the original as well as all the subsequent submissions made by UPCL during the course of the proceedings.

Tariff determination being the most vital function of the Commission, it has been the practice of the Commission to elaborate in detail the procedure and to explain the underlying principles in determination of tariffs. Accordingly, in the present Order also, in line with the past practices, the Commission has tried to elaborate the procedure and principles followed by it in determining the ARR of the licensee. For the sake of convenience and clarity, this Order has further been divided into following Chapters:

Chapter 1 - Background and Procedural History.

Chapter 2 - Stakeholders' Objections/suggestions, Petitioner's Responses & Commission's Views.

Chapter 3 - Petitioner's Submissions, Commission's Analysis, Scrutiny and Conclusion on Truing up for FY 2021-22.

Chapter 4 – Petitioner's Submissions, Commission's Analysis, Scrutiny and Conclusion on APR for FY 2022-23 and ARR for FY 2023-24.

Chapter 5 - Tariff Rationalisation, Tariff Design, and related issues.

Chapter 6 - Review of Commercial Performance of UPCL.

Chapter 7 - Commission's Directives.

# 1. Background and Procedural History

In accordance with the provisions of the Uttar Pradesh Reorganization Act 2000 (Act 29 of 2000), enacted by the Parliament of India on August 25, 2000, the State of Uttaranchal came into existence on November 9, 2000. Section 63(4) of the above Reorganization Act allowed the Government of Uttaranchal (hereinafter referred to as "GoU" or "State Government") to constitute a State Power Corporation at any time after the creation of the State. GoU, accordingly, established the Uttaranchal Power Corporation Limited (UPCL) under the Companies Act, 1956, on February 12, 2001, and entrusted it with the business of transmission and distribution in the State. Subsequently, from April 1, 2001, all works pertaining to the transmission, distribution, and retail supply of electricity in the area of Uttaranchal were transferred from UPPCL to UPCL, in accordance with the Memorandum of Understanding dated March 13, 2001, signed between the Governments of Uttaranchal and Uttar Pradesh. On May 31, 2004, GoU first vested all the interests, rights and liabilities related to Power Transmission and Load Despatch of "Uttaranchal Power Corporation Limited" into itself and, thereafter, re-vested them into a new company, i.e. "Power Transmission Corporation of Uttaranchal Limited" now renamed as "Power Transmission Corporation of Uttarakhand Limited" after change of name of the State. Since then, Uttarakhand Power Corporation Ltd. (UPCL) a company wholly owned by the Government of Uttarakhand became the sole distribution licensee engaged in the business of distribution and retail supply of power in the State of Uttarakhand.

The Commission vide its Order dated May 6, 2013 approved the Business Plan for UPCL for the first Control Period from FY 2013-14 to FY 2015-16 and Tariff for FY 2013-14. Further, the Commission had issued the Tariff Orders for FY 2014-15 and FY 2015-16 vide its Orders dated April 10, 2014 and April 11, 2015 respectively.

The Commission vide its Order dated April 5, 2016 issued the Order on approval of Business Plan for UPCL for the second Control Period from FY 2016-17 to FY 2018-19 and Tariff for FY 2016-17. Further, the Commission had issued the Tariff Orders for FY 2017-18 and FY 2018-19 vide its Orders dated March 29, 2017 and March 21, 2018 respectively.

The Commission, thereafter, vide its Order dated February 27, 2019 issued the Order on approval of Business Plan for UPCL for the third Control Period from FY 2019-20 to FY 2021-22 and

Tariff for FY 2019-20. Further, the Commission had issued the Tariff Order for FY 2020-21 and FY 2021-22 vide its Order dated April 18, 2020 and April 26, 2021 respectively.

The Commission, thereafter, vide its Order dated March 31, 2022 issued the Order on approval of Business Plan for UPCL for the fourth Control Period from FY 2022-23 to FY 2024-25 and Tariff for FY 2022-23.

As mentioned earlier also, in accordance with the provisions of the Electricity Act, 2003 and Regulation 10 of the UERC Tariff Regulations, 2021, UPCL filed a Petition (Petition No. 52 of 2022 and hereinafter referred to as the "Petition"), giving details of its revised projections of Aggregate Revenue Requirement (ARR) for FY 2023-24, based on the true up for FY 2021-22 and Annual Performance Review for FY 2022-23 on December 15, 2022.

The Petition was provisionally admitted by the Commission vide Order dated December 28, 2022. The Commission, through its above admittance Order dated December 28, 2022, to provide transparency to the process of tariff determination and give all the stakeholders an opportunity to submit their objections/suggestions/comments on the proposals of the Distribution Licensee, also directed UPCL to publish the salient points of its Petitions in the leading newspapers. The salient points of the Petitions were published by the Petitioner in the following newspapers:

**Table 1.1: Publication of Notice**

| S.No. | Newspaper Name | Date of Publication |
|---|---|---|
| 1. | Amar Ujala | 03.01.2023 |
| 2. | Dainik Jagran | 03.01.2023 |
| 3. | The Times of India | 04.01.2023 |
| 4. | The Hindustan Times | 04.01.2023 |

Through above notice, the stakeholders were requested to submit their objections/ suggestions/comments latest by 31.01.2023 (copy of the notice is enclosed as **Annexure 3**). The Commission received in all 82 objections/suggestions/comments in writing on the Petition filed by UPCL. The list of stakeholders who have submitted their objections/ suggestions/comments in writing is enclosed as **Annexure-4**.

Further, for direct interaction with all the stakeholders and public at large, the Commission also held public hearings on the proposals filed by the Petitioner at the following places in the State of Uttarakhand.

**Table 1.2: Schedule of Hearings**

| S. No | Place | Date |
|---|---|---|
| 1. | Rudrapur | 22.02.2023 |
| 2. | Pithoragarh | 24.02.2023 |
| 3. | Srinagar (Garhwal) | 27.02.2023 |
| 4. | Dehradun | 01.03.2023 |

The list of participants who attended the Public Hearing is enclosed at **Annexure-5**.

The Commission also sent the copies of the salient features of the tariff Petitions to Members of the State Advisory Committee and the State Government. The salient features of the tariff Petitions submitted by UPCL were also made available on the website of the Commission, i.e. www.uerc.gov.in. The Commission also held a meeting with the Members of the Advisory Committee on March 03, 2023, wherein, detailed deliberations were held with the Members of the Advisory Committee on the various issues linked with the Petition filed by UPCL.

The objections/suggestions/comments, as received from the stakeholders through mail/ post as well as during the course of public hearing were sent to the Petitioner for its response. All the issues raised by the stakeholders and Petitioner's response and Commission's views thereon are detailed in Chapter 2 of this Order. In this context, it is also to underline that while finalizing this Order, the Commission has, as far as possible, tried to address the issues raised by the stakeholders.

Meanwhile, based on the scrutiny of the Petition submitted by UPCL, the Commission vide its letter no. UERC/6/TF-669/2022-23/2022/1140 dated December 19, 2022, letter no. UERC/6/TF-669/2022-23/2023/1316 dated January 27, 2023, and further discussion with the Officers of the utility, pointed out certain data gaps in the Petition and sought following additional information/clarifications from the Petitioner:

- Resubmit all the Formats using formulae and appropriately link the same to the relevant formats for ensuring consistency and accuracy of the data submitted.
- Submit Audited Accounts along with Statutory Auditor and CAG's report.
- Justify the proposed tariff hike in terms of reduction of cross-subsidy between various consumer categories, in accordance with the provisions of the EA, 2003, Tariff Policy and previous Orders of the Commission.
- Submit revised tariff hike workings without considering revenue from Additional Power

Purchase Surcharge (APPS).

- Submit table indicating the existing and proposed category wise cross subsidy, in view of the proposed tariff revision.
- Submit all relevant duly filled in tariff formats.
- Audited Commercial Diary and COMDATA for FY 2021-22.
- Audited Statements of accounts and monthly trial balances for FY 2021-22.
- Submit reasons for increase in Distribution losses vis-à-vis FY 2020-21.
- Details of Bad Debts written off by it along with the segregation of DPS waived off.
- Details of Penalty paid included in A&G Expenses for FY 2021-22.
- Reasons for reduced funding of opening GFA for FY 2021-22 from Grants.
- Monthly trial balances for the period April 2022 to November 2022.
- Submit all the relevant information along with the supporting documents for substantiating the actual expenses incurred on account of Water Tax, for True up for FY 2021- 22.
- Segregate the additions of fixed assets into HT & LT works and submit the Clearance from the Electrical Inspector for capitalisation of various HT/EHT schemes for FY 2021-22.
- Submit all pending Electrical Inspector certificates in support of gross additional capitalization till FY 2021-22.
- Provide break up of additional provisioning claimed under A&G expenses for FY 2021-22.
- Submit revised energy availability projections for FY 2023-24 after rectifying the energy availability submitted from UJVN Ltd. stations including Vyasi HEP and from unallocated NTPC stations.
- Submit impact on time-of-day tariff considering procurement of power in peak and off-peak hours vis-à-vis demand of industries.

In order to have better clarity on the data submitted by the Petitioner and to remove inconsistency in the data, a Technical Validation Session (TVS) was also held with the Petitioner's officers on January 25, 2023, for further deliberations on certain issues related to the Petition filed by

UPCL. Minutes of above Technical Validation Session were sent to the Petitioner vide Commission's letter no. UERC/6/TF-669/2022-23/2023/1316 dated January 27, 2023, for its response.

The Petitioner submitted the replies to data gaps vide its letter no. 3344/UPCL/RM/B-26 dated December 26, 2022, letter no. 179/UPCL/RM/B-26 dated January 17, 2023, letter no. 772/ UPCL/RM/B-26 dated March 06, 2023. The Petitioner submitted the replies to the data gaps and clarifications sought during TVS vide its letter no. letter no. 481/ UPCL/RM/B-26 dated February 06, 2023. The submissions made by UPCL in the Petition as well as additional submissions have been discussed by the Commission at appropriate places in the Order along with the Commission's views on the same.

# 2. Stakeholders'Objections/suggestions, Petitioner's Responses & Commission's Views

The Commission has received suggestions and objections on UPCL's Petition for True up for FY 2021-22, Annual Performance Review for FY 2022-23, and Approval of Annual Revenue Requirement and Tariff for FY 2023-24. The Commission also obtained responses from UPCL on the comments received from the stakeholders.

For the sake of clarity, the objections raised by the stakeholders and responses of the Petitioner have been consolidated and summarized issue-wise. In the subsequent Chapters of this Order, the Commission has kept in view the suggestions/objections/comments of the stakeholders and replies of the Petitioner while deciding the ARR for UPCL.

## 2.1 Overall Tariff Increase

### 2.1.1 *Stakeholder's Comments*

Shri Munish Talwar of M/s Asahi India Glass Ltd., Roorkee, Shri Digvijay Singh Bisht of Nainital Hotels and Restaurants Association, and Shri Bhagwan Rawat, opposed the ARR and Tariff petition for the FY 2023-24 filed by UPCL before the Commission. They further submitted that UPCL has proposed average tariff hike of 16.96% and PTCUL, SLDC and UJVN Ltd. have also submitted their ARR and Tariff petition for the FY 2023-24 before the Commission and if all the claims as proposed are accepted by the Commission, it would necessitate a hike of 28.57% in consumer tariff for FY 2023-24 which is unacceptable and unjustified.

Shri R K Singh of M/s TATA MOTORS Ltd. submitted that UPCL's proposal of tariff hike of 7.72% in FY 2023-24 is not justifiable and requested the Commission to consider all aspects before concluding any tariff hike in FY 2023-24.

Shri Shakeel Siddiqui of M/s Galwalia Ispat Udyog Pvt. Ltd. and M/s Kashi Vishwanath Textile Mill Pvt. Ltd. submitted that there should be no tariff increase this year and instead focus should be on how to make UPCL reduce its overheads, losses, inefficiency by smart and professional working. Detailed study of working of UPCL is required analytically and technically so that loss making areas are curbed and turned into profit centers. The stakeholder further proposed that every substation should be evaluated and actions thereon should be taken to make each of them profitable.

Shri Ajay Bhargava of M/s Hotel Association of Mussoorie submitted that this year UPCL in order to meet out the losses amounting Rs. 1507.13 Crore, has proposed to raise the electricity tariff substantially. The losses are primarily due to negligence and incompetence of the organization and, hence, the application of UPCL to increase the tariff should be completely rejected.

Shri Nisheeth Kumar Maheshwari in the larger public interest, requested the Commission to not increase electricity rates as proposed by UPCL for all domestic consumers. The stakeholder further sought directions to UPCL to give clarity & information on various other charges being charged by UPCL in electricity bills, considering interest of electricity consumers of the State.

Shri Umakant Dwivedi, Shri Vipin Chandra Joshi, Sh. Ritika Kalkhudia, Shri Amit Pandey, and Shri Chandan Singh Digari submitted during the Public Hearing in Pithoragarh that the proposed electricity rates are beyond the paying capacity of the general public of the district due to which the general public is facing all kinds of economic crisis. Hence, they requested to reconsider the proposed rates so that the general public can get some relief.

Shri Avadhesh Kumar Verma submitted that under Section 62 of the Electricity Act 2003, all the States take steps in the matter of electricity rates of their electricity consumers. He further submitted that under the same constitutional process the decision is taken after hearing the general public, in the same order the State of Uttarakhand Consumer Council in the interests of electricity consumers opposes the total 16.96 percent average power increase demanded by UPCL as it comes under the category of tariff shock. It was further submitted that the Commission must take a decision in the interests of the electricity consumers of the State of Uttarakhand.

Shri Ramesh Joshi of Suraj Seva Dal submitted that the loss of crores of rupees caused to the electricity department by the corrupt officials should not be compensated by increasing the electricity rates, but a high-level inquiry should be conducted into all the tenures of these departmental corrupt officials and recovery should be made from them only. Action should also be taken against them.

Shri Harjinder Singh of Janta Dal (Secular), submitted that about 66% of the total available electricity in Uttarakhand state is for commercial use and about 34% is for domestic use. In this way, the people who make commercial use of the said 66% electricity earn profit from it and give the value of the electricity used after earning profit. On the other hand, about 34 percent of the total available electricity, domestic users pay the cost of the electricity used from their hard-earned money and the electricity used for domestic use comes in the essential services. Keeping in view the above situation, any kind of increase in domestic electricity rates (tariff) will not be in the interest of justice nor it is in public interest. Therefore, there should not be any increase in the electricity rates (tariff) for domestic use. On the contrary, the rates (tariff) for commercial use can be increased because it is paid by profit.

Shri Shanti Prasad Bhatt of Uttarakhand Kranti Dal submitted that after the announcement of tariff in the last financial year 2022-23, the tariff has been increased again, and he strongly demanded the same to be withdrawn. He further submitted that the proposed electricity tariff should not be increased and it should be ensured that in future the tariff is determined only once.

Ms. Ansari of M/s All India Democratic Women's Association (AIDWA) submitted during the Public Hearing that their organization strongly opposed the proposal to increase electricity rates as in the last year, electricity rates have already been increased three times. She further submitted that this will be a heavy burden on the people who are already suffering from inflation. It was further submitted that the deficit of the Electricity Department can be met by putting a stop to wastage of electricity, line loss, and theft of electricity in Government departments, as well as recovery from big defaulters and it is unjust to put the burden on the general public.

Shri Sunil Kumar Gupta submitted that, due to wasteful expenditure and corruptions and scams being done by all the three energy corporations in the past years, due to non-completion of projects or works on time, no action is being taken on the damage caused to the corporations. This is a wastage of public money and consumers are getting affected. Therefore, the stakeholder requested the Commission to reject the ARR and tariff proposal filed by UPCL, PTCUL, UJVNL etc. for FY 2023-24 and reduce the electricity rates effective from April 1, 2023 so that the consumers of the State would get justice.

Shri Rakesh Kumar Bhatia requested that instead of increasing the prices, Utilities should increase transparency and efficiency due to which there will be a sudden increase in their income, and there will be no need for any kind of increase.

Shri Pawan Agarwal of Uttarakhand Steel Manufacturers submitted that the total increase in the Power Purchase Cost from FY 2022-23 to FY 2023-24 is merely 5%, although the increase in the

Total ARR of FY 2023-24 is 31%. Such significant rise in the ARR of FY 2023-24 is not justifiable.

### 2.1.2 *Petitioner's Reply*

UPCL submitted that it is a commercial organization and is required to meet its Annual Revenue Requirement out of the revenue realized from the consumers through electricity tariffs. The consolidated revenue deficit for FY 2023-24 (including the carrying cost of FY 2021-22) at existing tariff has been estimated at Rs. 1507.13 Crore (Rs. 10,394.42 Crore – Rs. 8887.29 Crore). For recovery of the said gap of Rs. 1507.13 Crore, UPCL has proposed an overall tariff hike of 16.96%. Further, increase in all other categories has been proposed in line with the Tariff Policy and the Proposed ARR to be recovered in FY 2023-24. All the charges which are charged in the bills are shown head wise in the bills.

UPCL further submitted that the revenue gap so computed is the result of the difference between increased/projected cost and revenue at existing tariff. The Petitioner being a regulated entity needs to be revenue neutral and, hence, the approved gap will have to be allowed in terms of tariff increase as per the principles laid down in the Tariff Policy and approach adopted by the Commission in the past.

The Petitioner submitted that the total percentage share of Power Purchase Cost in the total cost for FY 2022-23 is 87.13% vis-à-vis for FY 2023-24 is 86.06%. The major increase in the Annual Revenue Requirement of FY 2023-24 is due to the recovery of past Revenue Gap of Rs. 1,121.51 Crore (Rs. 916.22 Crore + Carrying Cost of Rs. 205.30 Crore) on account of various factors as submitted in the Tariff petition.

UPCL submitted that there is 27% consumption in domestic category and the remaining 73% consumption in other categories, i.e. commercial, industrial, agriculture etc.

UPCL submitted that tariff for supply of electricity is determined by the Commission as per the provisions of the Electricity Act, 2003 and Tariff Policy, 2016, which provides that the tariff of all the categories should be based on cost of supply with applicable range of cross subsidy. Presently, the tariff of domestic category is determined @ 80% of the cost of supply and it should not be reduced further.

### 2.1.3 *Commission's Views*

The Commission is of the view that an overall tariff increase is a function of projected

Annual Revenue Requirement for the ensuing year (including impact of truing up of expenses and revenue for previous year) and projected revenue at existing tariffs. The Commission has carried out the detailed scrutiny of ARR for FY 2023-24 and truing up for FY 2021-22 in accordance with the provisions of the relevant Regulations as discussed in subsequent Chapters of this Order and as an outcome of scrutiny, the Commission has approved an overall tariff increase as discussed in Chapter 5 of this Order. Further, most of the stakeholders have submitted that Uttarakhand being a hydro rich State, no tariff increase should be allowed. In this regard it would be relevant to mention that only 35-40% of UPCL's requirement is being met from power generated from UJVN Ltd. and balance requirement is met through procurement of power from thermal and other sources which are costlier and their prices vary which necessitates increase in cost for UPCL and in turn tariff hike.

Besides it is a misnomer that commercial and industrial consumers are being supplied cheap electricity and the domestic consumers are being burdened with costlier power. The endeavour of the Commission is to recover average cost of supply from each consumer category keeping in view the provisions of cross subsidy as provided in the National Tariff Policy. Further, the tariff increase in FY 2022-23 by the Commission was only upto 31.03.2023 so as to enable UPCL to meet the high cost of power and the same has been subsumed in the approved tariffs for FY 2023-24.

## 2.2 Tariff Hike – Industrial Tariff

### 2.2.1 *Stakeholder's Comments*

M/s Asahi India Glass Ltd., Roorkee requested the Commission to eliminate all the escalated power costs such as Additional High-Power surcharge (@ 62 Paisa per kVAh) and CSS (from 2.5% to 15%). This hike must be immediately withdrawn as this is a huge burden on Industries since industry prepare budget at the beginning of each financial year and incurring such unexpected hikes in electricity tariff affects the Balance sheet and PBDIT of any consumer.

Shri Man Singh of M/s Vista Furnishing Limited (Formerly known as Alps Industries Limited) submitted that the increase of approx. 19% in basic electricity rate for industrial sector is not a favorable step for the consumers. Due to Covid-19 & Russia-Ukraine war, the industrial exports and developmental progresses have slowed down. Hence, the Commission should not permit any increase in the current year tariff as it is not in the interest of the State.

Shri Pawan Agarwal of Uttarakhand Steel Manufacturers Association submitted that the industrial tariff in Uttarakhand should be less by Rs. 1.50/- per unit (with electricity duty) from Uttar Pradesh.

Shri Vineet Kumar Sangal of M/s Kumaun Garhwal Chamber of Commerce and Industry (KGCCI) submitted that UPCL through petition no. 3157/UPCL/RM/B-26 dated 15.12.2022 at Page No. 150 has proposed for the hike of around 19% in the Energy Charge for Industrial category consumer. There is a hike of energy charge in Off Peak hours and Normal hours. There was already a tariff hike of 5.7% for FY 2022-23 initially, further UERC in its Order No. 24 of 2022 at Annexure-2 at Page No. 26 dated 28.09.2022 has imposed Additional Power Purchase Surcharge (APPS) at the rate of Rs. 0.62/kWh for HT-Industrial consumers. This continuous hike in tariff will only increase the burden on the industrial consumers. This will increase the manufacturing cost of the end products and in turn increase the burden on general consumers.

Shri Shakeel Siddiqui of M/s Galwalia Ispat Udyog Pvt. Ltd. submitted that Industry should not be treated as milking cow and is to be treated impartially. Being advisor, the Commission may make submission to the State Government giving broad view of the condition of electricity supply, roaring prices and the turmoil being faced by the industries in the State, since it is the industry that will shape the future of Uttarakhand through providing employment and revenue in the form of taxes.

Shri Adarsh Jaiswal of M/s Ambuja Cements Ltd., Unit-Roorkee (Adani group company) submitted that UPCL has proposed increase in electricity tariff which has increased the Additional Surcharge to Rs. 0.62/unit in Sept 2022, increase of Continuous supply surcharge to 15%, FCA increase just doubled to Rs. 0.14/kWh and Open Access power purchase surcharge to Rs. 1.14/kWh. The stakeholder further submitted that the Commission has always promoted the interest of the consumer industries at a larger framework and, hence, requested to reduce midterm tariff hike and to ensure no further increase in electricity tariff in the mid of year is carried out once the tariff is finalized by the Commission.

Shri Harindra Kumar Garg and Shri R K Tyagi of M/s SIDCUL Manufacturers Association of Uttarakhand submitted that the Industrial Sector is reviving from the trauma of COVID and is moving towards growth, but it requires help from the Government to sustain the growth. They, accordingly, requested the Commission not to increase electricity tariff for the sake of Industry and society.

Shri Avadhesh Kumar Verma, Chairman, Uttar Pradesh Upbhokta Parishad submitted that there should be no Tariff Hike for industries.

### 2.2.2 *Petitioner's Reply*

UPCL submitted that it is a commercial organization and is required to meet its Annual Revenue Requirement out of the revenue realized from the consumers through electricity tariffs. The consolidated revenue deficit for FY 2023-24 (including the carrying cost of FY 2021-22) at existing tariff has been estimated at Rs. 1507.13 Crore (Rs. 10,394.42 Crore – Rs. 8887.29 Crore). For recovery of the said gap of Rs. 1507.13 Crore, UPCL has proposed an overall tariff hike of 16.96%. Further, increase in all other categories has been proposed in line with the Tariff Policy and the Proposed ARR to be recovered in FY 2023-24.

UPCL submitted that the revenue gap so computed is the result of difference between increased / projected cost and revenue at existing tariff. The Petitioner being regulated entity needs to be revenue neutral and hence, approved gap will have to be allowed in terms of tariff increase as per the principles laid down in the Tariff Policy and approach adopted by the Commission in the past.

Considering the fact that actual power purchase cost for FY 2022-23 is much higher than the approved power purchase cost for the said year, the Commission vide its order dated 28.09.2022 allowed recovery of Rs. 379.06 Crore by levying additional power purchase surcharge from the consumers at the rates specified in the order for the period from September, 2022 to March, 2023.

As regards levy of additional power purchase surcharge, UPCL submitted that the State of Uttarakhand is facing acute shortage of electricity since start of the current financial year due to various factors, i.e. increase in demand, less availability of power in energy exchange because of exceptionally high prices of coal and gas on account of International crises, shutting down of gas based generating stations of the State having capacity of 321 MW, sudden climate change in the first quarter of the current financial year and boosting of economy after Covid – 19 crises all over India. UPCL had estimated an additional outlay of Rs. 1355 Crore over and above the power purchase cost approved by the Commission for FY 2022-23 and for recovery of the same it had filed a Petition before the Commission but the Commission vide its order dated 28.09.2022 provisionally allowed UPCL a recovery of Rs. 379.06 Crore only.

### 2.2.3 *Commission's Views*

The Commission is of the view that the overall tariff increase is a function of projected Annual Revenue Requirement for the ensuing year (including impact of truing up of expenses and revenue for previous year) and projected revenue at existing tariffs. The Commission has carried out the detailed scrutiny of ARR for FY 2023-24 and truing up for FY 2021-22 in accordance with the provisions of the relevant Regulations as discussed in subsequent Chapters of this Order and as an outcome of the scrutiny, the Commission has approved an average tariff increase as discussed in Chapter 5 of this Order.

Further, the tariff increase in FY 2022-23 by the Commission was only upto 31.03.2023 so as to enable UPCL to meet the high cost of power and the same has been subsumed in the approved tariffs for FY 2023-24.

## 2.3 Proposed Rate Schedule for FY 2022-23

### 2.3.1 *Stakeholder's Comments*

Shri R K Singh of M/s TATA MOTORS Ltd. submitted that UPCL's energy charges and voltage supply rebate is common for both 132 kV & 220 kV level. Hence, the Commission was requested to look into this and direct UPCL to further categorize 220 kV consumer separate from 132 kV and above category to felicitate higher voltage supply rebate.

Shri Puneet Mohindra of M/s Kashi Vishwanath Steels Pvt. Ltd. submitted that due to the lack of proper planning/estimation, distribution utility has filed a Petition after petition for revision of tariff in the current financial year. The ARR is prepared for three years with a provision for truing up every year but unfortunately, in total contrast to the spirit of the provisions, the distribution licensee is resorting to increase in tariff at the drop of a hat. The three-year tariff system can serve its purpose only if this practice of frequent revisions is stopped. He further requested that the distribution licensee should not be permitted to extend the levy of the Average Power Purchase Surcharge (APPSC) cost on the consumers beyond March, 2023.

Shri Pawan Agarwal of Uttarakhand Steel Manufacturers Association submitted that the estimated expenses of 2023-24 shown by UPCL shows the amount of Depreciation as Rs. 311.54 Crore and the amount of Return on Equity as Rs. 183.30 Crore which are the profit of the department and not part of the cost. This amount may be fine to show in the balance sheet but not in the tariff determination because the direct impact of the tariff falls on the consumers of the State and especially on the big industries. Therefore, the total amount of Rs. 492.54 Crore for the year 2023-24 should not be adjusted in this year’s tariff determination.

Shri Ajay Bhargava and Shri Sanjay Aggarawal of M/s Hotel Association of Mussoorie, Shri Deepak Gupta of M/s Uttarakhand Hotels & Restaurants Association submitted that UPCL has levied 77 Paisa per unit as “Additional Power Purchase Surcharge” applicable from 1st October 2022 which was totally unjust. It was further submitted that the Commission had determined the Tariff for the FY 2022-23 in the month of April, hence, levying such charges amidst the Year is totally unjust. This move should be strictly discouraged as the confidence of the law-abiding consumers is shattered.

Shri Teeka Singh Saini of M/s Bhartiya Kisan Union, Udham Singh Nagar submitted during the public hearing that the electricity tariff rate for the farmers have been increased to Rs. 2.15 + 0.05 (Fuel Charges) + 0.05 (APPS) = Rs. 2.25 per unit. In 2022, Additional Charges of 18 paisa per unit was collected from the farmers. Earlier, the Fuel charge and Energy charge were not collected from private tube wells and, hence, these charges should be abolished since the famers does not have enough wages to pay for them.

Shri Ashok Shukla of M/s V N Plastics Pvt. Ltd. submitted that UPCL is not keen on working up to the expected improvements like Line Losses and Billing efficiency. Due to their incompetence, the honest consumers have to bear the losses. Hence, the utilities should not discourage the honest consumers and take necessary steps to reduce line loses and increase recovery by banning blatant theft. He further requested that the proposed tariff hike should not be allowed, until the utilities are functioning properly.

Shri Sunil Kumar Gupta submitted strong objection to the system of ARR projection for every financial year by UPCL, UJVNL or PTCUL and after that Truing-up is approved because once in a year the Regulatory Commission revises the rates. He further submitted that the tariff is determined for the whole year and not for a few days, if so, then why the expenditure of these utilities and expensive consultant agency are burdened upon the consumers. In such a situation, is it not cheating and deceit with consumers for increasing the electricity rates again and again in the outgoing year.

### 2.3.2 *Petitioner's Reply*

UPCL submitted that presently, voltage wise/category wise losses are not available and Category Wise Tariff has been calculated on the basis of average cost of supply and permissible level of cross subsidy. This is as per Regulation 91 of the UERC Tariff Regulations, 2021. In the absence of availability of voltage wise losses, which is mix of technical losses and commercial losses, the distribution losses are required to be charged on average basis from all category of consumers as well as open access consumers. Further, considering the fact that losses at higher voltages are on lower side, rebate in energy charge @ 3.5% to the consumers getting supply at 33 kV and 7.5% to the consumers getting supply at 132 kV and above has been provided by the Commission. In such a situation, it does not seem appropriate to further segregate voltagewise losses for the purpose of providing rebate. However, if the Commission decides to provide the benefit of higher voltage supply rebate to the consumers; the impact of the same may be considered in ARR to ensure revenue neutrality for UPCL.

As regards levy of additional power purchase surcharge, UPCL submitted that the State of Uttarakhand is facing acute shortage of electricity since start of the current financial year due to various factors, i.e. increase in demand, less availability of power in energy exchange because of exceptionally high prices of coal and gas on account of International crises, shut down of gas based generating stations of the State having capacity of 321 MW, sudden climate change in the first quarter of the current financial year and boosting of economy after Covid – 19 crises all over India. UPCL had estimated an additional outlay of Rs. 1355 Crore over and above the power purchase cost approved by the Commission for FY 2022-23 and for recovery of the same it had filed a petition before the Commission but the Commission vide its order dated 28.09.2022 provisionally allowed UPCL recovery of Rs. 379.06 Crore only. Hence, there was an extra ordinary situation in FY 2022-23 and, accordingly, additional power purchase cost has been claimed and approved by the Commission in mid of the year.

UPCL further submitted that capital expenditure is recovered over a time of specified period as per Regulations and named as depreciation. This is a cost and needs to be included in the ARR and be recovered through Tariff.

It further submitted that Return on Equity is the cost of capital invested by the Discom in its Business and needs to be included in the ARR and be recovered through Tariff. Equity invested in business has an opportunity cost and if invested elsewhere will earn income on the same.

### 2.3.3 *Commission's Views*

The Commission has taken note of the concerns raised by the stakeholders and UPCL. The Commission has dealt with the issue in detail in Chapter 5 of this Order.

Further, the tariff increase in FY 2022-23 by the Commission was only upto 31.03.2023 so as to enable UPCL to meet the high cost of power and the same has been subsumed in the approved tariffs for FY 2023-24.

## 2.4 Distribution Loss

### 2.4.1 *Stakeholder's Comments*

Shri Munish Talwar of M/s Asahi India Glass Ltd., Roorkee submitted that it is very unfortunate to have an average loss of 15% in Distribution which does not speak of an efficient utility. UPCL must take initiatives for distribution loss reduction like following guidelines of R-APDRP schemes and monitoring of high loss feeders. Distribution loss must be calculated based on feeder rating and voltage level and, there must be some parameters on which Distribution Loss is to be fixed and it must be zero on 132 kV voltage connected consumers (0.25% at 132 kV Voltage level in Uttar Pradesh).

Shri J S Pundir (Retd Lt Col) submitted that the baseline loss of 80.97% and billing efficiency of 55% for Dehradun as stated in Table 5 – High Feeder Loss in R-APDRP Town, at Page 22, Part 1 of Petition, may be considered for immediate remedial measures. Likewise, all towns with baseline loss > 50% and Billing efficiency < 50% the situation be considered for correction. He further submitted that it may be considered that the initiatives stated under 'Distribution Loss Reduction' at Page 69 of Part 1 of Petition be wherever feasible be enunciated as also qualified by data. For example, the area and distance/quantum of LT Aerial Bunch Cable laid in theft prone areas could be stated under a tabulated form of 'LT Aerial Bunch Cable Progress' in the manner of Energy sales statement over last five years listing details of progress under different areas.

Shri R K Singh of M/s TATA MOTORS Ltd. submitted that UPCL is not able to maintain distribution loss after FY 2019-20 and it is degrading YoY basis. All these losses contribute to revenue loss that ultimately causes revenue gap and tariff hike. In this context the stakeholder requested the Commission to direct UPCL to sustain their performance so that consumers can be prevented to pay higher tariff.

Shri Puneet Mohindra of M/s Kashi Vishwanath Steels Pvt. Ltd. submitted that UPCL has projected overall distribution losses at 13.25% for FY 2023-24. However, network losses at 132 kV are normally below 1% so the industrial consumers who are connected at such higher voltage are compensating the network losses of the Corporation that caters to different category of consumers at low voltage. As per the mandate, the distribution licensee must determine voltage wise distribution losses, which UPCL has not done in the last ten years although 132 kV and above connections are very few in numbers. He, therefore, requested to take note of this fact and pass suitable direction to give relief to consumers connected at 132 kV and above voltage levels.

Shri Amber Agarwal of M/s Devarpan Foods Pvt. Ltd. submitted that the Commission should direct UPCL to compute Voltage-wise losses for each category of consumers and submit the data on voltage-wise losses along with next Tariff Petition.

Shri Pawan Agarwal of Uttarakhand Steel Manufacturers submitted that the tariff should be determined based on Voltage-wise losses whereas currently it is on the basis of average losses. The line loss data of 33 kV and 132 kV connected consumers is clearly known, and it is requested that according to the Electricity Act, the tariff of these consumers should be made on Nil line loss only.

Shri Vineet Kumar Sangal of M/s Kumaun Garhwal Chamber of Commerce and Industry (KGCCI) submitted that as listed in the petition dated 15.12.2022 at Clause No 3.26 at Page No. 78, UPCL has proposed the distribution loss of 13.25%. The stakeholder further enquired about the steps that are being taken by the Petitioner to reduce the Distribution Losses. Proper Bifurcation must be done and mentioned as to how the distribution losses have been accessed in urban/rural and hilly/plain areas. It becomes vital to find actionable points to compensate distribution loss trajectory which at present is taken on Average data. Significant efforts are to be made to reduce distribution losses to show substantial year-on-year improvement Likewise as suggested by the Commission, reliable Energy audit must be done by competent auditing agency and audit findings must be shared in the Petition with closure of compliances within the stipulated time period.

Shri Shakeel Siddiqui of M/s Galwalia Ispat Udyog Pvt. Ltd. and M/s Kashi Vishwanath Textile Mill Pvt. Ltd. submitted that the Distribution losses for determining Tariff voltage wise/category wise, for 33 kV consumers be not more than 5% and for 132 kV should not be more than 2%. For 33 kV the rebate should be minimum of 7.5% and for 132 kV it should be minimum @ 15% of energy charges. The distribution losses to be allowed on open access power should be voltage wise/category wise.

Shri Rakesh Kumar Bhatia submitted that there is a lot of theft of electricity in the areas which is being adjusted in the name of line loss and honest consumers are bearing the brunt of this theft. At the time of determining the tariff, the Commission should only keep in mind that the benefit of the limit of line loss fixed by it will be payable to UPCL and if the limit comes more than that than it should be recovered from the concerned Executive Engineer and not from the consumers. If the loss is more than 3% then it is the inefficiency of the department and its benefit cannot be given to the department.

### 2.4.2 *Petitioner's Reply*

UPCL submitted that presently, voltage wise / category wise losses are not available and Category wise Tariff has been calculated on the basis of average cost of supply and permissible level of cross subsidy. This is as per Regulation 91 of the UERC Tariff Regulations, 2021. In the absence of availability of voltage wise losses, which is mix of technical losses and commercial losses, the distribution losses are required to be charged on average basis from all categories of consumers as well as open access consumers.

The supply of electricity is disconnected of the consumers who defaults in making payment of electricity bill in time. However, the number of defaulting consumers is very high and the supply of all such consumers is not disconnected in time.

Further, recovery proceedings are also initiated against the defaulting consumers as per the provisions of the Uttarakhand (U.P. Government Electricity undertakings (Dues Recovery) Act, 1958) Adaptation and Modification order, 2002.

UPCL submitted that the distribution loss for FY 2021-22 for UPCL is 14.15% against the approved loss of 13.75%. UPCL strives hard to reduce the distribution losses as is evident from distribution loss over the past 5 years where the loss has been reduced from 15.17% for FY 2017-18 to 14.15% in FY 2021-22. Though, reduction in distribution losses below 15% is very difficult, UPCL has proposed the distribution losses @ 13.25% for FY 2023-24 equivalent to the distribution losses approved by the Commission for the said year.

UPCL further submitted that following action are being taken for reduction of distribution losses:

a) Vigilance raids are being conducted and cases are being registered under Sections 126 and 135 of Electricity Act, 2003. Legal proceedings are being initiated against the person(s) who is found indulging in theft of electricity.

b) Mechanical meters are being replaced by electronic meters.

c) Defective Meters are being replaced.

d) LT ABC is being laid in theft prone areas.

e) Automatic Meter Reading is being done of high value consumers.

f) Android based billing has been introduced for improvement in Billing Efficiency.

Further, in addition to this, the Petitioner submitted that the Detailed Project Report and Action Plan of the Results linked, Revamped Distribution Sector Scheme as approved by Government of India vide its notification dated 20.07.2021, is under consideration for implementation. The said scheme primarily aims for reduction of distribution and AT&C Losses.

Further, considering the fact that losses at higher voltages are on lower side, rebate in energy charge @ 3.5% to the consumers getting supply at 33 kV and 7.5% to the consumers getting supply at 132 kV and above has been provided by the Commission. In such a situation, it does not seem appropriate to further segregate voltagewise losses for the purpose of providing rebate. However, if the Commission decides to provide the benefit of higher voltage supply rebate to the consumers, the impact of the same may be considered in the ARR to ensure revenue neutrality for UPCL.

### 2.4.3 *Commission's Views*

The Commission has taken note of the concerns raised by the stakeholders and the initiatives taken by UPCL for reducing the losses. The Commission would like to clarify that the distribution losses submitted by the Petitioner is same as the losses approved by the Commission in the MYT Tariff Order for the Control Period from 2022-23 to FY 2024-25. However, the Commission approves the actual losses as per the actual data submitted by the Petitioner and the re-casted sales and excess loss is to be borne by the discom and is not loaded on to the consumers and the same has been discussed in Chapter 3 of the Order.

## 2.5 Power Procurement Plan

### 2.5.1 *Stakeholder's Comments*

Shri Munish Talwar of M/s Asahi India Glass Ltd., Roorkee suggested that since the electricity demand is increasing in all successive years, long term contract at cheaper rates must be finalized with Corporations like NHPC, NTPC, THDC, UJVNL and SJVNL so that some agreement is reached for minimum cost of purchase of power.

Shri Pawan Agarwal of Uttarakhand Steel Manufacturers Association submitted that after the power purchase taken from UJVNL, the balance sheet of UJVNL for the fourteenth year shows the profit of Rs. 126.05 Crore and in that Depreciation of Rs. 116.04 Crore. has been claimed and the matter did not stop here, Royalty and CESS of Rs. 177.93 Crore have been included in its operating expenses while both UJVNL and UPCL are under Government of Uttarakhand and they are not commercial organizations. Therefore, the amount of Rs. 420.02 Crore may be fine for the balance sheet, but this amount cannot be used indirectly for tariff determination.

Shri Vineet Kumar Sangal of M/s Kumaun Garhwal Chamber of Commerce and Industry (KGCCI) submitted that as mentioned in the Petition, it is of the view that UPCL is continuously procuring power from other bodies at a very high rate, there must be systematic approach to utilize this precious resource. It is very unethical to note that Power purchase expense has been projected to escalate by Rs. 1563.9 Crore for FY 2023-24. As guided by the Commission, power must not be purchased at unreasonable rate. The stakeholder requested for detailed submission of power purchase rates as the existing details in the Petition do not clarify at which rate power has been purchased.

Shri Sunil Kumar Gupta submitted that the way the game is being played by making loopholes in the power purchase issued by UPCL is objectionable because the Corporation and Jan Dhan are being frauded by adopting a disorganized and unplanned policy on Drawing-Demand and Schedule (Kota) by not adopting the formula of Energy Banking in power purchase. Therefore, Energy Banking System should be re-implemented in future. So that in the month of June to September, we can get the benefit of buying and selling power.

Shri Vijay Singh Verma submitted during the Public Hearing that UPCL should make sincere efforts for reducing its power purchase cost by long term planning by canceling costlier PPA to reduce the claims of generators which have failed to supply electricity.

### 2.5.2 *Petitioner's Reply*

UPCL submitted that it recognizes that a major part of the ARR pertains to the Power purchase cost and submitted that due actions are being taken to source cheaper power. Further, the grid demand varies across the seasons as well as on daily basis, UPCL plans for the power procurement based upon the availability of the generating stations as well as the cost of power from the generator. It further submitted that owing to mismatch in grid demand and supply in real time owing to the consumption pattern of the consumer, UPCL has to purchase power from short terms sources as well.

UPCL further submitted that the State of Uttarakhand is facing acute shortage of electricity since start of the current financial year due to various factors, i.e. increase in demand, less availability of power in energy exchange because of exceptionally high prices of coal and gas on account of International crises, shut down of gas based generating stations of the State having capacity of 321 MW, sudden climate change in the first quarter of the current financial year and boosting of economy after Covid – 19 crises all over India. This shortage is expected to be continued to a certain limit in FY 2023-24 and, accordingly, as against the estimated average power purchase cost of Rs. 4.99/kWh in FY 2022-23, the power purchase cost for FY 2023-24 has been estimated @ Rs. 4.67/kWh.

UPCL had estimated an additional outlay of Rs. 1355 Crore over and above the power purchase cost approved by the Commission for FY 2022-23 and for recovery of the same it had filed a Petition before the Commission but the Commission vide its Order dated 28.09.2022 provisionally allowed UPCL recovery of Rs. 379.06 Crore only.

Considering the optimistic situation in FY 2023-24, the Petitioner envisages that a very minimal quantum would be drawn from these sources for the balance months of FY 2023-24 due to the improved availability and moderation in price of gas.

UPCL submitted that it is of the view that although the current market prices of Gas are quite high but keeping in view the historical prices and considering the fact that the Petitioner is liable to pay fixed charges, it has pre-empted for the case that if the prices normalize back to lower levels, the Petitioner may have a case to source power from Gas based sources. With that optimistic view in mind and the current market rate of the fuel prices, the Petitioner has projected its availability and will operate only if procurement from such sources is viable. However, UPCL submitted that if the prices do not fall back, then the Petitioner would explore other short term options to meet its power requirement. The Petitioner has projected Energy Charge rate of Rs. 7.01/kWh for Gama, Shravanti, Anta, Auraiya, Dadri Gas based power plants, considering Gas prices at Rs. 880/MMBTU (based on historical data from gas exchange) and has, accordingly, projected the variable cost of power from the energy projected to be available from such gas generating station.

### 2.5.3 *Commission's Views*

The Commission has noted the comments and suggestions of the stakeholders. Earlier UPCL was resorting to the banking arrangements as advised by the Commission. However, FY 2022-23 being an unprecedented year banking could not take place as there was shortage of electricity during monsoons also. Further, the issues related to source-wise power purchase quantum, energy banking and costs have been deliberated by the Commission in Chapter 3 & 4 of this Order.

## 2.6 O&M Expenses

### 2.6.1 *Stakeholder's Comments*

Shri Munish Talwar of M/s Asahi India Glass Ltd., Roorkee submitted that the O&M expenses claimed by UPCL for FY 2023-24 is on a higher side. UPCL could take measures to reduce the O&M expenses such as recruitment of workmen on Contractual Basis or Fixed Term Contracts.

### 2.6.2 *Petitioner's Reply*

The Petitioner did not submit reply to the issue raised.

### 2.6.3 *Commission's Views*

The issue of O&M expenses has been deliberated by the Commission in Chapters 3 and 4 of the Order and the Commission has approved the O&M expenses on normative basis in accordance with the provisions of the UERC Tariff Regulations, 2021.

## 2.7 Interest on Loans

### 2.7.1 *Stakeholder's Comments*

Shri K. G. Behl of All India Consumer Council, Uttarakhand, submitted that the expenses claimed by UPCL are always higher than the approved expenses and UPCL has been resorting to loans for meeting the shortfall and interest expenses thereof are being claimed as part of fixed charges. UPCL has to meet the shortfall in expenses by seeking funds from State Government. as such funds do not carry interest and thereby aid in lower tariffs.

Shri Sushil Tyagi and Shri Pradeep Kukreti of Sanyukta Nagrik Sangathan submitted that UPCL has been resorting to financial indiscipline leading to higher interest expenses. The responsibility for such financial indiscipline has to be accounted.

### 2.7.2 *Petitioner's Reply*

The Petitioner did not submit reply to the issue raised.

### 2.7.3 *Commission's Views*

The Commission while carrying out the truing up for FY 2021-22 as discussed in Chapter 3 of this Order has carried out detailed computation of the rate of interest before allowing interest on loan to the Petitioner.

## 2.8 Return on Equity

### 2.8.1 *Stakeholder's Comments*

Shri Pawan Agarwal of Uttarakhand Steel Manufacturers submitted that the rate of Return on Equity claimed by UPCL is 16.50%, which is on a higher side in the present context which should not be more than 7%. The Commission may reduce the rate of RoE by amending the Regulations.

Shri Shakeel Siddiqui submitted that the rate of RoE of 16.5% is on a higher side. The interest rate of the banks may be considered as rate of RoE.

### 2.8.2 *Petitioner's Reply*

Clause (d) of Section 61 of the Electricity Act, 2003 and clause (a) of Para 5.11 of Tariff Policy, 2016 provides the guiding principle for determination of Rate of Return. It further mandates for maintaining a balance between the interests of consumers and the need for investment. The Tariff Policy, 2016 further provides for allowing reasonable surplus and to attract investment for the growth. The risk and rate of return on capital towards distribution business may be different from all other businesses due to several counts such as the distinct nature of supply of electricity distribution of electricity, variation in risk in distribution business in comparison to other activity of entire value chain of electricity, the additional efforts required to maintain consumer base in competitive market and ensuring consumer satisfaction by providing quality service. RoE is a measure of a company's profitability, and a reduction in RoE can indicate a decline in performance.

There are several reasons why the RoE should not be reduced:

- Capital allocation: A reduction in rate of return can limit the company's ability to invest in growth opportunities, such as expanding its network or improving customer service.
- Regulatory requirements: Distribution companies in the energy sector are often subject to strict regulatory requirements, and a reduction in rate of return could make it more difficult for the company to meet these requirements.
- Credit rating: A decrease in rate of return can also impact the company's credit rating, making it more difficult and expensive to access capital for future investments.

Therefore, the Commission may allow RoE @ 16.5% as per the provisions of the Regulations.

### 2.8.3 *Commission’s Views*

The Commission has allowed RoE to the Petitioner as per the provisions of UERC Tariff Regulations and the same has been discussed in detail in Chapter 3 and 4 of this Order and any amendment to the Regulations shall have a prospective effect and not retrospective effect and the same cannot be carried out through an Order.

## 2.9 Department Employees and Pensioners

### 2.9.1 *Stakeholder’s Comments*

Shri Ajay Bhargava and Shri Sanjay Agarwal of M/s Hotel Association of Mussoorie and Shri T. N Pant submitted that the existing and retired departmental employees have to be charged the electricity charges and should be treated as normal consumers. This would prevent the indiscriminate usage of electricity by the employees due to free electricity provided.

### 2.9.2 *Petitioner's Reply*

The employees of UPCL are being given the facility of departmental electricity connection since U.P. State Electricity Board was in existence. Under this facility, a fixed lump-sum amount is charged from the employees according to their designation towards electricity charges for electricity supplied to them. Erstwhile UPSEB was unbundled under the provisions of Uttar Pradesh Electricity Reforms Act, 1999 and Section 23(7) of the said Act provides that the "terms and conditions of service of the personnel shall not be less favorable to the terms and condition which were applicable to them before the transfer". The same spirit has been echoed under first proviso of Section 133(2) of the Electricity Act, 2003. The benefits for employees/pensioners as provided in Section 12(b)(ii) of the Uttar Pradesh Reform Transfer Scheme, 2000 includes "concessional rate of electricity", which means concession in rate of electricity to the extent it is not inferior to what was existing before January 14, 2000. The rates and charges indicated above for this category are strictly in adherence to the above statutory provisions. As UPCL is the successor entity of UPPCL (formed as a result of unbundling of UPSEB), the above legal provisions are also applicable on UPCL.

All the three Corporations, i.e. UPCL, UJVNL and PTCUL vide their combined office memorandum no. 5391/UPCL/RM/N-36 dated July 17, 2020 revised the fixed charges and imposed the ceiling limit on electricity consumption by the working/retired employees and family pensioners of UPCL, UJVNL and PTCUL from July 01, 2020. The consumption over and above the ceiling limit shall be charged at the rates specified in domestic category.

Further, the Commission in the Tariff Order dated February 27, 2019 at para 2.22.1.3 has also held in the matter as follows:

> *"……..The Commission would like to clarify that in the previous Tariff Orders, the Commission had not been allowing the impact of concessional supply to departmental consumers including pensioners of UPCL, UJVN Ltd. and PTCUL and has been considering revenue corresponding to the ABR of domestic consumers and the same approach has been adopted while carrying out the truing up for FY 2017-18……….."*

### 2.9.3 *Commission's Views*

The Commission is of the view that the overall tariff increase is a function of projected Annual Revenue Requirement for the ensuing year (including impact of truing up of expenses and revenue for previous year) and projected revenue at existing tariffs. The Commission has carried out the detailed scrutiny of ARR for FY 2023-24 and truing up for FY 2021-22 in accordance with the provisions of the relevant Regulations as discussed in the subsequent Chapters of this Order and as an outcome of scrutiny, the Commission has approved the tariff increase as discussed in Chapter 5 of this Order. Moreover, the Commission in its previous Tariff Orders has not been allowing the cost of concessional supply provided by UPCL to its departmental employees and pensioners and UPCL has been asked to bear the same out of its own resources. This issue has again been dealt in detail in Chapter 3 of this Order.

## 2.10 Rebate on Online payment of Electricity Bills

### 2.10.1 *Stakeholder's Comments*

Shri R K Singh of M/s TATA MOTORS Ltd. submitted that UPCL's initiative of providing a Rebate for Online Payment of Electricity Bill is a welcome step and requested that the same may be continued for FY 2023-24. It would aid UPCL in improvement of collection efficiency, avoidance of risk of bad debts for UPCL and encourage the electricity consumers to pay the dues in time.

Shri Shakeel Siddiqui of M/s Kashi Vishwanath Textile Mill Pvt. Ltd. submitted that the rebate on prompt payment is limited to Rs. 1 Lakh. It needs to be @1 % without any capping on payment made or before the due date.

### 2.10.2 *Petitioner's Reply*

As per suggestions of the consumer, the Petitioner has proposed the rebate for online payment of bills as approved by Commission in its Tariff Order for FY 2022-23.

### 2.10.3 *Commission's Views*

The Commission, in the Tariff Order for FY 2022-23 had allowed the rebate of 1.25% towards timely payment of bills through bank transfers also, i.e. through NEFT/RTGS/IMPS. The same has been discussed in Chapter 5 of the Order.

## 2.11 Revenue Gap

### 2.11.1 *Stakeholder's Comments*

Shri R K Singh of M/s TATA Motors Ltd. submitted that the revenue gap claimed for FY

2021-22 is Rs. 916.22 Crore which includes the claim of Rs. 123.42 Crore towards pending Electrical Inspector certificates till last year and the claim of Rs. 115.18 Crore as provision for bad debts and other past adjustments. These two claims may not be considered in tariff determination as such claims are not related to the sale of electricity to the consumers.

Shri Pawan Agarwal of Uttarakhand Steel Manufacturers submitted that UPCL has claimed the gap of Rs. 1121.51 Crore as the adjustment of the previous year and added it to the total revenue requirement for FY 2023-24. In September, 2022 the Commission had allowed the gap of Rs. 575.93 Crore out of the claimed amount of Rs. 1355.41 Crore. Therefore, the claimed gap of Rs. 1121.51 Crore is not allowable.

### 2.11.2 *Petitioner's Reply*

The Net ARR for FY 2023-24 is worked out as Rs. 10,394.42 Crore and the projected revenue at the existing tariff has been computed as Rs. 8,887.29 Crore.

**Table 2.1: Net ARR & Revenue Gap for FY 2023-24 (Rs. Crore)**

| Particular | Amount |
|---|---|
| Net ARR | 10,394.42 |
| Revenue at Existing Tariff | 8,887.29 |
| Revenue Gap/Surplus | 1,507.13 |

The computed revenue gap for FY 2023-24 is for Rs. 1,507.13 Crore, after adjusting for true-up gap/(surplus) of FY 2021-22 along with the carrying cost which is proposed to be met through tariff increase.

The Petitioner submitted that the complete EI certificates for HT works carried out during the period from FY 2016-17 to FY 2020-21 could not be submitted to the Commission which have been submitted in the present Petition and, accordingly, the claim on this account which was earlier not allowed by the Commission has been included in the ARR for FY 2023-24.

UPCL had computed the additional power purchase cost of Rs. 1355 Crore during FY 2022-23 over and above the power purchase cost approved by the Commission in its Order dated March 31, 2022. For recovery of the same, UPCL had filed the petition before the Commission, but the Commission provisionally allowed recovery of Rs. 379.06 Crore during FY 2022-23. This cost has been allowed to be recovered as additional power purchase surcharge for the period from September, 2022 to March, 2023.

In continuation to the above, the revenue gap amounting to Rs. 1,121.51 Crore pertains to the True up of FY 2021-22 claimed as per the UERC Tariff Regulation, 2021 and is independent of what is approved/disallowed in the Order dated September 22, 2022 for FY 2022-23.

### 2.11.3 *Commission's Views*

The Commission is of the view that the overall tariff increase is a function of projected Annual Revenue Requirement for the ensuing year (including impact of truing up of expenses and revenue for previous year) and projected revenue at existing tariffs. The Commission has carried out the detailed scrutiny of ARR for FY 2023-24 and truing up for FY 2021-22 in accordance with the provisions of the relevant Regulations as discussed in the subsequent Chapters of this Order.

## 2.12 Collection Efficiency

### 2.12.1 *Stakeholder's Comments*

Shri Rajeev Gupta of M/s KVS Castings Private Ltd. and Shri Amber Agarwal of M/s Devarpan Foods Pvt. Ltd. submitted that UPCL could not control its receivables. The Commission may carry out prudence check on this account so that the inefficiencies of UPCL do not burden the consumers with hike in tariff. The Commission may also carry out the prudence check on the following points; (1) Improvement in Billing Efficiency, (2) Reduction in AT&C losses and sustenance of high collection efficiency, (3) Better management of creditors, (4) Improvement in Cost coverage, (5) Achieving "A" ranking within a reasonable time period, (6) Better balancing of power purchase Vs better supply to all types of consumers.

Shri R K Singh of M/s TATA Motors Ltd. submitted that M/s UPCL has not only failed to achieve target set by Hon'ble Commission but also is exhibiting deteriorating performance as observed in the collection efficiency of March 2021 vis-a-vis the collection efficiency in March, 2021. The Commission may set stringent target for UPCL.

Shri Subodh Bisht submitted that despite several assurances in the past, UPCL has not been sending the electricity bills to the domestic consumers every month due to which undue financial burden is being imposed on the electricity consumers. The Commission may direct UPCL to send electricity bills to the domestic consumers every month.

### 2.12.2 *Petitioner's Reply*

The Petitioner submitted that the Commission vide its Tariff Order for FY 2022-23 dated March 31, 2022, approved the targets of collection efficiency @ 99.15% and distribution losses @ 13.25%. With a view to achieve collection efficiency and billing efficiency as approved by UERC, UPCL has fixed the month wise revenue collection targets of all the distribution divisions. The monitoring of these collection targets is being done at Corporate Office.

For recovery of outstanding arrears, the connections of defaulting consumers are being disconnected and notices under Sections 3 & 5 of the Uttarakhand (U.P. Government Electricity undertakings (Dues Recovery) Act, 1958) Adaptation and Modification order, 2002 are being issued regularly and the same shall be taken-up more promptly for ensuing early recovery of outstanding arrears.

Further the revenue gap computation is on accrual basis and not on cash basis. However, Petitioner is taking efforts to improve its cash position so as to reduce its working capital burden.

UPCL has its dedicated team in the power purchase cell and the costly power from firm sources is replaced from the power from energy exchanges whenever the prices in exchanges are lower than the variable cost of power from such plants. Further, the power procurement plan has also been submitted in the tariff petition.

### 2.12.3 *Commission's Views*

The Commission has given due consideration to the issues raised by the stakeholders and the replies submitted by the Petitioner. The Petitioner should continue to take all possible steps to reduce the arrears, in order to improve its cashflows. However, it is clarified that collection of arrears will not result in tariff reduction, as the tariffs are determined on accrual basis and not on cash basis.

With respect to monthly billing of domestic consumers, the Commission as dealt in Chapter 5 has directed UPCL to issue monthly bills to all its electricity consumers.

## 2.13 Metering and Billing Efficiency

### 2.13.1 *Stakeholder's Comments*

Shri J S Pundir (Retd Lt Col) submitted that in the CAG Audit Report, for FY 2016-17 two aspects being paramount considering the quantum of energy involved and its effect on the stakeholders viz., 'Inadequate meter reading through MRI' and 'Insufficient number of Automatic Meter Reading Instruments' have been highlighted amongst other issues.

Bhartiya Kisan Union, Udham Singh Nagar submitted that despite having meters in working condition, the electricity bills of many agricultural consumers are raised as I.D.F., which is leading to abnormal electricity charges in some cases.

Shri Sunil Kumar Gupta submitted that the domestic consumers are served electricity bills for uneven periods i.e., monthly, bimonthly, sometimes for 34 days, sometimes for 28 days etc. In addition to the fixed charges, energy charges, electricity duty, surcharge arbitrary amounts are included without any justification.

Shri Sunil Kumar Gupta submitted that by not using the Availability Based Tariff (ABT) Meters as per the rules, its purpose is being deliberately thwarted. The frequency linked penalties are also very high which is a concern.

Shri Rakesh Kumar Bhatia submitted that departmental website should be made simple and billing should also be made simple in it. Presently the software for billing is difficult and beyond the understanding of the consumers. Along with the consumers, the department should also be mandatorily equipped with a central metering system. The electricity supply should not be extended without meter. Monitoring arrangements should be made by installing meters on all types of electrical sub-stations from 33 kVA. Also, due to any type of meter defect, the provision of 1-year should be abolished and it should be reduced to 6 months.

Shri Vijay Singh Verma submitted that the Billing cycle of PTW consumers should be on bimonthly basis. RTS-4 category is for PTW connections which is primarily for irrigation purpose, however, agricultural equipment such as cane crusher, rice huller should be included under RTS-4(A).

### 2.13.2 *Petitioner's Reply*

UPCL submitted that the monthly billing of some domestic consumers with contracted load of above 4 kW has been started from the month of October, 2019 and the monthly billing of remaining consumers with such load has been started from November, 2020. Further, the billing of domestic consumers having load up to 4 kW in Electricity Distribution Division, Rishikesh and

Electricity Distribution Division (Central), Dehradun shall be started from April, 2023 in first phase.

Earlier the billing of PTW consumer was done on half yearly basis on the demand of consumers of this category. Now the Commission may take a view on the suggestions of the consumers.

### 2.13.3 *Commission's Views*

The Commission has taken note of various suggestions received from the stakeholders regarding improvement in metering and billing and is of the view that UPCL should consider the suggestions given by the stakeholders to improve its metering and billing system.

With respect to monthly billing of domestic consumers and bi-monthly billing of PTW consumers, the Commission as dealt in Chapter 5 has directed UPCL to issue monthly bills to all its domestic consumers and bi-monthly bills to PTW consumers.

Regarding the suggestion to bill agricultural equipment such as cane crusher, rice huller under RTS-4(A), the Commission is of the opinion that these are used for incidental activities in agriculture and creating separate tariff structure for these activities will lead to multiplicity of connections in the same premise which may lead to disputes and hence, the comment in this regard cannot be accepted.

## 2.14 Open Access

### 2.14.1 *Stakeholder's Comments*

Shri Man Singh of M/s Vista Furnishing Limited (Formerly known as Alps Industries Limited) submitted that the voltage rebate may be extended for Open Access power also. The surcharge and wheeling charges proposed by UPCL on Open Access are high. Such huge charges are making Open Access non profitable and, hence, some relaxations may be given. Also, UPCL is charging Electricity Duty and Green Energy Cess on Open Access power which is incorrect as it is the consumers' own arrangement and, hence, these charges are not to be levied.

Shri Puneet Mohindra of M/s Kashi Vishwanath Steels Pvt. Ltd. submitted that the Open Access charges act as entry barriers for Open Access making it unviable. The Open Access charges have to be reasonable and competitive, which will also drive UPCL to procure power at lower rate.

Shri Pawan Agarwal of Uttarakhand Steel Manufacturers submitted that Uttarakhand is facing power deficit since last year and if UPCL is not able to procure deficit power , the industries in Uttarakhand have to be allowed to buy power through Open Access or bilateral arrangements.

Shri Vineet Kumar Sangal of M/s Kumaun Garhwal Chamber of Commerce and Industry (KGCCI) submitted that UPCL has proposed additional surcharge of Rs. 1.13/unit for the period from April-September 2023. For the same period of FY 2022-23, the additional surcharge was Rs. 1.07/unit . This increase in additional surcharge will impact the open access consumers and, thus, open access would become unviable.

Shri Shakeel Siddiqui of M/s Galwalia Ispat Udyog Pvt. Ltd. and M/s Kashi Vishwanath Textile Mill Pvt. Ltd submitted that the proposed increase in charges by UPCL is on a higher side and may not be approved by the Commission. Rebate/surcharge for availing power supply at voltage higher/lower than base voltage may also be extended to open access consumers at 33 kV and 132 kV voltage levels or the distribution losses may be reduced to 5% for 33 kV and 2% for 132 kV voltage levels.

### 2.14.2 *Petitioner's Reply*

Open access charges are determined separately by Commission in accordance with the provisions of UERC (Terms and Conditions of Intra State Open Access) Regulations, 2015. The Commission vide its Order dated October 19, 2022 approved the additional surcharge of Rs. 1.14/ unit for the period from October 01, 2022 to March 31, 2023. A separate proposal has also been filed before the Commission for approval of additional surcharge of Rs. 1.13/unit for the period from April 01, 2023 to September 30, 2023 as per the provisions of UERC (Terms and Conditions of Intra State Open Access) Regulations, 2015. The Commission has invited comments from the stakeholders on the said proposal of UPCL. The detailed justification in support of levy of additional surcharge has been mentioned in the Petition. As per section 3 of Uttar Pradesh Electricity (Duty) Act (Uttarakhand adaptation and modification) order 2001, State Government is empowered to fix the rates of Electricity Duty to be charged from various category of consumers. Government of Uttarakhand vide its notification no. 79/I/2016-01(3)/01/2003, dated January 25, 2016 has fixed these rates applicable w.e.f. January 01, 2016. Electricity Duty is levied as per the same. The Electricity Duty levied on the consumers is payable by UPCL to GoU. Therefore, the matter may be taken up with GoU. As per Section 4 of the Act, Green Energy Cess upto 10 paise per unit shall be levied on the Electricity supplied to Commercial and Industrial Consumers of the

State. This Cess will be levied, collected and payable by UPCL. As per GoU notification dated June 17, 2015, rate of Cess has been determined as 10 paise per unit. Therefore, the matter may be taken up with GoU. The Petitioner submitted that all taxes levied are paid by the UPCL to the GoU. Therefore, the matter may be taken up with GoU.

UPCL is supplying electricity to all its consumers as per their demand and no consumer is being prevented to exercise the option of procuring power through open access. Further, the open access charges (wheeling charges) has been proposed as per the provisions of the Regulations. The additional surcharge on open access consumers is determined by Commission separately as per provisions of UERC (Terms and Conditions of Intra State Open Access) Regulations, 2015. The levy of Open Access charges is dependent on the ARR claimed by the Petitioner. The computation of the cross-subsidy surcharge, additional surcharge has been done in line with appropriate regulatory framework of UERC.

### 2.14.3 *Commission's Views*

Some of the stakeholders have raised the issues related to Open Access charges and the applicability, which are governed by Uttarakhand Electricity Regulatory Commission (Terms and Conditions of Intra State Open Access) Regulations, 2015 and its amendment thereof. The principles for calculating Transmission/rate charges, wheeling charges, cross-subsidy and additional surcharges and losses have already been specified in the Regulations and are, therefore, worked out on such specified principles. Further, the levy of Electricity Duty and Green Cess does not come under the jurisdiction of the Commission and relates to the Government and accordingly, industries are advised to approach the Government in the matter.

## 2.15 Billable Demand & Fixed Charges

### 2.15.1 *Stakeholder's Comments*

Shri Man Singh of M/s Vista Furnishing Limited (Formerly known as Alps Industries Limited) submitted that UPCL has proposed to increase demand charges for HT industrial consumers from Rs. 430/kVA to Rs. 530/kVA which is an increase of 23.25%. The demand charges may be retained at the same level of FY 2022-23. Also, the billable demand must be changed from 80% of contract load to 75% of contract load.

Shri J S Pundir (Retd Lt Col) submitted that the CAGR of tariff increase for categories RTS- 3, RTS- 4, and RTS -5 is to the tune of ~50 % to ~100% of RTS -1 category. The accelerated growth in the backdrop of energy demand – supply mismatch has serious ramifications as for extra energy the purchase has to be done from outside the State at higher cost. It may thus be considered that the extra energy purchase above the benchmark of an average growth say 4% be charged to categories exceeding the benchmark.

Shri Rajeev Gupta of M/s KVS Castings Private Ltd. and Shri Amber Agarwal of M/s Devarpan Foods Pvt. Ltd. submitted that the proposed increase in demand charges for different voltage levels increases burden on industrial consumers. The Commission may consider reduction of billable demand to 70% from the current level of 80%.

Shri Pawan Agarwal of Uttarakhand Steel Manufacturers submitted that the fixed charges are levied in case of supply is more than the demand. In the present scenario of power deficit and load shedding to the tune of average 6 hours a day, the fixed charges have to be withdrawn and single part tariff has to be levied.

Shri Vineet Kumar Sangal of M/s Kumaun Garhwal Chamber of Commerce and Industry (KGCCI) submitted that the billable demand may be reduced from 80 % of the contracted load to 75% of the contracted load.

Shri Shakeel Siddiqui of M/s Galwalia Ispat Udyog Pvt. Ltd. and M/s Kashi Vishwanath Textile Mill Pvt. Ltd. submitted that the Fixed charges should not be increased. The calculation of billable demand for fixed charge must be on average basis for the whole month instead of peak load of a particular slot of a month.

Shri Kartikay Tomar of M/s PSR Innovations (1) LLP submitted that the small industries in rural areas with power load requirement upto 500 kVA may be extended concession in demand charges and energy charges.

Shri Harinder Kumar Garg and Shri R K Tyagi of M/s SIDCUL Manufacturers Association of Uttarakhand submitted that Section 45(3) of the Electricity Act, 2003, provides for the levy of fixed charges. The fixed charge is billed based on the maximum load recorded in a slot in particular month. The maximum load might be recorded only once in a month but the consumer has to pay the fixed charge calculated on that particular peak load for the whole month. Since FY 2003-04 the fixed charges have increased by almost 161.50%. UPCL has proposed increase of Rs. 35 in fixed charges which may not be approved by the Commission. The billing demand may be considered as 70% of sanctioned load.

Shri Rakesh Kumar Bhatia submitted that for MSME sector industries which come under the category of LT consumers, different tariffs have been approved for 10 kW consumers and for 10-25 kW consumers. The categorization may be rationalized or withdrawn.

Shri Digvijay Singh Bisht of Nainital Hotels and Restaurants Association submitted that the Fixed Charges have to be levied on actual demand and not on sanctioned load. Further, excess actual demand over and above the sanctioned load should not be levied at twice of the normal fixed charges.

### 2.15.2 *Petitioner's Reply*

The Petitioner submits that from entire ARR, all costs except variable power purchase cost from Thermal based power plants (Coal & Gas) are fixed in nature, i.e. Power purchase fixed charges, O&M expenses and Financial Costs will be incurred/claimed in ARR irrespective of the sale of energy. The proportion of fixed and variable cost and revenue for the Petitioner is calculated for FY 2023-24, and has been presented in the Table given below:

**Table 2.2: Proportion of Fixed & Variable Charges for FY 2023-24**

| Particulars | Unit | Details |
|---|---|---|
| Total ARR (excluding recovery of past gap) | Rs. Crore | 9272.91 |
| Less: Variable cost component of Power purchase cost | Rs. Crore | 1855.27 |
| Net Fixed Charges component in ARR | Rs. Crore | 7417.64 |
| Proportion of Fixed Cost in ARR | % | 79.99% |
| Proportion of Variable Cost in ARR | % | 20.01% |
| Total Revenue from Sale of Power (proposed) | Rs. Crore | 10394.48 |
| Fixed/ Demand Charges | Rs. Crore | 1685.08 |
| Energy / Variable Charges | Rs. Crore | 8709.40 |
| Proportion of Fixed / Demand Charges | % | 16.21 |
| Proportion of Energy/ Variable Charges | % | 83.79 |

As can be seen from the above Table, the portion of fixed charge and variable charge in the total ARR is in ratio of 80%:20%, whereas the recovery of revenue from fixed charge and variable charge is in ratio of 16%:84%. Hence, there is a scope for improving the recovery from fixed charges rather than increasing the variable charge. UPCL has to make arrangement to supply power based on the contracted demand, irrespective of the consumption. Hence, the obligation of payment of fixed charges for power purchase arises and ideally all such fixed costs need to be recovered from demand/ fixed charges of consumers, so that the Petitioner is able to manage its cash flow. It is because of such reason reduction in fixed charges may be detrimental to the Petitioner and, hence, undesirable. Further, since the distribution network has to be laid down to meet the peak demand of the consumer, the demand charges are recovered to cover the system cost to meet the peak demand of the consumers. As regards availability of quality power, UPCL has been making consistent efforts to provide uninterrupted power supply to its consumers. The load shedding during FY 2021-22 was only 0.82% of the overall energy demand. No scheduled power cuts are being imposed and rostering is being done only due to emergency conditions.

The total cost of UPCL may be segregated into power purchase cost and other cost. While the majority of expenditure is of fixed nature, therefore, this cost should be recovered through fixed/demand charges. For recovery of this fixed cost billable demand has been approved by the Commission as 80% of the Contracted Load or actual recorded demand during the month, whichever is higher. Reduction in billable demand from 80% to 75% would reduce the recovery of fixed charges which should be avoided in a mandate of two-part tariff. Further, in case demand charges are reduced, the energy charges will have to be increased in order to have the composite tariff equivalent to the cost of supply plus required level of cross subsidy.

UPCL has created its infrastructure for supply of electricity based on the contracted load of the consumers. Further, UPCL also plans for procurement of power based on the contracted load of the consumers. In case of using load more than the sanctioned load, the distribution system of UPCL is affected adversely and, therefore, with a view to discourage such excess load, the fixed charges on the excess load are charged twice the normal rate of the fixed charges.

### 2.15.3 *Commission's Views*

The Commission would like to clarify that the fixed charges component in the ARR have to be incurred by the Petitioner irrespective of the actual electricity consumption of the consumers. The Commission in Chapter 5 of this Order has discussed the same in detail while approving the Fixed/Demand Charges for each Consumer Category.

## 2.16 Continuous Supply Surcharge

### 2.16.1 *Stakeholder's Comments*

Shri Man Singh of M/s Vista Furnishing Limited (Formerly known as Alps Industries Limited), Shri Vineet Kumar Sangal of M/s Kumaun Garhwal Chamber of Commerce and Industry

(KGCCI) and Shri Pravin Ahire of M/s Finolex Cables Ltd. submitted that the Commission had approved the continuous power supply surcharge of 2.5% for FY 2022-23, which was subsequently increased to 15%. The Commission may approve continuous supply surcharge as 2.5%. Also, in case of interruptions in power supply to such consumers, UPCL has to be penalized since it is responsibility of UPCL to arrange power for such consumers.

Shri Shakeel Siddiqui of M/s Galwalia Ispat Udyog Pvt. Ltd. and M/s Kashi Vishwanath Textile Mill Pvt. Ltd. submitted that the continuous supply surcharge should be limited to continuous process industry only, considering the power deficit. Continuous power supply to opting industries should not be at the cost of non-continuous industry by way of unscheduled load reliefs.

### 2.16.2 *Petitioner's Reply*

Para 8.2.1 (1) of the Tariff Policy provides that the consumers willing to avail continuous and quality power supply are required to pay a tariff which reflects efficient costs. This is an additional charge (premium) payable by the consumer to have the facility of availing continuous supply of power. These consumers are exempted from load shedding during scheduled/unscheduled power cuts and during restricted hours of the period of restriction of usages approved by the Commission from time to time. However, load shedding required due to emergency break-down / shut-down is imposed on these consumers as and when the situation arise. For the purpose of ensuring continuous supply, UPCL is required to incur extra infrastructure cost as well as arrangement for additional energy which is at a higher cost.

UPCL submitted that the power purchase cost of the short term sources is generally more than the power purchase cost of the long term sources, and for ensuring the continuous supply to some of the consumers, it has to make additional arrangements for procuring such power during supply deficit scenario or resort to load shedding to other consumers and, therefore, the cost of such additional power needs to be recovered from the consumers availing such benefit.

UPCL submitted that the Uttarakhand State was facing acute shortage of electricity since FY 2022-23 due to various factors vis-à-vis increase in demand, less availability of power in energy exchange because of exceptionally high prices of coal and gas on account of international crisis, shut down of gas based generating stations of the State and sudden climate change in the first quarter of the financial year. UPCL further submitted that even in situation of acute shortage of power, UPCL has been providing continuous supply of electricity to the consumers who have opted for the same and no load shedding is being done for these consumers. UPCL submitted that the cost of short-term power is very high and a portion of the same should be shared by the Industrial consumers who are getting continuous power supply in such a situation of shortage of power. The Commission after scrutiny and due diligence considered the extra ordinary situation and had approved Continuous Supply Surcharge of 15% w.e.f. October 01, 2022 till March, 2023.

Considering the fact that the said situation of shortage and high prices of power will also continue during FY 2023-24, the rate of Continuous Supply Surcharge has been proposed at the same level of 15% of energy charge as is approved by the Commission.

### 2.16.3 *Commission's Views*

As discussed in subsequent Chapters, UPCL is still having shortages in winter months, which are primarily met through short-term power purchase. The issue of continuous surcharge has been dealt in detail by the Commission in Chapter 5 of this Order. **However, UPCL is directed to ensure that consumers opting for continuous supply get uninterrupted supply of electricity except for load shedding required due to emergency break-down/shut-down failing which action may be initiated against it under the Electricity Act, 2003.**

## 2.17 Recovery of Pending Bills

### 2.17.1 *Stakeholder's Comments*

Shri Puneet Mohindra of M/s Kashi Vishwanath Steels Pvt. Ltd. submitted that the delayed recovery of dues by the distribution licensee unnecessarily loads the consumers with additional cost to compensate for that. Financial prudence advocates that the problem of delayed recovery should not be addressed by tariff increase. There are other ways to make short term arrangements like taking working capital finance from banks to meet the gap of timing and after recovery of dues, the working capital loan can be paid off. They can use the Late payment surcharge, recoverable from delayed payers to pay off interest to the banks. The distribution licensee should be directed to resort to this option to tackle delayed recovery of dues and not take the easier route of tariff increase.

### 2.17.2 *Petitioner's Reply*

UPCL submitted that for recovery of outstanding arrears, the connections of defaulting consumers are being disconnected and notices under Sections 3 & 5 of the Uttarakhand (U.P. Government Electricity undertakings (Dues Recovery) Act, 1958) Adaptation and Modification order, 2002 are being issued regularly and the same shall be taken-up more promptly for ensuing early recovery of outstanding arrears.

On default in making the timely payment of electricity bills, consumers are required to pay the delayed payment surcharge @ 1.25% per month. On the other hand on payment of electricity bill within stipulated time, consumers are allowed rebate @ 1.25% subject to a maximum of Rs. 1 Lakh for HT consumers and Rs, 10,000 for LT consumers. UPCL submitted that the amount not realized from the consumers is not added in the ARR and the same is not recovered from the other consumers.

### 2.17.3 *Commission's Views*

The Commission has given due consideration to the issues raised by the stakeholders and the replies submitted by the Petitioner. The Petitioner should continue to take all possible steps to reduce the arrears, in order to improve its cashflows. However, it is clarified that collection of arrears will not result in tariff reduction, as the tariffs are determined on accrual basis and not on cash basis.

## 2.18 Delayed Payment Surcharge

### 2.18.1 *Stakeholder's Comments*

Shri Rajeev Gupta of M/s KVS Castings Private Ltd. and Shri Amber Agarwal of M/s Devarpan Foods Pvt. Ltd. submitted that UPCL is charging different types of LPS – Arrears like LPS, Advance bill LPS, Last month Arrears, LPS Arrears, Previous year Arrears, Current year arrears etc. without giving details of such arrears. Consumers are not provided details of such arrears on their request. The Commission may direct UPCL not to charge such arrears/LPS without giving computation of the same.

Shri Shakeel Siddiqui of M/s Kashi Vishwanath Textile Mill Pvt. Ltd submitted that in Uttarakhand, Late Payment Surcharge (LPS) is being charged on ledger outstanding, thereby compounding the previous month bill in which surcharge was a part. The LPS need to be reduced to 1% per month on the dues.

Shri Harindra Kumar Garg and Shri R K Tyagi of M/s SIDCUL Manufacturers Association of Uttarakhand submitted that the late payment surcharge is charged from the consumers who have delayed the payment of their electricity bills within the due date. There are some issues from UPCL end such as improper circulation of bills and wrong accounting of bills. The Commission may consider the issue of LPS and advise the UPCL authorities to act as per relevant Tariff Orders and Regulations. In case of delay in bills distribution, consumers should be granted grace period and disputed amounts due to wrong accounting shall not be considered for LPS.

### 2.18.2 *Petitioner's Reply*

UPCL submitted that the bills are being generated and delivered to the consumers through email and SMS at the registered E-mail ids/mobile phones as per the directions of the Commission. In case the consumer has failed to make the payment within the due date, late payment surcharge is being levied as per the provisions of the Tariff Order. UPCL submitted that Delayed Payment Surcharge is charged only on the principal amount of the electricity dues and not on the outstanding amount of Delayed Payment Surcharge. Delayed Payment Surcharge is the cost of money not received by UPCL in time. This surcharge is also levied with a view to discourage the consumers who do not pay their bills within due date. Therefore, delayed payment surcharge should not be reduced.

### 2.18.3 *Commission's Views*

The Commission has gone through the comments of the stakeholders and submissions of the Petitioner. DPS is a penalty on the defaulting consumers leviable only in case the consumer is unable to pay, in full, the amount by the due date and hence, the rate should be on a higher side. The Commission has abolished the Grace Period in its Tariff Order dated April 18, 2020 and had directed the Petitioner to ensure that bills are delivered to the consumers on time and due date for payment of bills is specified atleast 15 days from the date of delivery of bills. **Hence, UPCL is once again directed to ensure compliance of the same failing which action may be initiated against it.**

## 2.19 Provision for Bad & Doubtful Debts

### 2.19.1 *Stakeholder's Comments*

Shri Shakeel Siddiqui submitted that the increasing Bad and Doubtful Debts as on March 31, 2022 is Rs. 2297.48 Crore, out of which the amount of more than one year is Rs. 2115.60 Crore.

Hence, focus should be on prepaid metering and connection should be given only after taking Aadhaar and PAN number and inspecting the site.

### 2.19.2 *Petitioner's Reply*

The Petitioner did not submit reply to the issue raised.

### 2.19.3 *Commission's Views*

The issue of the provision for Bad & Doubtful debts has been deliberated by the Commission in Chapters 3 of the Order.

## 2.20 Theft

### 2.20.1 *Stakeholder's Comments*

Shri Shakeel Siddiqui of M/s Kashi Vishwanath Textile Mill Pvt. Ltd. submitted that the main reasons for high losses is unmetered connections and improper energy accounting. Large number of unmetered connections and stopped/defective meters with slow pace of replacement is resulting in lower billing efficiency. Hence, there is a need for proper Energy Accounting and Energy Audit at various levels such as sub-stations (urban as well as rural), distribution feeders and distribution transformers as well as at the consumer end to provide reliable data about the actual levels of technical and commercial losses.

### 2.20.2 *Petitioner's Reply*

The following action are being taken for reduction of distribution losses:

a. Vigilance raids are being conducted and cases are being registered under Sections 126 and 135 of Electricity Act, 2003. Legal proceedings are being initiated against the person(s) who is found indulging in theft of electricity.

b. Mechanical meters are being replaced by electronic meters.

c. Defective Meters are being replaced.

d. LT ABC is being laid in theft prone areas.

e. Automatic Meter Reading is being done of high value consumers.

f. Android based billing has been introduced for improvement in Billing Efficiency.

Further, the Detailed Project Report and Action Plan of the Results linked, Revamped Distribution Sector Scheme approved by Government of India is under consideration for implementation. The said scheme primarily aims for reduction of distribution and AT&C Losses including energy accounting.

### 2.20.3 *Commission's Views*

The Commission has taken note of the concerns raised by the stakeholders and the initiatives taken by UPCL for reducing the theft and losses.

## 2.21 Power Factor Incentive

### 2.21.1 *Stakeholder's Comments*

Shri Shakeel Siddiqui of M/s Kashi Vishwanath Textile Mill Pvt. Ltd submitted that Power Factor Incentive may be approved on similar lines of provisions in States such as Chhattisgarh and Madhya Pradesh.

### 2.21.2 *Petitioner's Reply*

The Petitioner did not submit its response.

### 2.21.3 *Commission's Views*

The Commission has gone through the suggestions of the stakeholder and has duly considered the same while designing and rationalizing the tariff and has discussed the issues in detail in Chapter 5 of this Order.

## 2.22 Tariff Structure

### 2.22.1 *Stakeholder's Comments*

Shri J S Pundir (Retd Lt Col) submitted that in all categories the slab system may be considered to substitute single/fixed tariff rates. It may be considered for all categories at page 136, part 2 of petition under RTS -2: Non-Domestic, for the energy charges to be converted to slab system with first two slabs formed of 50% consumption of average of last six months at the rates as of RTS-1 Domestic consumers, and thereafter slabs formed of 50% of energy consumption over same period on tariff based on RTS-5 for LT category. Also, the whole subsidy flow among the categories may be reflected in the sales statement thus indicating the complete energy revenue spectrum.

Shri J S Pundir (Retd Lt Col) submitted that all new electricity supply demand (new connections), all categories, from April 01, 2023 may be considered to have minimum rate as benchmarked and higher rates scaled proportionately. Meaning there be two tariff rates or more and such difference to continue till the State from its resources bridges the electricity/energy demand - supply gap. Another option is for the State to share the difference till the situation of no demand - supply gap is achieved as State's revenues by each such activity involving new electricity demand is increased.

Shri Basava Vrc Purushottam, Secretary, Fisheries Department, Shri Kapil of Bahadarabad Cooperative Fisheries Jivi Committee, and Shri Nepal Singh Kashyap of District Cooperative Fisheries Development and Marketing Federation Haridwar have submitted a proposal to include fisheries in the separate tariff category (RTS-4A Fisheries). It is necessary to implement the electricity rates for fisheries to be based on agriculture rates so that fish farmers will get the following benefits - Continuous water supply, electricity to lift water from other sources, to reduce financial burden on fishermen, protecting the fish (highly perishable food item) by activities to preservation like a small processing unit, cold storage etc.

Shri Arvind Rana, Shri Manish Jindal, M/s Raja Farm (Bhagwantpur, Kashipur), Shri Dinesh Pant, Shri Jai Prakash, Shri Mohd. Salman, Shri Dheeraj Singh, Shri Yuvraj Talwar of M/s Ashoka Farms (Khatima), Shri Kapil Talwar of M/s Talwar Farms (Khatima), Shri Vineet Agarwal, Shri Aditya Prakash, Shri Suresh Singh, Smt. Shanti Devi, Shri Sukhdev Singh, Shri Nand Rana, Shri Mohd. Yasin, Shri Furkan Ali, M/s Aqua & Agro Farming (Jaspur), Shri Manish Kumar, and other Fish farmers submitted that the electricity tariffs for fisheries should be at par with agricultural tariffs. For fish production from nursery ponds, grow outs / production ponds, bio block tanks, recirculatory aquaculture tanks (RAS) and other types of techniques / ponds, power supply is essential for hatcheries for fish production and fish seed production, for which the prevailing agriculture rates at present is essential for fisheries too and hence, the approval of rates is very important.

Shri Pawan Agarwal of Uttarakhand Steel Manufacturers submitted that UPCL collects 30/- paisa as CSS, 10/- Paisa as Royalty, 50/- paisa as Water Tax and 10/- paisa as Green Cess, which is about Rs. 1500 Crore per year, which is being charged without any reason. Here, Green Cess is also being levied imprudently because when solar based power has already been added to its total power purchase cost at higher rates then there is no justification for taking this additional Green Cess. This Cess, Royalty and Water Tax should be imposed only on those Hydro generated electricity (units) which are being made in Uttarakhand and are being sold directly out of the State. In addition to the electricity duty, levy of Cess, Royalty, and Water Tax separately would be cascading of tax or multiplication of tax.

Shri Divyanshu Bhatt of M/s Bharti Airtel Ltd. submitted that high commercial electricity tariffs are currently being charged on the telecommunication towers which is creating difficulty. Hence, the Commission may categorize telecommunication towers under the industry (General) Tariff Category by prescribing a new sub-category for IT and IT enabled services.

Shri Digvijay Singh Bisht of M/s Nainital Hotels' & Restaurants Association and Vijay Singh Verma submitted that on domestic connections, the electricity tariff on the first 200 units should be extended to the first 400 units. Presently, domestic consumers are paying even more than commercial consumers, as commercial tariff is Rs. 5.90/unit whereas the highest slab of domestic tariff is Rs. 6.55/unit, so this tariff schedule needs to be modified in the interest of consumers. Also, for domestic consumers, the billing should be on monthly basis and not daily basis.

Shri Ajay Bhargava of M/s Hotel Association of Mussoorie submitted that the department charges "Fixed Charges," Electricity Duty, Green Energy Cess apart from the energy charges. In addition to this the energy charges for electric connections of more than 25 kW is charged on kVA basis instead of KW. This is almost 20% more than the energy charges and fixed charges based on kW. It is worth noting that all the calculations right from the load sanction are done in kW by UPCL. The method of calculating the energy charge and other charges on kVA is misleading and unjust. This should be rectified and all the calculations should be done on kW basis only.

M/s Sukkha Singh Virk submitted that some additional charges are being added in the electricity bill like – Fixed Charge, E.D, APPS, Fuel Charge etc. Hence, the Commission may withdraw these extra charges.

Shri A. K. Bajaj and other Residents of Sri Ram Residency, submitted that the Rates for Consumers under "Single point Bulk supply" RTS-1:1.3 must be much lower than that for RTS-1:1.2 as the former is paying for Transformer Losses. Otherwise, Metering System should be made same for all consumers under RTS-1:1.2 and RTS-1:1.3. The Fixed load charges should be based on kW connections for RTS-1:1.3 as are for RTS-1:1.2. The Fixed load charges for RTS-1:1.3 should be same as it is for RTS-1:1.2 for 4 kW and above connections. The Energy Charges basis for both consumers under RTS-1:1.2 and 1.3 should be made same and based on kWh as was prior to FY 2022-23. The Energy Charges for Consumers under RTS-1:1.3 must be lower than for those under RTS-1:1.2 for simple logic that former is paying for Transformer loss.

Shri Rajendra Chaudhary of UKPCC, submitted that a new slab may be created for the domestic consumers with consumption upto 400 units. The agricultural consumers have to be extended free electricity for agriculture activities. Railways/industries are given electricity at cheaper rate than the domestic consumers, which is inappropriate. Also, the families of the soldiers who were martyred in the war should be given some relaxation in electricity rate.

Shri Rakesh Kumar Bhatia submitted that the rates fixed for getting new connections are very high from 26 kW upto 50 kW, which have to be rationalized and UPCL has to bear the cost of the converter. In case of taking connection for 50-100 kW, all the expenses should be borne by UPCL. Only the cost of the converter should be recovered, other expenses should be borne by UPCL. In case of receipt of application for more than 100 kW electrical load, the price can be taken at UPCL level. Also, the maximum time for releasing connection should be 15 days and online system should be implemented. It should be ensured that the new consumer gets all the information through the portal.

Shri Vijay Singh Verma submitted that in RTS-1 Below Poverty Line, energy charges should be revised. In RTS-1, energy charges and fixed charges rate for sub-tariff categories (Domestic) should be uniform with Consumption within 0-100, 100-200 units or else, it will promote the cases of theft of electricity. RTS-4 Category is for PTW Connections which is primarily for irrigation purpose, however agricultural equipment such as Cane-Crusher, Rice-huller equipment should as be included in under RTS-4(A) Category as said equipment have 10 kW or above motor's rating which result in under recovery of Fixed Charges as well as Energy Charges.

Shri Avadhesh Kumar Verma, Chairman, Uttar Pradesh Rajya Vidyut Upbhokta Parishad submitted that the Subsidy in electricity tariff should be allowed to the industries.

Shri Ajay Bhargava and Shri Sanjay Agarwal of M/s Hotel Association of Mussoorie, Shri Deepak Gupta of M/s Uttarakhand Hotels & Restaurants Association submitted that the increase of 26.3% in Fixed Charges of RTS-2 Category from Rs. 95/kVA to Rs. 120/kVA should not be allowed.

The increase of 18.7% in Energy charges of RTS-2 Category from Rs. 5.90/kVAh to Rs. 7.00/kVAh should not be allowed. No Additional Power purchase Surcharge be levied from April 1, 2023 to March 31, 2024.

### 2.22.2 *Petitioner's Reply*

Presently, there are various sub-categories/slabs in non-domestic categories as follows:

**Table 2.3: Sub-categories under Non-Domestic Category**

<table>
<tr><th>S. No.</th><th>Description</th></tr>
<tr><td rowspan="3">1.1</td><td>(i) Government/Municipal Hospitals.<br>(ii) Government/Government Aided Educational Institutions.<br>(iii) Charitable Institutions registered under the Income Tax Act, 1961 and whose income is exempted from tax under this Act.</td></tr>
<tr><td>(a) Upto 25 kW.</td></tr>
<tr><td>(b) Above 25 kW.</td></tr>
<tr><td rowspan="4">1.2</td><td>Other Non-Domestic Users</td></tr>
<tr><td>(a) Small Non-Domestic Consumers with connected load upto 4 kW and consumption upto 50 units per month*.</td></tr>
<tr><td>(b) Others upto 25 kW not covered in 1.2(a) above.</td></tr>
<tr><td>(c) Above 25 kW.</td></tr>
<tr><td>1.3</td><td>Single Point Bulk Supply**</td></tr>
<tr><td>1.4</td><td>Independent Advertisement Hoardings.</td></tr>
</table>

Section 61 of The Electricity Act, 2003 provides as follows:

*"The Appropriate Commission shall, subject to the provisions of this Act, specify the terms and conditions for the determination of tariff, and in doing so, shall be guided by the following, namely:-*

*…………………………………………………………………………….*

*(g) that the tariff progressively reflects the cost of supply of electricity and also, reduces cross-subsidies in the manner specified by the Appropriate Commission*

*……………………………………………………………………."*

As per the above provision, the cross subsidies are required to be reduced progressively. The cross subsidy in domestic category having various slabs was in force since the enactment of the Act and thereafter these cross subsidies are being reduced regularly by the Commission. In case slab system is introduced in other categories, i.e. RTS 2 etc., the level of cross subsidy will be high for the consumers consuming less power, which will be against the provisions of the Act.

The average cost of supply for FY 2023-24 has been estimated by UPCL as Rs. 7.11/unit and, accordingly, energy charge in all slabs of domestic category have been proposed lower than Rs. 7.11/unit except the slab having monthly consumption of 400 units. The rational for having tariff higher than average cost of supply in the slab more than 400 units per month is that on consuming more energy, the effect of cross subsidy is reduced.

UPCL in its Tariff petition has already proposed to cover the fisheries activities in Rate Schedule RTS 4A. Para 5.6 of the Petition reads as follows:

> *"As per the announcement no. 298/2022 made by the Hon'ble Chief Minister, Uttarakhand on 10.07.2022, the usage of electricity for the purpose of "Fisheries" shall be charged at the rates applicable for the agricultural activities. Accordingly, the Petitioner proposes that the usage of electricity for the purpose of "Fisheries" may be covered under the rate schedule RTS 4A: Agricultural Allied Activities."*

The Cess and Royalty are levied on the saleable energy generated from the existing hydro power projects of the State Government under UJVN Limited which are under Commercial Operation for more than 10 years and whose cost of electricity generation is not more than Rs. 2 per unit. The rate of Cess and Royalty is Rs. 0.30 per unit and Rs. 0.10 per unit respectively. These Cess and Royalty is levied by UJVNL in its electricity bills which has to be paid by UPCL. Finally, the amount of Cess and Royalty is payable to GoU by the collecting agency. The Cess and Royalty is part of the power purchase of UPCL and should be allowed in its ARR.

The Water Tax is levied to avail the facility to draw water from any sources for generation of electricity in Uttarakhand under the provisions of the Uttarakhand Water Tax on Electricity Generation Act, 2012. The water tax is imposed by Irrigation department on UJVNL and UJVNL includes the same in its electricity bills which has to be paid by UPCL. Finally, the amount of water tax is payable to GoU by the collecting agency. The water tax is part of power purchase of UPCL and should be allowed in its ARR.

As per Section 4 of the Act, Green Energy Cess upto 10 paise per unit shall be levied on the Electricity supplied to Commercial and Industrial Consumers of the State. This Cess will be levied, collected and payable by UPCL. As per GoU notification dated June 17, 2015, rate of Cess has been determined as 10 paise per unit. UPCL is levying the Green Energy Cess as per provisions of the Act.

UPCL submitted that the following is mentioned in the Report of the Working Group on Preferential Tariff for Telecom Towers issued by Forum of Regulators in August, 2016:

*"Para 3.2.2 (c): In Bharat Sanchar Nigam Limited & anr Vs Union of India & Ors reported in (2006) 3 SCC 1, the Hon'ble Supreme Court considered the nature of the transaction by which mobile phone connection is made available by the telecom company to the consumers, namely, whether it is carrying out any process of manufacturing of goods or supply of any goods (and is an industry). The Hon'ble Apex court held that it was simply rendering service to customers."*

*"Para 3.2.2 (b): In the order dated 16.08.2007 of the Hon'ble Appellate Tribunal of Electricity (APTEL), Appeal no. 50 of 2007 & IA No. 90/07 & Appeal no. 80 of 2007 it is highlighted that only the consumers involved in the activity of manufacturing of goods are to be considered and billed as industrial units. Therefore, Telecom tariff is not to be considered under industrial category by the States."*

*"Para 4.2: From the point of view of Tariff policy and the Electricity Act 2003, providing special category for telecom towers would be in violation of the right to equality guaranteed by Article 14 of the Constitution of India."*

The Commission may consider the request of the consumer in view of the above provisions mentioned in the report.

UPCL submitted that the monthly billing of some domestic consumers with contracted load of above 4 kW has been started from the month of October, 2019 and the monthly billing of remaining consumers has been started from November, 2020. Further, the billing of domestic consumers having load upto 4 kW in Electricity Distribution Division, Rishikesh and Electricity Distribution Division (Central), Dehradun shall be started from April, 2023 in first phase.

Section 45 (3) of the Electricity Act, 2003 provides for levy of Fixed Charge in addition to the Energy Charge for Electricity Supplied. In case fixed charge is not levied the same will be merged into energy charges and the energy charges will be increased accordingly. Further, Electricity Duty is levied as per section 3 of Uttar Pradesh Electricity (Duty) Act (Uttarakhand adaptation and modification) order 2001. UPCL collects the electricity duty on behalf of Government of Uttarakhand and is required to pay the same to them. As regards levy of additional power purchase surcharge, UPCL submitted that the State of Uttarakhand is facing acute shortage of electricity since start of the current financial year due to various factors, i.e. increase in demand, less availability of power in energy exchange because of exceptionally high prices of coal and gas on account of International crises, shut down of gas based generating stations in the State having capacity of 321

MW, sudden climate change in the first quarter of the current financial year and boosting of economy after Covid–19 crises all over India. UPCL had estimated an additional outlay of Rs. 1355 Crore over and above the power purchase cost approved by the Commission for FY 2022-23 and, accordingly, filed a Petition before the Commission for recovery of the same but the Commission had provisionally allowed recovery of Rs. 379.06 Crore. UPCL is charging APPS as per the Orders issued by the Commission. The said APPS has not been proposed for FY 2023-24.

UERC Tariff Regulations, 2021 provides for recovery of fuel charge adjustment. Regulation 83 (3) provides as follows:

> *"The FCA charge for the quarter shall be computed within 15 days of quarter end and shall be charged for the quarter from the first month of second quarter itself, without prior approval of the Commission and under or over recovery shall be carried forward to the net quarter."*

UPCL charges FCA as per provisions of the above Regulations.

Providing subsidy in electricity tariff is the sole discretion of the State Government. In case State Government wants to give any concession to any category, it may give direct subsidy to that category as provided under section – 65 of the Electricity Act, 2003.

On the demand of various consumers representatives, UPCL vide its Office Memorandum dated January 21, 2022 ordered for adjustment of slabs of domestic categories based on number of days with the approval of UERC. The example is as follows:

**Table 2.4: Adjustment of Domestic Slabs**

| Electricity usage Fixed Slab | Adjusted Slab as per consumption period of 50 days | |
|---|---|---|
| 0 to 100 Unit Per Month | 100 / 30.417 x 50 | 0 to 164.38 Unit |
| 101 to 200 Unit Per Month | (200 / 30.417 x 50) – 164.38 Unit | 164.39 to 328.76 Unit |
| 201 to 400 Unit Per Month | (400 / 30.417 x 50) – 328.76 Unit | 328.77 to 657.53 Unit |
| 400 and above Unit Per Month | | 657.53 Unit and above |

Further, the fixed charges were also be recovered based on the number of days of consumption as follows:

$$\frac{\textit{Rate of fixed charge p.m. x number of days of consumption}}{\textit{30.417 days}}$$

It was also ordered that the interval of reading of domestic consumers shall be 55 – 65 days in case of bimonthly billing and 25-35 days in case of monthly billing.

Further, the methodology for charging of fixed charges in domestic consumers was revised vide UPCL's O.M. No. 4475/UPCL/RM/F-4, dated 31-10-2022 as per direction of UERC.

### 2.22.3 *Commission's Views*

The Commission has gone through the suggestions of the stakeholder and has duly considered the same while designing and rationalizing the tariff and has discussed the issues in detail in Chapter 5 of this Order.

Matter of providing subsidized/free electricity relates to the Government and the consumers may approach the Government in this regard. Further, as discussed in Chapter 5 of the Order, Fisheries have been included in RTS-4A. Matter of Cess, royalty etc. pertains to the State Government and the consumers can approach the Government in this regard.

With respect to monthly billing of domestic consumers, the Commission as dealt in Chapter 5 has directed UPCL to issue monthly bills to all its electricity consumers.

Moreover, some consumers have compared the energy charges of the highest slab of domestic consumers with industries and Railways and contended that they are paying cheaper tariffs as compared to the domestic consumers. In this regard, they have ignored the fixed charges being levied on the consumers. The effective tariff of Railways and industries are higher than the domestic tariffs.

Issue of covering incidental activities in RTS 4A instead of RTS 4 has already been discussed above and is not being reiterated. Levy of Fixed charges has been dealt in detail in Chapter 5 of this Order.

## 2.23 Street Light Dues and Maintenance

### 2.23.1 *Stakeholder's Comments*

Shri Vijay Singh Verma submitted that the public lamps and street light of Gramsabha and other area should be billed in the appropriate tariff category.

### 2.23.2 *Petitioner's Reply*

UPCL submitted that the responsibility to operate and maintain the street light lies with the Municipal Corporation (local body) of respective cities and UPCL has no jurisdiction over such matter. The Commission in its Tariff Order dated February 27, 2019 at para 2.37.1.3 has held in the matter as follows:

> *"The Commission is of the view that street lighting/public lamps system is the responsibility of the local bodies namely Municipal Corporations, Panchayats etc. and these local bodies have elected public representatives as their heads and the staffs in these bodies are primarily Government employees. In case local bodies decides to handover operation & maintenance of the above system to UPCL, it conducts the operation and maintenance of street light/public lamp system as an agency to these local bodies and material cost incurred is borne by these local bodies while UPCL is entitled for labor charges to be recovered by these local bodies. It is for these bodies and the Government to decide amongst themselves as to who would be making payments for electricity consumed by them."*

### 2.23.3 *Commission's Views*

The Commission is of the view that street lighting/public lamps system is the responsibility of the local bodies namely Municipal Corporations, Panchayats, etc. and these local bodies have elected public representatives as their heads and the staffs in these bodies are primarily Government employees. In case local bodies decides to handover operation & maintenance of the above system to UPCL, UPCL conducts the operation and maintenance of streetlight/public lamp system as an agency to these local bodies and material cost incurred is borne by these local bodies while UPCL is entitled for labour charges to be recovered by these local bodies. It is for these bodies and the Government to decide amongst themselves as to who would be making payments for electricity consumed by them. However, the billed amount have to be paid to UPCL.

## 2.24 Vigilance Cell

### 2.24.1 *Stakeholder's Comments*

Shri J S Pundir (Retd Lt Col) submitted that in the proposed manpower increase in FY 2023-24 of 503 may be considered to bolster the vigilance organization for better average billing ensuring that electricity provided is to legitimate consumers and correct in category with minimum distribution loss.

Shri Ajay Bhargava and Shri Sanjay Aggarawal of M/s Hotel Association of Mussoorie submitted that strict vigilance should be kept on the material purchases done by UPCL. The suppliers providing inferior quality of material should be blacklisted and the concerned employees should be punished for the involvement in such activities.

#### 2.24.2 *Petitioner's Reply*

UPCL has submitted a detailed plan to the Commission.

#### 2.24.3 *Commission's Views*

The Commission has taken note of the concerns raised by the stakeholders and the initiatives taken by UPCL for reducing the theft and losses.

## 2.25 Cross Subsidy

#### 2.25.1 *Stakeholder's Comments*

Shri Pawan Agarwal of Uttarakhand Steel Manufacturers submitted that the Snowbound & Hill Domestic consumers and 100 units per month consumers (poor) should only be allowed cross subsidy. Their electricity rate should be fixed at 10% less than the voltage wise cost of supply. The subsidy amount given to these above consumers (that too as per the framework of the National Tariff Policy) should be loaded on commercial and industrial consumers only. All the remaining consumers should have electricity rates fixed at par on their voltage wise cost of supply.

Shri Vineet Kumar Sangal of M/s Kumaun Garhwal Chamber of Commerce and Industry (KGCCI) submitted that UPCL has proposed the increase of cross subsidy to Rs. 0.70/unit. This increase in cross subsidy will decrease the opportunity of the consumer to procure power from open access market.

Shri Avadhesh Kumar Verma submitted that if the State Government gives subsidy of Rs. 1500 Crore then the gap of Rs. 1507 Crore for FY 2023.24 would be met and there will be no need to increase the electricity rates in the State of Uttarakhand.

Shri Rakesh Kumar Bhatia submitted that while estimating the price of electricity for different categories of consumers in the State, it has to be borne in mind that the determination of the price should be 20 percent lower or higher relative to the purchase price.

Shri Shakeel Siddiqui submitted that there is a continuous increase in the rate of cross subsidy. According to the Electricity Act and Policy, the rate of cross subsidy should not increase or decrease, so it should end by decreasing every year with time.

### 2.25.2 *Petitioner's Reply*

UPCL has proposed Cross subsidy surcharge in line with the provisions of Tariff Policy, 2016 and the UERC (Terms and Conditions of Intra State Open Access) Regulations, 2015 and its subsequent amendments. Cross subsidy surcharge is computed by reducing the average tariff from the tariff of the category. As such cross-subsidy surcharge for HT Industrial consumers and for non-Domestic consumers is proposed @ 0.70 Rs. /kWh and Rs. 1.23/kWh respectively.

### 2.25.3 *Commission's Views*

The Commission has been designing the tariffs for previous years with gradual reduction in cross subsidies and similar approach has been followed while designing the tariffs for FY 2023-24 as deliberated in Chapter 5 of the Order.

## 2.26 Review of peak hours

### 2.26.1 *Stakeholder's Comments*

Shri Pawan Agarwal of Uttarakhand Steel Manufacturers submitted that under RTS-5 category, there should be equality in peak hours in electricity tariff, i.e. whether it is winter or summer, peak hours should not be more than 4 hours per day only for evening but currently peak hours are for 6 hours in winter and 5 hours in summer. Also, the rate of peak hours should not be more than 20% of the normal rate, while here it is 30%.

Shri Sanjay Kumar Adhlakha of M/s Ambashakti Glass India Pvt. Ltd. submitted that the peak load time of morning hour was changed in last year's tariff, which was done from 06:00 am to 08:00 am, but the calibration in the meter has not happened till date. Request was made to UPCL's Executive Engineer, SDO Distributor, AE (Meter), AE (R). The information was also sent by the post, but no information has been received yet. Due to this, Peak Load Tariffs are being paid for about one and a half hours, instead of normal hours. The arrear for the same should allowed to be adjusted in February or March bill.

### 2.26.2 *Petitioner's Reply*

The peak hours are decided as per the peak demand during the season. During winters, the demand goes on peak in the morning also and, therefore, morning peak hours have been kept in the winter season whereas there is no peak in the morning during summer season, therefore, no morning peak hours have been kept during summer season. Similarly, the evening peak hours have been decided keeping in view the peak demand during different time slots in summer season and winter season.

The Commission in its Tariff Order dated March 31, 2022 has reduced the peak hours surcharge from 50% to 30%. Considering the deficit situation and high prices of power in the market, this surcharge should not be reduced further.

Considering the practical difficulties being faced by UPCL, the Commission allowed UPCL to continue the ToD slots as were applicable as on March 31, 2022. As the said difficulties will also exists during the ensuring year, UPCL has proposed to continue the same ToD slots .

### 2.26.3 *Commission's Views*

The Commission has gone through the suggestions of the stakeholder with respect to the peak hours and has duly considered the same while designing and rationalizing the tariff and has discussed the issues in detail in Chapter 5 of this Order.

## 2.27 Industrial Feeder/Voltage Rebate

### 2.27.1 *Stakeholder's Comments*

Shri Man Singh of M/s Vista Furnishing Limited (Formerly known as Alps Industries Limited) submitted that presently voltage rebate on 132 kV & 33 kV are 7.5% and 3.5% respectively. The same have to be increased to 10% and 5% respectively.

Shri Rajeev Gupta of M/s KVS Castings Private Ltd. submitted that the high voltage rebate approved by the Commission has to be reviewed and increased for from 7.5% to 12% for 132 kV connection.

Shri Kartikay Tomar of M/s PSR Innovations (1) LLP submitted that special concession should be given to the industries of 100 kVA to 1000 kVA electrical load capacity, because connections are taken by them through 11 kV line and the consumers must bear the losses of the transformer. Considering the problem of rural industries, the Commission may direct UPCL to take necessary action for the construction of industrial feeders for such consumers.

Shri Shakeel Siddiqui of M/s Kashi Vishwanath Textile Mill Pvt. Ltd submitted that as the cost to serve at a higher voltage is lower than the cost to serve at a lower voltage, therefore, the rebate on energy charges to the consumers getting supply at HT voltages should be provided. Also, Rebate @ 50 paisa to all the consumers getting supply at 132 kV and above, and @ 30 paisa to all consumers getting supply at 33 kV and above to be considered.

Shri Harindra Kumar Garg and Shri R K Tyagi of M/s SIDCUL Manufacturers Association of Uttarakhand submitted that the cost of service to HT consumer connected at high voltage is much less than the average cost of supply, since the distribution losses are very much less in comparison to low voltage consumers. For 33 kV the rebate should be at least 5% and for 132 kV it should be 12% of energy charges. The Commission may withdraw the continuous supply surcharge and reduce the same to 2.5% of energy charges. Keeping balancing approach UPCL has to compensate at the same rate to continuous power consumers if the electricity supply is interrupted because of DISCOM.

### 2.27.2 *Petitioner's Reply*

High Voltage Rebate is admissible on the Energy Charges. As no energy charges is payable on the Open Access Energy, allowing rebate on Open Access Energy does not arise. Rebate for taking supply at higher voltage was revised by the Commission in its Tariff Order dated April 10, 2014 from 1.5% to 2.5% and 5% to 7.5% for taking supply at 33 kV and 132 kV and above respectively. Further, the said rebate was revised by the Commission vide its Order dated March 31, 2022 from 2.5% to 3.5% for taking supply at 33 kV.

UPCL submitted that presently, voltage wise / category wise losses are not available and Category wise Tariffs have been proposed on the basis of average cost of supply and permissible level of cross subsidy. This is as per Regulation 91 of the UERC Tariff Regulations, 2021. In the absence of availability of voltage wise losses, which is a mix of technical losses and commercial losses, the distribution losses are required to be charged on the average basis from all category of consumers as well as open access consumers.

### 2.27.3 *Commission's Views*

In the absence of voltage wise losses, exact voltage wise rebates to be passed on to the consumers cannot be ascertained. The Commission in its last Tariff Order had increased the voltage wise rebates to the industrial consumers.

## 2.28 Load Shedding

### 2.28.1 *Stakeholder's Comments*

Shri Rajeev Gupta of M/s KVS Castings Private Ltd. and Shri Amber Agarwal of M/s Devarpan Foods Pvt. Ltd. submitted that despite the additional energy charges @ 0.62/-per unit levied on consumers w.e.f. September 01, 2022 the distribution licensee has failed to supply regular power to the industry forcing shutdowns leading to layoffs and financial losses.

Shri Rajeev Gupta of M/s KVS Castings Private Ltd. submitted that the Steel Industries in Uttarakhand are paying more energy charges than their major competitors in Uttar Pradesh and still they are getting more than 20 hours average power supply. The Commission may direct UPCL to manage the power procurement and supply so that all types of consumers should feel satisfied. In case there is a power cut, then UPCL should make more than one slot of power cut in a day and the same should be communicated to Steel consumers well in one day advance.

Shri Puneet Mohindra of M/s Kashi Vishwanath Steels Pvt. Ltd. submitted that the APPSC was levied because the distribution licensee claimed that its power purchase cost has increased and it must procure power from outside to ensure regular supply. Despite the said additional levy, the distribution licensee has failed to supply regular power to the industry forcing shutdowns leading to layoffs and financial losses. The distribution licensee is resorting to unscheduled / unannounced power cuts. In such a situation, production unit cannot plan its production schedule and plant maintenance activities. The power management by UPCL is to be checked for prudence, there seems to be no proper and effective planning and for which, the industries are unjustly penalized.

Shri Pawan Agarwal of Uttarakhand Steel Manufacturers submitted that there has been power cuts currently to the tune of 6 to 8 hours per day on an average basis and that too without any pre-fixed time. Therefore, if the electricity rates applicable at present are calculated based on this deduction, then it costs the big industries about 30/- paisa more per unit because it affects the fixed expenses of the industry.

Shri Shakeel Siddiqui of M/s Galwalia Ispat Udyog Pvt. Ltd. and M/s Kashi Vishwanath Textile Mill Pvt. Ltd submitted that the consumer is always unaware of the duration of power cut. UPCL needs to share its load shedding planning on advance basis and not on immediate basis. It should be shared on weekly basis in advance on the duration of the power cut so that operations can be planned accordingly. UPCL needs to compensate in fixed charges in proportion of supply to the consumer on daily basis. There needs to be a minimum guarantee of supply on per day basis. Since when there is no supply why the consumer needs to pay fixed charges.

Shri Sanjay Kumar Adhlakha of M/s Ambashakti Glass India Pvt. Ltd. submitted that there has been increase in electricity rates up to three times in the previous year. Even after that, there is no visible improvement in the electricity supply. If rostering occurs then it is unscheduled and if rostering doesn't occur then there is unscheduled shutdown which is scheduled two days in advance. The message of shutdown is never received from UPCL before a week.

Shri Pravin Ahire of M/s Finolex Cables Ltd. submitted that despite paying for continuous power the industries are facing frequent power trippings from last one year. One hour power tripping is equivalent to Rs. 25 lakh production loss (approx.). Also, one power fluctuation leads to two hours of production loss due to continuous process. Considering above facts, continuous charges may be reduced from 15.0% to 2.5%. Also, the tariff may be moderately increased this year (to the tune of 0.2% To 0.5 %) so that energy cost does not affect product cost.

Shri Vineet Kumar Sangal of M/s Kumaun Garhwal Chamber of Commerce and Industry (KGCCI) submitted that as per ARR presented by UPCL, the consumption of HT consumers is increasing compared to last year consumption but industries which are not sanctioned continuous power supply or have not opted for continuous power are unsatisfied with the day to day power supply because they are suffering from huge unscheduled power rostering. UPCL is supplying available power to the continuous power industries only.

Shri Shakeel Siddiqui submitted that at the time of power roasting, at least 10 percent energy should be given for administrative and auxiliary equipment.

### 2.28.2 *Petitioner's Reply*

UPCL submitted that the State of Uttarakhand is facing acute shortage of electricity since start of the current financial year due to various factors, i.e. increase in demand, less availability of power in energy exchange because of exceptionally high prices of coal and gas on account of International crises, shut down of gas based generating stations of the State having capacity of 321 MW, sudden climate change in the first quarter of the current financial year and boosting of economy after Covid – 19 crises all over India. This shortage is expected to be continued to the certain limit in FY 2023-24.

With a view to meet the deficit situation, UPCL is exploring all the opportunities to buy power from all the sources at the lowest rates to meet the demand of electricity of the consumers of the State.

The year wise consumption of HT Industry is as follows:

2018-19 : 6355.76 MU
2019-20 : 6105.24 MU
2020-21 : 5451.85 MU
2021-22 : 6212.16 MU

The consumption in FY 2019-20 and 2020-21 had reduced due to Covid – 19 crises and, thereafter, the consumption has an increasing trend.

As regards the availability of quality power, UPCL has been making consistent efforts to provide uninterrupted power supply to its consumers. The load shedding during FY 2021-22 was only 0.82% of the overall energy demand. No scheduled power cuts are being imposed and rostering is being done only in emergency conditions.

As regards levy of additional power purchase surcharge, it is submitted that the State of Uttarakhand is facing acute shortage of electricity since start of the current financial year due to various factors, i.e. increase in demand, less availability of power in energy exchange because of exceptionally high prices of coal and gas on account of International crises, shut down of gas based generating stations of the State having capacity of 321 MW, sudden climate change in the first quarter of the current financial year and boosting of economy after Covid – 19 crises all over India. UPCL had estimated an additional outlay of Rs. 1355 Crore over and above the power purchase cost approved by the Commission for FY 2022-23 and for recovery of the same it had filed a petition before the Commission but the Commission vide its order dated 28-09-2022 provisionally allowed UPCL recovery of Rs. 379.06 Crore only.

As far as possible, prior information is given for shutdowns.

### 2.28.3 *Commission's Views*

In this regard, the Commission in its Tariff Order dated April 18, 2020 has already directed the Petitioner to obtain prior approval of the Commission for load shedding to be carried out continuously for certain number of hours in a day for 15 days or more. Further, UPCL needs to ensure that load shedding is eliminated so that consumers are not impacted due to intermittency of supply and in case UPCL has to carry out load shedding prior information should be provided to all the industrial consumers being so affected. However, with respect to allowing the usage of 15% power during load shedding period, the Commission has dealt with this issue in Chapter 5 of this Order. **UPCL is directed to ensure that consumers opting for continuous supply get uninterrupted supply of electricity except for load shedding required due to emergency break-down/shut-down failing which action may be initiated against it under the Electricity Act, 2003**.

## 2.29 Voltage-wise Cost of Supply

### 2.29.1 *Stakeholder's Comments*

Shri Rajeev Gupta of M/s KVS Castings Private Ltd. submitted that earlier the Commission had directed UPCL to submit voltage wise cost of supply in the ARR & tariff proposals but UPCL is not complying with the same.

Shri Shakeel Siddiqui of M/s Galwalia Ispat Udyog Pvt. Ltd. and M/s Kashi Vishwanath Textile Mill Pvt. Ltd. submitted that the Tariff has to be determined voltage wise/category wise.

### 2.29.2 *Petitioner's Reply*

Presently, voltage wise / category wise losses are not available and Category Wise Tariff has been calculated on the basis of average cost of supply and permissible level of cross subsidy. This is as per Regulation 91 of the UERC Tariff Regulations, 2021. In the absence of availability of voltage wise losses, which is mix of technical losses and commercial losses, the distribution losses are required to be charged on an average basis from all category of consumers as well as open access consumers. Further, considering the fact that losses at higher voltage are on lower side, rebate in energy charge @ 3.5 % to the consumers getting supply at 33 kV and 7.5% to the consumers getting supply at 132 kV and above has been approved by the Commission. In such a situation, it does not seem appropriate to further segregate voltage level for the purpose of providing rebate. However, if the Commission decides to provide the benefit of higher voltage supply rebate to the consumers; the impact of the same may be considered in ARR and to ensure revenue neutrality for UPCL.

### 2.29.3 *Commission's Views*

The Commission has taken note of the concerns raised by the stakeholders. In this regard it would be relevant to mention that not only voltage wise losses are required for fixing voltage wise tariffs but segregation of voltage wise costs is also essential for the same. However, to compensate voltage wise losses, voltage wise rebates have been allowed to the industrial consumers. Accordingly, the Commission once again directs UPCL to compute Voltage-wise losses & also segregate voltage wise costs for each category of consumers and submit the data on voltage-wise losses and cost of supply along with next Tariff Petition failing which action may be initiated against it.

## 2.30 Load Factor based Tariff

### 2.30.1 *Stakeholder's Comments*

Shri Shakeel Siddiqui of M/s Galwalia Ispat Udyog Pvt. Ltd. submitted that UPCL may determine less rates for high load factor and high rates for low load factor to promote energy consumption by HT industries who are the maximum contributor of revenue to UPCL.

### 2.30.2 *Petitioner's Reply*

The Petitioner in its tariff proposal for FY 2021-22 had proposed lower tariff for higher load factor and vice versa, but the Commission did not accept the proposal of UPCL and continued with its previous approach, i.e. Higher energy charge for Low Load Factor and vice versa. The Commission in its Tariff Order dated April 26, 2021 at para 5.1.3.5 held as follow in the matter:

*"The two-part tariff tends to encourage high consumption as the same reduces the effective per unit composite rate. Accordingly, to correct this, tariff also needs to increase in a manner so as to achieve a near uniform composite rate. To achieve this, demand and energy charges will have to increase with every small increase in contracted demand or load utilization percentage. Although theoretically possible, such an approach would make the tariffs too complex, incomprehensible and will pose serious problems in implementation. There is, therefore, a trade-off between the simplicity of the tariff structure and precision in correcting the above distortion. The Commission's attempt has been to strike a balance between the two by choosing a uniform rate of demand charge and different rates of energy charges linked to the consumption levels represented by the Load Factor."*

### 2.30.3 *Commission's Views*

This issue had been dealt in detail by the Commission in the in-house paper issued during the MYT Order for the Second Control Period. Since, the marginal cost of power is higher than the average cost of power, therefore, to have cost reflective tariffs, the energy charges should increase with load factor. Further, the Commission has deliberated on this issue in detail in Chapter 5 of the Order.

## 2.31 Consumer Security Deposit

### 2.31.1 *Stakeholder's Comments*

Shri Rajeev Gupta of M/s KVS Castings Private Ltd., Shri Amber Agarwal of M/s Devarpan Foods Pvt. Ltd., and Shri Kartikay Tomar of M/s PSR Innovations (I) LLP submitted that the facility of giving bank guarantee of the security amount should be made available to the consumers.

Shri Shakeel Siddiqui of M/s Kashi Vishwanath Textile Mill Pvt. Ltd submitted that the LT/HT consumers should be provided with prepaid meters and security need not to be charged. UPCL may be directed to take bank guarantee as security instead of cash security. UCPL need to provide interest @ 8-10% which is the current rate of finance available to the industry. The Act also leaves it to Commission to decide the bank rate or more.

Shri Girish Joshi of Youth Cell, Pithoragarh, submitted that the domestic consumers are charged with Additional Security deposit every month, but are being provided with electricity bill after two months. This calculation is resulting in the consumers paying more to the utility. Hence, the monthly Additional Security deposit may be withdrawn and domestic bill should be given on a monthly basis.

Shri T. N Pant submitted that many types of expenses are recovered at the time of electricity connection. The interest given on the security amount remains at the discretion of the electricity department, when it should be given and the interest should be provided at the interest received on fixed deposit. Hence, the demand for additional security is imprudent.

Shri K. G. Behl of All India Consumer Council, Uttarakhand, submitted that in the current electric bills a new element of Security Charges are being recovered. The security charge is fixed and charged in the beginning when the load of electricity is sanctioned.

Shri Shakeel Siddiqui submitted that at present, there is a provision to take double the amount of the average bill for the year as security and interest is paid on it at the bank rate. It is requested that in lieu of the amount of security, the bank guarantee and the interest rate should be at least 10 percent, which is taken by the bank on the loan. Industries suffer double loss. And they deposit security by taking loan from the bank, whose interest rate is about 10 percent and the rate of interest received is only 4.5 percent.

### 2.31.2 *Petitioner's Reply*

Security deposits is received from the consumers to securitize the credit sales made by the distribution licensee. In case a consumer defaults in making the payment of his electricity bills, the recovery of such electricity dues may be made by adjusting the security deposit of the consumer. As regards mode of payment of security deposit, the Regulation 4.2 (2) of the UERC (The Electricity Supply Code, Release of New Connections and Related Matters) Regulations, 2020 is relevant to be quoted which clearly specified that the amount of additional security deposit shall be in the form of Cash/ DD/ RTGS/ NEFT or any other Electronic mode accepted by distribution licensee. As regards applicability of interest on security deposits, it is submitted that DPS is not a source of income for UPCL but a penalty mechanism to defer the consumers from defaulting in payments of their bill on time and hence, interest on security deposits cannot be equated with DPS.

Further, the Commission in its Tariff Order dated March 31, 2022 at Para 2.39.3 held as follows in the matter:

> "*The Commission is of the view that the issues raised regarding mode of payment of Security Deposit are governed by the provisions of the Supply Code Regulations and, hence, cannot be modified through Tariff Order. Further, it is to be recognized that DPS is not a source of income for UPCL, but a penalty mechanism to deter the consumers from defaulting in payments of their bill on time and hence, interest on security deposits and DPS cannot be equated.*

Interest on security deposits is being allowed by UPCL as per the Commission's Order dated July 27, 2007. The Commission vide the said Order had directed UPCL to pay interest on security deposits at the bank rate, as notified by Reserve Bank of India u/s 49 of the Reserve Bank of India Act, 1934 as on 1st April of the Financial Year for which interest is due. In case interest on security deposits is increased the same shall also be passed on to the consumers and the tariff of the consumers will increase.

The provisions of UERC (The Electricity Supply Code, Release of New Connections and Related Matters) Regulations, 2020 provides for review of security deposits based on consumption / billed amount of the previous year. In case the required security deposit is less than the security deposit of the consumer, UPCL is required to raise demand for the same to the consumers. Accordingly, the demand of additional security deposits is being raised on the consumers as per the provisions of the Regulations.

#### 2.31.3 *Commission's Views*

The Commission is of the view that the issues raised regarding mode of payment of Security Deposit are governed by the provisions of the Supply Code Regulations and, hence, cannot be modified through Tariff Order. The levy of security deposit and additional security deposits have been allowed under the Act and Regulations of the Commission and the Regulations also provides when additional security deposit can be demanded and the manner of adjustments of interest on security deposit. The Commission has provided that the interest on security deposit will be at the band rate, which at present is 6.75%. Further, it is to be recognised that DPS is not a source of income for UPCL, but a penalty mechanism to deter the consumers from defaulting in payments of their bill on time and hence, interest on security deposits and DPS cannot be equated.

With respect to monthly billing of domestic consumers, the Commission as dealt in Chapter 5 has directed UPCL to issue monthly bills to all its electricity consumers.

### 2.32 Promotion of Prepaid Meters

#### 2.32.1 *Stakeholder's Comments*

Shri J S Pundir (Retd Lt Col) submitted that the rebate as proposed at para 9 'Prepaid Metering', page 130 of Part 2 of the Petition under head Proposed rate schedule for FY 2023 -24 for RTS -1 category be linked for adjustment to the yearly revision of energy tariff.

Also, the proposed Material Security Deposit viz Rs 5,000/- for single phase and Rs 10,000/- for three phase meters is steep. Option for grant from State and other agencies may be explored to in the least have the deposit money brought to half. Consumers with good electricity bill payment history, say over a period of 1- 2 years, may be incentivized by the MSD deposition over a year through the usual electricity bill.

Shri Shakeel Siddiqui of M/s Galwalia Ispat Udyog Pvt. Ltd. and M/s Kashi Vishwanath Textile Mill Pvt. Ltd. submitted that the option of prepaid meter may be a good tool for UPCL to recover its amount in advance, hence the same needs to be promoted. It can be a good check in curbing bad debts too. The same needs to be promoted for all categories of consumers including HT/LT consumers. UPCL needs to give the targets in how much time it will achieve pre-paid meters in the coming years and getting benefited from the Central Scheme.

### 2.32.2 *Petitioner's Reply*

As regards material security, it is submitted that proposed material security has been decided by the Commission considering the cost of the material (meters).

As regards taking less amount of material security deposit from the consumers, it is submitted that material security deposit should be equivalent to the cost of material to UPCL. Further, on switch over from post-paid to prepaid scheme, the existing security deposit is adjusted towards the proposed security deposit. Further, it has been proposed in the Petition that a prompt payment rebate of up to 1.25% subject to maximum of Rs. 1 Lakh for HT consumers and Rs, 10, 000 for LT consumers.

As regards installation of consumer meter, it is submitted that the consumer meter may be installed outside the consumer premises.

UPCL submitted that it has proposed Smart Metering under RDSS Scheme wherein smart metering of Feeders/DTR/Consumers will be done. Under this scheme 397 no. 33 kV feeders, 1289 Nos. 11 kV feeders, 38,016 Nos. DTRs and 15,84,205 no. consumers will be covered.

### 2.32.3 *Commission's Views*

The Commission has taken note of suggestion received from the stakeholder regarding improvement in metering and billing through prepaid meters and directs UPCL to roll-out prepaid metering scheme. **UPCL is hereby directed to ensure to complete the Smart Metering under RDSS Scheme within the stipulated time frame.**

## 2.33 Formation of Consultative Committee

### 2.33.1 *Stakeholder's Comments*

Shri J S Pundir (Retd Lt Col) submitted that besides expediting the formulation of the mooted Consultative Committee as elaborated at serial no. 25 page 186 of Part 2 of Petition under Group C within specific time limit, Compliance Status of Directives issued by the Commission in the Tariff Order for FY 2022-23, also at the UPCL Board of Director's representation of its consumer's representatives with domain knowledge may be considered.

### 2.33.2 *Petitioner's Reply*

The constitution of Consultative Committee is under consideration as per direction of the Commission.

### 2.33.3 *Commission's Views*

The Commission taking the non-compliance on the part of Petitioner has initiated separate proceedings against the Petitioner under Section 142 of the Electricity Act vide notice dated 28.02.2023. The Commission shall deal with the issue raised under the above proceedings.

## 2.34 Promotion of Renewable Energy

### 2.34.1 *Stakeholder's Comments*

M/s Asahi India Glass Ltd., Roorkee suggests that UPCL and other generating bodies must emphasize to focus on Renewable Power sources and try to meet its growing demands by effective utilization of available resources like Rivers and Canals to set up Hydropower plants. Generating companies has to find opportunities to make comprehensive Renewable energy policy which will attract more industries for overall development of the State and increase in revenues. If effective solar policy is adopted, almost 30 to 40% of the energy needs of the State can be met at attractive rates with reduced losses.

Shri Rajeev Gupta of M/s KVS Castings Private Ltd. and Shri Amber Agarwal of M/s Devarpan Foods Pvt. Ltd. has requested to remove all the obstacles to make the Solar Power Plant viable for promotion of large solar power plants in Uttarakhand for captive user.

Shri Shakeel Siddiqui of M/s Galwalia Ispat Udyog Pvt. Ltd. submitted that if any manufacturing unit wishes to commission its solar power unit relaxation in applicable charges, i.e. wheeling charges and distribution losses to be provided so that more industries come forward for renewable energy generation.

Shri Sunil Kumar Gupta submitted that UPCL is charging solar consumers in violation of the

PPA by arbitrarily giving unclear bills on various items.

Ms. Ruby Goyal submitted that they are incurring losses due to domestic solar plant of 10 kW. UPCL has to promote and reward the consumers who generate their own power and give back the excess power to the grid. Measures should be taken by the utility to help support these domestic consumers / generators.

### 2.34.2 *Petitioner's Reply*

UPCL submitted that it has significant share of Solar in its total power purchase portfolio. Considering the geographical factors, and difficult terrain in the State of Uttarakhand, the Petitioner is of the opinion that it may maximize Solar/RE portfolio by procuring power from different States at competitive prices. UPCL shall also procure renewable energy as per policy of GoU / GoI and Regulations issued by the Commission in the matter. The same may be considered in view of the provisions of the Electricity Act, 2003 and Governments Policies on the same.

The billing of solar consumers is being done as per provisions of Tariff Orders / Regulations. In case of any specific grievance, consumer can represent his case before the Consumer Grievances Redressal Forum of the concerned area. In case he is not satisfied with the decision of the forum, he may also represent his case before the Hon'ble Ombudsman of electricity.

### 2.34.3 *Commission's Views*

The Commission in order to promote Renewable generation vide its UERC (Tariff and Other Terms for Supply of Electricity from Renewable Energy Sources and non-fossil fuel-based Cogeneration Stations) Regulations, 2018 has increased RPO Targets of the Petitioner substantially which will increase procurement of power from RE Sources. Further, the matter of allowing any industries to set up a solar generating station is not a tariff related matter and is governed by UERC RE Regulations and any industries willing to install a solar plant may take necessary action in accordance with the RE Regulations and Policies of the State Government in this regard. For any dispute between the developer and the licensee, they may approach the Commission for adjudication under the Act.

## 2.35 Miscellaneous

### 2.35.1 *Stakeholder's Comments*

Shri Munish Talwar of M/s Asahi India Glass Ltd., Roorkee submitted that the interstate and intrastate transmission charges have been projected to the tune of Rs. 1183 Crore which is very difficult to comprehend.

Shri J S Pundir (Retd Lt Col) submitted that the consumers who are on habitations via encroachment upon State property and the areas/establishments/complexes/houses where there are outstanding dues of say 5 times of the monthly electricity charges or non-payment for three months should be subjected to immediate stoppage of electricity supply. This action is necessary because these consumers are creating power constraints due to which the honest consumers must suffer.

Shri Rajeev Gupta of M/s KVS Castings Private Ltd. and Shri Amber Agarwal of M/s Devarpan Foods Pvt. Ltd. submitted that there had been many instances of wrong billing by UPCL which takes many months to be refunded to the consumers. The Commission may approve interest on late refund by UPCL on similar lines of late payment surcharge.

Shri R K Singh of M/s TATA Motors Ltd. submitted that as UPCL's infrastructure is getting older Y-o-Y, the budget allocation for repair/maintenance and testing of relays, transformers, breakers and reinforcement of poles and overhead conductor need to be considered for better human safety and equipment life enhancement.

Shri Shakeel Siddiqui of M/s Galwalia Ispat Udyog Pvt. Ltd. and M/s Kashi Vishwanath Textile Mill Pvt. Ltd. submitted that in the 10th report 20-21 of 'Annual Integrated Rating & Ranking: Power Distribution Utilities' conducted by Ministry of Power (GOI), UPCL stands with B rating, 17th position out of 52 (9th in the Country) in comparison to A+ in year 16-17, 7th position out of 41 (2nd in the Country). It is submitted that the Commission may advise UPCL to take the rating exercise's as an eye opener and take guidance how other distribution licensees with better rating are performing. Every loss-making substation should be taken up seriously, genuine, and timely billing, timely addressing complaints, recovering debts in time, and installing prepaid meters as early as possible will no doubt make the DISCOM achieve better results.

Shri A. K. Bajaj of Sri Ram Residency, Roorkee submitted that UPCL has raised the

Additional Power Purchase Surcharge (APPS) by only Rs. 0.30 per kWh for RTS-1 from 201-400 units, but for Single Point Bulk Users, UPCL raised the APPS rates to Rs. 0.45 per kVAh. The 'Transformer Loss' is billed to 'Single Point Bulk Supply Licensee' and licensee is not allowed to collect this loss from Users as UERC has defined rates which only can be charged to users.

Shri Shakeel Siddiqui of M/s Kashi Vishwanath Textile Mill Pvt. Ltd. submitted that Himachal Pradesh tariff provides rebate @ 10%-15% on energy charges during normal and peak hours to the new industries and expansion industries. Our State has more less same demography as Himachal, provision for rebates to be made at par for new and expansion thereby promoting industrial growth.

Shri Ajay Bhargava and Shri Sanjay Aggarawal of M/s Hotel Association of Mussoorie, Shri Deepak Guptal of M/s Uttarakhand Hotels & Restaurants Association submitted that the water barrages like the Asan Barrage, Dak paththar etc. are filled with silt and thereby the capacity of the power houses have been reduced. Steps should be taken to remove the silt and operate the existing infrastructure available at full capacity. This would in-turn reduce the cost of production.

Shri Ramesh Joshi of Suraj Seva Dal submitted that UPCL had purchased electricity at expensive prices without the approval of the Commission and made it available to industries at lower prices, due to which about Rs. 750 Crore was lost to UPCL.

Shri Sunil Kumar Gupta submitted that Electricity connections of common consumers are forcibly cut off for small outstanding amount like Rs. 5000/- Rs. 10000/- while the consumers with large outstanding amounts are treated otherwise. This is a direct example of Blockage and Dumping of Funds of billions of rupees due to negligence of UPCL officials. Action is expected from the Commission on this issue.

Shri Vijay Singh Verma submitted that the Aerial Bunch Cables installed by UPCL (specially at Distribution Circle Roorkee) are not in good condition (provided by Ascian Galaxy Company, Haridwar), system of feeder segregation is not working property at field level. Funding of R-APDRP had not been utilized properly which was released from Government of India.

Shri Vineet Kumar Sangal of M/s Kumaun Garhwal Chamber of Commerce and Industry (KGCCI) submitted that the consumers are paying unit charges as approved by the Commission but still the unscheduled power cuts persists. Unscheduled power rostering is not bearable at any cost and this point should needs to be taken seriously.

### 2.35.2 *Petitioner's Reply*

UPCL submitted that the transmission charges have been projected based on the following methodology which is in line with the approach of the Commission:

(i) Actual inter-state transmission charges as per Commercial information (without arrears) for FY 2021-22 have been used to compute the average per unit rate of PGCIL transmission charges by dividing the total amount paid to PGCIL by the total units wheeled through PGCIL network from April 2021 to March 2022.

The Petitioner submits that no escalation is considered while projecting the PGCIL charges for FY 2023-24.

(ii) For intra-state transmission and SLDC charges for FY 2022-23 & FY 2023- 24, the total Annual Transmission charges as approved by the Commission in the Order dated 31.03.2022 is considered.

It is the discretion of the State Government whether it wants to subsidise any categories of consumers or not. Further, the existing level of cross subsidies for all categories including domestic category is as per mandate of Electricity Act, 2003 and Tariff Policy, 2016.

For any specific grievance, the consumer can contact the Executive Engineer of the distribution division. Further, he may also represent his case before the Consumer Grievances Redressal Forums established by UPCL situated at 09 locations of the State, i.e. at Dehradun, Uttarkashi, Srinagar, Karanparyag, Haridwar, Pithoragarh, Almora, Rudrapur and Haldwani.

UPCL procures power only from the sources which are approved by the Commission.

Annual Integrated Rating of power distribution utilities conducted by Ministry of Power, Government of India for FY 2021-22, UPCL has got **A category.**

Presently, the tariff applicable to the single bulk supply consumers and other consumers is as follows:

**Table 2.5: Applicable Tariff under Domestic Category**

| Description | Fixed Charges* | Energy Charges |
|---|---|---|
| 1) Domestic | | |
| 1.1)BPL/Life line consumers | | |
| Below Poverty Line and Kutir Jyoti having load upto 1 kW and consumption upto 60 units per month | Rs. 18/ connection/month | Rs. 1.65/kWh |
| 1.2) Other Domestic Consumers | | |
| Upto 100 units per month | • Upto 1 kW-Rs. 60/kW/Month<br>• Above 1 kW and upto 4 kW-Rs. 70/kW/month<br>• Above 4 kW-Rs. 80/kW/month | Rs. 2.90/kWh |
| 101-200 units per month | | Rs. 4.20/kWh |
| 201-400 units per month | | Rs. 5.80/kWh |
| Above 400 units per month | | Rs. 6.55/kWh |
| **2) Single Point Bulk Supply** | **Rs. 100/kVA/month** | **Rs. 5.40/kVAh** |

** Fixed Charges based on sanctioned load*

As there is no slab system for single point bulk supply, a rate less than applicable for the consumers having monthly consumption above 200 units has been kept.

With a view to demand side management, kVA tariff is required. Initially this has been introduced for the big consumers. Further, Commission may take a view in the matter.

### 2.35.3 *Commission's Views*

The issue of interstate and intrastate transmission charges have been dealt with by the Commission in Chapter 3 and 4 of the Order.

**Further, UPCL is directed to ensure proper upkeep and maintenance of its infrastructure for better human safety and equipment life enhancement.**

With respect to subsidizing the consumers, the matter relates to the State Government. The Commission while carrying out the truing up allows only the purchase of electricity which is prudently incurred. With respect to recovering arrears from consumers the Commission time and again has been directing UPCL to improve its collection efficiency.

The Commission has dealt with other issues in the subsequent Sections of this Order.

## 2.36 Views of the State Advisory Committee

During the State Advisory Committee Meeting held on March 03, 2023, the Members made the following suggestions on the Petition for True up of FY 2021-22, APR of FY 2022-22 and ARR and Tariff for FY 2023-24.

a) Opposed the tariff increase proposed by UPCL as the existing tariff is already on the higher side and increase in tariff sought was irrational and hence, should not be accepted.

b) There is no justification for seeking huge truing up impact by UPCL.

c) UPCL's rating among other State distribution companies is on a declining path.

d) No meeting as required under UERC Distribution Code has been convened in the last two years and requested the Commission to look into the same.

e) Variation in the approved and actual expenses should be duly supported by appropriate justification.

f) UPCL cannot seek past impact corresponding to capitalisation for which Electrical Inspector Certificate submissions were delayed.

g) UPCL should make each Sub-station as profit centre which will enable UPCL to perform better.

h) No consultative forum has been instituted by UPCL till now and asked the Commission to look into the same.

i) Load shedding has been on an increasing trend even though additional costs were allowed to buy power. Further no intimation is given to industries before load shedding which is against the Regulations and that no Industries can operate with intermittent supply.

j) T&D Losses (%) have increased w.r.t last year and requested the Commission to not approve the same as all expenses are being allowed.

k) Distribution Losses in Dehradun District is shown as 50% against 16% projected in the last Petition and requested the Commission to look in to the same.

l) Out of the total outstanding (above 5 years) of Rs. 1041.16 Crore an amount of Rs. 419 Crore is attributable to Roorkee and should be looked into with utmost seriousness as this will ultimately burden honest consumers.

m) Pre-paid metering should be implemented in high loss zones such as Roorkee and government consumers.

n) Receivables pending from government categories is unacceptable.

o) As per new website of UPCL, except for the immediate previous month, bills cannot be downloaded for earlier months/years and also suggested that UPCL should provide a link along with the bill message to download the same.

p) All the consumers should be linked with Aadhaar.

q) RoE should be linked to Rate of Interest as RoE claimed are on the higher side as cost of debt is just 8-9%.

r) UPCL is not procuring power from gas based generating station even though it is paying considerable amount of fixed charges.

s) UPCL should apprise industries with regard to cost of power from gas and make power available from such plants in case industries seek such power during peak period.

t) In case UPCL is not able to make power available, penal provisions should apply.

u) UPCL should relinquish its PPA with gas stations of NTPC Ltd.

v) Electrical Inspector Certificates submitted by UPCL in support of additional capitalization pertaining to previous years should not be considered as the lapse is from UPCL side.

w) Interest rate on consumer security deposit is given at 4.5% p.a. whereas late payment surcharge is charged at 18% p.a. Moreover, security deposit should be allowed through bank guarantees.

x) Request for additional security should be intimated separately and not along with the bills and proper time should be given to comply with the same.

y) Open access and wheeling charges has increased due to which Industrial consumers cannot procure power at economical rates.

z) Open access should be facilitated as UPCL is not able to supply continuous power. Moreover, as there is no surplus power, therefore, there is no stranded power and hence, there should be no additional surcharge.

aa) Tariff proposal of UPCL is against the Tariff Policy wherein cross subsidy gap has been proposed to be further widened.

bb) Load factor categorisation should be revised to 50% from the present 40% and with regards to time-of-day tariff the average tariff can be reduced to incorporate relief of one hour instead of changing meters.

cc) The Commission may switch back to earlier categorisation of continuous supply industries or should ensure continuous power is made available to all under the present category.

dd) Steel and casting units should not be treated as furnace consumers as these units are export oriented and any load shedding will affect export obligations.

**2.36.1 *Petitioner's Reply***

1) With regards to tariff hike, UPCL submitted that the Power Purchase Cost is on the higher side and in FY 2022-23, 18% power was purchased from the market and presently not much power is available on power exchanges.

2) UPCL submitted that as power through exchanges get cleared one day prior to scheduling, it is hard for them to inform customers about rostering.

3) UPCL also submitted that tariff of gas-based projects is on the higher side due to increase in prices of gas and is not feasible. It submitted that the landed cost of gas is around $16/MMBTU which corresponds to variable charges of Rs. 10.30/kWh.

4) UPCL further submitted that the unallocated power from Central government is expected to continue in FY 2023-24, however approval is pending.

5) UPCL further submitted that it has called tenders for power procurement and around 100 MW of power is expected from 01.04.2023 from NVVN.

6) With regards to Additional Capitalisation, UPCL submitted that they are monitoring the works, however, due to RoW issues few projects gets delayed.

7) UPCL submitted that the losses for Dehradun District (50%) will be checked and in first instance it looks like a typo error.

8) UPCL further submitted that the Distribution loss targets shall be achieved for FY 2022-23 and FY 2023-24.

9) UPCL also submitted that the bill related issues raised shall be addressed including deficiencies pointed out with regards to the website.

10) UPCL further submitted that long term PPAs are being explored and shall be tied up considering anticipated capacity augmentation in State.

11) UPCL submitted that the State lacks base load plants and, therefore, banking arrangements are planned.

12) UPCL submitted that the PPA with Gas plants were done considering the anticipated gas availability from KG-D6 basin which didn't materialise. Further, due to anticipated shale gas availability, UPCL did not enter into long term gas contracts.

13) UPCL submitted that for 16 lakh consumers pre-paid metering shall be implemented.

14) UPCL submitted that it shall consider the suggestions with regard to allowing 10-15% load during rostering to support emergency load of industries.

### 2.36.2 *Commission's Views*

The issues raised by the Members of the Advisory Committee have been taken into consideration while deciding on the Petitioner's claims in the Petition filed for Truing Up for FY 2021-22, APR for FY 2022-23 and ARR & Tariff for FY 2023-24 as detailed in subsequent Chapters of this Order. **Further, UPCL is directed to submit a plan to recover arrears from the defaulting consumers within one month of the date of the Order. UPCL is also directed to update its website in accordance with the suggestions of the Members of the Advisory Committee so as to enable the consumers the facility to download the bills for earlier months/years within one month of the date of the Order.**

# 3. Petitioner's Submissions, Commission's Analysis, Scrutiny and Conclusion on Truing Up for FY 2021-22

## 3.1 Truing-up for FY 2021-22

Regulation 12(3) of the UERC (Terms and Conditions for Determination of Tariff) Regulations, 2018 specifies as under:

*"(3) The scope of the Annual Performance Review shall be a comparison of the actual performance of the Applicant with the approved forecast of Aggregate Revenue Requirement and expected revenue from tariff and charges and shall comprise of following:*

*a) A comparison of the audited performance of the applicant for the previous financial year with the approved forecast for such previous financial year and truing up of expenses and revenue subject to prudence check including pass through of impact of uncontrollable factors;*

*b) Categorisation of variations in performance with reference to approved forecast into factors within the control of the applicant (controllable factors) and those caused by factors beyond the control of the applicant (un-controllable factors).*

*c) Revision of estimates for the ensuing financial year, if required, based on audited financial results for the previous financial year;*

*d) Computation of the sharing of gains and losses on account of controllable factors for the previous year."*

The Petitioner submitted that the Commission vide its Tariff Order dated April 26, 2021 had approved the expenses and revenues of the Petitioner for FY 2021-22 based on the UERC Tariff Regulations, 2018, the historical trends and the revised projections of the Petitioner.

The Commission has analysed the head-wise elements of ARR and revenue for FY 2021-22 in the succeeding paragraphs. The head-wise details of variations in expenses and revenues are enumerated below.

### 3.1.1 *Sales*

The Commission had approved the energy sales for FY 2021-22 in its Tariff Order dated

April 26, 2021 as 13247.57 MU with efficiency improvement. The Petitioner in the current Petition has submitted the actual sales for FY 2021-22 as 12518.79 MU and requested the Commission to approve the actual sales as claimed for true-up.

The Commission in its previous Tariff Orders has been analysing the division wise commercial statements of UPCL and observed that the average billing rate (ABR) of certain categories of consumers in some divisions were even less than the energy charge approved for that category and had directed the Petitioner to rectify such anomalies. However, no efforts have been noticed from the Petitioner's end to rectify such anomalies, nor any satisfactory reply provided to the Commission on the same. Accordingly, the Commission during truing up of previous years has been re-casting the category wise sales of those categories that were having abnormally low ABR.

The Commission in the current proceedings also sought the commercial diary for FY 2021-22 to check the division wise sales and revenue. The Petitioner in its reply submitted the same. The Commission while analysing the same found that the ABR of almost all the categories for some of the divisions were abnormally low as compared to the ABR approved by the Commission for FY 2021-22.

The Commission during the Technical Validation Session held on January 25, 2023 pointed out various deficiencies in the Commercial diary and sought written justification of such abnormally low ABR. The Petitioner, however, could not submit the specific reasons for divisions where the ABR was abnormally lower, i.e. even lower than the approved Energy Charges.

In view of the above discrepancies observed in the sales data in the commercial diary submitted by the Petitioner for FY 2021-22 and reply submitted, the Commission in this Tariff Order has again re-casted the category wise sales of those divisions that have abnormally low ABR. The approach adopted for re-casting the category wise sales of UPCL for FY 2021-22 is discussed hereunder:

**a) Domestic Consumers**

Based on the detailed analysis of the division wise sales and ABR submitted by the Petitioner for FY 2021-22, it is observed that the following divisions have abnormally low ABR.

**Table 3.1: UPCL Divisions with Lower ABR for Domestic Category**

| S.No. | Name of Division/Circles | No. of Consumers | Load (KW) | Energy Sold (MU) | Revenue Booked (Rs. Lakh) | ABR Actual (Rs./kWh) |
|---|---|---|---|---|---|---|
| **Domestic (Except RTS 1.1)** | | | | | | |
| 1. | EDD, Laksar | 53942 | 94786 | 71.13 | 2501.99 | 3.52 |
| 2. | EDD, Dharchula | 20093 | 20169 | 12.14 | 478.22 | 3.94 |
| **RTS 1.1 (BPL/Lifeline)** | | | | | | |
| 1. | EDD Vikasnagar | 23597 | 23597 | 19.909 | 720.99 | 3.62 |
| 2. | EDD (N), Dehradun | 578 | 578 | 0.971 | 36.10 | 3.72 |
| 3. | EDD Rudrapur-II | 4656 | 4656 | 4.779 | 155.39 | 3.25 |
| 4. | EDD, Sitarganj | 14493 | 14493 | 19.662 | 778.33 | 3.96 |

In line with the approach followed in the Tariff Order dated March 31, 2022 division wise re-casting has been done where the actual ABR is found to be considerably lower than the approved tariffs. In order to assess the normative ABR, the Commission has computed the ABR for Domestic Consumers including RTS 1.1 (BPL/Lifeline Consumers) based on the approved energy charges and fixed charges considering the consumption per consumer per month for domestic consumers. The tariff of BPL/lifeline consumers is applicable to the consumers having load upto 1 kW and consumption upto 60 units/month. Based on the normative ABR and revenue booked, excess sales to be disallowed has been computed for each division which is as shown below:

**Table 3.2: Excess Sales to be disallowed for Domestic Category (Except RTS 1.1)**

| S. No | Name of Division/Circles | Consumer | Energy Sold (MU) | Revenue Booked (Rs. Lakh) | ABR actual (Rs./kWh) | Consumption /Consumer/ Month | ABR (Normative) Rs./kWh | Excess Sales (MU) |
|---|---|---|---|---|---|---|---|---|
| 1. | EDD, Laksar | 53942 | 71.13 | 2501.99 | 3.52 | 109.89 | 4.00 | 8.58 |
| 2. | EDD, Dharchula | 20093 | 12.14 | 478.22 | 3.94 | 50.36 | 3.99 | 0.16 |
| **Total** | | | | | | | | **8.74** |

**Table 3.3: Excess Sales to be disallowed for Domestic Category (RTS 1.1 – BPL/Lifeline)**

| S. No | Name of Division/Circles | Consumer | Energy Sold (MU) | Revenue Booked (Rs. Lakh) | ABR actual (Rs./kWh) | Consumption /Con./month | ABR (Normative) Rs./kWh | Excess Sales (MU) |
|---|---|---|---|---|---|---|---|---|
| 1. | EDD Vikasnagar | 23597 | 19.909 | 720.99 | 3.62 | 70.31 | 3.65 | 0.17 |
| 2. | EDD (N), Dehradun | 578 | 0.971 | 36.10 | 3.72 | 139.99 | 4.00 | 0.07 |
| 3. | EDD Rudrapur-II | 4656 | 4.779 | 155.39 | 3.25 | 85.53 | 3.50 | 0.34 |
| 4. | EDD, Sitarganj | 14493 | 19.662 | 778.33 | 3.96 | 113.05 | 4.00 | 0.20 |
| **Total** | | | | | | | | **0.79** |

Accordingly, based on the above, the total re-casted sales for Domestic Category for FY 2021-22 works out to 3348.17 MU against 3357.70 MU submitted by UPCL.

**b) Non-Domestic:**

Based on the detailed analysis of the division wise sales and ABR submitted for FY 2021-22, it is observed that the sales data for commercial consumers with load upto 75 kW was more or less in order, however, for consumer category with load above 75 kW the ABR in some of the Divisions was considerably lower than the average ABR of the category for the State as a whole. In order to assess normative ABR on the basis of Rate Schedule approved by the Commission, the Commission has computed the same for the category considering the energy charges and fixed charges applicable for the consumers which works out to Rs. 6.55/kWh for contracted capacity above 75 kW. The Commission has re-casted the sales of the following divisions for which the ABR has been found to be considerably lower than Rs. 6.55/kWh (above 75 kW).

**Table 3.4: UPCL Divisions with Lower ABR for Non-Domestic Category**

| S. No. | Name of Division/Circles | No. of Consumers | Load (KW) | Energy Sold (MU) | Revenue Booked (Rs. Lakh) | Actual ABR (Rs./kWh) |
|---|---|---|---|---|---|---|
| **RTS:2 - Non-Domestic (Above 75 kW)** | | | | | | |
| 1. | EDD, Raipur | 28 | 14021 | 8.50 | 531.51 | 6.26 |
| 2. | EDD Vikasnagar | 11 | 1843 | 1.22 | 75.75 | 6.20 |
| 3. | EDD, Rishikesh | 38 | 15036 | 33.43 | 1949.04 | 5.83 |
| 4. | EDD, Doiwala | 11 | 5550 | 15.03 | 811.66 | 5.40 |
| 5. | EDD (N), Dehradun | 94 | 28391 | 50.27 | 3107.39 | 6.18 |
| 6. | EDD, Tehri | 35 | 7038 | 10.48 | 671.91 | 6.41 |
| 7. | EDD, Uttarkashi | 3 | 525 | 1.27 | 77.89 | 6.13 |
| 8. | EDD, Srinagar | 10 | 5443 | 13.20 | 451.93 | 3.42 |
| 9. | EDD, Pauri | 6 | 2190 | 3.24 | 172.50 | 5.32 |
| 10. | EDD, Rudraprayag | 34 | 3192 | 4.84 | 306.61 | 6.33 |
| 11. | EDD (U), Hardwar | 63 | 10,365 | 12.31 | 786.98 | 6.39 |
| 12. | EDD, Nainital | 33 | 6521 | 0.83 | 0.00 | 0.00 |
| 13. | EDD (R), Haldwani | 18 | 4427 | 7.27 | 429.90 | 5.92 |
| 14. | EDD, Kashipur | 514 | 17649 | 12.38 | 789.76 | 6.38 |
| 15. | EDD, Almora | 18 | 6047 | 3.15 | 201.23 | 6.38 |
| 16. | EDD, Bageshwar | 3 | 300 | 0.64 | 40.93 | 6.38 |
| 17. | EDD Rudrapur-I | 27 | 11423 | 29.28 | 1770.52 | 6.05 |

Based on the normative ABR as discussed above and revenue booked, excess sales to be disallowed has been computed for each division. The excess sales to be disallowed for the above divisions is as shown below:

**Table 3.5: Excess Sales to be disallowed for Non-Domestic Category**

| S. No. | Name of Division/Circles | Load (KW) | Energy Sold (MU) | Revenue Booked (Rs. Lakh) | ABR actual (Rs./kWh) | ABR normative (Rs./kWh) | Excess sales (MU) |
|---|---|---|---|---|---|---|---|
| **RTS:2 - Non-Domestic (Above 75 kW)** | | | | | | | |
| 1. | EDD, Raipur | 14021 | 8.50 | 531.51 | 6.26 | 6.55 | 0.38 |
| 2. | EDD Vikasnagar | 1843 | 1.22 | 75.75 | 6.20 | 6.55 | 0.06 |
| 3. | EDD, Rishikesh | 15036 | 33.43 | 1949.04 | 5.83 | 6.55 | 3.68 |
| 4. | EDD, Doiwala | 5550 | 15.03 | 811.66 | 5.40 | 6.55 | 2.64 |
| 5. | EDD (N), Dehradun | 28391 | 50.27 | 3107.39 | 6.18 | 6.55 | 2.83 |
| 6. | EDD, Tehri | 7038 | 10.48 | 671.91 | 6.41 | 6.55 | 0.22 |
| 7. | EDD, Uttarkashi | 525 | 1.27 | 77.89 | 6.13 | 6.55 | 0.08 |
| 8. | EDD, Srinagar | 5443 | 13.20 | 451.93 | 3.42 | 6.55 | 6.30 |
| 9. | EDD, Pauri | 2190 | 3.24 | 172.50 | 5.32 | 6.55 | 0.61 |
| 10. | EDD, Rudraprayag | 3192 | 4.84 | 306.61 | 6.33 | 6.55 | 0.16 |
| 11. | EDD (U), Hardwar | 10,365 | 12.31 | 786.98 | 6.39 | 6.55 | 0.30 |
| 12. | EDD, Nainital | 6521 | 0.83 | 0.00 | 0.00 | 6.55 | 0.83 |
| 13. | EDD (R), Haldwani | 4427 | 7.27 | 429.90 | 5.92 | 6.55 | 0.70 |
| 14. | EDD, Kashipur | 17649 | 12.38 | 789.76 | 6.38 | 6.55 | 0.33 |
| 15. | EDD, Almora | 6047 | 3.15 | 201.23 | 6.38 | 6.55 | 0.08 |
| 16. | EDD, Bageshwar | 300 | 0.64 | 40.93 | 6.38 | 6.55 | 0.02 |
| 17. | EDD Rudrapur-I | 11423 | 29.28 | 1770.52 | 6.05 | 6.55 | 2.24 |
| **Total** | | | | | | | **21.48** |

Accordingly, based on the above, the total re-casted sales for Non-Domestic Category for FY 2021-22 works out to 1367.83 MU as against 1389.31 MU submitted by UPCL.

**c) Government Public Utilities:**

Similarly, for Government Public Utilities, normative ABR has been computed for each Division considering the energy charges and fixed charges approved by the Commission and the same has been compared with the average division wise ABR and, wherever, the actual division wise ABR is found to be lower than the normative ABR, sales have been re-estimated based on the actual revenue and normative ABR. The excess sales worked out based on the above approach is 22.70 MU.

Accordingly, based on the above, the total re-casted sales for Government Public Utilities for FY 2021-22 works out to 696.21 MU as against 718.90 MU submitted by UPCL.

**d) PTW Category:**

The Commission observed that the ABR for some of the divisons for PTW category were lower than the approved rate of Rs. 2.08/kWh and, therefore, the Commission during the technical validation session sought explanation from UPCL for low ABR. UPCL in its reply submitted that the lower ABR is because of the billing cycle of PTW consumers which is 6 monthly and billing for the period of December to March of previous year is reflected in the current year. The Commission observes that previous year's consumption for three months has been billed at the tariff of Rs. 2.03/kWh which was applicable for FY 2020-21 and consumption of rest of the nine months were billed at Rs. 2.08/kWh. The Commisison, therefore, for the purpose of re-casting the PTW sales, has considered the weighted average tariff of Rs. 2.07/kWh for PTW consumers. The Commission has re-casted the sales of the following divisions for which the ABR has been found to be considerably low.

**Table 3.6: UPCL Divisions with Lower ABR for PTW Category**

| S. No. | Name of Division/Circles | No. of Consumers | Load (KW) | Energy Sold (MU) | Revenue Booked (Rs. Lakh) | ABR actual (Rs./kWh) |
|---|---|---|---|---|---|---|
| **RTS 4 – Private Tube Well** | | | | | | |
| 1. | EDD Vikasnagar | 483 | 4692 | 2.00 | 40.81 | 2.04 |
| 2. | EDD, Doiwala | 114 | 836 | 0.56 | 11.45 | 2.06 |
| 3. | EDD (S), Dehradun | 27 | 149 | 0.15 | 1.35 | 0.93 |
| 4. | EDD (U), Roorkee | 2083 | 16876 | 16.26 | 329.46 | 2.03 |
| 5. | EDD (R), Roorkee | 4687 | 36206 | 47.62 | 978.22 | 2.05 |
| 6. | EDD Bhagwanpur | 4684 | 34366 | 30.41 | 622.50 | 2.05 |
| 7. | EDD Ramnagar (Roorkee) | 998 | 9919 | 5.13 | 105.47 | 2.06 |
| 8. | EDD, Nainital | 13 | 165 | 0.25 | 0.00 | 0.00 |
| 9. | EDD, Kashipur | 3980 | 26698 | 19.01 | 387.73 | 2.04 |
| 10. | EDD Rudrapur-I | 2533 | 10956 | 9.34 | 193.02 | 2.07 |

The re-casting is done division wise where actual ABR is found to be considerably lower. Based on the normative ABR equivalent to the tariff for this category and revenue booked, excess sales to be disallowed has been computed for each division. The excess sales to be disallowed for the above divisions is as shown below:

**Table 3.7: Excess Sales to be disallowed for PTW Category**

| S. No. | Name of Division/Circles | Load (KW) | Energy Sold (MU) | Revenue Booked (Rs. Lakh) | ABR actual (Rs./kWh) | ABR normative (Rs./kWh) | Excess sales (MU) |
|---|---|---|---|---|---|---|---|
| **RTS 4 – Private Tube Well** | | | | | | | |
| 1. | EDD Vikasnagar | 4692 | 2.00 | 40.81 | 2.04 | 2.07 | 0.03 |
| 2. | EDD, Doiwala | 836 | 0.56 | 11.45 | 2.06 | 2.07 | 0.002 |
| 3. | EDD (S), Dehradun | 149 | 0.15 | 1.35 | 0.93 | 2.07 | 0.08 |
| 4. | EDD (U), Roorkee | 16876 | 16.26 | 329.46 | 2.03 | 2.07 | 0.32 |
| 5. | EDD (R), Roorkee | 36206 | 47.62 | 978.22 | 2.05 | 2.07 | 0.30 |
| 6. | EDD Bhagwanpur | 34366 | 30.41 | 622.50 | 2.05 | 2.07 | 0.30 |
| 7. | EDD Ramnagar (Roorkee) | 9919 | 5.13 | 105.47 | 2.06 | 2.07 | 0.03 |
| 8. | EDD, Nainital | 165 | 0.25 | 0.00 | 0.00 | 2.07 | 0.25 |
| 9. | EDD, Kashipur | 26698 | 19.01 | 387.73 | 2.04 | 2.07 | 0.25 |
| 10. | EDD Rudrapur-I | 10956 | 9.34 | 193.02 | 2.07 | 2.07 | 0.01 |
| | **Total** | | | | | | **1.58** |

Accordingly, based on the above, the total re-casted sales for PTW Category for FY 2021-22 works out to 256.04 MU as against 257.62 MU submitted by UPCL.

**e) Agriculture and Allied Activities**

The Commission observed that ABR for some of the divisons for Agriculture and allied Activities consumers (RTS-4A) were lower than the approved rate of Rs. 2.75/kWh. The Commisison, therefore, for the purpose of re-casting, has considered the approved tariff of Rs. 2.75/kWh for RTS-4A consumers.

**Table 3.8: UPCL Divisions with Lower ABR for RTS 4A Category**

| S. No. | Name of Division/Circles | No. of Consumers | Load (KW) | Energy Sold (MU) | Revenue Booked (Rs. Lakh) | ABR actual (Rs./kWh) |
|---|---|---|---|---|---|---|
| **RTS-4A: Agriculture Allied Activities** | | | | | | |
| 1. | EDD, Doiwala | 22 | 1018 | 4.22 | 114.72 | 2.72 |
| 2. | EDD (S), Dehradun | 5 | 26 | 0.14 | 3.71 | 2.63 |
| 3. | EDD, Nainital | 1 | 88 | 0.18 | 4.46 | 2.48 |
| 4. | EDD, Kashipur | 65 | 347 | 4.62 | 126.25 | 2.74 |
| 5. | EDD, Bajpur | 15 | 99 | 0.60 | 12.61 | 2.12 |
| 6. | EDD, Almora | 6 | 22 | 0.02 | 0.49 | 2.04 |

The re-casting is done division wise where actual ABR is found to be considerably lower. Based on the normative ABR equivalent to the tariff for this category and revenue booked, excess sales to be disallowed has been computed for each division. The excess sales to be disallowed for the above divisions is as shown below:

**Table 3.9: Excess Sales to be disallowed for RTS 4A Category**

| S. No. | Name of Division/Circles | Load (KW) | Energy Sold (MU) | Revenue Booked (Rs. Lakh) | ABR actual (Rs./kWh) | ABR normative (Rs./kWh) | Excess sales (MU) |
|---|---|---|---|---|---|---|---|
| **RTS-4A: Agriculture Allied Activities** | | | | | | | |
| 1. | EDD, Doiwala | 1018 | 4.22 | 114.72 | 2.72 | 2.75 | 0.05 |
| 2. | EDD (S), Dehradun | 26 | 0.14 | 3.71 | 2.63 | 2.75 | 0.01 |
| 3. | EDD, Nainital | 88 | 0.18 | 4.46 | 2.48 | 2.75 | 0.02 |
| 4. | EDD, Kashipur | 347 | 4.62 | 126.25 | 2.74 | 2.75 | 0.03 |
| 5. | EDD, Bajpur | 99 | 0.60 | 12.61 | 2.12 | 2.75 | 0.14 |
| 6. | EDD, Almora | 22 | 0.02 | 0.49 | 2.04 | 2.75 | 0.01 |
| **Total** | | | | | | | **0.24** |

Accordingly, based on the above, the total re-casted sales for RTS-4A Category for FY 2021-22 works out to 19.07 MU as against 19.31 MU submitted by UPCL.

**f) LT Industry**

Based on the detailed analysis of the division wise sales submitted for FY 2021-22, it is observed that the ABR for the category was abnormally lower in case of the following divisions:

**Table 3.10: UPCL Divisions with Lower ABR for LT Industry**

| S. No. | Name of Division/Circles | No. of Consumers | Load (KW) | Energy Sold (MU) | Revenue Booked (Rs. Lakh) | ABR actual (Rs./kWh) |
|---|---|---|---|---|---|---|
| 1. | EDD, Raipur | 58 | 776 | 0.89 | 48.81 | 5.50 |
| 2. | EDD, Rishikesh | 132 | 1986 | 2.22 | 136.53 | 6.16 |
| 3. | EDD, Uttarkashi | 103 | 804 | 0.40 | 29.76 | 7.50 |
| 4. | EDD, Narayanbagarh | 22 | 169 | 0.07 | 5.76 | 7.78 |
| 5. | EDD (R), Hardwar | 355 | 17265 | 20.44 | 1118.42 | 5.47 |
| 6. | EDD, Jwalapur | 967 | 20835 | 18.75 | 1201.06 | 6.40 |
| 7. | EDD, Nainital | 150 | 2100 | 0.90 | 56.68 | 6.30 |
| 8. | EDD, Kashipur | 1143 | 20224 | 24.83 | 1497.31 | 6.03 |
| 9. | EDD, Almora | 106 | 840 | 0.68 | 40.91 | 6.06 |
| 10. | EDD, Bageshwar | 340 | 2486 | 1.25 | 77.58 | 6.23 |
| 11. | EDD, Ranikhet | 160 | 1694 | 0.80 | 50.61 | 6.31 |
| 12. | EDD, Bhikiyasain | 135 | 989 | 0.53 | 33.63 | 6.32 |
| 13. | EDD Rudrapur-II | 851 | 23658 | 19.71 | 1237.79 | 6.28 |
| 14. | EDD, Sitarganj | 727 | 15344 | 12.71 | 760.53 | 5.98 |
| 15. | EDD, Khatima | 499 | 8050 | 7.72 | 478.64 | 6.20 |
| 16. | EDD, Pithoragarh | 204 | 1598 | 0.74 | 57.92 | 7.83 |
| 17. | EDD, Champawat | 144 | 1947 | 1.43 | 94.78 | 6.65 |
| 18. | EDD, Dharchula | 48 | 479 | 0.256 | 16.6 | 6.48 |

The division wise normative ABR has been worked out considering the energy charge and fixed charges applicable for the consumer category considering the consumption per kW per month. Based on the normative ABR and revenue booked, excess sales to be disallowed has been computed for each division. The excess sales to be disallowed for the above divisions is as shown below:

**Table 3.11: Excess Sales to be disallowed for LT Industry**

| S. No. | Name of Division/Circles | Load (KW) | Energy Sold (MU) | Revenue Booked (Rs. Lakh) | ABR actual (Rs./kWh) | Consumption /kW/Month | ABR (Normative) Rs./kWh | Excess Sales (MU) |
|---|---|---|---|---|---|---|---|---|
| 1. | EDD, Raipur | 776 | 0.89 | 48.81 | 5.50 | 95.25 | 6.15 | 0.09 |
| 2. | EDD, Rishikesh | 1986 | 2.22 | 136.53 | 6.16 | 92.94 | 6.19 | 0.01 |
| 3. | EDD, Uttarkashi | 804 | 0.40 | 29.76 | 7.50 | 41.15 | 8.32 | 0.04 |
| 4. | EDD, Narayanbagarh | 169 | 0.07 | 5.76 | 7.78 | 36.49 | 8.81 | 0.01 |
| 5. | EDD (R), Hardwar | 17265 | 20.44 | 1118.42 | 5.47 | 98.66 | 6.09 | 2.08 |
| 6. | EDD, Jwalapur | 20835 | 18.75 | 1201.06 | 6.40 | 75.00 | 6.60 | 0.54 |
| 7. | EDD, Nainital | 2100 | 0.90 | 56.68 | 6.30 | 35.71 | 8.90 | 0.26 |
| 8. | EDD, Kashipur | 20224 | 24.83 | 1497.31 | 6.03 | 102.33 | 6.04 | 0.03 |
| 9. | EDD, Almora | 840 | 0.68 | 40.91 | 6.06 | 66.96 | 6.85 | 0.08 |
| 10. | EDD, Bageshwar | 2486 | 1.25 | 77.58 | 6.23 | 41.77 | 8.26 | 0.31 |
| 11. | EDD, Ranikhet | 1694 | 0.80 | 50.61 | 6.31 | 39.45 | 8.48 | 0.21 |
| 12. | EDD, Bhikiyasain | 989 | 0.53 | 33.63 | 6.32 | 44.83 | 8.01 | 0.11 |
| 13. | EDD Rudrapur-II | 23658 | 19.71 | 1237.79 | 6.28 | 69.42 | 6.76 | 1.41 |
| 14. | EDD, Sitarganj | 15344 | 12.71 | 760.53 | 5.98 | 69.02 | 6.78 | 1.49 |
| 15. | EDD, Khatima | 8050 | 7.72 | 478.64 | 6.20 | 79.89 | 6.47 | 0.32 |
| 16. | EDD, Pithoragarh | 1598 | 0.74 | 57.92 | 7.83 | 38.59 | 8.57 | 0.06 |
| 17. | EDD, Champawat | 1947 | 1.43 | 94.78 | 6.65 | 60.99 | 7.08 | 0.09 |
| 18. | EDD, Dharchula | 479 | 0.256 | 16.6 | 6.48 | 44.54 | 8.03 | 0.05 |
| | **Total** | | | | | | | **7.18** |

Accordingly, based on the above, the total re-casted sales for LT Industry for FY 2021-22 works out to 334.65 MU as against 341.83 MU submitted by UPCL.

**g) HT Industry**

The Petitioner submitted the sales to HT Industry of 6212.16 MU for FY 2021-22. The Commission carried out detailed analysis of the division wise sales and ABR submitted by the Petitioner for FY 2021-22, and from the same it is observed that following divisions have abnormally low ABR.

**Table 3.12: UPCL Divisions with Lower ABR for HT Industries**

| S. No. | Name of Division/Circles | No. of Consumers | Load (KW) | Energy Sold (MU) | Revenue Booked (Rs. Lakh) | ABR Actual (Rs./kWh) |
|---|---|---|---|---|---|---|
| **HT Industry (Upto 1000 kVA)** | | | | | | |
| 1. | EDD, Raipur | 6 | 2435 | 5.29 | 311.20 | 5.89 |
| 2. | EDD, Rishikesh | 3 | 1382 | 1.69 | 122.88 | 7.26 |
| 3. | EDD, Narayanbagarh | 1 | 400 | 0.36 | 29.60 | 8.15 |
| 4. | EDD, Rudraprayag | 4 | 954 | 1.02 | 59.62 | 5.83 |
| 5. | EDD, Laksar | 31 | 12772 | 12.96 | 875.96 | 6.76 |
| 6. | EDD, Nainital | 8 | 2993 | 2.49 | 159.36 | 6.40 |
| 7. | EDD, Kashipur | 130 | 52863 | 113.37 | 6870.37 | 6.06 |
| 8. | EDD, Bajpur | 70 | 24193 | 38.80 | 2504.11 | 6.45 |
| 9. | EDD, Dharchula | 1 | 81 | 0.02 | 1.94 | 9.24 |
| **HT Industry (Above 1000 kVA)** | | | | | | |
| 1. | EDD, Raipur | 2 | 6469 | 9.15 | 619.60 | 6.77 |
| 2. | EDD, Rudraprayag | 2 | 3000 | 1.44 | 104.99 | 7.31 |
| 3. | EDD, Jwalapur | 4 | 15600 | 57.35 | 3248.06 | 5.66 |
| 4. | EDD Rudrapur-II | 3 | 17935 | 18.54 | 1259.22 | 6.79 |

In order to assess normative ABR on the basis of the Rate Schedule approved by the Commission, the Commission has computed the same considering the energy charges and fixed charges applicable for the consumer category considering the consumption per kW per month for the respective divisions. Based on the normative ABR and revenue booked, excess sales to be disallowed has been computed for each division. The excess sales to be disallowed for the above divisions is as shown below:

**Table 3.13: Excess Sales to be disallowed for HT Industry**

| S. No. | Name of Division/Circles | Load (KW) | Energy Sold (MU) | Revenue Booked (Rs. Lakh) | ABR actual (Rs./kWh) | Consumption / kW/Month | ABR (Normative) Rs./kWh | Excess Sales (MU) |
|---|---|---|---|---|---|---|---|---|
| **HT Industry (Upto 1000 kVA)** | | | | | | | | |
| 1. | EDD, Raipur | 2435 | 5.29 | 311.20 | 5.89 | 180.87 | 6.10 | 0.18 |
| 2. | EDD, Rishikesh | 1382 | 1.69 | 122.88 | 7.26 | 102.03 | 7.30 | 0.01 |
| 3. | EDD, Narayanbagarh | 400 | 0.36 | 29.60 | 8.15 | 75.63 | 8.26 | 0.005 |
| 4. | EDD, Rudraprayag | 954 | 1.02 | 59.62 | 5.83 | 89.36 | 7.69 | 0.25 |
| 5. | EDD, Laksar | 12772 | 12.96 | 875.96 | 6.76 | 84.59 | 7.87 | 1.83 |
| 6. | EDD, Nainital | 2993 | 2.49 | 159.36 | 6.40 | 69.36 | 8.60 | 0.64 |
| 7. | EDD, Kashipur | 52863 | 113.37 | 6870.37 | 6.06 | 178.71 | 6.12 | 1.02 |
| 8. | EDD, Bajpur | 24193 | 38.80 | 2504.11 | 6.45 | 133.64 | 6.65 | 1.12 |
| 9. | EDD, Dharchula | 81 | 0.02 | 1.94 | 9.24 | 21.60 | 17.57 | 0.01 |
| **HT Industry (Above 1000 kVA)** | | | | | | | | |
| 1. | EDD, Raipur | 6469 | 9.15 | 619.60 | 6.77 | 117.90 | 7.42 | 0.80 |
| 2. | EDD, Rudraprayag | 3000 | 1.44 | 104.99 | 7.31 | 39.92 | 13.04 | 0.63 |
| 3. | EDD, Jwalapur | 15600 | 57.35 | 3248.06 | 5.66 | 306.38 | 6.06 | 3.73 |
| 4. | EDD Rudrapur-II | 17935 | 18.54 | 1259.22 | 6.79 | 86.14 | 8.48 | 3.69 |
| | | | | **Total** | | | | **13.91** |

Accordingly, based on the above, the total re-casted sales for HT Industry for FY 2021-22 works out to 6198.25 MU as against 6212.16 MU submitted by UPCL.

### h) Mixed Load

Based on the detailed analysis of the division wise sales and ABR submitted by the Petitioner for FY 2021-22, it is observed that following divisions have abnormally low ABR.

**Table 3.14: UPCL Divisions with Lower ABR for Mixed Load**

| S. No. | Name of Division /Circles | No of Consumers | Load (KW) | Energy Sold (MU) | Revenue Booked (Rs. Lakh) | ABR Actual (Rs./kWh) |
|---|---|---|---|---|---|---|
| 1. | EDD, Raipur | 4 | 772 | 0.85 | 47.81 | 5.65 |
| 2. | EDD (N), Dehradun | 7 | 9490 | 29.32 | 1702.21 | 5.81 |
| 3. | EDD (S), Dehradun | 5 | 5180 | 22.89 | 1307.14 | 5.71 |
| 4. | EDD, Tehri | 5 | 5625 | 17.71 | 1018.51 | 5.75 |
| 5. | EDD, Uttarkashi | 1 | 315 | 0.60 | 36.45 | 6.11 |
| 6. | EDD, Gairsain | 2 | 434 | 0.69 | 42.86 | 6.25 |
| 7. | EDD, Gopeshwar | 5 | 1495 | 3.22 | 195.26 | 6.07 |
| 8. | EDD (U), Roorkee | 4 | 12172 | 36.72 | 2078.10 | 5.66 |
| 9. | EDD (R), Hardwar | 1 | 125 | 0.77 | 25.84 | 3.34 |
| 10. | EDD, Nainital | 2 | 563 | 1.56 | 87.59 | 5.61 |
| 11. | EDD (R), Haldwani | 2 | 699 | 0.65 | 43.19 | 6.61 |
| 12. | EDD, Almora | 4 | 926 | 1.55 | 87.67 | 5.65 |
| 13. | EDD, Bageshwar | 3 | 265 | 0.72 | 41.87 | 5.83 |
| 14. | EDD Rudrapur-II | 1 | 76 | 0.07 | 4.90 | 6.62 |
| 15. | EDD, Pithoragarh | 3 | 2170 | 8.43 | 471.92 | 5.60 |
| 16. | EDD, Dharchula | 2 | 1175 | 1.46 | 86.28 | 5.93 |

In order to assess normative ABR on the basis of Rate Schedule approved by the

Commission, the Commission has computed the same considering the energy charges and fixed charges applicable for the consumers considering the consumption per kW per month for the respective divisions. Based on the normative ABR and revenue booked, excess sales to be disallowed has been computed for each division. The excess sales to be disallowed for the above divisions is as shown below:

**Table 3.15: Excess Sales to be disallowed for Mixed Load**

| S. No. | Name of Division/Circles | Load (KW) | Energy Sold (MU) | Revenue Booked (Rs. Lakh) | ABR actual (Rs./kWh) | Consumption /kW/Month | ABR (Normative) Rs./kWh | Excess Sales (MU) |
|---|---|---|---|---|---|---|---|---|
| 1. | EDD, Raipur | 772 | 0.85 | 47.81 | 5.65 | 91.32 | 6.67 | 0.13 |
| 2. | EDD (N), Dehradun | 9490 | 29.32 | 1702.21 | 5.81 | 257.43 | 5.88 | 0.38 |
| 3. | EDD (S), Dehradun | 5180 | 22.89 | 1307.14 | 5.71 | 368.23 | 5.75 | 0.17 |
| 4. | EDD, Tehri | 5625 | 17.71 | 1018.51 | 5.75 | 262.37 | 5.88 | 0.37 |
| 5. | EDD, Uttarkashi | 315 | 0.60 | 36.45 | 6.11 | 157.94 | 6.16 | 0.005 |
| 6. | EDD, Gairsain | 434 | 0.69 | 42.86 | 6.25 | 131.72 | 6.30 | 0.01 |
| 7. | EDD, Gopeshwar | 1495 | 3.22 | 195.26 | 6.07 | 179.43 | 6.07 | 0.003 |
| 8. | EDD (U), Roorkee | 12172 | 36.72 | 2078.10 | 5.66 | 251.40 | 5.89 | 1.46 |
| 9. | EDD (R), Hardwar | 125 | 0.77 | 25.84 | 3.34 | 515.90 | 5.67 | 0.32 |
| 10. | EDD, Nainital | 563 | 1.56 | 87.59 | 5.61 | 230.91 | 5.93 | 0.08 |
| 11. | EDD (R), Haldwani | 699 | 0.65 | 43.19 | 6.61 | 77.85 | 6.88 | 0.03 |
| 12. | EDD, Almora | 926 | 1.55 | 87.67 | 5.65 | 139.58 | 6.25 | 0.15 |
| 13. | EDD, Bageshwar | 265 | 0.72 | 41.87 | 5.83 | 225.79 | 5.94 | 0.01 |
| 14. | EDD Rudrapur-II | 76 | 0.07 | 4.90 | 6.62 | 81.14 | 6.82 | 0.002 |
| 15. | EDD, Pithoragarh | 2170 | 8.43 | 471.92 | 5.60 | 323.73 | 5.79 | 0.29 |
| 16. | EDD, Dharchula | 1175 | 1.46 | 86.28 | 5.93 | 103.19 | 6.53 | 0.13 |
| **Total** | | | | | | | | **3.54** |

Accordingly, based on the above, the total re-casted sales for Mixed Load for FY 2021-22 works out to 172.08 MU as against 175.62 MU submitted by UPCL.

Based on the above analysis, the category wise sales for FY 2021-22 as recasted by the Commission is as shown in the Table below:

**Table 3.16: Category-wise Sales for FY 2021-22 (MU)**

| Categories | Approved in the Tariff Order dated April 26, 2021 | Claimed in the Petition | Approved after Truing Up |
|---|---|---|---|
| Domestic (RTS - 1) | 3542.81 | 3357.70 | 3348.17 |
| Non-domestic, incl. Commercial (RTS - 2) | 1494.84 | 1389.31 | 1367.83 |
| Govt. Public Utilities (RTS - 3) | 759.49 | 718.90 | 696.21 |
| Private Tubewell/Pump Sets (RTS - 4) | 207.48 | 257.62 | 256.04 |
| Agriculture and Allied Activities (RTS-4A) | | 19.31 | 19.07 |
| LT & HT Industry (RTS-5) | 6983.08 | 6553.99 | 6532.90 |
| *Total LT* | 319.63 | 341.83 | 334.65 |
| *Total HT* | 6663.45 | 6212.16 | 6198.25 |
| Mixed Load (RTS - 6) | 190.23 | 175.62 | 172.08 |
| Railway Traction (RTS - 7) | 31.24 | 46.30 | 46.30 |
| EV Charging Stations | - | 0.04 | 0.04 |
| Additional sales (efficiency improvement) | 38.40 | - | - |
| **Total** | **13247.57** | **12518.79** | **12438.64** |

### 3.1.2 *Distribution Losses*

The Petitioner in its Petition has submitted its distribution losses for FY 2021-22 as 14.15%. The Commission for FY 2021-22 had approved the distribution losses of 13.75% based on the loss reduction trajectory approved in the MYT Order for the Control Period from FY 2019-20 to FY 2021-22. However, as per the actual data submitted by the Petitioner and the re-casted sales approved by the Commission, the actual distribution losses for FY 2021-22 works out to 14.70%.

UPCL submitted that it has been making significant efforts to reduce distribution losses but change in sales mix on account of COVID induced lockdowns and dynamic shift in economic activities across the State's unique geography, the Petitioner's Company has witnessed a marginally higher Distribution loss against the approved trajectory. The Commission observed that though the HT sales increased substantially, the distribution loss has increased vis-à-vis FY 2020-21, and had, therefore, asked UPCL to justify the same. UPCL in its reply submitted that though HT:LT ratio impacts the Distribution losses, however, there are other factors also at play which contribute to the Distribution losses. While the technical part of the losses could be explained using HT:LT sales but the billing efficiency contributes to the non-technical part of the Distribution losses, and the billing efficiency of the Petitioner's company has reduced from 86.04% in FY 2020-21 to 85.85% in FY 2021-22 which explains the increase in Distribution loss. The Petitioner further submitted that the True up year under consideration was plagued by the Covid induced pandemic and subsequent lockdowns which had a deteriorating impact as far as the Distribution operations are concerned and thus, requested to approve the Distribution losses of 14.15% instead of the loss trajectory approved by the Commission.

No plausible reason has been offered by UPCL for reduction in billing efficiency when meter reading activity has majorly been outsourced by UPCL. Besides, it is unimaginable that despite increase in industry sales where distribution losses are less, overall distribution losses of UPCL are increasing. Hence, the Commission does not find any reason to allow actual losses to UPCL as claimed by it. The Commission, in accordance with the approach adopted in its previous Orders, has allowed the actual quantum of power purchase made by the Petitioner. Considering the actual energy input of 14581.67 MU at distribution periphery (T&D interface) for FY 2021-22 and applying the approved loss level of 13.75% for the year, the Commission re-estimated the sales of 12576.69 MU for FY 2021-22. As against this sale of 12576.69 MU, the actual re-casted sales approved by the

Commission for FY 2021-22 is 12438.64 MU. Therefore, there is a loss of sales to the tune of 138.05 MU on account of commercial inefficiencies of the Petitioner resulting from its failure to achieve the distribution losses target approved by the Commission. The Commission has worked out the average billing rate of Rs. 5.71/kWh on the approved re-casted sales of 12438.64 MU. The Commission for FY 2021-22 has not carried out revenue adjustment for supply of power to UPCL's employees & pensioners as the Average billing rate is similar to the ABR of other domestic consumers. The Commission has carried out revenue adjustment towards rebate allowed on online payment of bills by substracting the allowed rebate of Rs. 25.51 Crore from the sales revenue which the Petitioner has wrongly claimed under interest on loan. Accordingly, the revenue for FY 2021-22 works out to Rs. 7098.82 Crore. Further, the Commission has computed the additional revenue on account of loss in sales due to higher distribution loss of Rs. 78.78 Crore for FY 2021-22. Moreover, since distribution loss is a controllable parameter, the Commission has carried out the sharing of the impact of excess distribution loss in accordance with the provisions of UERC Tariff Regulations, 2018.

### 3.1.3 *Power Purchase Expenses (Including Transmission Charges)*

The Petitioner has submitted the power purchase cost (including transmission charges) of Rs. 6253.33 Crore as against the approved expenses of Rs. 6144.52 Crore for FY 2021-22.

The Petitioner further submitted that it has reduced revenue towards sale of surplus power amounting to Rs. 2.34 Crore and Late Payment Surcharge of Rs. 0.22 Crore and added prior period expenses (Him Urja Pvt. Ltd.) of Rs. 1.48 Crore, and accordingly, claimed net power purchase cost of Rs. 5226.78 Crore excluding transmission charges.

The Commission in its previous Tariff Orders had laid down the principle for calculating the rate of free power based on the average rate of power purchase from large hydro stations by UPCL. The Commission computed the rate of free power as per the audited accounts as Rs. 2.33/kWh which is the same as booked in the audited accounts and, therefore, no adjustment on account of rate of free power has been carried out.

With regards to the claim of Water Tax amounting to Rs. 178.87 Crore, the Commission sought supporting documents to substantiate the actual expenses incurred towards the same. The Petitioner in its reply dated January 17, 2023, submitted the same. The Commission has gone through the submissions of the Petitioner and has approved the same.

UPCL has claimed PGCIL charges of Rs. 734.51 Crore as against the approved expenses of Rs. 614.55 Crore. It is observed that the variation is on account of Other Charges amounting to Rs. 93.94 Crore which includes arrears of Rs. 75.87 Crore and transmission charges towards 400 kV Srinagar S/s and PH Line amounting to Rs. 18.45 Crore and Rs. 0.61 Crore towards deferred taxes. The Commission has approved the Inter-State Transmission Charges of Rs. 734.51 Crore for FY 2021-22.

However, the Commission would like to point out that Inter-State Transmission charges are increasing as dependency on short term power is also increasing. In FY 2021-22, UPCL had purchased about 2077.83 MU from IEX (Net Purchase) and Tender Purchase at an average rate of Rs. 4.04 per unit and Rs. 4.90 per unit respectively. The Commission had allowed deficit purchase at State periphery at Rs. 4 per unit for FY 2021-22. In the current truing up proceedings, the Commission is not going into the details of landed price of power procured by UPCL during FY 2021-22 from the energy exchange, as the same would include not only the price of power but SToA charges and PoC losses as well. In this regard, **the Commission directs UPCL to ensure that actual power purchase to meet the deficit should not exceed the rate given by the Commission in the relevant tariff orders at the State periphery. Any procurement over and above the rate at the State periphery approved by the Commission shall be disallowed unless prior approval for the same is sought by UPCL.**

With regard to the Intra-State transmission charges, UPCL has claimed PTCUL and SLDC Charges of Rs. 290.95 Crore which includes incentives on account of higher availability. The Commission has approved the Intra-State Transmission Charges and SLDC charges as claimed by the Petitioner.

UPCL submitted that it has not been able to fulfill the RPO targets for FY 2021-22 in accordance with the provisions of the UERC (Tariff and Other Terms for Supply of Electricity from Renewable Energy Sources and non-fossil fuel based Co-Generating Stations) Regulations, 2018 (RE Regulations, 2018). The Petitioner requested the Commission to exercise power to relax available under Regulation 51 of RE Regulations, 2018 and allow the Petitioner to carry forward the following deficit of solar as well as non-solar RPO to FY 2023-24.

**Table 3.17: RPO Status for FY 2021-22 (MU)**

| Particulars | FY 2021-22 |
|---|---|
| Renewable Purchase Obligation - Non-solar | 10.50% |
| Renewable Purchase Obligation - Solar | 10.50% |
| Total Energy (at State Periphery) (In MU) | 14912.21 |
| Total Hydro Energy | 7608.04 |
| Energy Excluding Hydro | 7304.17 |
| RPO Target (Non-Solar) | 766.94 |
| RPO Target (Solar) | 766.94 |
| RE Energy Purchased (Non-Solar) | 741.30 |
| RE Energy Purchased (Solar) | 416.87 |
| **Energy deficit for achieving RPO (Non-solar) {(-ve) Surplus/(+) Deficit}** | **25.64** |
| **Energy deficit for achieving RPO (Solar) {(-ve) Surplus/(+) Deficit}** | **350.07** |

The Commission has gone through the submissions of the Petitioner and has taken serious note of the non-compliance of RPO targets specified in the RE Regulations, 2018. However, since the matter cannot be dealt with in this Tariff proceedings, the Commission advises UPCL to bring a separate Petition seeking carry forward of unmet RPO in accordance with UERC (Compliance of Renewable Purchase Obligation) Regulations, 2010.

The Commission for allowing the power purchase cost has relied upon the cost booked in the audited accounts and approves the power purchase cost as follows:

**Table 3.18: Power Purchase Cost claimed by UPCL and approved by the Commission for FY 2021-22 (Rs. Crore)**

| Particulars | Claimed by UPCL | Approved by the Commission |
|---|---|---|
| Power Purchase Expenses | 5226.78 | 5226.78 |
| Transmission Charges-Inter-State | 734.51 | 734.51 |
| Intra-State Transmission & SLDC Charges | 290.95 | 290.95 |
| **Total Power Purchase Cost** | **6252.25** | **6252.25** |

### 3.1.4 *Operation and Maintenance (O&M) Expenses*

O&M expenses comprises of Employee Expenses, A&G Expenses and R&M Expenses, i.e. expenditure on staff, administration and general expenses and repairs and maintenance expenses etc. O&M expenses for the third Control Period has to be calculated in accordance with Regulation 84 of UERC Tariff Regulations, 2018 which specifies as under:

*"(1) The O&M expenses for the first year of the Control Period will be approved by the Commission taking into account the actual O&M expenses for last five years till Base Year subject to prudence check and any other factors considered appropriate by the Commission.*

*(2) The O&M expenses for the nth year and also for the year immediately preceding the Control*

*Period, i.e. FY 2018-19, shall be approved based on the formula given below:-*

*O&Mn = R&Mn + EMPn + A&Gn*

*Where –*

- *O&Mn – Operation and Maintenance expense for the nth year;*
- *EMPn – Employee Costs for the nth year;*
- *R&Mn – Repair and Maintenance Costs for the nth year;*
- *A&Gn – Administrative and General Costs for the nth year;*

*(3) The above components shall be computed in the manner specified below:*

*EMPn = (EMPn-1) x (1+Gn) x (1+CPIinflation)*

*R&Mn = K x (GFAn-1) x (1+WPIinflation) and*

*A&Gn = (A&Gn-1) x (1+WPIinflation) + Provision*

*Where -*

- *EMPn-1 – Employee Costs for the (n-1)th year;*
- *A&G n-1 – Administrative and General Costs for the (n-1)th year;*

*Provision: Cost for initiatives or other one-time expenses as proposed by the Transmission Licensee and approved by the Commission after prudence check.*

- *'K' is a constant specified by the Commission in %. Value of K for each year of the control period shall be determined by the Commission in the MYT Tariff order based on licensee's filing, benchmarking of repair and maintenance expenses, approved repair and maintenance expenses vis-à-vis GFA approved by the Commission in past and any other factor considered appropriate by the Commission;*
- *CPIinflation – is the average increase in the Consumer Price Index (CPI) forimmediately preceding three years;*
- *WPIinflation - is the average increase in the Wholesale Price Index (CPI) for immediately preceding three years;*
- *GFAn-1 – Gross Fixed Asset of the Transmission Licensee for the n-1th year;*

- *Gn is a growth factor for the nth year and it can be greater than or less than zero based on the actual performance. Value of Gn shall be determined by the Commission in the MYT tariff order for meeting the additional manpower requirement based on licensee's filings, benchmarking and any other factor that the Commission feels appropriate:*

*Provided that repair and maintenance expenses determined shall be utilised towards repair and maintenance works only.*

*Provided further that, repair and maintenance expenses for IT related assets and non-IT related assets shall be computed separately under these Regulations if the distribution utility maintains separate record of assets wise detail of R&M expenses claimed under these Regulations."*

#### 3.1.4.1 Employee Expenses

The Petitioner submitted that the actual gross employee expense as per audited account is Rs. 398.96 Crore. The Petitioner further submitted that it has capitalized employee expenses of Rs. 60.47 Crore and has claimed net employee expenses of Rs. 326.86 Crore after excluding the subsidized electricity to its employees amounting to Rs. 11.63 Crore.

The Petitioner submitted that the normative employee expenses for FY 2021-22 has been arrived at as per the methodology adopted by the Commission in its previous orders and in accordance with UERC Tariff Regulations, 2018. The Petitioner further submitted that the opening $EMP_{n-1}$ has been considered as Rs. 402.96 Crore as approved by the Commission in truing up of FY 2020-21 and CPI inflation has been considered as the average increase in the consumer price index for the preceding three years. The Petitioner has further considered growth in number of employees as 0.36% based on fresh recruitments during FY 2021-22. Further, actual capitalization rate as per the audited accounts has been considered as 15.16% for arriving at the normative employee cost.

The Petitioner has claimed the normative employee expenses for FY 2021-22 of Rs. 363.68 Crore as shown in the Table below:

**Table 3.19: Revised Employee Expenses as claimed by the Petitioner for FY 2021-22 (Rs. Crore)**

| Particulars | Approved in Order dt. April 26, 2021 | Revised normative |
|---|---|---|
| $Emp_{n-1}$ | 402.96 | 402.96 |
| Inflation Factor | 5.35% | 6.00% |
| Growth Factor | 0.00% | 0.36% |
| Gross Employee Expenses | 424.55 | 428.66 |
| Capitalisation Rate | 16.01% | 15.16% |
| Less: Employee Expenses Capitalised | 67.98 | 64.97 |
| **Net Employee Expenses** | **356.55** | **363.68** |

UPCL has requested the Commission to approve the normative employee expenses of Rs. 363.68 Crore.

The Commission had approved the normative gross employee expenses of Rs. 402.96 Crore for FY 2020-21 during truing up. Considering the same as the base and in accordance with the UERC Tariff Regulations, 2018, the Commission has computed the normative employee expenses for FY 2021-22. Regarding the growth factor, the Commission observed that the number of employees have marginally increased by 0.36% in FY 2021-22, therefore, the Gn has been considered as 0.36%. The employee expenses so computed has then been escalated by the CPI inflation of 6.00%.

The Commission further observed that a cost of Rs. 11.63 Crore was booked towards subsidised electricity provided to the employees and pensioners of UPCL. The Commission in line with its approach adopted in its earlier tariff orders has, therefore, deducted the above amount for computing actual employee expenses for FY 2021-22.

The Commission has computed the capitalisation rate of employee expenses as worked out based on the actual employee expenses capitalized, as reflected in the audited accounts of FY 2021-22 which works out to 15.16% and is same as that considered by the Petitioner.

The normative employee expense approved by the Commission for FY 2021-22 is as shown in the Table below:

**Table 3.20: Approved Employee Expenses for FY 2021-22 (Rs. Crore)**

| Particulars | Approved in the Tariff Order | Actual as per Audited Accounts | Actual for truing up | Normative | |
|---|---|---|---|---|---|
| | | | | Claimed by UPCL | Approved |
| EMPn-1 | 402.96 | 338.49 | 338.49 | 402.96 | 402.96 |
| Gn | 0.00% | | | 0.36% | 0.36% |
| CPIinflation | 5.35% | | | 6.00% | 6.00% |
| **EMPn = (EMPn-1) x (1+Gn) x (1+CPIinflation)** | **424.52** | | | **428.66** | **428.66** |
| Capitalisation rate | 16.01% | | | 15.16% | 15.16% |
| Less: Employee expenses capitalized | 67.98 | | | 64.97 | 64.97 |
| **Net Employee Expenses** | **356.55** | | | **363.68** | **363.69** |
| Impact of enhanced Pension & Pay Commission | - | | | - | - |
| **Less:** Subsidised Electricity to Employees | | | 11.63 | - | - |
| **Total Employee Expenses** | **356.55** | **338.49** | **326.86** | **363.68** | **363.69** |

### *3.1.4.2 Repair and Maintenance*

The Commission had approved the R&M expenses of Rs. 183.93 Crore for FY 2021-22 in its Order dated April 26, 2021. As against the same, the actual R&M expenses for FY 2021-22 as per the audited accounts are Rs. 228.53 Crore. The Petitioner submitted that for computing normative R&M expenses, it has considered K factor of 3.06% as approved by the Commission and has considered opening GFA for FY 2021-22 as Rs. 6665.10 Crore (Approved Opening GFA of FY 2020-21 as Rs. 5867.65 Crore and Net Capitalisation as per the Books of Accounts for FY 2020-21 at Rs. 797.45 Crore).

The Commission in its Order dated February 27, 2019 had considered the 'K' factor of 3.06% for computation of the normative R&M expenses for FY 2021-22 in accordance with the UERC Tariff Regulations, 2018. With regard to Opening GFA to be considered, it is observed that the Petitioner has claimed entire net capitalization pertaining to FY 2020-21 even though it is yet to submit EI certificates corresponding to net capitalization of Rs. 58.38 crore pertaining to FY 2020-21.

The Commission, has, therefore, for computation of R&M expenses for FY 2021-22, has considered opening GFA for FY 2021-22 as approved by the Commission in its Order dated March 31, 2022.

The Commission for truing up of FY 2021-22 has considered the same K factor and has reworked the R&M expenses considering the Opening GFA for FY 2021-22 as Rs. 6606.71 Crore. The Commission has considered the inflation factor as 2.42%, as the average of WPI inflation for the preceding three years of FY 2021-22. The normative R&M expenses trued up by the Commission for

FY 2021-22 is as shown in the Table below:

**Table 3.21: Approved R&M Expenses for FY 2021-22 (Rs. Crore)**

| Particulars | Approved in the Tariff Order | Actual as per Audited Accounts | Actual Approved | Normative | |
|---|---|---|---|---|---|
| | | | | Claimed by UPCL | Approved |
| R&M Expenses | 183.93 | 228.53 | 228.53 | 208.88 | 207.31 |

### *3.1.4.3 A&G Expenses*

The Commission had approved the A&G expenses of Rs. 54.80 Crore for FY 2021-22 in its Tariff Order dated April 26, 2021. As against the same, the actual net A&G expenses for FY 2021-22 as per the audited accounts was Rs. 65.08 Crore which includes expenses towards UERC Fees and Bandwidth and FMS Charges amounting to Rs. 33.91 Crore.

The Petitioner in line with the Commission's approach in Order dated February 27, 2019 requested the Commission to allow Data Centre Expenses and Licence Fees on actual basis. UPCL submitted the cost against data centre of Rs. 30.37 Crore and Licence fee of Rs. 3.54 Crore.

The Commission examined the actual A&G expenses of UPCL for FY 2021-22 and sought justification for increase in provisioning towards data centre by Rs. 10 Crore. UPCL in its reply submitted that the increase is on account of the following:

- Increase in Call Centre Staffing cost due to increase in nos. of seats from 70 in FY 2020-21 to 105 in FY 2021-22.
- Increase in average nos. of consumers to be billed by deployed meter reading agency from 6.89 Lakh in FY 2020-21 to 7.62 lakh in FY 2021-22.
- Payment of SCADA system maintenance invoices pertaining to FY 2020-21 paid in FY 2021-22 as invoices were raised by the agency in FY 2021-22.
- Increase in Scope of Work by deployed Technical Support System and development team for necessary software enhancement and other data centre and DR centre maintenance works.
- During FY 2021-22 additional service of FMS and AMC started for RT-DAS system established under IPDS program.

The Commission further observed that UPCL has included an amount of Rs. 1.56 Crore paid as penalty as a part of its claim. The Commission has, therefore, excluded the penalty paid from the actual A&G Expenses.

It is to be noted when the expenses are allowed on normative basis, the actual expenses may be higher or lower in comparison to the normative expenses. It is for this reason, the MYT Regulations, 2018 provides for sharing of gains and losses in controllable factors. Section 61 of the Electricity Act, 2003 also lays down that the Tariff Regulations should be guided by factors that would encourage efficiency, economical use of resources, good performance and optimum investments.

The Commission had approved the trued up normative gross A&G expenses of Rs. 30.34 Crore for FY 2020-21. Considering the same as the base and in accordance with the UERC Tariff Regulations, 2018, the Commission has computed the normative A&G expenses for FY 2021-22. The Commission had considered WPI inflation as 2.42% which is the average of WPI Inflation for the preceding three years of FY 2021-22. The Commission has computed the capitalisation of expenses in the same proportion of actual capitalisation of expenses to the actual gross A&G expenses excluding provision, penalty paid & licence fees.

The normative A&G expense including licence fees and data centre cost approved by the Commission for FY 2021-22 is as shown in the Table below:

**Table 3.22: Normative A&G expenses approved for FY 2021-22 (Rs. Crore)**

| Particulars | Allowable |
|---|---|
| A&Gn-1 | 30.34 |
| WPIinflation | 2.42% |
| Gross A&G expenses | 31.07 |
| Capitalisation rate | 34.76% |
| Less: A&G expenses capitalised | 10.80 |
| **Net A&G expenses** | **20.27** |
| Provision & License fee | 33.91 |
| **A&Gn = A&Gn-1 x (1+WPIinflation) + Provision** | **54.18** |

The A&G expense claimed and approved by the Commission for truing up including licence fees and data centre costs approved by the Commission for FY 2021-22 is as shown in the Table below:

**Table 3.23: Approved A&G expenses for FY 2021-22 (Rs. Crore)**

| Particulars | Approved in the Tariff Order | Actual as per Audited Accounts | Actual for sharing | Normative | |
|---|---|---|---|---|---|
| | | | | Claimed by UPCL | Approved |
| A&G expenses | 54.80 | 65.08 | 63.52 | 54.54* | 54.18 |

**as per revised submissions dated 26.12.2022*

Accordingly, the Commission has allowed the O&M Expenses as shown in the Table below:

**Table 3.24: Approved O&M Expenses for FY 2021-22 (Rs. Crore)**

| S. No. | Particulars | Approved in the Tariff Order | Actual as per Audited Accounts | Actual for sharing | Normative | |
|---|---|---|---|---|---|---|
| | | | | | Claimed by UPCL | Approved |
| 1. | Employee expenses | 356.55 | 326.86 | 326.86 | 363.68 | 363.69 |
| 2. | R&M expenses | 183.93 | 228.53 | 228.53 | 208.88 | 207.31 |
| 3. | A&G expenses | 54.80 | 65.08 | 63.52 | 54.54 | 54.18 |
| **Total** | | **595.27** | **620.47** | **618.91** | **627.10** | **625.18** |

The normative O&M expenses approved by the Commission in the true up are higher in comparison to the normative O&M expenses approved in the Tariff Order mainly on account of increase in GFA, Provisioning towards data centre cost and variation in capitalization rate and CPI & WPI Inflation.

As O&M expenses are controllable in nature, the Commission has further carried out sharing on account of actual and normative O&M expenses in the subsequent section of this Order.

## 3.2 Cost of Assets and Financing

### 3.2.1 *Capital cost of Original Assets*

As regards the capital cost of original assets, the Commission vide its Order dated April 11, 2015 held as under:

*"**3.2.5.1 Capital Cost of Original Assets***

*The Commission observed that the issue of original value of fixed assets for the Petitioner examined in detail in Paras 5.3.1 and 5.3.2 of the Order dated April 25, 2005. For reasons provided in the said Order, the original value of GFA as on November 09, 2001 was fixed at Rs. 508 Crore for the Petitioner, instead of the value of Rs. 1058.18 Crore assigned in the Provisional Transfer Scheme. The Commission had already recorded the reasons for the same in its previous Tariff Orders. Since, there is no change in the factual position and the matter is pending before the Hon'ble ATE, the Commission decides to maintain Status-quo ante."*

In this regard, Hon'ble ATE in its Judgment dated May 18, 2015 in Appeal No. 180 of 2013 ruled as under:

> *"25. We feel that since it is matter of transfer scheme and apportioning of value of assets between two States after reorganization, the Appellant should take up the matter with State Government for issuance of notification on transfer of assets to Uttarakhand from UP. Accordingly decided."*

In light of the Judgment of the Hon'ble ATE, the Commission in its Tariff Order dated April 05, 2016 did not find the need to revise the capital cost of original assets from the earlier approved value of Rs. 508 Crore for the Petitioner.

The Government of Uttarakhand vide its Notification dated March 08, 2022 sanctioned the Scheme for division of assets and liabilities executed between Uttar Pradesh Power Corporation Ltd. and Uttarakhand Power Corporation Ltd. on October 12, 2003. The aforesaid Notification further stated that GFA amounting to Rs. 1058.18 Crore is included in the notified Scheme. The Commission has taken note of the Notification, however, as the Petitioner has not filed any consequential claims on this account, the Commission in the current tariff proceedings has not considered the same. The Petitioner is, however, at liberty to claim the same in the next tariff filing.

The Commission vide its Order dated April 05, 2016, March 29, 2017, March 21, 2018, February 27, 2019, April 18, 2020, April 26, 2021 and March 31, 2022 has already carried out the truing up till FY 2020-21. The year wise GFA addition allowed by the Commission till FY 2020-21 is as shown below:

**Table 3.25: Assets base approved by the Commission after truing up (Rs. Crore)**

| Particulars | FY 2008-09 | FY 2009-10 | FY 2010-11 | FY 2011-12 | FY 2012-13 | FY 2013-14 | FY 2014-15 | FY 2015 -16 | FY 2016-17 | FY 2017-18 | FY 2018-19 | FY 2019-20 | FY 2020-21 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Opening Balance | 1540.46 | 1698.88 | 2019.76 | 2449.87 | 2787.04 | 3017.55 | 3202.56 | 3695.78 | 3980.56 | 4218.85 | 4616.40 | 5554.13 | 5867.65 |
| Net additions | 158.42 | 320.88 | 430.11 | 337.17 | 230.50 | 185.01 | 493.22 | 284.78 | 238.29 | 359.27 | 937.73 | 313.52 | 739.06 |
| **Closing Balance** | **1698.88** | **2019.76** | **2449.87** | **2787.04** | **3017.55** | **3202.56** | **3695.78** | **3980.56** | **4218.85** | **4616.40** | **5554.13** | **5867.65** | **6606.71** |

With regard to FY 2021-22, the Petitioner has claimed a net capitalisation of Rs. 1430.87 Crore as per audited accounts. The Petitioner was directed to submit the segregation of fixed assets added into HT and LT works and to submit the Electrical Inspector clearance for HT works for FY 2021-22 alongwith all the pending capitalisation which were disallowed in FY 2020-21. The Petitioner was also directed to rectify the anomalies in the EI certificate provided for FY 2016-17 to

FY 2020-21 and submit the details as per the format specified by the Commission. The Petitioner has, however, failed to rectify the anomalies pointed in the past EI certificates and instead has made a claim of Rs. 123.42 Crore towards the impact of non-consideration of capitalisation on account of non-submission of EI certificates. With regard to FY 2021-22, the Petitioner has been able to submit the EI certificates and details of LT works amounting to gross captialisation of Rs. 1243.46 Crore. The status of capitalisation details submitted by the Petitioner is as shown below.

**Table 3.26: Pending Electrical Inspector Certificates (Rs. Crore)**

| Particulars | Gross Capitalisation | Trued Up in Previous Orders | Details Provided now | Total Submitted | Balance Pending |
|---|---|---|---|---|---|
| **FY 2016-17** | 321.99 | 308.56 | 13.43 | 321.99 | - |
| **FY 2017-18** | 465.14 | 387.59 | 77.55 | 465.14 | - |
| **FY 2018-19** | 1009.9 | 828.65 | 181.25 | 1009.9 | - |
| **FY 2019-20** | 424.43 | 123.25 | 301.18 | 424.43 | - |
| **FY 2020-21** | 866.59 | 803.15 | - | 803.15 | 63.44 |
| **FY 2021-22** | 1514.51 | - | 1243.46 | 1243.46 | 271.05 |
| **Total** | **4602.56** | **2451.20** | **1816.87** | **4268.07** | **334.49** |

The Commission, as discussed earlier in preceding paras, regarding Electrical Inspector Certifcates, while carrying out truing up for FY 2020-21 observed as follows.

*"The Commission examined the Electrical Inspector certificates submitted by the Petitioner and observed as follows:*

*i) Duplicate EI certificates towards same works were submitted for certain projects.*

*ii) Some EI certificates were not legible, hence, works cannot be ascertained.*

*iii) EI certificates did not reconcile with the schemes provided in the summary of the covering letter.*

*iv) Multiple EI certificates for 7-8 schemes issued by same Electrical Inspector on a single day.*

*v) Details of work inspected not mentioned specifically.*

*In this regard, the Commission sought information from UPCL in response to which it was submitted by the Petitioner that the field units of UPCL were engaged in the Revenue Collection drive as the month of March being the peak month of revenue collection, and the information collation would take a lot of time, therefore, the submission of the requisite information seems quite difficult and time taking. The Petitioner, accordingly, requested the Commission to grant waiver from submission of the same. "*

The Commission further directed the Petitioner as follows:

*"…. **The Commission directs the Petitioner to submit the complete requisite information within 6 months from the date of this Order or otherwise, the Commission shall not allow the disallowed capitalisation for FY 2019-20**."*

It is observed that the Petitioner did not comply with the above. The Commission in the current proceedings vide its letter dated January 27, 2023, provided the Petitioner another opportunity to remedy the above. The Petitioner, however, could not remedy the above defects. The Commission in its Order dated March 31, 2022 had observed as follows.

*"It is observed that the Petitioner on one hand is making submissions before the Commission that it is facing severe cash flow issues and on the other hand it is falling behind in claiming ARR by furnishing proper capitalisation details. This exhibits a callous and indifferent approach in complying with the directions of the Commission. Since, the delay is on account of the inefficiency of the Petitioner, hence, no carrying cost will be allowed to the Petitioner for delayed approval of pending capitalisation of FY 2016-17, FY 2017-18, FY 2018-19 & FY 2019-20. **The Commission is further of the view that unless the complete capitalisation details for FY 2016-17 to FY 2019-20 is provided, truing up for these years shall not be done. The Commission has, however, allowed the impact of capitalisation details submitted for FY 2016-17 to FY 2019-20 in the truing up for FY 2020-21."***

In view of the decision taken above, the Commisison has continued with its approach and allowed the impact of capitalization in the truing up for FY 2021-22 for which details have been submitted for FY 2016-17 to FY 2020-21. However, the Commission is not carrying out truing up for these years since the Petitioner is yet to rectify the anomalies in the past EI certificates as mentioned above.

The Petitioner has submitted the details of LT works (including other assets) amounting to Rs. 584.90 Crore and Electrical Inspector Certificate for HT works amounting to Rs. 658.56 Crore capitalized during FY 2021-22. The Commission has considered Decapitalization against these assets amounting to Rs. 83.64 Crore based on the deletions of assets, as per books of accounts in FY 2021-22.

The Commission has, therefore, approved net additional capitalisation of Rs. 1159.82 Crore for FY 2021-22.

The Commission has, accordingly, approved the Opening GFA and net additions for FY

2021-22 as follows:

**Table 3.27: Assets base approved by the Commission (Rs. Crore)**

| Particulars | FY 2016-17 | FY 2017-18 | FY 2018-19 | FY 2019-20 | FY 2020-21 | FY 2021-22 |
|---|---|---|---|---|---|---|
| Opening Balance | 3980.56 | 4218.85 | 4616.40 | 5554.13 | 5867.65 | 6606.71 |
| Net additions | 238.29 | 397.55 | 937.73 | 313.52 | 739.06 | 1159.82 |
| **Closing Balance** | 4218.85 | 4616.40 | 5554.13 | 5867.65 | 6606.71 | 7766.53 |

## 3.2.2 *Financing of Capital Cost*

### *3.2.2.1 Truing Up of Capital Related Expenses for FY 2021-22*

The Petitioner has claimed net GFA addition of Rs. 1430.87 Crore for FY 2021-22. The means of finance submitted by the Petitioner in its Petition is as shown in the Table below:

**Table 3.28: Means of Finance for FY 2021-22 as submitted by the Petitioner (Rs. Crore)**

| Particulars | Amount |
|---|---|
| Loan | 419.65 |
| Deposit Works | 831.37 |
| Grant | |
| Internal resources | 179.85 |
| **Total** | **1430.87** |

As discussed above, the Commission has approved net additional capitalisation of Rs. 1159.82 Crore during FY 2021-22. The pro-rated means of finance as approved by the Commission is as follows:

**Table 3.29: Means of Finance as approved by the Commission for FY 2021-22 (Rs. Crore)**

| Particulars | Amount |
|---|---|
| Loan | 340.16 |
| Grant/Deposit Works | 673.88 |
| Equity | 145.78 |
| **Total** | **1159.82** |

#### *3.2.2.1.1 Interest and Finance Charges*

The Petitioner has claimed Interest and Finance Charges of Rs. 148.99 Crore for FY 2021-22 against the amount of Rs. 129.30 Crore approved by the Commission in the Tariff Order dated April 26, 2021.

The Petitioner submitted that it has claimed interest expenses as per the audited accounts after considering the following adjustments:

a) Interest on REC (Old) loans has been taken in accordance with the re-schedulement package of REC (Old) loans determined by the Commission in its Tariff Order for FY 2009-10 dated 23rd October, 2009.

b) Government Guarantee fees has been considered as per the audited accounts.

c) Interest on consumer security deposit has been claimed as per the actual interest paid.

d) The Petitioner has considered the interest on GPF as per audited accounts. The Petitioner submitted that the GoU has in the past refused to provide support on account of Interest on GPF. The Petitioner added that GoU is already bearing the terminal liability of the old employees unlike other States.

e) Provision for interest on loans towards assets which shall be converted to grants after successful implementation of the works have been excluded.

f) Other financial and bank charges have been considered after reducing the interest on overdraft / short term loans.

g) Rebate for online payment.

h) Actual interest accrued during the year has been claimed which is net off capitalisation as follows:

**Table 3.30: Interest expense on capital loans as submitted by the Petitioner for FY 2021-22 (Rs. Crore)**

| Particulars | As per Accounts |
|---|---|
| **Net Interest Expenses as per Accounts** | **203.22** |
| **Less:** | |
| Interest on GPF | - |
| Interest on Old REC Loans | 3.96 |
| Interest on Consumer Security Deposits | 37.66 |
| Guarantee Fee | 0.24 |
| Interest on Bank Short Term Loan/ Overdraft | 63.88 |
| Bank Charges & Other Commission | -2.47 |
| Rebate towards Online Payment | 25.51 |
| **Net Interest Expense Claimed towards Capitalized Assets** | **74.42** |

Regulation 27 of the UERC Tariff Regulations, 2018 specifies the methodology for computation of interest expenses. The Commission in accordance with the above Regulations has worked out the Interest and Finance Charges for FY 2021-22 considering the loan amount corresponding to the assets capitalised in the year based on the approved means of finance, and the interest rate of 10.60% computed on the basis of weighted average interest rate on the actual loan portfolio, i.e. opening loan as reduced by average repayment during the year.

The Petitioner has claimed interest on consumers' security deposits (CSD) for FY 2021-22 on cash basis as Rs. 40.48 Crore. The Commission has approved the interest on CSD for FY 2021-22 as Rs. 40.48 Crore on cash basis.

Further, the interest on REC Old Loan has been allowed as claimed by UPCL. The Petitioner has claimed guarantee fee of Rs. 0.24 Crore for FY 2021-22. The Commission has considered the same as claimed by the Petitioner.

Regarding the claim of Rs. 25.51 Crore incurred on account of Rebate provided towards online payment, the Commission is of the view that such cost cannot form part of Interest expenses and should be accounted in the same manner as other rebates are accounted for, which is as part of revenue. The Commission has, therefore, not considered the cost as part of interest expenses and has instead reduced the said amount from Revenue while computing Gap/Surplus for FY 2021-22.

Regarding negative bank charges submitted by UPCL, the Commission sought justification from UPCL. UPCL in its reply submitted that the same was on account of excess provisioning made in the past which has now been adjusted. The Commission has, therefore, approved bank charges as submitted by UPCL.

The Commission has worked out the Interest and Finance Charges for FY 2021-22 considering the loan amounts corresponding to the assets capitalised in the year based on the approved means of finance, as shown in the Table below:

**Table 3.31: Interest and Finance Charges approved for FY 2021-22 (Rs. Crore)**

| Particulars | Tariff Order | Claimed by UPCL | Approved |
|---|---|---|---|
| Interest on Loan corresponding to assets capitalised | 50.77 | 74.42 | 86.91 |
| REC Old Loan | 10.80 | 10.80 | 10.80 |
| Interest on Normative Loans | - | - | - |
| Guarantee Fee | 1.24 | 0.24 | 0.24 |
| Financing Charges | 2.33 | -2.47 | -2.47 |
| Interest on Security Deposit | 64.15 | 40.48 | 40.48 |
| Rebate towards Online Payment | - | 25.51 | - |
| **Net Interest and Finance Charges** | **129.30** | **148.99** | **135.97** |

### *3.2.2.1.2 Depreciation*

The Petitioner submitted that the Commission has been allowing depreciation on opening

GFA as the same was provided in the notes to accounts for the respective years. For FY 2021-22, the depreciation in the audited accounts as submitted by the Petitioner is Rs. 253.30 Crore. The Petitioner submitted that it has calculated depreciation on the Opening GFA for FY 2021-22 considering the depreciation rate of 5.40%. The Petitioner has, accordingly, claimed total depreciation of Rs. 246.98 Crore as against Rs. 178.80 Crore approved by the Commission in the Tariff Order for FY 2021-22.

The Commission observed that UPCL has considered opening grants of Rs. 2094.86 Crore towards opening GFA of Rs. 6665.10 Crore for FY 2021-22 as against the trued-up value of Rs. 2854.17 Crore towards opening GFA of Rs. 6606.71 Crore approved in MYT Order dated March 31, 2022. The Commission, accordingly, sought explanation from UPCL on the variation in the opening grants considered by it. UPCL vide its reply dated February 06, 2023 submitted that there is a great difficulty in identifying the assets created out of grants and consumer contribution and corresponding depreciation to be charged as well as writing back of the same (in case of scrap) at the time of dismantling of such assets. UPCL submitted that the same has also been covered in the Capitalization Policy of UPCL approved by the Commission, wherein it has been mentioned that the linking of receipts of capital grant, consumer contribution and subsidy to the creation of fixed assets and charging depreciation/ writing back proportionate amount is practically not possible. UPCL submitted that this has resulted in variance in the balance of the GFA as submitted in the past (Rs. 2,605 Crore) and the balance as submitted in the latest response as per Audited Accounts (Rs. 2,094.85 Crore). UPCL further submitted that the exercise of identification of such assets along with their source of funding and their corresponding depreciation, has already been assigned on 31.10.2021 initially for 4 months and is still being carried out by M/s K.G. Somani & Co., LLP, Chartered Accountants due to the arduous nature of the task. UPCL, accordingly, requested the Commission to currently consider the value of Grants as per the Audited Accounts.

The Commission has gone through the submissions of the Petitioner and observes that the Commission has been approving the funding of Assets, since the creation of UPCL, based on actuals funding submitted by the Petitioner based on the audited accounts and after carrying out due prudence check and truing up till FY 2020-21 has been carried out based on the same. The submission made by UPCL in the current tariff proceedings raises serious concern on the quality of information being supplied by UPCL in support of its claims. The Commission, therefore, do not find any merit for such re-instatement of funding as no material explanation has been provided by

UPCL. The Commission has, therefore, considered the amount of grant as approved by it in its MYT Order dated March 31, 2022. **The Petitioner is directed to reconcile the funding and submit the reasons for deviations within six months from the date of this Order.**

The Commission has allowed depreciation at a weighted average rate of 5.40% based on the audited balance sheet for FY 2021-22. Further, the Commission in the past has been allowing depreciation on the value of opening GFA keeping in line with the practice being followed by the Petitioner of capitalising the asset in its accounts on the last day of the financial year.

The depreciation approved by the Commission for FY 2021-22 is as shown in the Table below:

**Table 3.32: Depreciation approved for FY 2021-22 (Rs. Crore)**

| Particulars | Tariff Order | Claimed by UPCL | Approved |
|---|---|---|---|
| Opening GFA | 5830.60 | 6665.10 | 6606.71 |
| Grants | 2528.49 | 2094.86 | 2854.71 |
| Depreciable opening GFA | **3302.11** | 4570.24 | 3752.00 |
| Net addition during the year | 344.52 | 599.51 | 485.94 |
| Closing GFA | 3646.64 | 5169.76 | 4237.94 |
| Depreciation Rate | 5.41% | 5.40% | 5.40% |
| **Depreciation** | **178.80** | **246.98** | **202.76** |

### 3.2.3 *Provisions for Bad and Doubtful Debts*

The Petitioner in its Petition has submitted that the annual provision towards bad & doubtful debts is as per Generally Accepted Accounting Principle and considering the peculiarity of retail supply business, the same has also been recognized by other SERCs. The Petitioner added that the amount, if any, written off towards bad debts is only adjusted against the accumulated provisions in the books, irrespective of the actual amounts of bad debts written off during any particular financial year.

The Petitioner requested the Commission to allow provision for bad and doubtful debts on actual basis after considering the geographical spread of the large consumer base across the State including a large part of the same prevailing in the difficult terrain and hilly region and the problem of realizing energy dues from retail consumers.

The Petitioner submitted that as per Regulation 31 of UERC Tariff Regulations, 2018 it is allowed to make provision of Bad and Doubtful Debts and further submitted that it has been making provisioning of the bad-debts but the Commission has not been allowing the same on account of pending Bad-debt policy.

The Petitioner further submitted that the Commission vide letter no. UERC/6/TF-540/2021-22/2021/671 dated 12.10.2021 has approved the Policy for Provisioning and Writing Off Bad & Doubtful Debts. The Petitioner further submitted that a total of Rs. 491.90 Crore has been written off during the period FY 2001-02 to FY 2020-21. In the instant Petition the Petitioner has claimed the Provision for bad and doubtful debts/actual writing off bad and doubtful debts amounting to Rs. 115.18 Crore.

The Petitioner further submitted that based on the above terms of the Policy, UPCL is taking corrective action and expects to write-off fictitious receivables/ arrears after due process is followed/approval is taken from management. The recovery of provisioning towards Bad debts would help UPCL achieve firmness in writing off bad debts, collection of dues in effective and efficient manner, ensure bad debts are kept within reasonable proportions.

The Commission after going through the submission of the Petitioner directed the Petitioner to submit category wise Bad Debts written off along with segregation of DPS waived. The Petitioner in its reply submitted the category wise bad debts written off till FY 2021-22 as follows:

**Table 3.33: Category wise Bad Debt written off as submitted by the Petitioner (Rs. Crore)**

| Category | FY 20-21 | FY 19-20 | FY 18-19 | FY 17-18 | FY 16-17 | FY 15-16 | FY 14-15 | FY 13-14 | FY 12-13 | FY 12-13 |
|---|---|---|---|---|---|---|---|---|---|---|
| RTS-1: Domestic | 39.38 | 10.99 | 24.40 | 38.66 | 20.60 | 40.60 | 20.16 | 24.76 | 28.12 | 1.97 |
| RTS-2: Non-Domestic | 16.59 | 3.26 | 8.05 | 5.33 | 4.19 | 10.48 | 8.73 | 7.82 | 9.17 | 7.00 |
| RTS-3: Govt. Public Utilities | 23.77 | 0.62 | 2.25 | 0.00 | 0.00 | 0.00 | 1.66 | 0.00 | 0.11 | 1.02 |
| RTS-4: Private Tube-wells / Pumping sets | 3.51 | 0.96 | 12.53 | 3.18 | 1.08 | 2.66 | 0.16 | 1.72 | 4.37 | 0.57 |
| RTS-5: LT & HT Industry | 48.59 | 7.69 | 12.04 | 0.00 | 7.75 | 2.37 | 5.92 | 12.70 | 2.27 | 0.40 |
| RTS-6: Mixed Load | 0.00 | 0.00 | 0.00 | 0.00 | 0.17 | 0.00 | 0.51 | 0.00 | 0.00 | 0.00 |
| RTS-7: Railway Traction | 0.30 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Inter - State/ Country Supply | 0.00 | 0.73 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| **Total** | **132.15** | **24.25** | **59.28** | **47.17** | **33.80** | **56.11** | **37.14** | **47.00** | **44.04** | **10.96** |

The Petitioner also submitted the segregation of DPS waived off from FY 2001-02 to FY 2021-22 amounting to Rs. 136.15 Crore as shown below.

**Table 3.34: Details of Surcharge waived off as submitted by the Petitioner (Rs. Crore)**

| S. No. | Duration of Scheme | Category | Amount of Surcharge Waived Off (Rs. Cr.) |
|---|---|---|---|
| 1. | 1.10.2021 to 31.03.2022 | Domestic | 39.92 |
| | | Non-Domestic (upto 75 kW) | 9.75 |
| | | PTW | 3.70 |
| | | LT Industry | 1.20 |
| | | **Total** | **54.57** |
| 2. | 19.02.2021 to 18.05.2021 | Domestic | 29.01 |
| | | Non-Domestic (upto 75 kW) | 2.93 |
| | | PTW | 4.13 |
| | | LT Industry | 0.45 |
| | | **Total** | **36.52** |
| 3. | 14.04.2020 to 30.06.2020 | PTW | 0.76 |
| 4. | 18.03.2019 to 31.03.2019 | PTW | 2.72 |
| 5. | 18.07.2016 to 30.09.2016 | LT Industry | 0.04 |
| 6. | 08.02.2016 to 31.03.2016 | Domestic | 17.21 |
| | | PTW | 1.23 |
| | | **Total** | **18.44** |
| 7. | 05.03.2014 to 15.08.2014 | Domestic | 6.44 |
| | | PTW | 0.45 |
| | | LT Industry | 0.31 |
| | | **Total** | **7.20** |
| 8. | 14.12.2012 to 30.06.2013 | Domestic | 15.97 |
| | | PTW | 3.45 |
| | | **Total** | **19.42** |
| **Grand Total** | | | **136.15** |

The Commission has gone through the submissions of the Petitioner and observes that out of the total Bad Debt written off amounting to Rs. 491.90 Crore, surcharge waiver amounts to Rs. 136.15 Crore. It is further observed that the Petitioner has not submitted the year wise surcharge waived off for necessary co-relation with the principal amount writen off. The Commission is of the view that surcharge is a voluntary relief provided by the Petitioner mostly at the behest of Government and, therefore, honest consumers cannot be loaded with the impact of such waiver. Excluding the amount of surcharge waived off, the principal amount written off works out to Rs. 355.75 Crore. The Commission has already allowed the Petitioner a total provision of Rs. 333.75 Crore till FY 2008-09 which also includes the opening balance of the provision inherited from UPPCL. Hence, the amount of bad debts to be allowable to UPCL works out to Rs. 22 Crore.

The Commision further in its MYT Order dated March 31, 2022, observed as follows.

*"The Commission has gone through the submissions of the Petitioner and observes that the Petitioner*

*has failed to submit any specific approval of its BoD for writing off Bad Debts and, therefore, has not considered the same in the current proceedings. Merely mentioning that the financial statements have been approved by its BoD and hence, write offs have also been approved is devoid of merits. When a particular action requires specific approval of BoD, the same has to be taken specifically and it cannot be inferred that the approval has been accorded indirectly. Moreover, the Commission has in its past tariff orders held that any surcharge waiver will have to be borne by UPCL and it cannot be allowed to be passed on to the consumers. Thus, UPCL is required to submit the details of bad debts written off year wise giving separate details of surcharge waived off. The Commission shall consider the same once specific approvals are submitted in future tariff filings alongwith the requiste details."*

In view of the above, in the absence of specific approval and details and reasons of year wise surcharge waived off, the Commission has not approved any Bad Debts for FY 2021-22. The Petitioner is, however, at liberty to submit its claim duly certified by Statutory Auditor along with specific approval of BoD alongwith the next tariff Petition justifying the write offs.

### 3.2.4 *Interest on Working Capital (IoWC)*

The Petitioner has submitted that it has computed interest on working capital as per UERC Tariff Regulations (First Amendment), 2020. The Petitioner has submitted that it has claimed normative IoWC of Rs. 117.42 Crore as per the amended Regulation 33 of the UERC Tariff Regulations, 2018.

The Petitioner also submitted that the actual interest on working capital/overdraft facility is Rs. 63.88 Crore. The Petitioner has also claimed sharing of gains on account of the same.

The computation of interest on working capital as submitted by the Petitioner is detailed in the Table below:

**Table 3.35: Interest on Working Capital Claimed by the Petitioner for FY 2021-22 (Rs. Crore)**

| Particulars | Amount |
|---|---|
| Operation and Maintenance Expenses (one month) | 53.45 |
| Maintenance Spares @ 15% of O&M Expenses | 96.21 |
| Receivables (2 months) | 1340.09 |
| Capital required to finance such shortfall in collection of current dues | 149.55 |
| Less: Power Purchase for 1 month | 521.02 |
| **Net working capital** | **1118.28** |
| **Interest on working capital** | **117.42** |

It is observed that the Petitioner has claimed IoWC after factoring in the First Amendment to UERC Tariff Regulations, 2018 issued on November 26, 2020.

Regulation 33 of the UERC Tariff Regulations, 2018 as amended vide first amendment for computing interest on working capital specifies as follows.

*""33. Interest on Working Capital*
*Rate of interest on working capital shall be on normative basis and shall be equal to the State Bank Advance Rate (SBAR) of State Bank of India as on the date on which the application for determination of tariff or Truing-up or annual performance review is made.*

*(2) Distribution:*

*a) The Distribution Licensee shall be allowed interest on the estimated level of working capital for the financial year, computed as follows:*

*(i.) Operation and maintenance expenses for one month;*

*(ii.) Maintenance spares @ 15% of operation and maintenance expenses; plus*

*(iii.) Two months equivalent of the expected revenue from sale of electricity at the prevailing tariffs;*

*(iv.) Capital required to finance such shortfall in collection of current dues as may be allowed by the Commission; minus*

*(v.) One-month equivalent of cost of power purchased, based on the annual power procurement plan."*

The Commission in line with the above, has computed interest on working capital for FY 2021-22 as shown in the Table below.

**Table 3.36: Interest on Working Capital as approved by the Commission for FY 2021-22 (Rs. Crore)**

| Particulars | Amount |
|---|---|
| Operation and Maintenance Expenses (one month) | 52.10 |
| Maintenance Spares @ 15% of O&M Expenses | 93.78 |
| Receivables (2 months) | 1183.14 |
| Capital required to finance such shortfall in collection of current dues | 61.46 |
| Less: Power Purchase for 1 month | 502.09 |
| **Net working capital** | **888.38** |
| **Interest on working capital** | **107.94** |

The Petitioner further submitted that the Petitioner has been availing overdraft facility from various banks which has been primarily utilized for the purpose of payments of power purchase expenses and to fund the receivables which are long overdue from consumers. The Petitioner further submitted that it considers the receipt of Delayed Payment Surcharge from the consumers in the year it is received but the funding cost for the same is not being approved by the Commission. The details of such overdraft facility and interest expenses for FY 2021-22 as submitted by the Petitioner is as shown in the Table below.

**Table 3.37: Interest on OverDraft availed by the Petitioner for FY 2021-22 (Rs. Crore)**

| Month | Overdraft availed at the end of the month (Rs. Cr.) | Interest on OD (Rs. Cr.) |
|---|---|---|
| April, 21 | 215.58 | 0.74 |
| May, 21 | 216.96 | 0.49 |
| June, 21 | 223.37 | 0.69 |
| July, 21 | 221.05 | 0.73 |
| Aug, 21 | 225.16 | 0.72 |
| Sept, 21 | 213.63 | 0.70 |
| Oct, 21 | 227.06 | 0.70 |
| Nov, 21 | 126.79 | 0.66 |
| Dec, 21 | 56.78 | 0.55 |
| Jan, 22 | 42.92 | 0.54 |
| Feb, 22 | 20.47 | 0.33 |
| March, 22 | 0.00 | 0.19 |
| **Total** | | **7.05** |

The Petitioner submitted that in addition to the overdraft facility, the Petitioner has availed special loan @ 9.50% to meet the working capital requirement. The Petitioner submitted that the total actual interest on working capital for FY 2021-22 is Rs. 63.88 Crore (Interest on OD of Rs. 7.05 Crore and interest on special loan of Rs. 56.83 Crore).

The Commission observes that the Petitioner for sharing the gain/loss on account of interest on working capital has considered actual interest on loan of Rs. 63.88 Crore. It is further observed that the Overdraft facility was availed for the dual prupose of meeting power purchase and to fund receivables. It is further observed that the collection efficiency of the Petitioner is very poor in the beginning months of the financial year resulting in increased requirement of OD. The Commission in the MYT Oder dated March 31, 2022 ruled as follows.

*"The need of overdraft arises as UPCL does not meet the collection efficiency targets. In fact in the initial months of the financial year, Collection efficiency is found to be around 50%. Hence, due to inefficiencies of the field officers, the Petitioner Company is being loaded with the burden of LPS to*

*generating companies and interest on overdrafts which ultimately passes on to the consumers. The Commission has taken a serious note of this and **directs UPCL to submit the month wise division wise details of collection of dues by the 15th of the next month and action may be taken against the Executive Engineer of those divisions whose collection efficiency is less than the approved collection efficiency."***

The Commission for FY 2021-22 also observed that the collection efficiency in the month of April 2021 was merely 57.37% as against approved collection efficiency of 99.15%. The Commisison is, therefore, of the view that such inefficiency on the part of the Petitioner cannot be passed on to the consumers and, therefore, there is a need to re-state the OD requirement to fund only the shortfall in the receivables at approved collection efficiency of 99.15%. Moreover, the Commission while issuing the first amendment to UERC Tariff Regulations, 2018 had clarified in the SoR to the amended Regulations that while comparing the normative Interest on Working Capital against the actual cost on borrowing paid by the discom, the Commission shall reinstate the actual borrowing cost considering the actual working capital requirement at the level of approved collection efficiency and not on actual collection efficiency which is abysmal in the initial months.

The Commission, therefore, sought month wise revenue billed and collected to compute the monthly OD requirement and based on the monthly shortfall if any, interest on OD has been pro-rated to compute the actual monthly interest on OD and is as shown in the Table below.

**Table 3.38: Interest on Overdraft Re-instated for FY 2021-22 (Rs. Crore)**

| Month | Revenue Billed (Rs. Cr.) | Revenue Collected (Rs. Cr.) | Collection Efficiency (%) | Revenue Shortfall (Rs. Cr.) | Overdraft availed at the end of the month (Rs. Cr.) | Interest on OD (Rs. Cr.) | Shortfall in collection @ 99.15% collection efficiency (Rs. Cr.) | Interest pro-Rated to actual shortfall (Rs. Crore) |
|---|---|---|---|---|---|---|---|---|
| April, 21 | 602.13 | 345.41 | 57.37% | 256.71 | 215.58 | 0.74 | 5.12 | 0.02 |
| May, 21 | 552.32 | 499.10 | 90.36% | 53.22 | 216.96 | 0.49 | 4.69 | 0.01 |
| June, 21 | 610.99 | 501.39 | 82.06% | 109.60 | 223.37 | 0.69 | 5.19 | 0.02 |
| July, 21 | 680.30 | 566.81 | 83.32% | 113.49 | 221.05 | 0.73 | 5.78 | 0.02 |
| Aug, 21 | 709.27 | 647.04 | 91.23% | 62.23 | 225.16 | 0.72 | 6.03 | 0.02 |
| Sept, 21 | 697.27 | 610.84 | 87.60% | 86.43 | 213.63 | 0.70 | 5.93 | 0.02 |
| Oct, 21 | 680.64 | 607.10 | 89.20% | 73.54 | 227.06 | 0.70 | 5.79 | 0.02 |
| Nov, 21 | 663.15 | 648.66 | 97.81% | 14.50 | 126.79 | 0.66 | 5.64 | 0.03 |
| Dec, 21* | 672.70 | 714.27 | 106.18% | -41.57 | 56.78 | 0.55 | - | - |
| Jan, 22 | 677.17 | 651.47 | 96.21% | 25.70 | 42.92 | 0.54 | 5.76 | 0.07 |
| Feb, 22 | 672.21 | 647.37 | 96.30% | 24.85 | 20.47 | 0.33 | 5.71 | 0.09 |
| March, 22* | 620.46 | 1253.11 | 201.96% | -632.65 | 0.00 | 0.19 | - | - |
| **Total** | **7838.63** | **7692.59** | **98.14%** | **146.05** | | **7.05** | **55.64** | **0.31** |

** No shortfall in the month of December and March.*

Therefore, for the current proceedings, the re-stated interest of Rs. 0.31 Crore and actual interest on loan corresponding to the special loan of Rs. 56.83 Crore has been considered for sharing of IoWC in accordance with UERC MYT Regulations, 2018 as amended from time to time.

### 3.2.5 *Return on Equity*

The Petitioner submitted that it has computed Return on Equity (RoE) for FY 2021-22 considering the opening equity of Rs. 840.94 Crore and the rate of RoE of 16.50%.

The Commission has considered the closing equity of Rs. 840.95 Crore for FY 2020-21 as the opening equity for FY 2021-22. Accordingly, the Commission has approved the Return on Equity at the rate of 16.50% on the opening equity in accordance with the Regulations. The Return on Equity approved by the Commission for FY 2021-22 is as shown in the Table below:

**Table 3.39: Return on Equity approved by the Commission for FY 2021-22 (Rs. Crore)**

| Particulars | Approved in the Tariff Order | Claimed by UPCL | Approved |
|---|---|---|---|
| Return on Equity | 117.87 | 138.76 | 138.76 |

### 3.2.6 *Non-Tariff Income*

The Petitioner submitted that the Non-Tariff Income includes income from non-tariff sources such as income from investments, delayed payment surcharge, etc. The Petitioner has claimed non-tariff income as Rs. 304.73 Crore.

The Petitioner with regard to material cost variance submitted that out of the total Rs. 0.86 Crore, contribution from grants (Rs. 0.50 Crore) has been deducted from the overall claim in line with the methodology adopted by the Commission in the previous Tariff Orders. The Petitioner further submitted that it has considered the wheeling charges and cross subsidy surcharge as part of non-tariff income and has excluded the same from revenue from sale of power.

The Commission agrees with the submissions made by the Petitioner with regard to the material cost variance on the value of grants.

The Petitioner with regard to Rebate earned has submitted that the same has not been considered as part of NTI as it is to be considered for sharing of gains/losses as per the first amendment to UERC Tariff Regulations, 2018. The Commission agrees with the submissions made by the Petitioner and has not considered the Rebate earned as part of NTI.

The Commission futher observed that as per Note 13 of the audited accounts, UPCL has not considered DPS amount of Rs. 124.84 Crore that was to be recovered from Government consumers. The Commssion during the technical validation session held on Januray 25, 2023 sought explanation from the Petitioner for not recovering the same. The Petitioner vide its reply dated February 06, 2023, submitted that as per the policy direction of Government of Uttarakhand (GoUk), no interest/DPS is payable by UPCL on dues payable to GoU and by GoU on dues payable to UPCL. The Commission has gone through the submissions of the Petitioner and observes that the Petitioner and GoU have come to an internal agreement on the applicablility of DPS which is not as per the UERC Tariff Regulations, 2018. The Commission has been allowing UPCL all the costs that is to be paid to the Government, however, UPCL due to its inefficiencies and also imprudent financial management has either not been able to collect its dues from the consumers or is utilising the said amount in creation of fixed assets which can very well be ascertained from the fact that every year UPCL is claiming assets to be created out of its equity/internal resources when it is having negative net worth and is claiming RoE on the same. Hence, the entire burden of this inefficient practices cannot be loaded on to the consumers. The Commission, accordingly, is of the view that both the Petitioner as well as the Commission are bound by the provisions of UERC Tariff Regulations, 2018 and the Regulation is not subject to any such agreements which may be agreed between the Petitioner and its consumers. Therefore, any impact arising out of such agreement is to the account of the Petitioner and, therefore, the Commisison has considered Rs. 124.84 Crore as part of NTI for FY 2021-22.

Accordingly, the non-tariff income claimed by the Petitioner and that approved by the Commission for the purpose of truing up for FY 2021-22 is as given in the Table below:

**Table 3.40: Non-tariff Income approved by the Commission for FY 2021-22 (Rs. Crore)**

| Particulars | Approved in the Tariff Order | Claimed by UPCL | Approved |
|---|---|---|---|
| Non-tariff income | 282.72 | 304.73 | 429.57 |

## 3.3 Tariff Revenue

The Petitioner submitted the revenue at existing tariff as Rs. 7124.33 Crore as against the revenue of Rs. 7684.78 Crore, approved by the Commission for FY 2021-22.

The Petitioner submitted that after making significant improvements, the actual distribution loss of 14.15% for FY 2021-22 were marginally higher than the baseline value of 13.75% approved by the Commission for FY 2021-22. The Petitioner further submitted the loss to be passed on, which is as shown in the Table below:

**Table 3.41: Additional Revenue from Sale for FY 2021-22 (Rs. Crore)**

| S. No. | Particulars | Actuals |
|---|---|---|
| 1. | Actual Sales (MU) | 12518.80 |
| 2. | Actual Distribution Loss Level (%) | 14.15% |
| 3. | Actual Energy Input at T-D Interface (MU) | 14581.68 |
| 4. | Sales at Actual Energy Input with 13.75% Loss (MU) | 12576.70 |
| 5. | Loss of Sales (MU) | 57.90 |
| 6. | Revenue at Existing Tariff (Rs. Crore) | 7124.33 |
| 7. | ABR (Rs./kWh) | 5.69 |
| 8. | Loss of Revenue due to higher distribution losses (Rs. Crore) | 32.95 |
| **9.** | **Loss to be retained by the Petitioner (2/3 of 8) (Rs. Crore)** | **21.97** |

The Petitioner has separately claimed sharing of the above loss to be allowed in FY 2021-22.

The Commission has considered the trued-up distribution loss for FY 2021-22 and has, accordingly, computed the loss of sales as 138.05 MU due to the commercial inefficiencies of UPCL.

The Commission in the past has been considering additional revenue due to substantial variation in the ABR of Deparmental employees and other Domestic Consumers. However, from the Commercial Diary for FY 2021-22 it is observed that the ABR of Departmental employees is marginally higher than the ABR of Rs. 4.60/kWh of other Domestic consumers and, therefore, no adjustment has been carried out on account of the same.

As discussed while approving interest expenses, the Commission has ruled that the rebate towards online payment of bills needs to be adjusted from the Revenue and, therefore, the same has been reduced while computing the gap/surplus for FY 2021-22.

Based on the above, the revenue from the sale of power, as worked out by the Commission is shown in the Table below:

**Table 3.42: Revenue from Sale of Power for FY 2021-22 (Rs. Crore)**

| Particulars | Amount |
|---|---|
| Actual Revenue | 7124.33 |
| Less: Rebate online payment of Bills | 25.51 |
| **Total Revenue** | **7098.82** |

The Commission for the computation of ABR, to determine the additional revenue from sale due to inefficiency of the Petitioner in FY 2021-22, has considered the revenue as Rs. 7098.82 Crore as stated above.

Further, as discussed herein above there is a loss of 138.05 MU on account of commercial inefficiencies of the Petitioner in failing to achieve the distribution loss target approved by the Commission. The Commission has considered the revenue of Rs. 78.78 Crore at an average billing rate of Rs. 5.71 kWh for this additional loss of sale on account of higher distribution losses while truing up the ARR for FY 2021-22 as shown in the Table below:

**Table 3.43: Additional Revenue from Sale due to inefficiency for FY 2021-22 (Rs. Crore)**

| S. No. | Particulars | Claimed by UPCL | Approved |
|---|---|---|---|
| 1. | Actual/ Re-casted Sales (MU) | 12518.80 | 12438.64 |
| 2. | Actual Distribution Loss Level (%) | 14.15% | 14.70% |
| 3. | Actual Energy Input at T-D Interface (MU) | 14581.68 | 14581.67 |
| 4. | Sales at Approved Loss of 13.75% (MU) | 12576.70 | 12576.69 |
| 5. | Loss of Sales due to Inefficiency (MU) | 57.90 | 138.05 |
| 7. | ABR (Rs./kWh) | 5.69 | 5.71 |
| 8. | Loss of Revenue due to higher distribution losses (Rs. Crore) | 32.95 | 78.78 |
| 9. | Losses to borne by Petitioner (2/3rd of 8) (Rs. Crore) | 21.97 | 52.52 |

Accordingly, the Commission has considered a tariff revenue of Rs. 7151.34 Crore including Rs. 52.52 Crore as deemed revenue on account of excess distribution loss for FY 2021-22 as against total revenue of Rs. 7124.33 Crore claimed by the Petitioner.

## 3.4 Sharing of Gains and Losses

The sharing of gains and losses claimed by the Petitioner for FY 2021-22 is as shown in the Table below:

**Table 3.44: Sharing of Gains and Losses for FY 2021-22 claimed by the Petitioner (Rs. Crore)**

| Particulars | Amount Gain/(Loss) | Consumer Share | UPCL Share |
|---|---|---|---|
| **Gain** | | 1/3rd | 2/3rd |
| IoWC | 53.54 | 17.85 | 35.69 |
| O&M Expenses | 20.90 | 6.97 | 13.93 |
| Distribution Loss | (32.95) | (10.98) | (21.97) |
| Rebate Earned on Discharge of Power Purchase Liability | 38.02 | 12.67 | 25.35 |
| Late Payment Surcharge due to Delayed Payment of Power Purchased | (0.22) | (0.07) | (0.15) |
| **Total** | **79.29** | **26.44** | **52.85** |

Regulation 12 of the UERC Tariff Regulations, 2018 specifies as under:

*"**12. Annual Performance Review***

…

*(5) The "uncontrollable factors" shall include such of the factors which are beyond the control of, the applicant, as determined by the Commission. Some examples of uncontrollable factors are as follows:*

*…*

*c) Economy wide influences such as unforeseen changes in inflation rate, market interest rates, taxes and statutory levies;*

*…*

*(6) Some illustrative variations or expected variations in the performance of the applicant which may be attributed by the Commission to controllable factors shall include, but shall not be limited to, the following:*

*…*

*f) Variations in working capital requirements;*

*…*

*j) Variation in operation & maintenance expenses*

*k) Rebate earned on discharge of power purchase liability;*

*l) Late payment surcharge on account of delayed discharge of power purchase liability;*

*(10) Upon completion of the Annual Performance Review, the Commission shall pass on an order recording-*

*a) The approved aggregate gain or loss to the Applicant on account of uncontrollable factors and the mechanism by which the Applicant shall be allowed such gains or losses in accordance with Regulation 13;*

*b) The approved aggregate gain or loss to the Applicant on account of controllable factors and sharing of such gains or such losses that may be shared in accordance with Regulation 14;*

*c) The approved modifications to the forecast of the Applicant for the ensuing year, if any;*

*The surplus/deficit determined by the Commission in accordance with these Regulations on account of truing up of the ARR of the Applicant shall be carried forward to the ensuing financial year."*

Regulation 13 of the UERC Tariff Regulations, 2018 specifies as under:

*"**13. Sharing of Gains and Losses on account of Uncontrollable factors***

*(1) The approved aggregate gain or loss to the Applicant on account of uncontrollable factors shall be allowed as an adjustment in the tariff/charges of the Applicant over such period as may be specified in the Order of the Commission;*

*…"*

Regulation 14 of the UERC Tariff Regulations, 2018 specifies as under:

*"**14. Sharing of Gains and Losses on account of Controllable factors***

*(1) The approved aggregate gain and loss to the Applicant on account of controllable factors shall be dealt with in the following manner:*

*a) 1/3rd of such gain shall be passed on as a rebate or allowed to be recovered in tariff over such period as may be specified in the Order of the Commission;*

*b) The balance amount of gain may be utilized or absorbed by the Applicant."*

Hence, in accordance with UERC Tariff Regulations, 2018 as amended, the O&M expenses, IoWC and Distribution losses, LPS on Power Purchase cost, Rebate on Power Purchase cost are controllable factors and any gain or loss on account of the controllable factors is to be dealt in accordance with the provisions of Regulation 14 of the above-mentioned Regulations.

The sharing of gains on account of controllable factors approved by the Commission for FY 2021-22 is as shown in the Table given below:

**Table 3.45: Sharing of Gains on Account of Controllable Factors approved by the Commission for FY 2021-22 (Rs. Crore)**

| Particulars | Actual for truing up | Normative as Trued up | Aggregate gain/(loss) | Consumer's Share | Petitioner's Share of Gain/(Loss) |
|---|---|---|---|---|---|
| | A | B | C=B-A | Gain: D=1/3 x C<br>(Loss) D=1/3 x C | E=C-D |
| O&M expenses | 618.91 | 625.18 | 6.27 | 2.09 | 4.18 |
| Distribution Loss | 14.70% | 13.75% | (78.78) | (26.26) | (52.52) |
| IoWC | 57.14 | 107.94 | 50.80 | 16.93 | 33.87 |
| PP Rebate | 38.02 | - | 38.02 | 12.67 | 25.35 |
| DPS | 0.22 | - | (0.22) | (0.07) | (0.15) |
| **Total** | | | **16.09** | **5.37** | **10.72** |

## 3.5 ARR and Revenue for FY 2021-22

The Commission in its Tariff Order dated April 26, 2021 had approved the Net Revenue Requirement for FY 2021-22 as Rs. 7625.22 Crore. The Petitioner has now claimed an ARR of Rs. 8062.51 Crore for FY 2021-22. However, based on the various elements of the ARR as discussed above and approved by the Commission, the summary of final Truing up for FY 2021-22 is given in the Table below:

**Table 3.46: Summary of True up for FY 2021-22 approved by the Commission (Rs. Crore)**

| Particulars | Tariff Order | Claimed by UPCL | Approved |
|---|---|---|---|
| Power Purchase Cost incl. UJVN Arrears & Water Tax | 5241.86 | 5226.78 | 5226.78 |
| PGCIL | 614.55 | 734.51 | 734.51 |
| PTCUL and SLDC | 288.11 | 290.95 | 290.95 |
| Interest on Loan and guarantee fee | 129.30 | 148.99 | 135.97 |
| Depreciation | 178.8 | 246.98 | 202.76 |
| O&M expenses after sharing | 595.27 | 634.40 | 623.09 |
| Interest on Working Capital | 121.86 | 117.42 | 107.94 |
| Impact of Sharing on Interest on Working Capital | - | (17.85) | (16.93) |
| Return on Equity | 117.87 | 138.76 | 138.76 |
| Provision for Bad and doubtful debts | - | 115.18 | - |
| Sharing on account of Rebate and LPS | - | (12.60) | (12.60) |
| **Aggregate Revenue Requirement** | **7287.62** | **7746.94** | **7431.23** |
| Less: Non-Tariff Income | 282.72 | 304.73 | 429.57 |
| **Gap/(Surplus) of previous year** | **620.30** | **620.30** | **620.30** |
| **Net ARR** | **7625.22** | **8062.51** | **7621.96** |
| **Revenue** | | | |
| **Revenue at Existing Tariff** | **7364.51** | **7124.33** | **7098.82** |
| Revenue from Addl Sales. (after sharing) | | 21.97 | 52.52 |
| **Total Revenue** | **7364.51** | **7146.30** | **7151.34** |
| **Adjusted Revenue (Surplus)/Gap** | **260.71** | **916.22** | **470.61** |

The Petitioner in its Petition had requested the Commission to approve the gap of Rs. 916.22 Crore. However, the Commission has approved a gap of Rs. 470.61 Crore for FY 2021-22. The Commission has allowed the same alongwith the carrying cost in truing up of FY 2021-22.

**Table 3.47: Total gap including carrying cost (Rs. Crore)**

| Particulars | FY 2021-22 | FY 2022-23 | FY 2023-24 |
|---|---|---|---|
| Opening Gap/(Surplus) | 0.00 | 499.20 | 551.62 |
| Addition | 470.61 | | -551.62 |
| Closing | 470.61 | 499.20 | 0.00 |
| Interest Rate | 12.15% | 10.50% | 11.29% |
| Carrying/(Holding) Cost | 28.59 | 52.42 | 31.14 |
| Closing Balance | 499.20 | 551.62 | 582.76 |

The Commission has, accordingly, considered the total gap of Rs. 582.76 Crore including carrying cost, in the ARR of FY 2023-24.

# 4. Petitioner's Submissions, Commission's Analysis, Scrutiny and Conclusion on APR for FY 2022-23 and ARR for FY 2023-24

## 4.1 Background

As regard the MYT Framework and determination of ARR, UERC Tariff Regulations, 2021 specifies as follows:

*"**4. Multi-year Framework***

*The Multiyear tariff framework shall be based on the following:-*

*a) Business plan submitted by the applicant for the entire control period for the approval of the Commission prior to the beginning of the control period;*

*b) Applicant's forecast of expected ARR for each year of the control period, based on reasonable assumptions and financial & operational principles/parameters laid down under these Regulations submitted alongwith the MYT petition for determination of Aggregate Revenue Requirement and Tariffs for first year of the control period;*

*c) Review of control period ending on 31.03.2019 shall also be taken up alongwith the ARR/Tariff petition for the first year of ensuing control period.*

*d) Trajectory for specific parameters as may be stipulated by the Commission based on submissions made by the Licensee, actual performance data of the Applicants and performance achieved by similarly placed utilities;*

*e) Annual review of performance shall be conducted vis-à-vis the approved forecast and categorization of variations in performance into controllable factors and uncontrollable factors;*

*f) Sharing of excess profit or loss due to controllable and uncontrollable factors as per provisions of these Regulations.*

*…*

***7. Determination of Baseline***

*The baseline values (operating and cost parameters) for the base year of the control period shall be determined by the Commission and shall be based on the approved values by the Commission, the latest audited accounts, estimates for the relevant year, prudence check and other factors considered by the Commission.*

*The Commission may re-determine the baseline values for the base year based on the actual audited accounts of the base year."*

In accordance with the above provisions of the Regulations, the Commission had approved the Aggregate Revenue Requirement of the Petitioner for all the years of the fourth Control Period, i.e. from FY 2022-23 to FY 2024-25 excluding the power purchase cost for FY 2023-24 and FY 2024-25 vide its MYT Order dated March 31, 2022.

As regards the Annual Performance Review, Regulations 12(3) of the UERC (Terms and Conditions for Determination of Tariff) Regulations, 2018 specifies as follows:

> *"The scope of the Annual Performance Review shall be a comparison of the actual performance of the Applicant with the approved forecast of Aggregate Revenue Requirement and expected revenue from tariff and charges and shall comprise of following:*
>
> *a) A comparison of the audited performance of the applicant for the previous financial year with the approved forecast for such previous financial year and truing up of expenses and revenue subject to prudence check including pass through of impact of uncontrollable factors;*
>
> *b) Categorisation of variations in performance with reference to approved forecast into factors within the control of the applicant (controllable factors) and those caused by factors beyond the control of the applicant (un-controllable factors).*
>
> *c) Revision of estimates for the ensuing financial year, if required, based on audited financial results for the previous financial year;*
>
> *d) Computation of the sharing of gains and losses on account of controllable factors for the previous year."*

The Petitioner in the present APR Petition requested the Commission to approve the revised estimates for FY 2022-23 based on the revised submissions in the APR Petition. The Commission had already approved most of the ARR components for the fourth Control Period from FY 2022-23 to FY 2024-25 after detailed analysis, scrutiny and prudence check of the Petitioner's submission vide its MYT Order dated March 31, 2022. As the Commission had not approved the power purchase cost for FY 2023-24 in its MYT Order dated March 31, 2022, hence, in the present Order the Commission has approved the power purchase quantum and cost associated therewith based on the analysis and scrutiny of the Petitioner's projections in the Petition and considering the subsequent submissions including actual audited data available for FY 2021-22. As discussed in the previous Chapter, the Commission in this Order has carried out the Truing up for FY 2021-22 in accordance with the UERC Tariff Regulations, 2018. In accordance with Regulation 12(3) of the UERC Tariff Regulations, 2021 the scope of annual performance review is limited to the revision of the estimates for the ensuing year, if required, based on the audited financial results for the previous year and give resultant effect on this account in the estimates of the said current year.

## 4.2 Sales

The Petitioner submitted the year wise actual sales for FY 2015-16 to FY 2021-22 along with the year on year growth in sales as shown in the Table below.

**Table 4.1: Actual Energy sales for consumer categories during FY 2015-16 to FY 2021-22 (MU)**

| Consumer Category | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | 2020-21 | 2021-22 |
|---|---|---|---|---|---|---|---|
| RTS-1: Domestic | 2391.15 | 2486.15 | 2741.53 | 2849.20 | 3113.85 | 3307.62 | 3357.70 |
| RTS-2: Non-Domestic | 1121.03 | 1178.02 | 1235.23 | 1301.34 | 1397.84 | 1215.52 | 1389.31 |
| RTS-3: Govt. Public Utilities | 533.45 | 551.52 | 590.25 | 614.66 | 678.32 | 725.08 | 718.91 |
| RTS-4: Private Tube-wells/ Pumping sets | 331.98 | 350.49 | 271.37 | 190.13 | 202.62 | 225.40 | 276.93 |
| RTS-5: LT & HT Industry | | | | | | | |
| *Total LT* | 282.32 | 300.13 | 302.21 | 309.93 | 311.94 | 311.19 | 341.83 |
| *Total HT* | 5437.27 | 5508.03 | 5858.07 | 6355.76 | 6105.24 | 5451.85 | 6212.16 |
| RTS-6: Mixed Load | 186.78 | 178.11 | 182.43 | 177.75 | 182.47 | 169.55 | 175.62 |
| RTS-7: Railway Traction | 14.16 | 19.23 | 27.73 | 27.91 | 29.08 | 26.39 | 46.30 |
| RTS-8: Electric Vehicle | | | | | | | 0.04 |
| **Total** | **10298.13** | **10571.68** | **11208.82** | **11826.67** | **12021.36** | **11432.60** | **12518.80** |
| **Year on Year Growth (%)** | | **2.66%** | **6.03%** | **5.51%** | **1.65%** | **-4.90%** | **9.50%** |

The Petitioner submitted that for the purpose of projecting category wise energy sales for FY 2022-23 it has compared the actual sales for the period of April-September of FY 2021-22 vis-à-vis April-September FY 2022-23. The actual growth rate as submitted by the Petitioner is as shown below:

**Table 4.2: Comparison of Actual sales for Period April 21-Sept 21 to April 22 -Sept 2022 (MU)**

| Consumer Category | FY 2021-22 (Apr-Sept) | FY 2022-23 (Apr-Sept) | Actual Growth (%) |
|---|---|---|---|
| RTS-1: Domestic | 1747.61 | 1931.69 | 10.53% |
| RTS-2: Non-Domestic | 658.27 | 917.87 | 39.44% |
| RTS-3: Govt. Public Utilities | 362.11 | 366.77 | 1.29% |
| RTS-4: Private Tube-wells/Pumping sets | 140.99 | 133.85 | -5.06% |
| RTS-5: LT & HT Industry | 3216.95 | 3541.00 | 10.07% |
| *LT Industry* | 163.97 | 178.31 | 8.75% |
| *HT Industry* | 3052.98 | 3362.69 | 10.14% |
| RTS-6: Mixed Load | 79.41 | 91.07 | 14.68% |
| RTS-7: Railway Traction | 19.35 | 36.94 | 90.87% |
| RTS-8: Electric Vehicle | | 1.75 | |
| **Total** | **6224.69** | **7020.92** | **12.79%** |

The Petitioner submitted that it has relied upon the growth rate based on the 6-month sales data as well as the current month consumption data. The Petitioner further submitted that on comparison a significant growth is seen in the energy sales in the key categories such as Domestic, Non-Domestic, Industry, etc. The Petitioner highlighted that these trends are varying significantly compared to the historical trends, but the Petitioner expects that with the post-covid changing scenario and change in weather pattern, the growth estimated for FY 2022-23 is reasonable. Based on the above assumptions, the Petitioner has envisaged an energy sales growth of ~10.85% from FY 2021-22.

The Petitioner for projecting sales for FY 2023-24 submitted that category wise actual sales data for FY 2019-20 and FY 2021-22 suggests that the pre-COVID sales level has been attained and the actual 6 month's sales data for the current year FY 2022-23 reveals that the revival of the State economy is on track. Accordingly, from FY 2023-24 onwards, the consumption pattern is expected to closely align with the historical growth rates. The Petitioner on the basis of the same submitted that it has adopted a mix of 5 year/7 year CAGR approach to project the sales for each consumer category except for a few categories in line with the methodology adopted by the Commission.

The category wise growth rate considered by the Petitioner for projecting sales for FY 2022-23 and FY 2023-24 is as shown in the Table below.

**Table 4.3: Category Wise Growth rate in Sales considered by the Petitioner (%)**

| S. No | Category | Assumptions (UPCL) FY 23 | | Assumptions (UPCL) FY 24 | |
|---|---|---|---|---|---|
| | | Growth (%) | Basis | Growth (%) | Basis |
| 1 | Domestic | 10.53% | April-Sept 22 over April Sept 21 | 6.19% | 5 year CAGR - FY 15-20 |
| 2 | Non-Domestic | 18.72% | Three times escalation of 5.49% (5 year CAGR on FY 2019-20 basis) | 5.49% | 5 year CAGR - FY 15-20 |
| 3 | Public Lamps | 11.61% | April-Sept 22 over April Sept 21 | 5.19% | 5 year CAGR - FY 15-20 |
| 4 | GIS | 2.00% | Assumption | 1.08% | |
| 5 | PWW | 2.64% | April-Sept 22 over April Sept 21 | 7.06% | |
| 6 | PTW | 2.00% | Assumption | 2% | Assumption |
| 7 | LT Industry | 8.75% | April-Aug 22 over April Aug 21 | 5% | Assumption |
| 8 | HT Industry | 10.14% | April-Aug 22 over April Aug 21 | 5% | Assumption |
| 9 | Mixed Load | 14.68% | April-Sept 22 over April Sept 21 | 3.58% | YOY growth rate FY 22 vis-à-vis FY 21 |
| 10 | Railway Traction | 59.56% | Avg. sales for the period Apr-Sept 2022 is pro-rated for 12 months | 17.81% | 7 year CAGR FY 2015-2022 |
| 11 | EV Charging Stations | | | | As per Business Plan |

The Petitioner has considered the base year as FY 2021-22 for projecting the sales for FY 2022-23 and FY 2023-24. The Petitioner has, accordingly, projected the energy sales for FY 2023-24 as shown in the Table below:

**Table 4.4: Sales projected by the Petitioner for FY 2023-24 (MU)**

| S. No. | Category Wise Sales | FY 2023-24 |
|---|---|---|
| 1. | RTS-1: Domestic | 3941.28 |
| 2. | RTS-2: Non-Domestic | 1740.03 |
| 3. | RTS-3: Govt. Public Utilities | 784.26 |
| 4. | RTS-4: Private Tube-wells / Pumping sets | 288.12 |
| 5. | RTS-5: LT & HT Industry | 7574.79 |
| | *Total LT* | *390.32* |
| | *Total HT* | *7184.47* |
| 6. | RTS-6: Mixed Load | 208.62 |
| 7. | RTS-7: Railway Traction | 87.03 |
| 8. | RTS-8: Electric Vehicle | 4.00 |
| | **Total** | **14628.13** |

The Commission has gone through the submissions of the Petitioner. The Commission observed that the sales of 14628.13 MU projected by the Petitioner is more than 13796.17 MU estimated by the Commission for FY 2023-24 in the MYT Order primarily because of increase in the growth rate of Industries, Mixed Load, Railway and Commercial category.

The sales projected by the Petitioner for FY 2022-23 is 13877.14 MU. The Commission in order to compare the same with the actuals, sought actual sales for April to October 2022. The Petitioner in its reply submitted that the actual sales achieved during April-October 2022 is 8130.55 MU. It is observed that when the sales of 8130.55 MU is extrapolated for 12 months, the sales derived works out to be 13938 MU which is more or less the same as projected by the Petitioner and, therefore, the Commission has considered sales projected by UPCL for FY 2022-23 as base year and has projected sales for FY 2023-24 considering the following assumptions.

(i) Base year has been considered as FY 2022-23 as projected by the Petitioner. The Commission has then added the category wise load shedding carried out during April to September as submitted by the Petitioner to derive the un-restricted sales for FY 2022-23.

(ii) The Commission has considered 5 Year CAGR (FY 2016-17 to FY 2021-22) of 6.31% for Domestic category. For computing CAGR, FY 2021-22 has been considered as there has been no major impact of pandemic on domestic sales.

(iii) Growth rate of RTS 2: For Non-Domestic Category the growth rate has been considered as 5 Year CAGR of 5.49% as also considered by the Petitioner.

(iv) Growth rate of RTS 3: Govt. Public Utilities: The Commission has considered 5 Year CAGR of 4.82% for the combined category. For computing CAGR, FY 2021-22 has been considered as there has been no major impact of pandemic on essential services.

(v) Growth rate of RTS 4: PTW: The Commission has considered the nominal growth rate of 2% as considered by the Petitioner.

(vi) Growth rate of RTS 5: LT & HT Industry: The Commission has considered the growth rate of 5% for both LT Industry and HT Industry as projected by the Petitioner.

(vii) Growth rate of RTS 6: Mixed Load: The Commission has considered growth rate of 3.58% as projected by the Petitioner.

(viii) Growth rate of RTS 7: Railway Traction: The Commission has considered the growth rate of 17.81% as also considered by the Petitioner. Abnormal increase has been considered in view of enhancement in contracted capacity by Railways.

(ix) Growth rate of RTS 8: Electric Vehicle: As the actual consumption is negligible and in the absence of any clear trend, the Commission has considered sales as projected by the Petitioner.

On the basis of the above, the total sales works out to 14812.03 MU which is higher than the sales of 13756.41 MU (excluding efficiency sales) approved in the MYT Order dated March 31, 2022 by 1055.62 MU. The Commission observes that there is a considerable difference in the sales approved in the MYT Order and that projected now. The Commission has, therefore, revised the sales considering the revised growth rates as discussed above for FY 2023-24 and the same is as shown below:

**Table 4.5: Consumer Category wise sales approved by the Commission for FY 2023-24 (MU)**

| S. No. | Category | Claimed | Approved |
|---|---|---|---|
| 1. | Domestic | 3941.28 | 3996.99 |
| 2. | Non-Domestic | 1740.03 | 1764.11 |
| 3. | Public Utilities | 784.26 | 788.02 |
| 4. | Private Tube Wells (PTW) | 288.12 | 290.81 |
| 5. | Industrial Consumers | | |
| | LT Industries | 390.32 | 395.01 |
| | HT Industries | 7184.47 | 7273.88 |
| 6. | Mixed Load | 208.62 | 211.02 |
| 7. | Railway Traction | 87.03 | 88.19 |
| 8. | Electric Vehicle | 4.00 | 4.00 |
| | **GRAND TOTAL** | **14628.13** | **14812.03** |

## 4.3 Distribution Loss Trajectory

The Commission has approved the Distribution Loss Trajectory for the fourth Control Period from FY 2022-23 to FY 2024-25 in the MYT Order dated March 31, 2022. The distribution loss trajectory approved by the Commission for the fourth Control Period from FY 2022-23 to FY 2024-25 is as shown in the Table given below:

**Table 4.6: Distribution Loss Trajectory approved by the Commission for the fourth Control Period from FY 2022-23 to FY 2024-25**

| Particulars | FY 2022-23 | FY 2023-24 | FY 2024-25 |
|---|---|---|---|
| | Approved | Approved | Approved |
| Distribution Losses | 13.50% | 13.25% | 13.00% |

The Petitioner has proposed Distribution loss of 13.25% for FY 2023-24 as approved by the Commission in its MYT Order dated March 31, 2022.

The Commission approves the Distribution Loss for FY 2023-24 as 13.25% in accordance with the trajectory approved for the fourth Control Period. The Distribution Loss as projected by the Petitioner and as approved by the Commission is as shown below:

**Table 4.7: Distribution Losses approved for FY 2023-24**

| Particulars | Proposed | Approved |
|---|---|---|
| Distribution Losses | 13.25% | 13.25% |

In line with the approach adopted by the Commission in its previous Tariff Orders, the Commission has considered the entire distribution loss reduction target as reduction in commercial losses of the Petitioner and has, therefore, considered the impact of distribution loss reduction in terms of increase in sales due to efficiency improvement.

Accordingly, the estimated energy requirement at distribution periphery, State periphery and approved loss level for FY 2023-24 is given in the Table below:

**Table 4.8: Energy Input requirement approved by the Commission for FY 2023-24**

| Particulars | Quantum |
|---|---|
| Distribution Sales (MU) | 14812.03 |
| Loss level for Energy Input (%) | 13.50% |
| Energy Input required at T-D interface (MU) | 17123.73 |
| Commercial Loss reduction (%) | 0.25% |
| Commercial Loss reduction (Additional sales due to efficiency improvement) (MU) | 42.81 |
| Total sales with efficiency improvement (MU) | 14854.84 |
| Overall Distribution Loss (%) | 13.25% |
| PTCUL Loss (%) | 1.40% |
| **Energy Input at State periphery (MU)** | **17366.87** |

It is further observed that the Petitioner has to return 420 MU of banked energy that it received in FY 2022-23. Therefore, the total energy requirement at State Periphery for FY 2023-24 works out to 17786.87 MU.

## 4.4 Aggregate Revenue Requirement

Regulation 69 of the UERC Tariff Regulations, 2021 specifies as follows:

*"**69. Aggregate Revenue Requirement for each Financial Year of the Control Period***

*(1) The total annual expenses and return on equity of the Distribution Licensee for each financial year of the Control Period shall be worked out on the basis of expenses and return allowed in terms of these Regulations.*

*(2) The retail supply tariff of a Distribution Licensee for each financial year of the Control Period shall provide for recovery of Aggregate Revenue Requirement of the Distribution Licensee for each financial year of the Control Period, as reduced by the amount of non-tariff income, income from wheeling in respect of open access customers, income from Other Business and receipts on account of cross-subsidy surcharge and additional surcharge for the relevant financial year, as approved by the Commission, and subsidy from the State Government for the financial year, if any, and shall comprise the following:*

*(a) Cost of power purchase;*

*(b) Transmission charges;*

*(c) System Operation Charges i.e. Fee and Charges paid to NLDC/RLDC/SLDC*

*(d) Interest and Finance charges on Loan Capital and on consumer security deposit;*

*(e) Depreciation, including and amortisation of intangible assets;*

*(f) Lease Charges*

*(g) Operation and Maintenance expenses;*

*(h) Interest on working capital; and*

*(i) Return on equity capital;*

*(j) Income-tax;*

*(k) Provision for Bad and doubtful debts*

*(3) Net Revenue Requirement from sale of electricity = Aggregate Revenue Requirement, as above, minus:*

*(a) Non-Tariff Income;*

*(b) Income from wheeling charges recovered from open access customers;*

*(c) Income from Other Business, to the extent specified in these Regulations;*

*(d) Receipts from cross-subsidy surcharge from open access consumers; and*

*(e) Receipts from additional surcharge on charges of wheeling from open access consumers.*

*(f) Any revenue subsidy or grant received from the State Government other than the subsidy under Section 65 of Electricity Act, 2003."*

The Commission in this Order has determined the Net Revenue Requirement for FY 2023-24 as detailed in the subsequent Paras of this Chapter.

## 4.5 Power Purchase Cost

The power requirement of UPCL is met from various sources which includes the generating stations of:

- NTPC Ltd.
- NHPC Ltd.
- NPCIL.
- SJVNL.

- THDC Ltd.
- State generating stations of UJVN Ltd.
- UREDA.
- Gas Generating Stations in the State.
- Co-generation stations.
- Independent Power Producers (IPPs).
- Other Renewable Sources.
- Short-term power arrangements: Banking, open market purchase etc.

The Petitioner in its Petition submitted the source wise power purchase from various sources along with the cost of power purchase. For projecting the ex-bus availability of power for FY 2023-24, the Petitioner has considered the average of the actual monthly energy generation during FY 2019-20, FY 2021-22, and FY 2022-23. Further, for FY 2022-23, the Petitioner has considered actual monthly energy availability for April 2022 to September 2022 and for the balance months the Petitioner has considered average of monthly energy availability for FY 2018-19 to FY 2019-20 and FY 2021-22.

With regard to transmission losses, the Petitioner has considered Inter-State losses of 4% to estimate the energy availability at State Periphery. The energy availability from various sources has been projected by the Petitioner based on the following:

- **UJVN Ltd. –** For 10 LHPs and SHPs, for FY 2023-24, the Petitioner has considered the average of the actual monthly energy generation during FY 2019-20, FY 2021-22, and FY 2022-23. Further, for FY 2022-23, the Petitioner has considered actual monthly energy availability for April 2022 to September 2022 and for the balance months the Petitioner has considered average of monthly energy availability for FY 2018-19 to FY 2019-20 and FY 2021-22.
- **NTPC –** For Singrauli, Unchahar-I, II & III - for FY 2023-24, the Petitioner has considered the average of the actual monthly energy generation during FY 2019-20, FY 2021-22, and FY 2022-23. Further, for FY 2022-23, the Petitioner has considered actual monthly energy availability for April 2022 to September 2022 and for the balance months the Petitioner has considered average of monthly energy availability for FY 2018-19 to FY 2019-20 and FY 2021-22.

- For Unchahar IV, NCT Dadri II, Rihand STPS I, II & III, Kahalgaon-II, Jhajjar, Koldam actual monthly energy availability from April, 22 to September 22 is considered for FY 2022-23. Further, the energy availability same as that of FY 2021-22 is considered for the balance months of FY 2022-23. Subsequently, for FY 2023-24 the average of monthly energy availability of last 3 years (FY 2019-20, FY 2021-22 & FY 2022-23) is considered to arrive at the total energy availability.
- For Gas based Power Plants, the availability has been considered based on the actual monthly energy availability from April, 22 to September 22 for FY 2022-23. Further, the average of actual monthly energy availability of balance months of last 2 years (FY 2018-19, FY 2019-20) is considered to arrive at the total energy availability for FY 2022-23. Subsequently, for FY 2023-24 the average of monthly energy availability of last 2 years (FY 2018-19, FY 2019-20) is considered to arrive at the total energy availability.
- The Petitioner has also projected energy availability from NTPC Stations that have been temporarily allocated to the State in FY 2022-23. These stations include Ramagundam STPS-I & III, Bongaigaon TPS, Kudgi TPS, Simhadri STPS-II and Talcher STPS-II. The Petitioner has considered actual energy availability for FY 2022-23 for the period April 2022 to September 2022. Further, for the balance months of FY 2022-23, energy availability same as that of August 2022 is considered. Subsequently, for FY 2023-24 the average of monthly energy availability same as that of FY 2022-23 is considered to arrive at the total energy availability.
- **Tanda-II –** The Petitioner has considered actual energy availability for FY 2022-23 for the period April 2022 to September 2022. Further, for the balance months of FY 2022-23, energy availability same as that of FY 2021-22 is considered. Subsequently, for FY 2023-24 the average of monthly energy availability of last 2 years (FY 21-22 & FY 22-23) is considered to arrive at the total energy availability.
- **NHPC –** For all stations, the Petitioner has considered Actual monthly energy availability from April, 22 to September, 22 for FY 2022-23. Further, the average of actual monthly energy availability of balance months of last 3 years (FY 2018-19, FY 2019-20 & FY 2021-22) is considered to arrive at the total energy availability. Subsequently, for FY 2023-24 for all stations except Kishanganga and Sewa-II the average of monthly energy availability of

last 3 years (FY 2019-20, FY 2021-22 & FY 2022-23) is considered to arrive at the total energy availability and for Kishanganga HEP and Sewa II, the Petitioner has considered the energy as derived for FY 2022-23.

- **SJVNL, THDC & NPCIL-** The Petitioner has considered Actual monthly energy availability from April, 22 to September 22 for FY 2022-23. Further, the average of actual monthly energy availability of balance months of last 3 years (FY 2018-19, FY 2019-20 & FY 2021-22) is considered to arrive at the total energy availability. Subsequently, for FY 2023-24 the average of monthly energy availability of last 3 years (FY 2019-20, FY 2021-22 & FY 2022-23) is considered to arrive at the total energy availability.
- **UREDA Stations and IPPs -** The Petitioner has considered Actual monthly energy availability from April, 22 to September 22 for FY 2022-23. Further, the average of actual monthly energy availability of balance months of last 3 years (FY 2018-19, FY 2019-20 & FY 2021-22) is considered to arrive at the total energy availability. Subsequently, for FY 2023-24 the average of monthly energy availability of last 3 years (FY 2019-20, FY 2021-22 & FY 2022-23) is considered to arrive at the total energy availability.
- **State Gas Stations –** No energy was available from these stations for the period from April 2022 to September 2022, due to the limitations in availability and high price of Gas. The Petitioner has submitted that it anticipates very minimal quantum would be drawn from these sources for the balance months of FY 2022-23 due to the improved availability and moderation in the prices of gas. Therefore, 25% of the average of actual monthly energy availability of balance months of last 3 years (FY 18-19, FY 19-20 & FY 21-22) is considered to arrive at the total energy availability. Subsequently, for FY 2023-24 25% of the average of monthly energy availability of last 2 years (FY 18-19, FY 19-20) is considered to arrive at the total energy availability.
- **Upcoming Stations –** For Vyasi LHP, the Petitioner has projected the monthly energy availability for FY 2023-24 by considering the PLF of 50%. For Tehri PSP, the Petitioner has projected the monthly energy availability for FY 2023-24 by considering the PLF of 25%. For UREDA Solar Rooftop projects of 203 MW, the Petitioner has projected the monthly energy availability considering annual CUF of 19%.
- **Transmission Losses -** The Petitioner has considered Inter-State Transmission Losses of

4%. Intra-State transmission losses of 1.40% has been considered as approved by the Commission in its MYT Order dated March 31, 2022.

- **Deficit Power Purchase –** The Petitioner has proposed to procure energy in deficit months through open market.

The Petitioner has proposed the total power purchase of 17085.39 MU for FY 2023-24. The Commission after going through the submissions of the Petitioner observed few anomalies in the quantum of power purchases from some of the sources. The Commission, accordingly, sought following justifications from the Petitioner.

1. Erroneous consideration of 5095 MU from UJVN Ltd. resulting in over projections by around 600-700 MUs.
2. Erroneous projections from Vyasi of 525 MU as against design energy of only 375 MU resulting in over-projections by around 150 MU.
3. Erroneous projections from unallocated capacity of NTPC Station allotted to the State for an interim period ending Feb/March 2023.

The Petitioner in its reply admitted the errors and revised its projections. The Petitioner also estimated that the power purchase cost projected in the Petition will increase by around Rs. 268.71 Crore as short-term power purchase requirement will increase by around 2214.45 MU. The Commission has taken serious note of the careless submissions being made on such important issue. It is because of such approach, the requirement of short-term power purchase has reached to an unprecedented levels of around 4000 MUs which is approximately 25% of its total power purchase requirement.

The Commission for projection of power purchase for FY 2023-24 has considered the energy availability from various generating stations based on the three years month-wise energy availability from all the generating stations. Further, the Commission has computed the deficit/ surplus quantum of power which the Petitioner would be required to purchase/bank depending on its requirement on the basis of monthly energy availability and estimated energy requirement. The Commission for projecting power purchase has considered existing generating stations as well as the upcoming generating stations likely to be commissioned by FY 2023-24 in which UPCL has firm allocation. The detailed approach for approving the power purchase quantum has been discussed below.

For projecting the energy availability quantum from various new sources, the Commission sought the following information from the Petitioner:

- Likely COD of Tehri PSP stations along with the source on which the Petitioner has relied upon.
- Whether Tehri PSP is connected to ISTS or InSTS network.

In reply, UPCL submitted the following:

- The Petitioner submitted that Tehri PSP is expected to be commissioned by December 2023 as per CEA reports and the station is connected to ISTS network.

The Commission while projecting the quantum of energy available from various sources for FY 2023-24 has made the following assumptions as detailed below.

### 4.5.1 *Power Purchase from UJVN Ltd.*

The Commission has considered the availability from generating stations of UJVN Ltd. as under:

**Table 4.9: Power Purchase from UJVN Ltd.**

<table>
<tr><th>Stations of UJVN Ltd.</th><th>Basis</th><th>Rationale</th></tr>
<tr><td>9 LHPs</td><td>Average of actual month wise gross generation in FY 2020-21, FY 2021-22 & FY 2022-23 (actual for 10 months, projections for 2 months); Further, impact of non-availability on account of RMU in Dhakrani, Dhalipur and Chilla has been considered.</td><td rowspan="2">Three Year's average as per the Commission's earlier approach.</td></tr>
<tr><td>Maneri Bhali-II</td><td>Average of actual month wise gross generation in FY 2020-21, FY 2021-22 & FY 2022-23 (actual for 10 months, projections for 2 months);</td></tr>
<tr><td>Vyasi*</td><td>Revised monthwise generation as projected by the Petitioner.</td><td>Projections in line with Design Energy.</td></tr>
<tr><td>SHPs, viz. Pathri, Mohammadpur & Galogi</td><td>Average of actual month wise gross generation in FY 2020-21, FY 2021-22 & FY 2022-23 (actual for 10 months, projections for 2 months);</td><td>Three Year's average as per the Commission's earlier approach.</td></tr>
</table>

**Petitioner revised its earlier projections vide reply dated 27.02.2023.*

The Commission has estimated the energy availability from these generating stations to UPCL at State Periphery after considering the normative auxiliary consumption and excluding the share allocation to Himachal Pradesh. The summary of energy availability from UJVN Ltd. for FY 2023-24 as estimated by the Petitioner and the Commission is shown in the Table below:

**Table 4.10: Summary of Energy Availability from UJVN Ltd. for FY 2023-24 (MU)**

| Particulars | Claimed | Approved |
|---|---|---|
| 9 Old LHPs | 3618.13 | 2890.59 |
| Maneri Bhali-II | 1477.20 | 1313.51 |
| Vyasi* | 525.60 | 353.00 |
| Small Hydro | 195.59 | 179.63 |
| *Pathri* | *131.00* | *118.31* |
| *Mohammadpur* | *56.35* | *52.35* |
| *Galogi* | *8.25* | *8.98* |
| **Total** | **5816.52** | **4736.73** |

**Petitioner revised its earlier projections vide reply dated 27.02.2023.*

### 4.5.2 *Power Purchase from NHPC Ltd.*

The Commission has considered the availability from generating stations of NHPC Ltd. as under:

**Table 4.11: Power Purchase from NHPC Ltd.**

<table>
<tr><th>Stations of NHPC</th><th>Basis</th><th>Rationale</th></tr>
<tr><td>Salal</td><td rowspan="12">Average of actual month wise gross generation in FY 2020-21, FY 2021-22 & FY 2022-23 (actual for 10 months, projections for 2 months)</td><td rowspan="12">Three Year's Average as per the Commission's earlier approach</td></tr>
<tr><td>Chamera I</td></tr>
<tr><td>Chamera II</td></tr>
<tr><td>Chamera III</td></tr>
<tr><td>Uri</td></tr>
<tr><td>Dulhasti</td></tr>
<tr><td>Sewa II</td></tr>
<tr><td>Uri II</td></tr>
<tr><td>Prabati III</td></tr>
<tr><td>Tanakpur</td></tr>
<tr><td>Dhauliganga</td></tr>
<tr><td>Kishanganga</td></tr>
</table>

The Commission has estimated the energy availability from these generating stations to UPCL at State Periphery after considering the normative auxiliary consumption, station wise POC losses for the period from October 2022 to December 2022 and considering the allocation to Uttarakhand. The summary of energy availability from NHPC Ltd. for FY 2023-24 as estimated by the Petitioner and the Commission is shown in the Table below:

**Table 4.12: Energy Availability from NHPC Ltd. for FY 2023-24 (MU)**

| Station | Estimated by UPCL | Approved |
|---|---|---|
| Salal | 40.21 | 39.88 |
| Tanakpur | 13.30 | 18.88 |
| Chamera I | 74.25 | 66.09 |
| Chamera II | 24.42 | 16.88 |
| Chamera III | 55.85 | 51.04 |
| Uri | 102.40 | 97.75 |
| Dhauliganga | 66.01 | 65.24 |
| Dulhasti | 116.46 | 117.15 |
| Sewa II | 26.96 | 26.25 |
| Uri II | 83.98 | 76.44 |
| Parbati III | 35.13 | 30.82 |
| Kishanganga | 22.78 | 17.20 |
| Free Power-Tanakpur | 63.42 | 58.24 |
| Free Power-Dhauliganga | 157.60 | 144.72 |
| **Total** | **882.77** | **826.56** |

### 4.5.3 *Power Purchase from THDC India Ltd.*

The Commission has considered the availability from generating stations of THDC Ltd. as under:

**Table 4.13: Power Purchase from THDC India Ltd.**

| Stations of THDCIL | Basis | Rationale |
|---|---|---|
| Tehri HEP | Average of actual month wise gross generation in FY 2020-21, FY 2021-22 & FY 2022-23 (actual for 10 months, projections for 2 months). | Three years average considered as per the standard approach followed by the Commission in past. |
| Koteshwar HEP | | |

The Commission has estimated the energy availability from these generating stations to UPCL at State Periphery after considering the normative auxiliary consumption, station wise POC losses for the period from October 2022 to December 2022 and considering the share allocation to Uttarakhand. The summary of energy availability from THDC Ltd. for FY 2023-24 at State periphery as estimated by the Petitioner and the Commission is shown in the Table below:

**Table 4.14: Energy Availability at State periphery from THDC Ltd. for FY 2023-24 (MU)**

| State | Estimated by UPCL | Approved |
|---|---|---|
| Tehri HEP | 113.04 | 107.22 |
| Free Power-Tehri HEP | 416.64 | 358.94 |
| Koteshwar HEP | 76.99 | 76.82 |
| Free Power-Koteshwar HEP | 159.83 | 140.65 |
| **Total** | **766.50** | **683.64** |

### 4.5.4 *Power Purchase from NTPC Ltd*

The Commission has considered the availability from generating stations of NTPC Ltd. as under:

**Table 4.15: Power Purchase from NTPC Ltd.**

| Stations of NTPC | Basis | Rationale |
|---|---|---|
| Singrauli STPS | Average of actual month wise gross generation in FY 2020-21, FY 2021-22 & FY 2022-23 (actual for 10 months, projections for 2 months) | Actual monthly generation of past 3 years as per the standard approach followed by the Commission |
| Rihand STPS | | |
| *Rihand I* | | |
| *Rihand II* | | |
| *Rihand III* | | |
| Unchahar TPS | | |
| *Unchahar I* | | |
| *Unchahar II* | | |
| *Unchahar III* | | |
| Anta CCPP | | |
| Auraiya CCPP | | |
| Dadri CCPP | | |
| Dadri (NCTPP) | | |
| Jhajjar | | |
| Kahalgaon TPS | | |
| Koldam | | |
| Unchahar IV | | |
| Tanda-II | As projected by the Petitioner | New Plant - 3 year generation not available. |
| Meja TPS | As considered in the MYT Order. | New Plant - 3 year generation not available. |

The Commission has estimated the energy availability from these generating stations to UPCL at State Periphery after considering the normative auxiliary consumption, station wise POC losses for the period from October 2022 to December 2022 and considering the share allocation to Uttarakhand. The summary of energy availability from NTPC Ltd. for FY 2023-24 at State periphery as estimated by the Petitioner and the Commission is shown in the Table below:

**Table 4.16: Energy Availability from NTPC Ltd. at State periphery for FY 2023-24 (MU)**

| Station | Estimated by UPCL | Approved |
|---|---|---|
| Singrauli STPS | 629.71 | 667.67 |
| Rihand STPS | | |
| *Rihand I* | 222.40 | 276.75 |
| *Rihand II* | 207.23 | 247.13 |
| *Rihand III* | 257.83 | 285.00 |
| Unchahar TPS | | |
| *Unchahar I* | 161.88 | 172.44 |
| *Unchahar II* | 88.02 | 74.95 |
| *Unchahar III* | 69.02 | 63.31 |
| Anta CCPP | 4.76 | 9.56 |
| Auraiya CCPP | 10.52 | 21.26 |

**Table 4.16: Energy Availability from NTPC Ltd. at State periphery for FY 2023-24 (MU)**

| | | |
|---|---|---|
| Dadri CCPP | 54.54 | 50.96 |
| Dadri (NCTPP) | 10.74 | 8.21 |
| Jhajjar | 121.65 | 38.02 |
| Kahalgaon TPS | 139.35 | 250.51 |
| Koldam | 203.94 | 199.26 |
| Unchahar IV | 166.26 | 149.27 |
| Ramagundam I | 197.55 | - |
| Ramagundam III | 43.19 | - |
| Bongaigaon TPS | 817.64 | - |
| KUDGI TPS | 146.15 | - |
| Simhadri STPS-II | 17.23 | - |
| Talcher STPS-II | 36.60 | - |
| Tanda-II | 212.07 | 212.07 |
| Meja TPS | 206.56 | 288.10 |
| **Total** | **4024.85** | **3014.48** |

### 4.5.5 *Power Purchase from SJVN Ltd.*

The Commission has considered the availability from generating stations of SJVN Ltd. as under:

**Table 4.17: Power Purchase from SJVN Ltd.**

| Stations of SJVNL | Basis | Rationale |
|---|---|---|
| Nathpa Jhakri HEP | Average of actual month wise gross generation in FY 2020-21, FY 2021-22 & FY 2022-23 (actual for 10 months, projections for 2 months). | Actual monthly generation of past 3 years as per the standard approach followed by the Commission. |
| Rampur HPS | | |

The Commission has estimated the energy availability from these generating stations to UPCL at State Periphery after considering the normative auxiliary consumption, station wise POC losses for the period from October 2022 to December 2022 and considering the share allocation to Uttarakhand. The summary of energy availability from SJVN Ltd. for FY 2023-24 as estimated by the Commission is shown in the Table below:

**Table 4.18: Energy Availability from SJVN Ltd. at State periphery for FY 2023-24 (MU)**

| Station | Estimated by UPCL | Approved |
|---|---|---|
| Nathpa Jhakri HEP | 75.26 | 59.89 |
| Rampur HPS | 217.12 | 215.87 |
| **Total** | **292.38** | **275.77** |

### 4.5.6 *Power Purchase from NPCIL Stations*

For estimating the energy availability from these stations, the Commission has considered the monthly average generation for the last three years, i.e. FY 2020-21 to FY 2022-23 (10 months actual and 2 months projection). The Commission has estimated the energy availability from these generating stations to UPCL at State Periphery after considering the normative auxiliary consumption, station wise POC losses for the period from October 2022 to December 2022 and considering the share allocation to Uttarakhand. The summary of energy availability from NPCIL for FY 2023-24 as estimated by the Commission is shown in the Table below:

**Table 4.19: Energy Availability from NPCIL at State periphery for FY 2023-24 (MU)**

| Station | Estimated by UPCL | Approved |
|---|---|---|
| NAPP | 163.27 | 146.99 |
| RAPP | 178.09 | 210.51 |
| **Total** | **341.36** | **357.50** |

### 4.5.7 *Power Purchase from Renewable Energy Sources*

The existing renewable energy sources include the hydro power stations of UREDA, IPPs, co-generation plants, and existing as well as upcoming solar power plants within the State and solar power to be received from outside the State. The Commission has considered the energy availability at State periphery as projected by UPCL.

The summary of energy availability from existing renewable energy sources for FY 2023-24 as estimated by the Petitioner and the Commission is shown in the Table below:

**Table 4.20: Energy Availability from Renewable Energy Sources for FY 2023-24 (MU)**

| Station | Estimated by UPCL | Approved |
|---|---|---|
| Existing renewable energy sources | 1266.65 | 1266.65 |

### 4.5.8 *Power Purchase from Vishnu Prayag HEP, GVK Srinagar and Singoli Bhatwari (State Royalty Power)*

For estimating the State Royalty power from Vishnu Prayag HEP & GVK Srinagar HEP the Commission has considered the average of actual monthly generation for the years FY 2020-21, FY 2021-22 and FY 2022-23 (actual for 10 months, projections for 2 months). The Commission has estimated the energy availability from these generating stations to UPCL at State Periphery after considering the normative auxiliary consumption, POC losses for the period from October 2022 to December 2022 and considering the free power share of 12% to Uttarakhand. The Commission has considered the energy availability from Singoli Bhatwari as proposed by the Petitioner. The summary of energy availability from these stations as estimated by the Petitioner and the

Commission is shown in the Table below:

**Table 4.21: Energy Availability from State Royalty Power for FY 2023-24 (MU)**

| Station | Estimated by UPCL | Estimated by Commission |
|---|---|---|
| Vishnu Prayag HEP (State Royalty Power) | 226.87 | 207.55 |
| GVK Srinagar | 181.25 | 134.16 |
| Singoli Bhatwari | 65.90 | 65.90 |

### 4.5.9 *Power Purchase from Sasan UMPP*

For estimating the energy availability from Sasan UMPP, the Commission has considered the actual monthly generation of FY 2020-21, FY 2021-22 and FY 2022-23 (actual for 10 months, projections for 2 months).

The Commission has estimated the energy available to UPCL at State Periphery after considering the normative auxiliary consumption, station wise POC losses for the period from October 2022 to December 2022 and considering share allocation to Uttarakhand. The summary of energy availability from Sasan UMPP for FY 2023-24 as estimated by the Petitioner and the Commission is shown in the Table below:

**Table 4.22: Energy Availability from Sasan UMPP at State periphery for FY 2023-24 (MU)**

| Station | Estimated by UPCL | Approved |
|---|---|---|
| Sasan UMPP | 705.33 | 730.95 |

### 4.5.10 *Power purchase from State Gas Generating Station*

The Commission to project energy availability from gas based generating stations sought the current landed cost of gas from the Petitioner. The Petitioner in its reply submitted that the current cost of gas is around $14/MMBTU and further $2/MMBTU is the cost of transportation of gas. The Petitioner further submitted that the variable cost of generation at this rate works out to Rs. 10.30/kWh. The Commission observes that though the current price of gas is high, but is expected to reduce in the next six months. The Commission has, therefore, considered the energy availability from the gas based stations based on the contracted capacity and by considering the normative performance parameters in accordance with the Regulations from October 2023 to March 2024. The summary of energy availability from these stations for FY 2023-24 as estimated by the Petitioner and the Commission is shown in the Table below:

**Table 4.23: Energy Availability from State Gas Generating Stations at State periphery for FY 2023-24 (MU)**

| Station | Estimated by UPCL | Estimated by Commission |
|---|---|---|
| Gama Infraprop | 126.00 | 388.40 |
| Shravanthi Energy | 268.77 | 776.80 |
| **Total** | **394.77** | **1165.21** |

### 4.5.11 *Power purchase from Greenko Budhil Hydro*

The Commission has considered the energy availability from Greenko Budhil Hydro with whom UPCL has a PPA for 70 MW, based on the month wise Design Energy. The Commission has estimated the energy available from the generating station to UPCL at State Periphery after considering the normative auxiliary consumption, POC losses for the period from October 2022 to December 2022 and also excluding the free share of Himachal Pradesh. The summary of energy availability from Greenko Budhil Hydro for FY 2023-24 as estimated by the Commission is shown in the Table below:

**Table 4.24: Energy Availability from Greenko Budhil Hydro at State periphery for FY 2023-24 (MU)**

| Station | Estimated by UPCL | Approved |
|---|---|---|
| Greenko Budhil Hydro | 220.97 | 225.68 |

### 4.5.12 *Power purchase from upcoming generating stations*

With regard to Tehri PSP, the Commission observes that the commissioning of the stations is delayed and is expected to spill over in FY 2024-25 and, therefore, has not been considered.

### 4.5.13 *Energy available from Firm Sources*

The total energy available from firm sources estimated by the Petitioner and approved by the Commission is as shown in the Table given below:

**Table 4.25: Energy Availability from Firm Sources at State periphery for FY 2023-24 (MU)**

| Generating Stations | UPCL | Approved |
|---|---|---|
| UJVN Ltd. | 5816.52 | 4736.73 |
| NHPC | 882.77 | 826.56 |
| THDC | 766.50 | 683.64 |
| NTPC | 4024.85 | 3014.48 |
| NPCIL | 341.36 | 357.50 |
| SJVNL | 292.38 | 275.77 |
| Renewables | 1,266.65 | 1266.65 |
| Vishnu Prayag | 226.87 | 207.55 |
| Tehri PSP | 153.30 | 0.00 |
| Sasan UMPP | 705.33 | 730.95 |

**Table 4.25: Energy Availability from Firm Sources at State periphery for FY 2023-24 (MU)**

| Generating Stations | UPCL | Approved |
|---|---|---|
| Gamma Infra | 126.00 | 388.40 |
| Shravanthi Energy | 268.77 | 776.80 |
| Greenko Budhil Hydro | 220.97 | 225.68 |
| GVK Srinagar Free Power | 181.25 | 134.16 |
| L&T Free Power | 65.90 | 65.90 |
| Rajwakti and Debal Free Power | 3.12 | 3.12 |
| **Total Firm Sources** | **15342.54** | **13693.89** |

### 4.5.14 *Power Purchase for fulfilling RPO*

UPCL in accordance with UERC (Tariff and Other Terms for Supply of Electricity from Renewable Energy Sources and non-fossil fuel based Co-Generating Stations) Regulations, 2018 had proposed to fulfil the RPO over and above the estimated power purchase from renewable energy sources by purchase of RECs. UPCL has projected shortfall in meeting both Solar (243.40 MU) and non-solar (14.07 MU) RPO. The Petitioner has further included the deficit in fulfilment of RPO of FY 2021-22 (375.71 MU). The Commission has gone through the submissions of the Petitioner, and it is observed that the Commission has notified first amendment to UERC (Tariff and Other Terms for Supply of Electricity from Renewable Energy Sources and non-fossil fuel based Co-Generating Stations) Regulations, 2018 on 21st March 2023. The Commission, in accordance with the amendment has computed the RPO compliance for FY 2023-24.

With regard to the Petitioner's claim to carry forward the past unmet targets the Commission is of the view that this issue cannot be dealt in the tariff proceedings and UPCL is advised to file a separate Petition under UERC (Compliance of RPO) Regulations, 2010 as amended from time to time. The Commission, based on the estimated power purchase from renewable energy sources, has computed additional power procurement required from Solar and Non-Solar sources for FY 2023-24 as follows.

**Table 4.26: Additional Purchase for fulfilling RPO for FY 2023-24**

| Particulars | Units | Approved |
|---|---|---|
| Total Power Purchase at State Periphery (excl. Banking Payable) | MU | 17366.87 |
| RPO | | |
| Wind | % | 1.60% |
| Other RPO | % | 24.81% |
| HPO | % | 0.66% |
| RPO | | |
| Wind | MU | 277.87 |
| Other RPO | MU | 4308.72 |
| HPO | MU | 114.62 |

**Table 4.26: Additional Purchase for fulfilling RPO for FY 2023-24**

| Particulars | Units | Approved |
|---|---|---|
| **Total** | **MU** | **4701.21** |
| Purchase from Renewable Sources | | |
| Wind | MU | 0.00 |
| Other RPO | MU | 7865.20 |
| HPO | MU | 353.00 |
| **Total** | **MU** | **8218.20** |
| Unmet target | | |
| Wind | MU | 277.87 |
| Other RPO | MU | 0.00 |
| HPO | MU | 0.00 |
| **Total** | **MU** | **277.87** |

As can be seen from the above table, there is a surplus of 238.38 MU from HPO sources. The amendment to the UERC RE Regulations, 2023 specifies that any shortfall in achievement of 'Wind RPO' in a particular year can be met with excess energy consumed from Hydro Power Plants, which is in excess of 'HPO' for that year and vice versa, accordingly, after adjusting the surplus from HPO against the deficit from Wind RPO. The Commission has, accordingly, considered additional power procurement amounting to 39.49 MU to meet the RPO from wind sources. The Commission has separately included the cost towards meeting the above RPO through procurement of power from wind sources in subsequent section of this Chapter.

### 4.5.15 *Deficit/(Surplus) Energy*

The Petitioner, in its Petition has submitted that the availability from the existing stations and upcoming stations shall not be sufficient to meet the increasing demand of the state. Therefore, the Petitioner has to rely on other sources to meet the demand of the State. Accordingly, the Petitioner has projected monthly purchase of power through open market in power deficit months for FY 2023-24.

The energy deficit/surplus scenario estimated by the Commission for FY 2023-24 after considering power procurement to meet RPO is as shown in the Table given below:

**Table 4.27: Quantum Energy deficit for FY 2023-24 (MU)**

| Particulars | Approved |
|---|---|
| Energy requirement at State periphery | **17786.87** |
| Total Energy available from firm sources | **13693.89** |
| Power Procurement to meet RPO | 39.49 |
| **Deficit/(Surplus)** | **4053.49** |

The Commission while projecting the power purchase, has first projected the monthly power purchase requirement of the Petitioner and monthly availability from various sources. Based on the monthly requirement and availability, it is observed that the Petitioner is in deficit in all the months.

In this regard it is relevant to refer to third proviso to Regulation 73(1) of the MYT Regulations, 2021 which is reproduced hereunder:

> *"Provided that the power procurement plan submitted by the Distribution Licensee may include long-term, medium-term and short-term power procurement sources of power, in accordance with these Regulations. However, the distribution licensee should as far as possible, not plan for short-term purchases except for conditions specified in Regulation 75 and should endeavor to meet its requirement from long term and medium term power procurement and make a plan accordingly."*

Regulation 75 of MYT Regulations, 2021 lays down conditions in which the distribution licensee can resort to short-term power procurement. However, it has been observed that the Petitioner has been relying on short term procurement, i.e. by way of tender through DEEP Portal or by purchase from exchange. The Commission in its past Orders have been warning the Petitioner for its over reliance on short term purchase, however, despite several directions, the Petitioner has failed to tie up the 90-95% of total power requirement on long/medium term basis for which hefty price is being paid by the consumers of the State.

**In view of persistent deficit scenario during the Control Period, the Petitioner should put its sincere efforts to procure the deficit energy optimizing the cost of power purchase and reliable power. Further, the procurement should be through transparent process of bidding.**

### 4.5.16 *Cost of Power Purchase*

The Petitioner submitted that the cost of power purchase has been projected based on the following assumptions.

- **UJVN Ltd.**: The Petitioner for FY 2023-24 has considered fixed charges approved by the Commission for FY 2022-23 without any arrears and escalation. Variable Cost for FY 2023-24 has been computed by pro-rating variable cost of 6 months of FY 2022-23 without arrears & escalation considered. For Vyasi HEP, the rate has been considered as per the provisional tariff approved by the Commission in its Order dated 09.11.2022.

- **NTPC, NHPC, SJVNL, THDC, NPCIL, UREDA solar, UREDA Biomass, Co-Generating Station and IPP Hydro:** For FY 2023-24, the Petitioner has considered pro-rated Fixed Cost of 6-months of FY 2022-23 without arrears & escalation. Further, pro-rated variable cost of 6 months of FY 2022-23 without arrears & escalation is considered for FY 2023-24.
- **State Gas Generating Station:** The Petitioner for FY 2023-24 has considered fixed charges approved by the Commission for FY 2022-23 without any arrears and escalation. For projecting variable charges, the Petitioner has submitted that the prices of gas in Indian Energy Exchange in the month of October, 2022 was hovering around Rs. 1100/MMBTU to Rs. 1300/MMBTU. However, it believes that with stabilisation of the market situation, the gas price may come down nearly to Rs. 800 /MMBTU to Rs. 1000/MMBTU. Considering the same, the Petitioner has considered cost of gas as Rs. 880/MMBTU translating to a variable charge of Rs. 7.01 /kWh.
- **Cost of Power from new stations:** For Tehri PSP, total tariff of Rs. 4/kWh has been considered.
- **Cost of Free Power:** The cost of free power has been calculated based on the approach adopted by the Commission in its earlier Tariff orders. The rate of State royalty/free power has been considered equal to the average rate of power procured by the Petitioner from large hydro stations.
- **Short Term Purchase for deficit power:** The Petitioner has proposed to procure the net deficit through short term purchase at the rate of Rs. 5.42/kWh at State Periphery.

The Petitioner in its Petition has projected the average power purchase cost of Rs. 3.94/kWh for FY 2023-24 at State Periphery.

The Commission has estimated the cost of power purchase from various sources as detailed below:

### Table 4.28: Approach of the Commission in estimating the Cost of Power Purchase for FY 2023-24

| Source | Approach of the Commission in estimating the cost of power purchase |
|---|---|
| UJVN Ltd. | The Commission has considered the approved Tariff of UJVN Ltd. (9 LHPs) for FY 2023-24.<br>As per the GoU Notification No. 601/1(2)/04(1)-1/2007 dated May 31, 2017, GoU imposed a cess of Rs. 0.30/kWh and royalty of Rs. 0.10/kWh on saleable energy generated from hydro generating stations which are under commercial operation for 10 or more years with cost of generation below Rs. 2/kWh with effect from the date of notification. Hence, additional impact on account of the same has been considered. For Vyasi, tariff provisionally approved by the Commission has been considered.<br>For SHPs, the Commission has considered the applicable Tariff for such generating stations as specified in the Renewable Energy Regulations or Orders of the Commission.<br>Further, the Commission has considered the Water Tax equivalent to Water Tax paid in FY 2021-22. |
| NHPC Ltd., THDC Ltd., SJVN Ltd. | The tariff for these stations has been considered equal to approved Annual Fixed Charges (AFC) for FY 2023-24 for stations whose tariff has been approved for FY 2019-24. For stations whose tariff as per CERC Regulations, 2019 is yet to be determined, AFC approved for FY 2018-19 has been considered without any escalation. |
| NTPC Ltd. | The tariff for these stations has been considered equal to approved Annual Fixed Charges (AFC) for FY 2023-24 for stations whose tariff has been approved for FY 2019-24. For stations whose tariff as per CERC Regulations, 2019 is yet to be determined, AFC approved for FY 2018-19 has been considered without any escalation. For estimating the Energy Charges for FY 2023-24, to avoid substantial impact on quarterly FCA, the weighted average rate of actual Energy Charges for the months of October 2022 to December 2022 has been considered. |
| NPCIL | The tariff for NPCIL stations has been considered based on the actual billing during FY 2022-23 without any escalation. |
| Renewable energy sources | For solar generating sources, cost has been considered as projected by the Petitioner, and w.r.t. other renewable sources, the cost as determined by the Commission in accordance with applicable RE Regulations has been considered. |
| Sasan UMPP | The applicable tariff for FY 2023-24 as per the PPA has been considered. |
| Gama and Shravanthi CCPP | The tariff for this station has been considered as approved by the Commission for FY 2023-24. Further, the Commission has also considered impact of truing up of FY 2021-22 including true up of Energy Charges. Further, variable charge of Rs. 5.42/kWh has been considered equivalent to short term rates. |
| Greenko Budhil Hydro | The tariff for this station has been considered as approved by the Commission for FY 2023-24 including truing up impact of FY 2021-22. |
| Additional purchase for fulfilling RPO | The Tariff for the additional purchase for fulfilling the wind RPO has been considered as Rs. 4.00/kWh at State periphery and the Petitioner should seek to buy actual power to meet the RPO. |
| Upcoming Stations | For UREDA Solar, tariff as considered by UPCL has been approved. |
| Deficit purchase | The tariff for deficit purchase has been considered as Rs. 5.42/kWh at State periphery, as considered by the Petitioner. |

**Table 4.28: Approach of the Commission in estimating the Cost of Power Purchase for FY 2023-24**

<table>
<tr><th>Source</th><th>Approach of the Commission in estimating the cost of power purchase</th></tr>
<tr><td>Cost of free power</td><td>The cost of free power has been computed in line with the methodology adopted by the Commission in its previous Tariff Orders as shown below. However, for the calculation, only the stations commissioned prior to 31.03.2022 has been considered.<br>
<table>
<tr><th rowspan="2">Particulars</th><th>Quantum</th><th>Total Cost</th><th>Average Cost</th></tr>
<tr><th>MU</th><th>Rs. Crore</th><th>Rs./kWh</th></tr>
<tr><td>UJVN Ltd. (9 LHPs)</td><td>2890.59</td><td>450.39</td><td>1.56</td></tr>
<tr><td>Maneri Bhali II</td><td>1313.51</td><td>212.03</td><td>1.61</td></tr>
<tr><td>NHPC</td><td>606.41</td><td>220.12</td><td>3.63</td></tr>
<tr><td>THDC</td><td>184.05</td><td>99.20</td><td>5.39</td></tr>
<tr><td>SJVNL</td><td>275.77</td><td>105.05</td><td>3.81</td></tr>
<tr><td>Greenko</td><td>225.68</td><td>84.53</td><td>3.75</td></tr>
<tr><td>Koldam</td><td>199.26</td><td>97.95</td><td>4.92</td></tr>
<tr><td>Kishanganga</td><td>17.20</td><td>7.38</td><td>4.29</td></tr>
<tr><td>Average</td><td>5712.46</td><td>1276.66</td><td>2.23</td></tr>
</table>
</td></tr>
</table>

The summary of estimated power purchase cost for FY 2023-24 is as shown in the Table below:

**Table 4.29: Summary of Power Purchase Cost for FY 2023-24**

| Generating Stations | Claimed | | | Approved | | |
|---|---|---|---|---|---|---|
| | PP at State periphery | Total Cost | Average Rate | PP at State periphery | Total Cost | Average Rate |
| | MU | Rs. Crore | Rs./kWh | MU | Rs. Crore | Rs./kWh |
| **UJVN Ltd.** | | | | | | |
| UJVN Ltd. (9 LHPs) | 3618.13 | 644.54 | 1.78 | 2890.59 | 541.02 | 1.87 |
| Maneri Bhali II | 1477.20 | 309.89 | 2.10 | 1313.51 | 264.57 | 2.01 |
| Vyasi | 525.60 | 399.46 | 7.60 | 353.00 | 268.28 | 7.60 |
| Small Hydro | 195.59 | 40.03 | 2.05 | 179.63 | 30.05 | 1.67 |
| **Total UJVN Ltd.** | **5816.52** | **1393.92** | **2.40** | **4736.73** | **1103.91** | **2.33** |
| **NHPC** | | | | | | |
| Salal | 40.21 | 11.09 | 2.76 | 39.88 | 7.68 | 1.93 |
| Tanakpur | 13.30 | 6.58 | 4.94 | 18.88 | 7.45 | 3.94 |
| Chamera I | 74.25 | 17.41 | 2.35 | 66.09 | 14.97 | 2.27 |
| Chamera II | 24.42 | 5.26 | 2.15 | 16.88 | 5.01 | 2.97 |
| Chamera III | 55.85 | 25.22 | 4.52 | 51.04 | 23.89 | 4.68 |
| Uri | 102.40 | 25.69 | 2.51 | 97.75 | 18.19 | 1.86 |
| Dhauliganga | 66.01 | 22.54 | 3.41 | 65.24 | 17.08 | 2.62 |
| Dulhasti | 116.46 | 62.08 | 5.33 | 117.15 | 51.80 | 4.42 |
| Sewa II | 26.96 | 16.98 | 6.30 | 26.25 | 16.34 | 6.22 |
| Uri II | 83.98 | 45.85 | 5.46 | 76.44 | 33.57 | 4.39 |
| Parbati III | 35.13 | 21.84 | 6.22 | 30.82 | 24.14 | 7.83 |
| Kishanganga | 22.78 | 10.03 | 4.40 | 17.20 | 7.38 | 4.29 |
| Free Power-Tanakpur | 63.42 | 15.65 | 2.47 | 58.24 | 13.02 | 2.23 |
| Free Power-Dhauliganga | 157.60 | 38.90 | 2.47 | 144.72 | 32.34 | 2.23 |
| **Total NHPC** | **882.77** | **325.11** | **3.68** | **826.56** | **272.86** | **3.30** |
| **THDC** | | | | | | |
| Tehri HEP | 113.04 | 42.85 | 3.79 | 107.22 | 58.01 | 5.41 |
| Free Power-Tehri HEP | 416.64 | 102.83 | 2.47 | 358.94 | 80.22 | 2.23 |
| Koteshwar HEP | 76.99 | 36.21 | 4.70 | 76.82 | 41.19 | 5.36 |
| Free Power-Koteshwar HEP | 159.83 | 39.45 | 2.47 | 140.65 | 31.43 | 2.23 |

## Table 4.29: Summary of Power Purchase Cost for FY 2023-24

| Generating Stations | Claimed | | | Approved | | |
|---|---|---|---|---|---|---|
| | PP at State periphery | Total Cost | Average Rate | PP at State periphery | Total Cost | Average Rate |
| | MU | Rs. Crore | Rs./kWh | MU | Rs. Crore | Rs./kWh |
| **Total THDC** | **766.50** | **221.34** | **2.89** | **683.64** | **210.85** | **3.08** |
| **NTPC** | | | | | | |
| Singrauli STPS | 629.71 | 143.38 | 2.28 | 667.67 | 153.83 | 2.30 |
| Rihand STPS | | | | | | |
| *Rihand I* | 222.40 | 56.77 | 2.55 | 276.75 | 69.19 | 2.50 |
| *Rihand II* | 207.23 | 54.56 | 2.63 | 247.13 | 59.55 | 2.41 |
| *Rihand III* | 257.83 | 92.35 | 3.58 | 285.00 | 87.40 | 3.07 |
| Unchahar TPS | | | | | | |
| *Unchahar I* | 161.88 | 109.36 | 6.76 | 172.44 | 103.53 | 6.00 |
| *Unchahar II* | 88.02 | 52.70 | 5.99 | 74.95 | 43.53 | 5.81 |
| *Unchahar III* | 69.02 | 46.93 | 6.80 | 63.31 | 40.16 | 6.34 |
| Anta CCPP | 4.76 | 13.06 | 27.44 | 9.56 | 15.99 | 16.73 |
| Auraiya CCPP | 10.52 | 22.69 | 21.57 | 21.26 | 26.62 | 12.52 |
| Dadri CCPP | 54.54 | 110.30 | 20.22 | 50.96 | 40.33 | 7.91 |
| Dadri (NCTPP) | 10.74 | 7.41 | 6.90 | 8.21 | 6.53 | 7.95 |
| Jhajjar | 121.65 | 74.68 | 6.14 | 38.02 | 32.78 | 8.62 |
| Kahalgaon TPS | 139.35 | 76.08 | 5.46 | 250.51 | 113.47 | 4.53 |
| Koldam | 203.94 | 113.11 | 5.55 | 199.26 | 97.95 | 4.92 |
| Unchahar IV | 166.26 | 110.48 | 6.65 | 149.27 | 101.41 | 6.79 |
| Ramagundam I | 197.55 | 106.73 | 5.40 | - | - | - |
| Ramagundam III | 43.19 | 22.20 | 5.14 | - | - | - |
| Bongaigaon TPS | 817.64 | 413.58 | 5.06 | - | - | - |
| KUDGI TPS | 146.15 | 107.59 | 7.36 | - | - | - |
| Simhadri STPS-II | 17.23 | 8.40 | 4.87 | - | - | - |
| Talcher STPS-II | 36.60 | 10.48 | 2.86 | - | - | - |
| Meja Power Plant | 206.56 | 95.95 | 4.65 | 288.10 | 133.83 | 4.65 |
| Tanda-II | 212.07 | 135.05 | 6.37 | 212.07 | 102.60 | 4.84 |
| **Total NTPC** | **4024.85** | **1983.84** | **4.93** | **3014.48** | **1228.70** | **4.08** |
| **NPCIL** | | | | | | |
| Narora APP | 163.27 | 52.90 | 3.24 | 146.99 | 46.30 | 3.15 |
| Rajasthan APP | 178.09 | 70.73 | 3.97 | 210.51 | 87.15 | 4.14 |
| **Total NPCIL** | **341.36** | **123.63** | **3.62** | **357.50** | **133.45** | **3.73** |
| **SJVNL** | | | | | | |
| Nathpa Jhakri HEP | 75.26 | 17.63 | 2.34 | 59.89 | 14.81 | 2.47 |
| Rampur HPS | 217.12 | 68.46 | 3.15 | 215.87 | 90.25 | 4.18 |
| **Total SJVNL** | **292.38** | **86.10** | **2.94** | **275.77** | **105.05** | **3.81** |
| **IPPs** | | | | | | |
| Sasan UMPP | 705.33 | 107.05 | 1.52 | 730.95 | 102.33 | 1.40 |
| Greenko Budhil Hydro | 220.97 | 91.33 | 4.13 | 225.68 | 84.53 | 3.75 |
| **Total IPP** | **926.30** | **198.38** | **2.14** | **956.63** | **186.86** | **1.95** |
| **State Gas based Stations** | | | | | | |
| Gamma Infra | 126.00 | 177.21 | 14.06 | 388.40 | 308.53 | 7.94 |
| Shravanthi Energy | 268.77 | 438.38 | 16.31 | 776.80 | 695.77 | 8.96 |
| **Total Gas** | **394.77** | **615.59** | **15.59** | **1165.21** | **1004.30** | **8.62** |
| Renewables | 1,266.65 | 639.85 | 5.05 | 1266.65 | 623.10 | 4.92 |
| Rajwakti and Debal Free Power | 3.12 | 0.74 | 2.37 | 3.12 | 0.70 | 2.23 |
| Vishnu Prayag Free Power | 226.87 | 56.00 | 2.47 | 207.55 | 46.39 | 2.23 |
| GVK Srinagar Free Power | 181.25 | 44.74 | 2.47 | 134.16 | 29.98 | 2.23 |
| L&T Free Power | 65.90 | 15.61 | 2.37 | 65.90 | 14.73 | 2.23 |

**Table 4.29: Summary of Power Purchase Cost for FY 2023-24**

| Generating Stations | Claimed | | | Approved | | |
|---|---|---|---|---|---|---|
| | PP at State periphery | Total Cost | Average Rate | PP at State periphery | Total Cost | Average Rate |
| | MU | Rs. Crore | Rs./kWh | MU | Rs. Crore | Rs./kWh |
| Tehri PSP - Upcoming | 153.30 | 61.32 | 4.00 | - | - | - |
| **Total Firm Sources** | **15342.54** | **5766.16** | **3.76** | **13693.89** | **4960.88** | **3.62** |
| Deficit Purchase | 2145.75 | 1163.20 | 5.42 | 3633.49 | 1969.70 | 5.42 |
| Cost for meeting RPO | 0.00 | 63.32 | 0.00 | 39.49 | 15.80 | 4.00 |
| Banking payable | -403.20 | -196.18 | 0.00 | 420.00 | 227.68 | 5.42 |
| **Total** | **17085.39** | **6796.50** | **3.98*** | **17786.87** | **7174.05** | **4.03** |

**Considering Petitioner's revised projections APPC as claimed works out to Rs. 4.13/kWh.*

**The Commission, further, directs the Petitioner to seek prior approval of the Commission, in case the variation in power purchase quantum or total power purchase cost in any quarter exceeds by more than 5% of the approved power purchase quantum and cost for the respective quarter worked out on pro-rata basis from the total approved quantum and cost for FY 2023-24 as indicated in the Table below, failing which, the Commission may disallow power purchases so made while Truing up the ARR for FY 2023-24.**

**Table 4.30: Quarterly Power Purchase approved by the Commission for FY 2023-24**

| Quarter | Sales (MU) | Power Purchase Quantum (MU) | Power Purchase Cost (Rs. Crore) |
|---|---|---|---|
| April – June | 3709.41 | 4277.50 | 1725.26 |
| July – September | 3906.83 | 4927.16 | 1987.29 |
| October – December | 3653.97 | 4422.37 | 1783.69 |
| January – March | 3584.62 | 4159.83 | 1677.80 |
| **Total** | **14854.84** | **17786.87** | **7174.05** |

Moreover, it has been observed that the Petitioner has been continuously resorting to short term power purchase. As dealt in above, in this regard, third proviso of Regulation 73(1) of UERC Tariff Regulations, 2021 is reproduced hereunder:

*"Provided that the power procurement plan submitted by the Distribution Licensee may include long-term, medium-term and short-term power procurement sources of power, in accordance with these Regulations.* ***However, the distribution licensee should as far as possible, not plan for short-term purchases except for conditions specified in Regulations 75 and should endeavour to meet its requirement from long term and medium term power procurement and make a plan accordingly."***

***(Emphasis added)***

Regulation 75 specifies the circumstances under which short term power procurement may be made by the distribution licensee without seeking prior approval of the Commission. However, Regulation 75(5) specifies as under:

> *"(5) Within fifteen (15) days from the date of entering into an agreement or arrangement for short-term power procurement for which prior approval is not required, the Distribution Licensee shall provide the Commission, full details of such agreement or arrangement, including quantum, tariff calculations, duration, supplier details, method for supplier selection and such other details as the Commission may require with regard to such agreement/arrangement to assess that the conditions specified in this Regulation have been complied with:"*

While projecting the power purchase requirement of the Petitioner for FY 2023-24, it has been observed that the Petitioner is having deficits in all the months. **Accordingly, the Petitioner is directed to prepare its power purchase plan for the next year and initiate the bidding process to meet the deficit, if any. The Petitioner is directed to submit an action plan in this regard within 15 days of the date of Order. The Petitioner is also directed to ensure compliance of the Regulations issued by the Commission from time to time, failing which any consequent liability would be to the account of the Petitioner.**

The base Energy Charges of thermal stations (base fuel cost) for the purpose of computation of FCA is given in the Table below:

**Table 4.31: Energy Charges of thermal generating stations for FY 2023-24**

| Generating Station | Energy Charges (Rs. /kWh) |
|---|---|
| Singrauli STPS | 1.632 |
| Rihand I | 1.640 |
| Rihand II | 1.627 |
| Rihand III | 1.608 |
| Unchahar I | 4.516 |
| Unchahar II | 4.259 |
| Unchahar III | 4.619 |
| Anta CCPP | 5.000 |
| Auraiya CCPP | 5.000 |
| Dadri CCPP | 5.000 |
| Dadri (NCTPP) | 5.435 |
| Jhajjar | 5.563 |
| Kahalgaon TPS | 3.658 |
| Tanda II | 2.857 |
| Meja | 3.208 |
| Gamma CCPP | 5.420 |
| Shravanthi CCPP | 5.420 |

## 4.6 Transmission Charges

### 4.6.1 *Inter-State Transmission Charges Payable to PGCIL*

The Petitioner submitted that it has considered the actual inter-state transmission charges excluding arrears of FY 2021-22 to compute the average per unit rate of PGCIL transmission charges by dividing the total amount paid to PGCIL by the total units wheeled. The Petitioner has proposed the Inter-State Transmission Charges of Rs. 775.34 Crore. The Commission has computed the per unit transmission charges for FY 2021-22 and has considered the same to arrive at the per unit transmission charges for FY 2023-24 and has approved the PGCIL charges for FY 2023-24 considering the energy to be received from outside the State. The Commission in accordance with the above approach has approved Inter-State transmission charges as Rs. 598.40 Crore which shall be subject to true up based on the actual expenses incurred.

### 4.6.2 *Intra-State Transmission Charges payable to PTCUL*

The Petitioner submitted that the Intra-State Transmission Charges including SLDC charges for FY 2023-24 has been projected by considering the transmission charges approved by the Commission in its MYT Order dated March 31, 2022.

The Commission has approved the Annual Transmission Charges for PTCUL and SLDC charges of Rs. 369.75 Crore for FY 2023-24 (Rs. 354.23 Crore for PTCUL and Rs. 15.52 Crore for SLDC) vide its Orders dated March 30, 2023. Hence, the Commission has considered the same in the approval of ARR for FY 2023-24 for the Petitioner.

The Transmission Charges claimed by the Petitioner and approved by the Commission for FY 2023-24 is as shown in the Table given below:

**Table 4.32: Transmission Charges for FY 2023-24 (Rs. Crore)**

| Particulars | Claimed by UPCL | Approved |
|---|---|---|
| Inter-State Transmission Charges | 775.34 | 598.40 |
| Intra-State Transmission Charges | 408.52 | 369.75 |
| **Total** | **1183.86** | **968.15** |

## 4.7 Water tax

The Petitioner in its Petition has not sought water tax for FY 2023-24. The Commission has, however, approved the water tax of Rs. 178.87 Crore for FY 2023-24 same as that actually incurred in FY 2021-22.

## 4.8 GFA and Additional Capitalisation

### 4.8.1 *GFA base for FY 2021-22*

The Commission vide its MYT Order dated March 31, 2022 on approval of ARR for FY 2022-23 had approved the capitalisation of Rs. 912.21 Crore and Rs. 877.79 Crore for FY 2022-23 and FY 2023-24 respectively. As against the same, the Petitioner has proposed the capitalisation of Rs. 521.96 Crore and Rs. 662.52 Crore for FY 2022-23 and FY 2023-24 respectively.

The Petitioner in its Petition has submitted that the capital investment plan aims to achieve loss reduction, cater to increasing load demand besides improving the quality of supply to the consumers as well as improving reliability of the system. The Petitioner submitted that it has carried out the detailed analysis of capital investment required for FY 2022-23 and FY 2023-24. The Petitioner projected capital expenditure for FY 2022-23 as Rs. 333.33 Crore and for FY 2023-24 as Rs. 890.50 Crore. The Petitioner further submitted that the capital investment is proposed under the following benefit centres:

a) Load growth.
b) Loss reduction.
c) System reliability and safety improvement.
d) Creation of Infrastructure Facilities & other misc. works.

The Petitioner has further submitted various schemes to achieve the above targets as shown below:

a) Load growth:
   i. New substation projects.
   ii. Release of New PTW Connections.
   iii. Installation of meters for giving new connections.
   iv. Installations of Breakers (new).
   v. CSS 990 kVA where two transformers are installed at the same place.
   vi. Laying of LT lines for new connections.

b) Loss reduction:
   i. Installation of Double metering in all the 11 kV and 33 kV consumers.
   ii. Implementation of AMR.

iii. 11 kV and 33 kV covered cable for forest area.
iv. Laying of LT ABC cables in theft prone areas.
v. Replacement of defective single phase and three phase meters.
vi. Laying of 11 kV and 33 kV underground cables.

c) System reliability & safety improvement:
i. Additional Transformers installation with associated 11 kV and LT lines.
ii. Installation of LT protection system on the transformers.
iii. Safety Measures.

d) Creation of infrastructure facilities & other misc. works:
i. Consumer care centres, e-payment of bills and cash collection centres.
ii. WAMS/ADMS.

The Petitioner submitted that the Government of India has revamped old schemes and launched some new central sector schemes for the power sector. The Petitioner submitted that the schemes currently under progress are Central Schemes such as RAPDRP-Part B, IPDS, DDUGJY and SAUBHAGYA and are proposed to be completed by FY 2022-23 and only RDSS scheme shall be executed from FY 2023-24.

The capital expenditure and additional capitalisation as proposed in the Petition is as shown in the Table below:

**Table 4.33: Proposed Capital Expenditure and Capitalisation for FY 2022-23 and FY 2023-24 (Rs. Crore)**

| Particulars | Proposed Capital expenditure | Capitalization As per Tariff Petition |
|---|---|---|
| FY 2022-23 | 333.33 | 521.96 |
| FY 2023-24 | 890.50 | 662.52 |
| **Total** | **1223.83** | **1184.48** |

The Commission has gone through the submissions of the Petitioner. It is observed that the Petitioner has projected lower capitalisation in FY 2022-23 and FY 2023-24 than that approved in the MYT Order dated March 31, 2022.

The Commission observed that the Petitioner has made a downward revision of additional capitalisation and there is considerable gap between the amount approved vis-à-vis now projected by the Petitioner and, therefore, the Commission has approved the revised additional capitalisation as claimed by the Petitioner.

However, during the Annual Performance Review/Truing-up exercise, the Commission shall consider the Capitalisation on actual basis subject to capitalisation of only those Schemes which fulfil the conditions as stipulated by the Commission. The Commission has, accordingly, approved the capitalization and GFA for FY 2023-24.

Based on the above, the GFA base approved by the Commission for FY 2023-24 is as shown in the Table below:

**Table 4.34: GFA base approved by the Commission for FY 2023-24 (Rs. Crore)**

| S. No. | Particulars | Approved in the Tariff Order | Claimed by UPCL | Approved |
|---|---|---|---|---|
| 1. | Opening Value | 8120.24 | 8928.39 | 8288.49 |
| 2. | Total addition during the year | 877.79 | 662.52 | 662.52 |
| 3. | Closing value | 8998.03 | 9590.91 | 8951.01 |

## 4.9 Means of Finance

The Commission, as discussed above, has considered the capitalisation as projected by the Petitioner. The Commission with regards to funding proposed by the Petitioner observed that the percentage of debt equity funding after taking out the grant component is more than the permissible normative limit of 30%. The Commission has, therefore, considered the grant amount as proposed by the Petitioner and the balance capitalisation funding has been approved considering normative debt equity of 70:30. The approved financing is as shown in the Table below.

**Table 4.35: Means of Finance approved by the Commission (Rs. Crore)**

| Particulars | FY 2022-23 | FY 2023-24 |
|---|---|---|
| Capitalisation | 521.96 | 662.52 |
| **Financing** | | |
| Grant | 237.13 | 282.73 |
| Debt | 199.38 | 265.85 |
| Equity | 85.45 | 113.94 |
| **Total** | **521.96** | **662.52** |

## 4.10 Interest and Finance Charges

The Petitioner submitted that the interest on loan for FY 2023-24 has been computed by considering the revised closing balance of FY 2021-22 based on the addition in FY 2021-22. Further, the closing balance of FY 2021-22 has been considered as opening balance for FY 2022-23 and subsequently the proposed capitalisation for FY 2022-23 has been added to arrive at the closing balance of FY 2022-23 which has then been taken as the opening balance of FY 2023-24. The Petitioner further submitted that new loans for FY 2022-23 and FY 2023-24 has been considered as per the means of financing of capitalization, while the repayment has been considered equivalent to the depreciation for FY 2022-23 and FY 2023-24 in line with the UERC Tariff Regulations, 2021. Rate of interest of 10.60% has been applied which is in line with the existing arrangement of loans with REC and PFC and other financial institutions.

The Petitioner submitted that it has considered interest against REC (Old Loans) as per the repayment schedule in accordance with the Tariff Order for FY 2009-10 dated October 23, 2009 and is as shown in the Table below.

**Table 4.36: Repayment Schedule for REC old loans**

| Particulars | Amount (Rs. Crore) |
|---|---|
| FY 2022-23 | 9.00 |
| FY 2023-24 | - |

The Petitioner has claimed yearly financing charges of Rs. (2.47) Crore for 2023-24. The Petitioner has claimed yearly guarantee fee of Rs. 0.24 Crore for FY 2023-24.

The Petitioner further submitted that it has claimed rebate amount offered to consumers for digital/online payment of bills totalling Rs. 25.51 Crore based on the actuals for FY 2021-22.

Accordingly, the Petitioner has claimed the total interest and financing charges of Rs. 158.98 Crore for FY 2023-24.

For computing the interest on security deposit, the Petitioner has considered addition in consumer security deposit for FY 2021-22 and has escalated the same based on the number of consumers projected and the average amount of consumer security deposit per consumer. The Petitioner has considered interest rate of 4.25% and has, accordingly, claimed the interest on consumer security deposit of Rs. 56.21 Crore for FY 2023-24.

Regulation 27 of the UERC Tariff Regulations, 2021 specifies as follows:

*"**27. Interest and finance charges on loan capital and on Security Deposit***

*(1) The loans arrived at in the manner indicated in Regulation 24 shall be considered as gross normative loan for calculation of interest on loan.*

*(2) The normative loan outstanding as on 01.04.2019 shall be worked out by deducting the*

*cumulative repayment as admitted by the Commission up to 31.03.2019 from the approved gross normative loan.*

*(3) The repayment for each year of the Control Period shall be deemed to be equal to the depreciation allowed for that year…*

*…*

*(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio of the previous year after providing appropriate accounting adjustment for interest capitalised:*

*…*

*(6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.*

*…"*

The Commission has considered the closing loan balance for FY 2021-22 as opening loan balance for FY 2022-23 as discussed in Chapter 3 of the Order. Thereafter, the Commission has considered the loan addition during FY 2022-23 as per the approved means of finance for FY 2022-23. The Commission has considered the depreciation for FY 2022-23 as the normative repayment for the year. The Commission has considered the closing loan balance for FY 2022-23 as the opening loan balance for FY 2023-24. The Commission has considered the loan addition during FY 2022-23 and FY 2023-24 as per the approved Financing Plan.

With regard to the computation of the rate of interest, the Commission has considered the weighted average rate of interest of 10.60% as approved for FY 2021-22.

The Commission has determined the interest on loan by applying the interest rate of 10.60% on the amount of average of the opening loan & closing loan excluding the loan additions corresponding to the assets capitalised during FY 2023-24.

The Commission has not allowed interest on additions during the year as the Petitioner capitalises the assets at the end of the financial year, and the amount of interest accrued during the year on the loan portion corresponding to the capital expenditure is treated as Interest during construction and is added to CWIP for the purposes of capitalisation.

Further, with respect to guarantee fee, the Commission has considered the same amount as approved for FY 2021-22, i.e. Rs. 0.24 Crore. The financing charges of Rs. (2.47) Crore as approved for FY 2021-22 has been considered for FY 2023-24. Interest on security deposit has been considered as Rs. 56.21 Crore as claimed by the Petitioner. Timely payment and digital/online payment rebate has not been considered as a part of interest and financing charges by the Commission and the same shall be adjusted in the actual revenue for FY 2023-24 during the truing up exercise. Besides actual impact of the same cannot be ascertained at this instance and in any case timely payment by consumers of their dues will result in reduction in working capital requirement of UPCL and in turn interest on the same. Thus, the total interest expenses approved for FY 2023-24 works out to Rs. 150.12 Crore as against the Petitioner's claim of Rs. 158.98 Crore.

Accordingly, the interest on loan approved by the Commission for FY 2023-24 is as shown in the Table given below:

**Table 4.37: Interest on Loan approved by the Commission for FY 2023-24 (Rs. Crore)**

| Particulars | Claimed | Allowable |
|---|---|---|
| Opening Loan balance | 784.66 | 1028.78 |
| Drawal during the year | 241.31 | 265.85 |
| Repayment during the year | 311.54 | 244.41 |
| Closing Loan balance | 714.43 | 1050.22 |
| Interest Rate | 10.60% | 10.60% |
| **Interest on Loan** | **79.48** | **96.13** |
| Other finance charges | -2.47 | -2.47 |
| Guarantee fee | 0.24 | 0.24 |
| Interest on CSD | 56.21 | 56.21 |
| Rebate for online payments | 25.51 | - |
| **Total Interest** | **158.98** | **150.12** |

## 4.11 Depreciation

The Petitioner submitted that the asset class wise depreciation has been computed considering the average GFA and the rates of depreciation specified in the UERC Tariff Regulations, 2021. The Petitioner submitted that the average depreciation rate of 5.40% has been applied on the Opening GFA for FY 2023-24. Assets created from grants and deposit works have been excluded for the purpose of depreciation as per the provisions of the UERC Tariff Regulations, 2021.

Accordingly, the Petitioner has proposed the depreciation of Rs. 311.54 Crore for FY 2023-24.

Regulation 28 of the UERC Tariff Regulations, 2021 specifies as follows:

*"**28. Depreciation***

*(1) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission.*

*Provided that no depreciation shall be allowed on assets funded through Consumer Contribution and Capital Subsidies/Grants.*

*(2) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset.*

*...*

*(4) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix - II to these Regulations.*

*…"*

In the absence of complete Fixed Asset Register and for reasons discussed in Chapter 3 of this Order, the Commission at this stage has considered the weighted average rate of 5.40% computed for FY 2021-22 and has applied the same on the opening depreciable GFA for FY 2023-24.

The depreciation approved by the Commission for FY 2023-24 is as shown in the Table given below:

**Table 4.38: Depreciation approved for FY 2023-24 (Rs. Crore)**

| Particulars | Claimed | Allowable |
|---|---|---|
| Opening GFA | 8928.39 | 8288.49 |
| Grants | 3163.35 | 3765.72 |
| Depreciable opening GFA | 5765.04 | 4522.77 |
| Net addition during the year | 378.75 | 379.79 |
| Closing GFA | 6143.79 | 4902.56 |
| Depreciation rate | 5.40% | 5.40% |
| **Depreciation** | **311.54** | **244.41** |

## 4.12 Operation and Maintenance expenses

Regulation 84 of the UERC Tariff Regulations, 2021, with regard to the Operation and Maintenance expenses, specifies as follows:

*"**84. Operation and Maintenance Expenses***

*(1) The O&M expenses for the first year of the Control Period will be approved by the Commission taking into account actual O&M expenses for last five years till Base Year subject to prudence*

*check and any other factors considered appropriate by the Commission.*

*(2) The O&M expenses for the nth year and also for the year immediately preceding the Control Period i.e., FY 2018-19 shall be approved based on the formula given below: -*

$O\&M_n = R\&M_n + EMP_n + A\&G_n$

*Where –*

- *O&Mn – Operation and Maintenance expense for the nth year;*
- *EMPn – Employee Costs for the nth year;*
- *R&Mn – Repair and Maintenance Costs for the nth year;*
- *A&Gn – Administrative and General Costs for the nth year;*

*(3) The above components shall be computed in the manner specified below:*

$EMP_n = (EMP_{n-1}) \times (1+G_n) \times (1+CPI_{inflation})$

$R\&Mn = K \times (GFA_{n-1}) \times (1+WPI_{inflation})$ *and*

$A\&Gn = (A\&G_{n-1}) \times (1+WPI_{inflation}) + Provision$

*Where –*

- $EMP_{n-1}$ *– Employee Costs for the (n-1)th year;*
- *A&Gn-1 – Administrative and General Costs for the (n-1)th year;*

*Provision: Cost for initiatives or other one-time expenses as proposed by the Distribution Licensee and approved by the Commission after prudence check.*

- *"K" is a constant specified by the Commission in %. Value of K for each year of the control period shall be determined by the Commission in the MYT Tariff order based on licensee's filing, benchmarking of repair and maintenance expenses, approved repair and maintenance expenses vis-à-vis GFA approved by the Commission in past and any other factor considered appropriate by the Commission;*
- *CPI inflation – is the average increase in the Consumer Price Index (CPI) for immediately preceding three years;*
- *WPI inflation – is the average increase in the Wholesale Price Index (CPI) for*

*immediately preceding three years;*

- *GFAn-1 - Gross Fixed Asset of the distribution licensee for the n-1th year;*
- *Gn is a growth factor for the nth year and it can be greater than or less than zero based on actual performance. Value of Gn shall be determined by the Commission in the MYT tariff order for meeting the additional manpower requirement based on licensee's filings, benchmarking and any other factor that the Commission feels appropriate:*

*Provided that repair and maintenance expenses determined shall be utilised towards repair and maintenance works only.*

*Provided further that, repair and maintenance expenses for IT related assets and non-IT related assets shall be computed separately under these Regulations if the distribution utility maintains separate record of assets wise detail R&M expenses claimed under these Regulations."*

The O&M expenses include Employee expenses, R&M expenses and A&G expenses. In accordance with Regulation 84 of the UERC Tariff Regulations, 2021, the O&M expenses for FY 2023-24 shall be determined by the Commission taking into account the actual O&M expenses of the previous years and any other factors considered appropriate by the Commission. The submissions of the Petitioner and the Commission's analysis on the O&M expenses for FY 2023-24 is detailed below.

### 4.12.1 *Employee Expenses*

The Commission has approved the employee expenses of Rs. 429.51 Crore for FY 2023-24 in its MYT Order dated March 31, 2022. As against the same, the Petitioner has computed the employee expenses as Rs. 408.64 Crore as per the UERC Tariff Regulations, 2021 considering the normative employee expenses for FY 2021-22.

The Petitioner has considered the CPI inflation of 6.00% per annum which is the average increase in CPI for preceding three years till the base year (FY 2019-20 to FY 2021-22). The Petitioner has considered growth factor as zero for FY 2023-24. Further, the Petitioner has considered the capitalisation of 15.16% same as actual capitalisation for FY 2021-22.

In accordance with the UERC Tariff Regulations, 2021, the Gn (growth factor) is to be considered in the computation of employee expenses. The Commission has considered the Gn as 0%

as projected by the Petitioner.

In accordance with UERC Tariff Regulations, 2021, CPI inflation which is the average increase in the Consumer Price Index (CPI) for the preceding three years, is to be considered. The Commission has calculated the annual growth in values of CPI (overall) based on the average of preceding three full years upto FY 2021-22 as 5.89%.

The Commission has considered the gross normative employee expenses approved in the true up for FY 2021-22 for projecting the employee expense for FY 2023-24 in accordance with the UERC Tariff Regulations, 2021. Further, the Commission has considered the capitalisation rate of employee expenses as 15.16% based on the actual rate of capitalisation for FY 2021-22.

The normative employee expenses approved by the Commission for FY 2023-24 are as shown in the Table below:

**Table 4.39: Employee expenses approved by the Commission for FY 2023-24 (Rs. Crore)**

| Particulars | Claimed by UPCL | Approved |
|---|---|---|
| EMPn-1 | 454.38 | 454.38 |
| Gn | 0.00% | 0.00% |
| CPIinflation | 6.00% | 5.89% |
| **EMPn = (EMPn-1) x (1+Gn) x (1+CPIinflation)** | **481.64** | **481.16** |
| Capitalisation rate | 15.16% | 15.16% |
| Less: Employee expenses capitalised | 73.00 | 72.93 |
| **Net Employee expenses** | **408.64** | **408.23** |

### 4.12.2 *R&M expenses*

The Commission had approved the R&M expenses of Rs. 259.01 Crore for FY 2023-24 in its MYT Order dated March 31, 2022. As against the same, the Petitioner has computed the R&M expenses as Rs. 279.81 Crore as per the UERC Tariff Regulations, 2021.

The Petitioner submitted that the R&M expenses for FY 2023-24 has been proposed as per the UERC Tariff Regulations, 2021. The Petitioner has erroneously considered the K factor of 3.06% instead of 3.11% approved by the Commission in its MYT Order dated March 31, 2022. Further, the Petitioner has considered the WPI inflation of 2.42% considering the average increase in the Wholesale Price Index (WPI) for FY 2019-20 to FY 2021-22. Accordingly, the Petitioner has proposed the R&M expenses of Rs. 279.81 Crore for FY 2023-24.

The Commission has determined the R&M expenses for FY 2023-24 in accordance with

UERC Tariff Regulations, 2021. The Commission has considered the same K factor of 3.11% as considered by it in its MYT Order dated March 31, 2022. The Commission for computation of R&M expenses has considered the opening GFA for FY 2023-24. The Commission has further considered the WPI inflation of 5.32% which is the average increase in the Wholesale Price Index (WPI) for FY 2019-20 to FY 2021-22.

The R&M expenses approved by the Commission for FY 2023-24 is as shown in the Table below:

**Table 4.40: R&M Expenses approved by the Commission for FY 2023-24 (Rs. Crore)**

| Particulars | Claimed by UPCL | Approved |
|---|---|---|
| K | 3.06% | 3.11% |
| GFAn-1 | 8928.39 | 8288.49 |
| WPIinflation | 2.42% | 5.32% |
| **R&Mn = K x (GFAn-1) x (1+WPIinflation)** | **279.81** | **271.87** |

### 4.12.3 *A&G Expenses*

The Commission had approved the A&G expenses of Rs. 57.97 Crore for FY 2023-24 in its MYT Order dated March 31, 2022. As against the same, the Petitioner has computed the A&G expenses for FY 2023-24 as Rs. 75.68 Crore as per the UERC Tariff Regulations, 2021.

The Petitioner submitted that the A&G expenses for FY 2023-24 consists of three main components comprising of existing expenses, new initiatives and provisions. The Petitioner submitted that it has computed A&G Expenses in line with the methodology adopted by the Commission. The approach submitted by the Petitioner is as stated below:

a) An escalation factor, i.e. WPI inflation of 2.42% as computed in earlier section has been applied for FY 2022-23 and FY 2023-24 to arrive at the normative A&G expenses for subsequent years.

b) Capitalization rate of 33.61% based on actual capitalization rate of FY 2021-22 (as also discussed in True-up of FY 2021-22) has been considered for each year.

c) Additional expenditure on account of License fee has been considered, in line with the Commission's methodology and considering increase of 5 %.

d) In line with approach adopted by the Commission for approving Data centre expenses on actual basis (over and above normative computations), the same has been estimated for FY 2022-23 and FY 2023-24.

Accordingly, the Petitioner has proposed the A&G expenses of Rs. 75.68 Crore for FY 2023-24.

The Commission has considered the normative gross A&G expenses approved in the true up of FY 2021-22 as the gross base A&G expenses. This normative opening gross A&G expenses has been escalated by the WPI inflation of 5.32% to arrive at A&G expenses for FY 2022-23. The gross A&G expenses so arrived at have been considered as the gross A&G expenses (A&Gn-1) for FY 2023-24. Further, the Commission has considered the actual capitalisation rate of A&G expenses for FY 2021-22 to be the capitalisation rate for FY 2023-24. In addition, the Commission has provisionally considered the license fee as Rs. 3.90 Crore as also claimed by the Petitioner for FY 2023-24.

In line with the approach adopted in the MYT Order dated March 31, 2022, the Commission has approved the additional expenses of Rs. 35.17 Crore towards data centre cost for FY 2023-24.

The normative A&G expenses approved by the Commission for FY 2023-24 is as shown in the Table below:

**Table 4.41: A&G expenses approved by the Commission for FY 2023-24 (Rs. Crore)**

| Particulars | Claimed | Allowable |
|---|---|---|
| A&Gn-1 | 53.84 | 31.82 |
| WPIinflation | 2.42% | 5.32% |
| Gross A&G expenses | 55.14 | 33.51 |
| Capitalisation rate | 33.61% | 34.76% |
| Less: A&G expenses capitalized | 18.53 | 11.65 |
| **Net A&G expenses** | **36.61** | **21.86** |
| Provision (Data Centre) | 35.17 | 35.17 |
| License Fee | 3.90 | 3.90 |
| **Total A&G Expenses** | **75.68** | **60.93** |

### 4.12.4 *O&M Expenses*

The summary of O&M expenses approved by the Commission for FY 2023-24 is as shown in the Table below:

**Table 4.42: O&M Expenses approved by the Commission for FY 2023-24 (Rs. Crore)**

| Particulars | Claimed by UPCL | Approved |
|---|---|---|
| Employee expenses | 408.64 | 408.23 |
| R&M expenses | 279.81 | 271.87 |
| A&G expenses | 75.68 | 60.93 |
| **Total O&M expenses** | **764.13** | **741.04** |

## 4.13 Interest on Working Capital

The Petitioner has submitted that the interest on working capital (IWC) for FY 2023-24 has been proposed in accordance with the UERC Tariff Regulations, 2021. Accordingly, the Petitioner has proposed the normative IWC of Rs. 140.24 Crore for FY 2023-24.

Regulation 33(2) of the UERC Tariff Regulations, 2021 specifies as follows:

*"(2)* ***Distribution***

*a) The Distribution Licensee shall be allowed interest on the estimated level of working capital for the financial year, computed as follows:*

*(i) Operation and maintenance expenses for one month;*

*(ii) Maintenance spares @ 15% of operation and maintenance expenses; plus*

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

*(iv) Capital required to finance such shortfall in collection of current dues as may be allowed by the Commission; minus*

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

The Commission has determined the interest on working capital for FY 2023-24 in accordance with the UERC Tariff Regulations, 2021.

### 4.13.1 *One Month O&M Expenses*

The annual O&M expenses approved by the Commission are Rs. 741.04 Crore for FY 2023-24. Based on the approved O&M expenses, one month's O&M expenses work out to Rs. 61.75 Crore for FY 2023-24.

### 4.13.2 *Maintenance Spares*

The Commission has considered the maintenance spares as 15% of annual O&M expenses, which works out to Rs. 111.16 Crore for FY 2023-24.

### 4.13.3 *Receivables*

The Commission has approved the receivables for two months equivalent to the expected revenue from the sale of electricity at the net revenue requirement of Rs. 9900.54 Crore for FY 2023-24, which works out to Rs. 1650.09 Crore for FY 2023-24.

### 4.13.4 *Capital required to finance shortfall in collection of current dues*

The Commission has approved the collection efficiency of 99.15% for FY 2023-24 while approving the Business Plan of UPCL for the Control Period from FY 2022-23 to FY 2024-25. In accordance with the provisions of the UERC Tariff Regulations, 2021 the Commission has approved the capital required to finance shortfall in collection of current dues as 0.85% of the net revenue required which work out Rs. 76.75 Crore.

### 4.13.5 *Adjustment for Credit by power suppliers*

The Petitioner has proposed one month of power purchcase cost as Rs. 665.03 Crore for FY 2023-24. As per the Power Purchase approved, one month of power purchase cost worked out by the Commission is Rs. 664.98 Crore.

Based on the above, the total working capital requirement of the Petitioner for FY 2023-24, works out to Rs 1234.77 Crore. The interest on working capital for FY 2023-24 approved by the Commission is as shown in the Table below:

**Table 4.43: Interest on working capital approved by the Commission for FY 2023-24 (Rs. Crore)**

| Particulars | Claimed by UPCL | Approved |
|---|---|---|
| O&M expenses for 1 month | 64.25 | 61.75 |
| Maintenance Spares | 115.65 | 111.16 |
| 2 months of expected revenue at prevailing tariffs | 1732.40 | 1650.09 |
| Capital required to finance shortfall in collection of current dues | 88.35 | 76.75 |
| Minus: one month power purchase cost | 665.03 | 664.98 |
| Net Working Capital | 1335.62 | 1234.77 |
| Rate of Interest on Working Capital | 10.50% | 11.29% |
| **Interest on Working Capital** | **140.24** | **139.41** |

### 4.13.6 *Return on Equity*

The Petitioner has considered the opening Equity for FY 2023-24 as Rs. 1110.91 Crore. The Petitioner has considered the equity addition during the year as per the proposed financing plan for the year. The Petitioner has proposed the Return on Equity at the rate of 16.50% on the opening equity for the year. Accordingly, the Petitioner has proposed the Return on Equity of Rs. 183.30 Crore for FY 2023-24.

Regarding the Return on Equity, Regulation 26 of the UERC Tariff Regulations, 2021 specifies as follows:

*"26. Return on Equity (1)Return on equity shall be computed on the equity base determined in accordance with Regulation 24.*

*Provided that, Return on Equity shall be allowed on amount of allowed equity capital for the assets put to use at the commencement of each financial year.*

*Provided further that, if the generating stations/licensees are able to demonstrate the actual date of asset being put to use and capitalized in its accounts of each asset for the purposes of business carried on by it through documentary evidence, including but not limited to 'asset put to use certificate', 'audited accounts' etc., then in such cases, after due satisfaction of the Commission, the RoE shall be allowed on pro-rata basis after considering additional capitalization done during the year out of the equity capital.*

*(2) Return on equity shall be computed on at the base rate of 15.5% for thermal generating stations, transmission licensee, SLDC and run of the river hydro generating station and at the base rate of 16.50% for the storage type hydro generating stations and run of river generating station with pondage and distribution licensee on a post-tax basis.*

*Provided that return on equity in respect of additional capitalization after cut-off date beyond the original scope excluding additional capitalization due to Change in Law, shall be computed at the weighted average rate of interest on actual loan portfolio of the distribution company or the generating station or the transmission system;"*

In accordance with the UERC Tariff Regulations, 2021, Return on Equity is allowable on the opening equity for the year. Hence, the Commission has determined the Return on Equity considering the eligible opening equity for return purposes for FY 2023-24.

Further, the proviso to the above-mentioned Regulation on RoE provides that if the licensee is able to demonstrate that the actual date of asset being put to use and capitalized in its accounts for the purposes of business carried on by it through documentary evidence, then Return on Equity shall be allowed on pro-rata basis considering additional capitalisation done during the year. However, at this stage it cannot be projected when the asset will be capitalised. Moreover, as discussed in Chapter 3 of this Order, it has been the practice of the Petitioner to capitalise the assets at the end of the year. Hence, the Commission may consider the Return on Equity on pro-rata basis at the time of truing-up if complete details as per the proviso to the Regulations are submitted by the Petitioner.

Accordingly, the Commission has considered the closing eligible equity for return purposes approved for FY 2021-22 as the opening balance for FY 2022-23 as discussed in Chapter 3 of the Order. Thereafter, the Commission has considered the equity addition during FY 2022-23 as per the approved means of finance for FY 2022-23. The Commission has considered the closing balance for FY 2022-23 as the opening balance for FY 2023-24.

The Return on Equity approved by the Commission for FY 2023-24 is as shown in the Table below:

**Table 4.44: Return on Equity approved by the Commission for FY 2023-24 (Rs. Crore)**

| Particulars | Claimed by UPCL | Approved |
|---|---|---|
| Opening Equity | 1110.91 | 1072.18 |
| Addition during the year | 138.48 | 113.94 |
| Closing Equity | 1249.38 | 1186.11 |
| Rate of Return | 16.50% | 16.50% |
| **Return on Equity** | **183.30** | **176.91** |

### 4.13.7 *Income Tax*

The Petitioner has not claimed any Income Tax in its ARR proposals for FY 2023-24.

Regulation 34 of the UERC Tariff Regulations, 2021 specifies as follows:

*"**34. Tax on Income***

*Income Tax, if any, on the income stream of the regulated business of Generating Companies, Transmission Licensees, Distribution Licensees and SLDC shall be reimbursed to the Generating Companies, Transmission Licensees, Distribution Licensees and SLDC as per actual income tax paid, based on the documentary evidence submitted at the time of truing up of each year of the Control Period, subject to prudence check."*

As stated above, Income Tax is admissible at the time of truing up and, hence, the

Commission has not considered any Income Tax in the approval of ARR for FY 2023-24.

### 4.13.8 *Non-Tariff Income*

The Petitioner has proposed non-tariff income of Rs. 272.50 Crore for FY 2023-24 based on the average NTI approved by the Commission in the last six years (FY 2016-17 to FY 2021-22). In the absence of any yardstick for estimating the non-tariff income of the Petitioner, the Commission provisionally approves the actual NTI as approved for FY 2021-22. The same shall, however, be Trued up based on the actual audited accounts for the year.

### 4.13.9 *Revenue Requirement for FY 2023-24*

Based on the above, the net Revenue Requirement approved by the Commission for FY 2023-24 is as shown in the Table below:

**Table 4.45: Revenue Requirement approved by the Commission for FY 2023-24 (Rs. Crore)**

| S. No. | Particulars | UPCL | Approved |
|---|---|---|---|
| 1 | Power Purchase Cost including RPO & Water Tax | 6796.50 | 7352.92 |
| 2 | UJVN Ltd. Arrears/(Surplus) | | (25.60) |
| 3 | Transmission Charges | | |
| | PGCIL | 775.34 | 598.40 |
| | PTCUL & SLDC | 408.52 | 369.75 |
| 4 | Interest on Loan and finance charges | 102.77 | 93.91 |
| 5 | Interest on consumer security deposit | 56.21 | 56.21 |
| 6 | Depreciation | 311.54 | 244.41 |
| 7 | O&M expenses | 770.99 | 741.04 |
| 8 | Interest on Working Capital | 140.24 | 139.41 |
| 9 | Return on Equity | 183.30 | 176.91 |
| **10** | **Aggregate Revenue Requirement** | **9545.41** | **9747.35** |
| 11 | Less: Non-Tariff Income | 272.50 | 429.57 |
| 12 | True up impact Gap/(Surplus) | 1121.51 | 582.76 |
| **13** | **Net Revenue Requirement** | **10394.42** | **9900.54** |

## 4.14 Revenue at Existing Tariff

The Petitioner has projected the revenue of Rs. 9649.72 Crore for FY 2023-24 at the existing Tariffs. The Petitioner in its Petition has erroneously projected the category-wise revenue for FY 2023-24 based on the existing fixed and energy charges approved by the Commission in its MYT Order dated March 31, 2022, along with additional energy charge approved by the Commission which was a one-time relief allowed by the Commission. The Petitioner was, therefore, directed to rectify the same and the Petitioner in its reply dated December 26, 2022, submitted the revised estimated revenue from existing tariff as Rs. 8887.29 Crore.

The revenue at existing Tariff as proposed by the Petitioner and estimated by the Commission is shown in the Table given below:

**Table 4.46: Revenue for FY 2023-24 at existing Tariff (Rs. Crore)**

| S. No. | Consumer Category | Proposed by the Petitioner | | | Estimated by the Commission | | |
|---|---|---|---|---|---|---|---|
| | | Sales (MU) | Revenue (Rs. Crore) | Average Billing Rate (Rs./kWh) | Sales (MU) | Revenue (Rs. Crore) | Average Billing Rate (Rs./kWh) |
| 1. | RTS-1: Domestic | 3941.28 | 1961.37 | 4.98 | 3996.99 | 4.98 | 4.98 |
| 2. | RTS-2: Non-Domestic | 1740.03 | 1212.73 | 6.97 | 1764.11 | 6.95 | 6.95 |
| 3. | RTS-3: Govt Public Utilities | 784.26 | 506.25 | 6.46 | 788.02 | 6.74 | 6.74 |
| 4. | RTS-4: Private Tube Wells | 288.12 | 63.35 | 2.20 | 290.81 | 2.20 | 2.20 |
| 7. | RTS-5: Industry | 7574.79 | 4965.59 | 6.56 | 7668.89 | 6.54 | 6.54 |
| | *LT Industry* | 390.32 | 255.28 | 6.54 | 395.01 | 6.47 | 6.47 |
| | *HT Industry* | 7184.47 | 4710.31 | 6.56 | 7273.88 | 6.54 | 6.54 |
| 8. | RTS-6: Mixed Load | 208.62 | 125.37 | 6.01 | 211.02 | 6.01 | 6.01 |
| 9. | RTS-7: Railway Traction | 87.03 | 50.42 | 5.79 | 88.19 | 5.64 | 5.64 |
| 10. | RTS-8: EV Sharging | 4.00 | 2.20 | 5.50 | 4.00 | 5.50 | 5.50 |
| | Revenue from Incremental Sales | - | - | - | 42.81 | 6.08 | 6.08 |
| **Total** | | **14628.13** | **8887.29** | **6.08** | **14854.84** | **9029.69** | **6.08** |

## 4.15 Revenue Gap for FY 2023-24 at existing Tariff

Based on the net revenue requirement of Rs. 10394.42 Crore (including the proposed True up amount for FY 2021-22) and revenue at existing Tariff of Rs. 8887.29 Crore, the Petitioner has proposed the revenue gap of Rs. 1507.13 Crore. Out of this total amount, the standalone gap for FY 2023-24 works out to Rs. 385.62 Crore. Accordingly, the Petitioner has proposed the recovery of Rs. 1507.13 Crore in FY 2023-24 through tariff increase in FY 2023-24.

Considering the net revenue requirement of Rs. 9900.54 Crore and revenue at existing Tariff of Rs. 9029.69 Crore, the Commission has approved the revenue gap of Rs. 870.85 Crore for FY 2023-24. The Commission allows the same to be recovered through tariff increase in FY 2023-24. The revenue gap for FY 2023-24 proposed by the Petitioner and approved by the Commission is as shown in the Table given below:

**Table 4.47: Revenue Gap for FY 2023-24 (Rs. Crore)**

| Particulars | Proposed by the Petitioner | Approved |
|---|---|---|
| Net Revenue Requirement | 10394.42 | 9900.54 |
| Revenue at existing Tariff | 8887.29 | 9029.69 |
| Revenue Gap | 1507.13 | 870.85 |

# 5. Tariff Rationalisation, Tariff Design and related issues

## 5.1 Tariff Rationalisation and Tariff Design for FY 2023-24

### 5.1.1 *General*

In Chapter 4 of this Order, it has been concluded that the revenue projected to be earned by UPCL during FY 2023-24 at tariffs approved vide Tariff Order dated 31.03.2022 will be Rs. 9029.69 Crore. Against this, the ARR approved by the Commission for FY 2023-24 including gap and surplus on account of truing up of previous years works out to Rs. 9900.54 Crore, leaving a total gap of Rs. 870.85 Crore.

In view of the objections received and the Petitioner's submissions, the Commission considers it appropriate to first take a view on the tariff rationalisation measures proposed by the Petitioner and the concerns voiced by other stakeholders.

### 5.1.2 *Petitioner's Proposals*

The Petitioner submitted that the tariff proposal has been formulated to recover the projected ARR for FY 2023-24.

The Petitioner also proposed the following amendment in the Tariff structure for FY 2023-24:

#### *5.1.2.1 Green Power Tariff*

The Petitioner submitted that the Central Government in August, 2021 has notified draft Electricity Rules (Promoting renewable energy through Green Open Access) 2021 where a separate tariff for Green energy was to be determined by the Appropriate Commission.

The Petitioner submitted that Green Power Tariff is meant for large Corporates who are looking to procure only green power. They can contract such power from Discoms similar to procurement from clean energy developer for Commercial and Industrial (C&I) category of consumers. Discoms based on their Power purchase portfolio will allocate such power from RE sources to an eligible entity. In case of shortfall between green energy sought by consumer and available with Discom, the Discom may have to buy additional green power and, thereafter, supply it at 'Green Tariff'.

The computation of Green Tariff is based on the weighted average tariff of green energy that the consumer will have to pay. Based on the current RE market trends, the tariff from conventional sources is expected to be lower than the tariff from conventional fuel sources in near future and a new Regulation will help to ensure, if an industry wants only green power from developer, open access applications will be approved within a fortnight.

In view of the above, the Petitioner had claimed the Green Power Tariff during the Tariff determination of FY 2022-23 and the Commission had approved the same in line with the approach proposed by the Petitioner. For FY 2022-23, the rate of Green Power Tariff was determined based on the cost of procurement from RE and non-RE sources of energy. Following the similar methodology, the Petitioner based on estimated Power purchase cost from RE and non-RE sources of energy proposes Green Power Tariff for FY 2023-24 as follows:

**Computation of Green Power Tariff**

The total power purchase cost projected by the Petitioner for Non-RE power (excluding RE power eligible for RPO) is provided in the Table below:

**Table 5.1: Power Purchase Cost as projected by UPCL**

| Particulars | FY 2023-24 |
|---|---|
| **Computation of cost for Non-RE power (Total Power minus RE power)** | |
| Net Generation at State periphery (MU) | 15,467 |
| Total power purchase cost (Rs. Crore) | 6,055 |
| Net Rate of Non-RE power (Rs./kWh) | 3.91 |
| **Computation of cost for RE power** | |
| Net Generation (MU) | 1,619 |
| Total Cost (Rs. Crore) | 742 |
| Net Rate of RE power (Rs./kWh) | 4.58 |
| **Total cost for Non-RE power & RE power** | |
| Net Generation at State periphery (MU) | 17,085 |
| Total cost excluding Transmission charges (Rs. Crore) | 6,796 |
| Net Rate (Rs./kWh) | 3.98 |

In view of the above, Green Power Tariff proposed by UPCL is as follows:

**Table 5.2: Computation of Green Power Tariff for FY 2023-24**

| Particulars | Computation |
|---|---|
| Average cost of RE for FY 2023-24 (Rs./kWh) | 4.58 |
| Less: Average cost of Non-RE for FY 2023-24 (Rs./kWh) | 3.91 |
| Difference (Rs./kWh) | 0.67 |
| Less: Promotional discount for Green Power for FY 2023-24 | 25% |
| **Applicable Green Power Charges (Rs/kWh)** | **0.50** |

The Petitioner submitted that the Green Power Tariff recovered from these consumers for supply of 100% renewable energy will increase the other business income of the distribution licensee. As per Section 51 of the Electricity Act 2003, a proportion of the revenues derived from such business shall, as may be specified by the concerned State Commission, be utilized for reducing its charges for wheeling. Therefore, these services will further subsidize the ARR of the distribution business and normal tariff of the consumers may also get proportionately subsidized. Further, these initiatives will also promote the Government of India pledge towards green energy, clean environment and sustainable development Goals.

#### *5.1.2.2 Recovery from Fixed Charges*

The Petitioner requested the Commission for Rationalisation of Tariff, i.e. Fixed/ Demand Charges linked to its fixed cost components and Energy Charges linked to variable components. The Petitioner submitted that out of the total ARR, all costs except variable power purchase cost of thermal power plants like coal and gas are fixed in nature, i.e. O&M and Financial Costs will be incurred/claimed in the ARR irrespective of sale of energy.

The Petitioner submitted that Tariff for Fixed charges and Energy charges should be adjusted gradually, say over a period of three to five years, so as to make the retail tariff cost structure reflective of the actual Fixed Cost. This will ensure that fixed charges obligation of the Petitioner is recovered from fixed/demand charges realized from consumers and there is a better management of working capital.

#### *5.1.2.3 Fisheries to be covered in RTS 4A: Agricultural Allied Activities*

The Petitioner submitted that as per the announcement no. 298/2022 made by the Hon'ble Chief Minister, Uttarakhand on 10.07.2022, the usage of electricity for the purpose of "Fisheries" shall be charged at the rates applicable for the agricultural activities. Accordingly, the Petitioner proposes that the usage of electricity for the purpose of "Fisheries" may be covered under the rate schedule RTS 4A: Agricultural Allied Activities.

### 5.1.3 *Commission's Views on Tariff Rationalisation Measures*

The Commission believes that tariff rationalisation is a dynamic and ongoing process and is essential to accommodate the socio-economic and technological changes taking place in the system over a period of time.

The following Sections discuss the tariff rationalisation measures suggested by the Petitioner, Respondents, and the Commission's views on the same.

#### *5.1.3.1 Green Power Tariff*

The Commission in its MYT Order dated March 31, 2022 considering the request of the Petitioner approved the Green Power Tariff of Rs. 0.45/kWh applicable for consumers availing 100% RE power on payment of Green Power tariff in addition to the applicable tariff for RTS-5 HT Industry having contracted load above 88 kVA/75 kW (100 BHP).

The Petitioner has proposed the Green Power Tariff for FY 2023-24 in line with the approach adopted by the Commission while approving Green Power Tariff for FY 2022-23 with the difference that the Commission in its Order had considered 50% of the difference of weighted average rate of RE procurement and weighted average rate of non-RE procurement, while the Petitioner has considered 75% of the difference of weighted average rate of RE procurement and weighted average rate of non-RE procurement.

The Commission opines that the Renewable Energy Power is intermittent in nature and in order to supply 100% RE power to any consumer it entails additional cost towards grid balancing and fixed cost of stranded capacity, which cannot be passed to other consumers of the State. Therefore, it is necessary to recover such additional cost from these consumers requiring 100% RE power only and not from the other consumers of the State. However, the Green Power Tariff should also be reasonable to the consumer, thereby acting as a catalyst for wider acceptance of RE.

The Commission has analysed the approach adopted by Other State Electricity Regulatory Commission and opines that it is appropriate to compute Green Power Tariff as the difference of weighted average rate of RE procurement and weighted average rate of non-RE procurement which is also in line with the Petitioners' proposal. However, since the cost of such RE procurement is already embedded in the base tariff being determined by the Commission some benefit needs to be passed on to the consumer as well. Accordingly, the Commission considers it appropriate to levy only 50% of the rate so arrived from the consumers willing to procure 100% RE power from DISCOMs to promote procurement of RE power. However, this approach may be reviewed by the Commission at the time of determining the tariff for subsequent period based on the experience gained during the course of time. Based on the above, Green Power Tariff approved by the Commission for FY 2023-24 is shown in the Table below:

**Table 5.3: Green Power Tariff approved by the Commission for FY 2023-24**

| RE Power Procurement for the Period FY 2023-24 | | | Non-RE Power Procurement for the Period FY 2023-24 | | | Difference between RE & Non-RE Power | Approved Green Power Tariff |
|---|---|---|---|---|---|---|---|
| MU | Rs. Crore | Rs./ Unit | MU | Rs. Crore | Rs./Unit | Rs./Unit | Rs./Unit |
| A | B | C | D | E | F | G = (C – F) | H=G*50% |
| 1449.41 | 653.84 | 4.51 | 16337.46 | 6520.21 | 3.99 | 0.52 | 0.26 |

In view of the above, the Commission approves the Green Power Tariff of Rs. 0.26/kWh, which will be applicable for consumers availing 100% RE power on payment of Green Power tariff in addition to the applicable tariff for RTS-5 HT Industry having contracted load above 88 kVA/75 kW (100 BHP).

The revenue earned by the Petitioner from such sale of green power shall be considered as Tariff Income at the time of truing up. Such treatment of revenue shall also ensure that the benefit of the same is passed on to the other consumers of the State.

As regards the issuance of a monthly certificate to the consumers certifying 100% green power sale, the Commission is of the view that the Petitioner can issue such certificate to the consumers who are availing 100% green power.

The Petitioner has requested to allow treatment of this RE power under RPO of UPCL in case the consumers does not wish to use the green attributes for meeting its RPO obligations. The Commission would like to clarify that such green energy supplied by the Petitioner to consumers will be duly considered for meeting RPO of UPCL in case the RPO obligated consumers does not wish to consider the same for meeting its RPO obligations.

#### *5.1.3.2 Fixed Charges, Minimum charges and Minimum Consumption Guarantee*

It is a well-accepted economic principle that the fixed costs of the Utility should be recovered to a certain extent through fixed charges to ensure revenue stability. At the same time, the Commission recognises that if the entire fixed cost is recovered through fixed charges, then the utility shall have no incentive to be concerned about the sales and, hence, quality of supply may suffer. Historically, the recovery of fixed costs has been done through a mix of minimum charges and fixed charges. Levy of Minimum Consumption Guarantee Charges (MCG) is a way of ensuring minimum revenue to the utility from the consumers, however, if the consumption exceeds the specified units, then no MCG charges are levied on the consumers and the entire charges are recovered by the utility through energy/fixed charges.

The fixed charge component reflecting the fixed cost of providing the service to the consumer and the energy charge component reflecting the cost of energy actually consumed should ideally be taken in the two-part tariff structure.

Section 45(3) of the Electricity Act, 2003 also provides for levy of fixed charges. The relevant Section is reproduced below:

*"The charges for electricity supplied by a distribution licensee may include:*

*(a) a fixed charge in addition to the charge for the actual electricity supplied;*

*..."*

Further, the licensee is incurring fixed cost directly attributable to the individual consumers such as meter reading, bill preparation, bill distribution and collection, which should ideally be allocated to and recovered from each consumer. One of the guiding factors mentioned in Section 61 of the Electricity Act, 2003 for specifying terms and conditions of tariffs is that the tariff has to be gradually cost reflective. Considering that levy of higher fixed charges should not impact the consumers adversely, the Commission in its Tariff Order dated March 18, 2008, introduced a nominal fixed charge for all the categories as a progression towards designing a two part tariff structure linked to the cost structure. Further, in its subsequent Tariff Orders from FY 2009-10 to FY 2022-23, considering the level of proportion of fixed costs as a percentage of total costs of UPCL and level of revenue recovery from fixed charges, the Commission had marginally increased the fixed charges for most of the categories to increase the revenue recovery from fixed charges and at the same time avoiding tariff shock to any consumer category.

UPCL has requested the Commission to rationalise the tariffs in such a manner that over next 3 to 5 years, the fixed costs of the ARR is recovered from the Fixed Charges/Demand Charges. The Commission appreciates that the recovery from Fixed Charges/Demand Charges should increase over a period of time, but the entire fixed costs is not allowed to be recovered through Fixed/Demand Charges as it will lead to tariff shock for the consumers. Further, if the Utility's entire fixed costs is allowed to be recovered through Fixed/Demand Charges, the Utility will not have any motivation to supply power to the consumers. The increase in recovery from Fixed/Demand Charges should be gradually increased to a certain level. Accordingly, the Commission in this Order also has marginally increased the fixed charges for all the categories except Domestic and Non-Domestic category.

#### *5.1.3.3 Fisheries to be covered in RTS 4A : Agricultural Allied Activities*

The Petitioner has proposed to include the usage of electricity for the purpose of "Fisheries" under the rate schedule RTS 4A: Agricultural Allied Activities. The Commission agrees with the views of the Petitioner that the consumption for the purpose of Fisheries is related to agricultural allied activities as has also been done in other States. Hence, the Commission accepts the Petitioner's proposal of including the usage of electricity for the purpose of "Fisheries" under the rate schedule RTS 4A: Agricultural Allied Activities.

#### *5.1.3.4 Continuous Supply Surcharge*

The Commission, in its Tariff Order dated October 23, 2009, had approved continuous supply surcharge @ 15% of the Energy Charge for consumers opting for supply during restricted hours (continuous). Further, all the consumers had an option to opt for continuous supply irrespective of whether they were on dedicated independent feeder or on mixed feeder. In accordance with the above provision, even if a single consumer in mixed feeder opted for continuous supply, its benefit got extended to all the consumers on that mixed feeder. This was a sort of discrimination amongst the consumers who had opted for continuous supply on mixed feeder and those who had not opted for continuous supply on mixed feeder as both enjoyed the benefit of continuous supply irrespective of the fact that they were paying any continuous supply surcharge or not. On the other hand, if the supply on the mixed feeder was required to be cut during rostering, the supply of continuous supply consumer also got unintentionally cut.

The Commission in order to rectify this anomaly had taken a view in its Tariff Order dated April 10, 2010 that the option of continuous supply should be made available only to consumers who are connected on a dedicated independent feeder or industrial feeder provided that all the industrial consumers on such feeder opt for continuous supply. The Commission was also of the view that considering the supply shortage position, this option was to be provided only to the continuous process industries requiring continuous supply due to the continuous nature of their process. In this connection, Regulation 3(2) of UERC (Release of new HT & EHT Connections, Enhancement and Reduction of Loads) Regulations, 2008 provided that loads for all HT consumers having continuous processes, irrespective of load applied for, shall be released through independent feeder only. The Commission in its Tariff Order dated April 10, 2010 had, therefore, decided that with effect from May 1, 2010, the option of continuous supply shall remain available only to continuous process industries operating twenty four hours a day and for seven days in a week without any weekly off. Further, this option was only to be available to continuous process industries connected through an independent feeder or industrial feeder provided that all the industrial consumers on such feeder opted for continuous supply option and for availing such an option, they were required to pay 15% extra energy charges at revised tariff with effect from May 1, 2010 or from the date of connection, whichever is later till 31st March, 2011 irrespective of actual period of continuous supply option. Further, the Commission in its Tariff Order dated April 10, 2010 also decided that the load shedding would be applicable for all the consumer categories except continuous process industries availing continuous supply option and, hence, the Commission abolished the mechanism of allowing utilisation of power upto 15% of the contracted load by industrial consumers who did not opt for continuous supply.

In its Tariff Order for FY 2011-12 dated May 24, 2011, Tariff Order for FY 2012-13 dated April 11, 2012, MYT Order dated May 06, 2013 and APR Order dated April 10, 2014 the Commission decided to continue with the same provisions for Continuous Supply as approved in its Order dated April 10, 2010.

The Commission in its ARR/Tariff Order dated April 11, 2015 after detailed deliberations on the issue after floating the in-house paper extended the option of continuous supply to non-continuous process industries in addition to the continuous process industries. The Commission in its Tariff Order dated 21.03.2018, considering the fact that the deficit in winter months had reduced as compared to the previous years, reduced the continuous supply surcharge from 15% of energy charges to 10% of energy charges. The Commission in its Tariff Order for FY 2019-20 dated 27.02.2019 decided to continue with the continuous supply surcharge of 10% of energy charges. Further, the Commission in its Tarif Order for FY 2020-21 dated 18.04.2020 considering the requests of various stakeholders decided to reduce the continuous supply surcharge from 10% of energy charges to 7.5% of energy charges. The Commission in its Tariff Order for FY 2021-22 dated 26.04.2021 considering the requests of various stakeholders decided to reduce the continuous supply surcharge from 7.5% of energy charges to 5% of energy charges. Further, the Commission in its Tariff Order for FY 2022-23 dated 31.03.2022 considering the requests of various stakeholders decided to reduce the continuous supply surcharge from 5% of energy charges to 2.5% of energy charges.

Subsequently, the Commission vide its Order dated October 19, 2022 in Petition No. 31 of 2022 considering the huge shortages and cost of power available in the market increased the Continuous Supply Surcharge from 2.5% of energy charges to 15% with effect from October 1, 2022.

In these tariff proceedings, the Commission has received mixed responses from various stakeholders. Some of the industries submitted that the continuous supply surcharge be reduced or abolished.

The Commission would like to clarify that the State of Uttarakhand is still facing power shortage and UPCL is procuring short term power from market to meet the demand at very high rates which in FY 2022-23 has gone upto Rs. 12 per unit, and the continuous supply surcharge at existing rate is also not sufficient to meet such costs. The situation is expected to remain the same even in FY 2023-24. For FY 2023-24, the Commission has estimated a total deficit of about 4093 MU for the year and deficit of 2370 MU in winter months during October to March in the requirement of UPCL which is of substantial nature. Hence, the Commission does not find any reason to reduce or abolish the continuous supply surcharge altogether as for the entire year UPCL is still having deficit. Hence, the Commission has decided to retain the Continuous Supply Surcharge of 15% as approved vide its Order dated October 19, 2022 in Petition No. 31 of 2022. The Commission will review the same once the aforesaid deficit in UPCL's requirement is wiped off.

In this regard, one of the suggestions received by the Commission was to allow continuous supply only to the continuous process industries. In this regard the Commission opines that it would not be proper to restrict the non-continuous industries from exercising this option, as any industry which is willing to pay extra premium to avail continuous supply should be eligible to avail the option subject to conditions provided therein.

Further, one of the suggestions from the industries was to allow protective load to the industries during the period of load shedding as was prevalent earlier. In this regard, the Commission would like to mention that the Commission vide its Order dated April 10, 2010 had abolished the concept of protective load. In this regard, the Commission in the Order had held as under:

> *"Further, currently consumers not opting for continuous supply are allowed to use power upto 15% of their contracted demand during restricted hours of the period of restriction and for usage in excess of 15% of contracted load during the restricted hours, penalty is leviable. Some of the stakeholders raised the issue that this is discrimination amongst various categories of consumers as some consumers are allowed to use power upto 15% of contracted load without any penalty and above 15% of contracted load with penalty, while other consumers do not get power at all during restricted hours, even if they are willing to pay the penalty. Moreover, the penalty mechanism has lead to a number of disputes related to days of applicability of penalty, communication date and time of scheduled load shedding and amounts of penalty. Further, considering the severe shortage supply situation and to avoid any kind of discrimination, the Commission is of the view that the load shedding should be applicable for all the consumer categories except continuous process industries availing continuous supply option and hence the Commission has abolished the mechanism of allowing utilisation of power upto 15% of contracted load by industrial consumers who have not opted for continuous supply and the corresponding penalty mechanism with effect from the date of issue of this Order…"*

Thus, to avoid any discrimination amongst consumers getting power during restricted hours and also to mitigate the disputes arising due to the penalty mechanism, the Commission had done away with the protective load. The situation has not changed and the request made by the stakeholders to this effect cannot be accepted.

Hence, the option of continuous supply shall only be available to continuous and non-continuous industries connected on an independent feeder or industrial feeder provided that all the industrial consumers on such feeder opt for continuous supply option. The existing non-continuous process industrial consumers opting for continuous supply shall pay 15% extra energy charges with effect from April 01, 2023 or in case of new consumers from the date of new connection, till March 31, 2024 irrespective of actual period of continuous supply. However, in case of re-arrangement of supply through independent feeder, the Continuous Supply Surcharge shall be applicable from the date of energisation of aforesaid independent feeder till March 31, 2024, irrespective of actual period of continuous supply option.

In this regard, the Commission would like to clarify certain key issues, pertaining to the applicability conditions for existing and new continuous and non-continuous supply consumers in order to avoid any misinterpretation of the conditions, and the same are discussed as under:

- Consumers who have opted for Continuous supply shall continue to remain Continuous Supply Consumers and they need not to apply again for seeking continuous supply option. Such consumers shall pay 15% extra energy charges, in addition to the energy charges approved, w.e.f. April 01, 2023 till March 31, 2024. However, in case of any pending dispute with UPCL in the matter of continuous supply on certain feeders, those consumers will have to apply afresh, for availing the facility of continuous supply by April 30, 2023.
- The existing consumers who are new applicants for continuous supply of power (including those who are applying afresh as per above condition) can apply for seeking the continuous supply option at any time during the year. However, continuous supply surcharge for such existing consumers shall be applicable with effect from May 01, 2023 till March 31, 2024. UPCL shall provide the facility of continuous supply within 7 days from the date of application, subject to fulfilment of Conditions of Supply as mentioned in Clause 6 under Tariff Schedule of RTS-5. However, in case of re-arrangement of supply through independent feeder, UPCL shall provide the facility of continuous supply from the date of completion of work of independent feeder subject to fulfilment of Conditions of Supply and the continuous supply surcharge on such consumers shall be applicable from the date of energisation of aforesaid independent feeder till March 31, 2024, irrespective of actual period of continuous supply option.
- The existing consumers availing continuous supply option, who wish to discontinue the continuous supply option granted to them earlier, will have to communicate, in writing, to UPCL latest by April 30, 2023 and they shall continue to pay continuous supply surcharge alongwith the tariff approved in this Order till April 30, 2023. Further, in this regard, if due to withdrawal by one consumer from availing continuous supply option on a particular feeder, the status of other continuous supply consumers in that feeder is affected, then UPCL shall inform all the affected consumers in writing, well in advance.
- UPCL shall not change the status of a continuous supply feeder to a non-continuous

supply feeder.

- UPCL/PTCUL shall take up augmentation, maintenance and overhauling works on top priority, specially in the sub-stations where circuit breakers, other equipments, etc. are in dilapidated condition and, thereby, shall ensure minimisation of interruptions of the continuous supply feeders.
- UPCL/PTCUL shall carry out periodical preventive maintenance of the feeders supplying to continuous supply consumers. The licensees shall prepare preventive maintenance schedule, in consultation with continuous supply consumers, well in advance, so that such consumers can plan their operations, accordingly.
- Continuous supply surcharge shall not be applicable on power procured by industrial consumers through open access.

#### *5.1.3.5 Tariff Categorisation for HT Industries and Load Factor based Tariff*

The Commission has considered the stakeholders/industries responses and observed that some of the consumers have again raised the issue of load factor based tariff for HT Industries. Some of the stakeholders submitted that the load factor based tariff for HT Industries is discriminatory as well as against the provisions of the Act, Tariff Policy and the Commission's Tariff Regulations. Some of the stakeholders also submitted that the higher consumption needs to be promoted and discount/rebate should be provided for maintaining higher load factor.

The Commission would like to highlight Section 62(3) of the Act, which empowers the Appropriate Commission, while determining the tariff, to differentiate according to the consumer's load factor, power factor, voltage, total consumption of electricity etc. Section 62(3) of the Act is reproduced below:

> *"The Appropriate Commission shall not, while determining the tariff under this Act, show undue preference to any consumer of electricity but may differentiate according to the* ***consumer's load factor****, power factor, voltage, total consumption of electricity during any specified period or the time at which the supply is required or the geographical position of any area, the nature of supply and the purpose for which the supply is required"* ***(emphasis added)****.*

Regulation 92(2) of UERC Tariff Regulations, 2021, specifically empowers the Commission to design load-factor based tariffs for any category of consumers and is reproduced below:

*"The Commission, shall not, while determining the tariff, show undue preference to any consumer of electricity but may differentiate according to consumer's load factor, voltage, total consumption of electricity during any specified period or time at which the supply is required or the geographical position of any area, the nature of supply and the purpose for which the supply is required."*

The Commission in its Order dated April 11, 2015 after detailed deliberations in response to the in-house paper had modified the slabs for load factor based tariff from three slabs to two slabs.

Further, as discussed in Chapter 2 of the Order, some of the stakeholders submitted that the principle applied for the categorisation of the industry on the basis of load factor should be on the principle of higher the load factor, lower the tariff as prevalent in other States. They further expressed that the higher load factor implies that the consumer consumes nearly as much as it has contracted for and has paid the demand charges, accordingly, and the Utility stands to benefit by higher load factor because the utility is able to sell more electricity which it has arranged for meeting the demand of the consumer. They further opined that if the load factor is lower, the utility would find itself having contracted more power from generating companies than it would be able to sell to the consumers and in this process may suffer loss.

The Commission does not agree with the views of the stakeholders that higher load factor implies that the Utility stands to benefit from selling more electricity which it has arranged for meeting the demand of the consumer and load incidence on the system matches with the contracted demand/load of the consumers of the State. The Commission would like to clarify that there is diversity in the time of usage of electricity by different consumers and, hence, the actual simultaneous maximum demand of all the consumers put together shall always be less than the summation of their contracted loads. Further, nowhere, the Utility makes the power purchase arrangement equivalent to the contracted demand of its consumers. Further, increase or decrease of the contracted load, and/or, the load factor, by consumer does not actually influence the consumption pattern of consumers including diversity factor and, hence, the actual simultaneous maximum demand is the basis for contracting power from different sources by the licensee rather than the contracted load/load factor of the consumers. Further, the utilisation of the contracted capacity for State consumption from firm sources of generation by UPCL is only about 80%. With the increase in load factor of consumers, the energy requirement of the Utility will further increase, and the Petitioner will be left with no option than to resort to procurement of costly power. This inability of the Petitioner will require it to purchase power at marginal price, i.e. the Petitioner will have to purchase costlier power to meet the increase in energy requirement at higher load factor.

The two part tariff tends to encourage high consumption as the same reduces the effective per unit composite rate. Accordingly, to correct this, tariff also needs to increase in a manner so as to achieve a near uniform composite rate. To achieve this, demand and energy charges will have to increase with every small increase in contracted demand or load utilization percentage. Although theoretically possible, such an approach would make the tariffs too complex, incomprehensible and will pose serious problems in implementation. There is, therefore, a trade-off between the simplicity of the tariff structure and precision in correcting the above distortion. The Commission's attempt has been to strike a balance between the two by choosing a uniform rate of demand charge and different rates of energy charges linked to the consumption levels represented by the Load Factor. The Commission has avoided sharp increase in energy charges and has infact modified the three slabs in HT industry category prevalent earlier to only two slabs in its previous Tariff Order dated April 11, 2015.

As had been illustrated by the Commission in its previous Tariff Orders in case of single energy charge, without any load factor slabs, the effective tariff of an intended cross-subsidising consumer goes down steeply with increasing load factor, thereby, reducing the quantum of cross-subsidy charged from it. After a threshold level of load factor, this structure leads to an undesirable anomaly that the effective tariff becomes lower than the average Cost of Supply and the consumer instead of being subsidising consumer becomes subsidised consumer. Thus, this structure apart from leading to the above said anomaly is highly inequitable amongst the consumers of the same category with consumers having low load factor being loaded with much higher effective tariff and making up for loss on account of lower effective tariff even below the average cost of supply paid by high load factor consumers. Transition from subsidising consumer to subsidised consumer with increasing load factor is not only incorrect but is also highly undesirable.

Some of the stakeholders represented that the tariff structure for HT Industries should also be telescopic. In Uttarakhand, as the cross-subsidies are very low, the tariff needs to be corrected at different load factors to ensure that steepness of the effective tariff curve does not reduce the cross-subsidies to very low level or make them negative (subsidised). Further, there is a practical difficulty in implementing slabs of tariffs for excess consumption only, due to ToD tariffs in vogue.

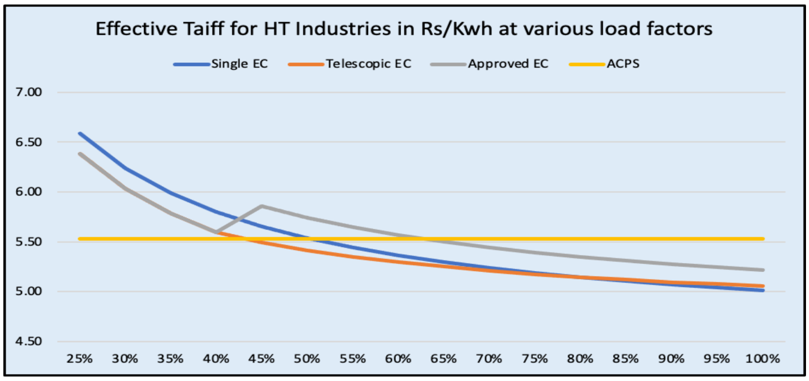
Apportionment of various slabs of consumption for different time slots would be very complicated and would result in disputes between licensee and consumers as consumer would like to book cheapest load factor slab (1st slab) against peak hour consumption and highest load factor slab (last slab) against off-peak hour consumption. The licensee, on the other hand, would like to book first load factor slab against off-peak consumption and the last load factor slab under peak hour consumption. Thus, this structure would unnecessarily complicate the billing process and would also lead to disputes. Due to these reasons, the Commission is not implementing telescopic slab based tariff for HT industrial consumers.

The above reasoning can be easily explained by taking an example with the figures of approved tariff (Demand Charges Rs. 360/kVA/month and Energy Charges in two slabs of Rs. 3.95 and 4.35/kVAh for FY 2019-20, where Average Cost of Supply was taken as Rs. 5.28/kWh and average tariff from HT industrial consumers including ToD surcharge and rebate was designed to be Rs. 5.79/kWh. It is evident that in case of single energy charge of Rs. 4.10/kVAh and demand charge of Rs. 360/kVA/month, without any load factor slabs, the effective tariff of an intended cross-subsidising consumer goes down steeply with increasing load factor, thereby, reducing the quantum of cross-subsidy charged from it. After a threshold level of load factor, this structure leads to an undesirable anomaly that the effective tariff becomes lower than the average Cost of Supply and the consumer instead of being subsidising consumer becomes subsidised consumer. Thus, this structure apart from leading to the aforesaid anomaly is highly inequitable amongst the consumers of the same category with consumers having low load factor being loaded with much higher effective tariff and making up for loss on account of lower effective tariff even below average Cost of Supply paid by high load factor consumers. The same applies to the condition if telescopic slab energy charges for HT industries [Demand Charges: Rs. 370/kVA/monthly, Energy Charges: for consumption upto LF 40%: Rs. 4.20/kVAh & for consumption exceeding LF 40%: Rs. 4.60 kVAh are considered], the reduction in effective tariffs is almost similar to the case where single energy charges are approved without any slab. The Table & Graph below shows these anomalies of consumers getting cross-subsidised falling below the average cost of supply after a particular load factor and wide range of tariffs over different load factors with the single energy charge without any slab and telescopic slabs. Increase of cross-subsidisation of HT industry with increasing load factor (particularly > 45%) is not only incorrect but also highly undesirable.

**Table 5.4: Effective Tariff & Cross-subsidy for HT Industry having contracted load 1 KVA**

| Load Factor | Consumption (kVAh) | Demand Charge (Rs./ kVA) | Energy Charge (Rs./kVah) | | | Total Amount | | | Effective Tariff (Rs.kWh) | | | Cost of Supply | Cross Subsidy % | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Single EC of Rs.3.60 /kVah | Telescopic Tariff | Approved Tariff | Single EC of Rs.3.60/ kVah | Telescopic Tariff | Approved Tariff | Single EC of Rs.3.60/kVah | Telescopic Tariff | Approved Tariff | Rs./ kWh | Single EC of Rs.4.40 /kVah | Telescopic Tariff | Approved Tariff |
| (1) | (2) | (3) | (4) | (5) | (6) | (7)=(3)+ (4) | (8)=(3)+ (5) | (9)=(3)+(6) | (10)=(7)/(2x 0.98) | (11)=(8)/(2x 0.98) | (12)=(9)/(2x 0.98) | -13 | (14)=(10/13)-1 | (15)=(11/13)-1 | (16)=(12/13)-1 |
| 25% | 180 | 370 | 792 | 756 | 756 | 1162 | 1126 | 1126 | 6.59 | 6.38 | 6.38 | 5.53 | 19.12% | 15.43% | 15.43% |
| 30% | 216 | 370 | 950 | 907 | 907 | 1320 | 1277 | 1277 | 6.24 | 6.03 | 6.03 | 5.53 | 12.80% | 9.11% | 9.11% |
| 35% | 252 | 370 | 1109 | 1058 | 1058 | 1479 | 1428 | 1428 | 5.99 | 5.78 | 5.78 | 5.53 | 8.28% | 4.59% | 4.59% |
| 40% | 288 | 370 | 1267 | 1210 | 1210 | 1637 | 1580 | 1580 | 5.80 | 5.60 | 5.60 | 5.53 | 4.90% | 1.21% | 1.21% |
| 45% | 324 | 370 | 1426 | 1375 | 1490 | 1796 | 1745 | 1860 | 5.66 | 5.50 | 5.86 | 5.53 | 2.26% | -0.61% | 5.95% |
| 50% | 360 | 370 | 1584 | 1541 | 1656 | 1954 | 1911 | 2026 | 5.54 | 5.42 | 5.74 | 5.53 | 0.15% | -2.06% | 3.85% |
| 55% | 396 | 370 | 1742 | 1706 | 1822 | 2112 | 2076 | 2192 | 5.44 | 5.35 | 5.65 | 5.53 | -1.57% | -3.25% | 2.12% |
| 60% | 432 | 370 | 1901 | 1872 | 1987 | 2271 | 2242 | 2357 | 5.36 | 5.30 | 5.57 | 5.53 | -3.01% | -4.24% | 0.68% |
| 65% | 468 | 370 | 2059 | 2038 | 2153 | 2429 | 2408 | 2523 | 5.30 | 5.25 | 5.50 | 5.53 | -4.22% | -5.07% | -0.53% |
| 70% | 504 | 370 | 2218 | 2203 | 2318 | 2588 | 2573 | 2688 | 5.24 | 5.21 | 5.44 | 5.53 | -5.26% | -5.79% | -1.57% |
| 75% | 540 | 370 | 2376 | 2369 | 2484 | 2746 | 2739 | 2854 | 5.19 | 5.18 | 5.39 | 5.53 | -6.17% | -6.41% | -2.48% |
| 80% | 576 | 370 | 2534 | 2534 | 2650 | 2904 | 2904 | 3020 | 5.15 | 5.15 | 5.35 | 5.53 | -6.96% | -6.96% | -3.27% |
| 85% | 612 | 370 | 2693 | 2700 | 2815 | 3063 | 3070 | 3185 | 5.11 | 5.12 | 5.31 | 5.53 | -7.65% | -7.44% | -3.96% |
| 90% | 648 | 370 | 2851 | 2866 | 2981 | 3221 | 3236 | 3351 | 5.07 | 5.10 | 5.28 | 5.53 | -8.27% | -7.86% | -4.58% |
| 95% | 684 | 370 | 3010 | 3031 | 3146 | 3380 | 3401 | 3516 | 5.04 | 5.07 | 5.25 | 5.53 | -8.83% | -8.25% | -5.14% |
| 100% | 720 | 370 | 3168 | 3197 | 3312 | 3538 | 3567 | 3682 | 5.01 | 5.05 | 5.22 | 5.53 | -9.33% | -8.59% | -5.64% |

**Graph 1 : Effective HT Industrial Tariff**




Hence, in view of the above, the Commission is continuing with the existing load factor based tariff structure for HT Industry.

### *5.1.3.6 Time of Day Tariff*

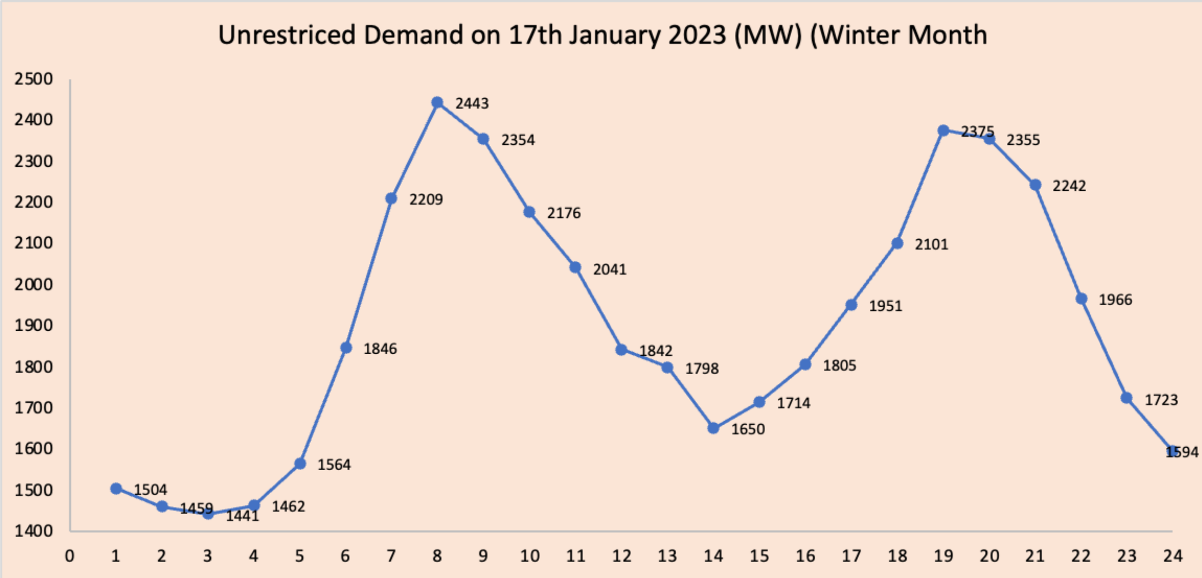
Regarding Time of Day Tariff, the stakeholders requested the following:

- Abolish the morning peak hours.
- Reduce the peak hours timings in such a manner that the Single Shift Industry can operate for 8 hours with normal tariff.
- The ToD charges should be retained at existing levels.
- The rebate for consumption during off-peak hours should be increased.

The Commission in its Tariff Order for FY 2010-11 dated April 10, 2010 approved the peak hour rate as 50% higher than the normal hour rate for Industrial Category. Further, in case of HT industries, the Commission has specified the peak hour rate as 50% higher than the normal hour rate applicable for highest load factor slab, i.e. energy charge for load factor above 50% for all the HT industrial consumers. The Commission kept the rebate during off peak hours to 10% to incentivise the shift in consumption from peak hours to off peak hours. The Commission in its Tariff Order dated 21.03.2018 in order to incentivise the consumers for shifting the demand from Peak hours to Off Peak hours, increased the off-peak hour rebate from existing level of 10% to 15% in energy charges.

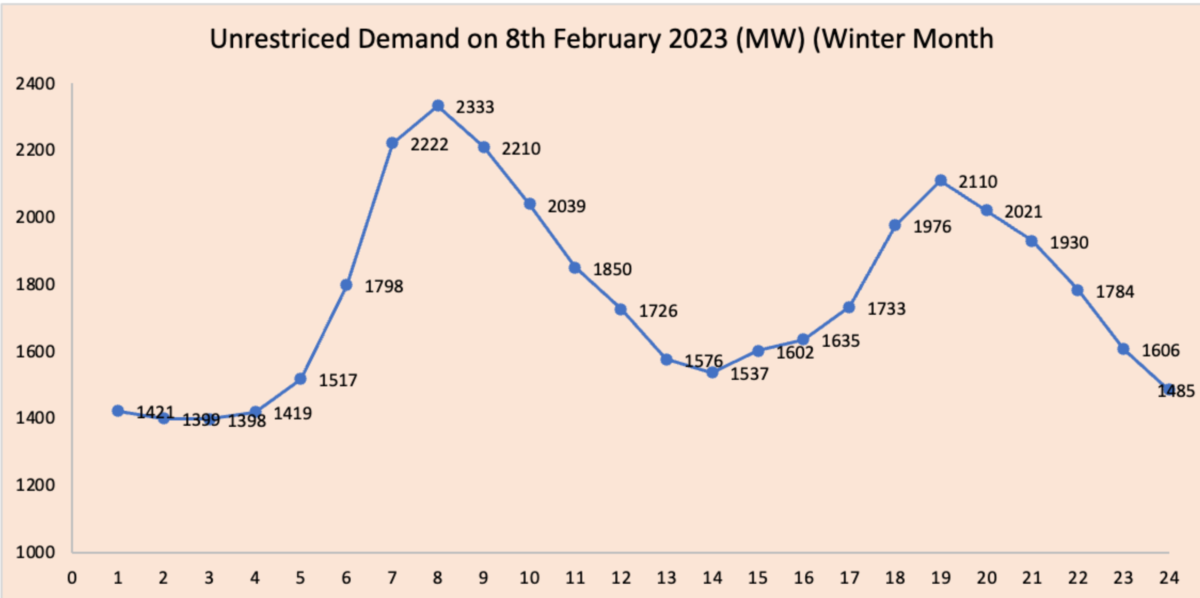
The Commission, in each of its tariff determination exercise, has been analysing the shift from the peak hours to normal and off-peak as well as the consumption pattern during the peak and off-peak hours in the State. The Commission has analysed the unrestricted load curves in summer as well as the winter month to assess the consumption during peak hours in these months. The load curves for the days having highest peak load in the months of summer and winter season, have been examined and the same are graphically presented below:

**Chart 1: Load Curve for 17th January 2023 (MW) [Winter Month]**



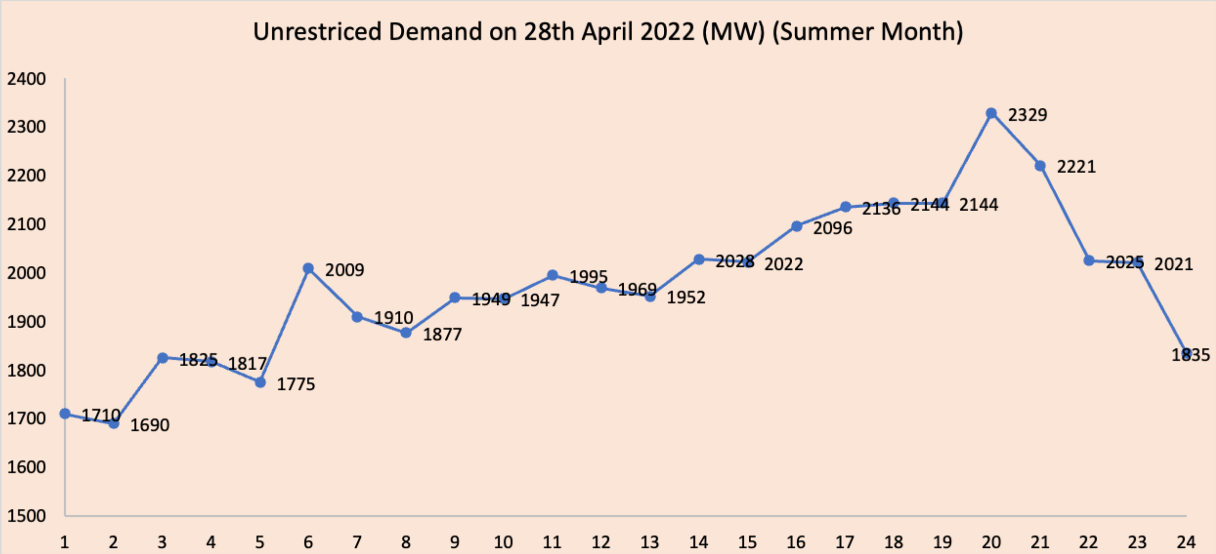

**Morning Peak Demand – 2443 MW at 8.00 AM**
**Evening Peak Demand - 2375 MW at 6.00PM**

**Chart 2: Load Curve for 8th Feb 2023 (MW) [Winter Month]**



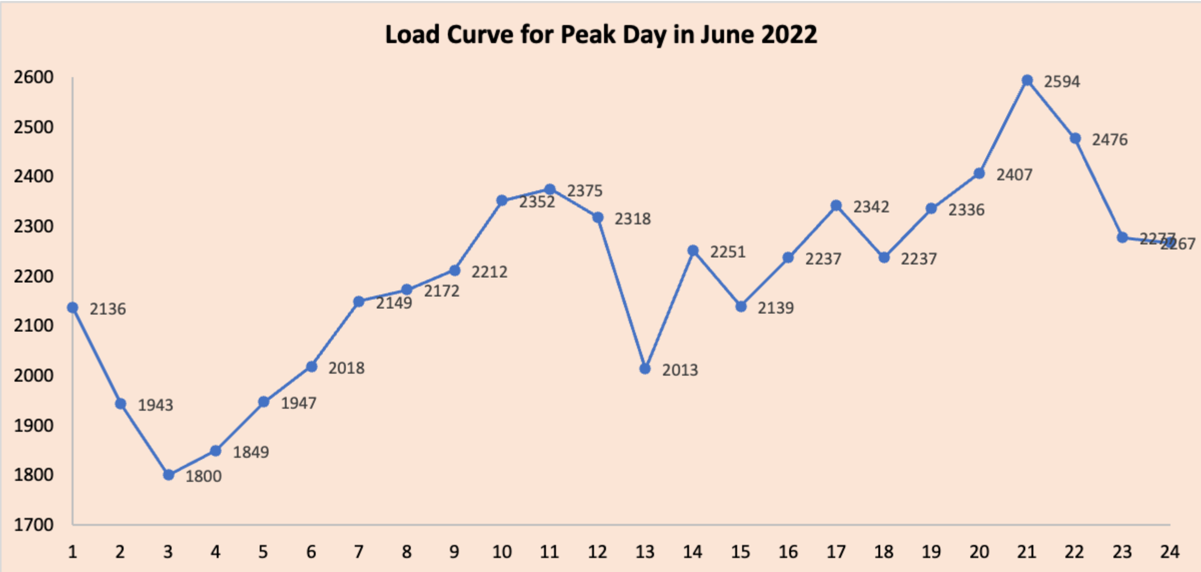

**Morning Peak Demand – 2333 MW at 8.00 AM**
**Evening Peak Demand – 2110 at 7.00 PM**

**Chart 3: Load Curve for 28th April, 2022 (MW) [Summer Month]**




**Peak Demand –2329 MW at 8.00 PM**
**No Morning Peak**

**Chart 4: Load Curve for 14th June, 2022 (MW) [Summer Month]**




**Evening Peak Demand – 2594 MW at 9.00 PM**
**No Morning Peak**

It is observed from the above graphical presentations that during the winter season both morning as well as evening peak demand exists in the State. Infact, in the months of January and February, the morning peak demand has been found to be even more pre-dominant than the evening peak demand. From Chart 1 & 2 illustrating the load curve for December 17, 2023 and February 8, 2023 respectively, it can be observed that the demand starts rising from 6.00 a.m. till it reaches the peak at about 8.00 a.m. or 9.00 am and then starts falling around 9.00 a.m. in the morning. Hence, the request of the stakeholders regarding abolishing the morning peak hours or change in morning peak hours cannot be accepted since it would defeat the demand side management through tariffs in vogue in the State. Further, it is seen from the above graphs that the overall system peak of Uttarakhand State during the year is significantly observed in the morning hours also besides evening peak.

The Commission feels the need for DSM and having ToD tariff as a measure for ensuring curtailment of morning as well as evening peaks. Considering all these aspects, the Commission in the present Order is continuing with the morning peak hours during winter season and evening peak hours for the entire year. During the tariff order for FY 2019-20, some of the stakeholders requested that the peak hour slots shall be modified in such a way that the General Single Shift Industry should get clear 8 hours of operations at normal tariff. The Commission in its Order dated February 27, 2019 considering the requests of the stakeholders and the load pattern during peak hours modified the Peak, Normal and Off Peak hour duration for ToD metering slots in such a manner that the Industry gets nine hours for working during normal hours and they are able to operate eight hours in General Shift with one hour break modified the normal hours to 0900-1800 hours in winters and 0700-1800 hours in summers.

The Commission in its Tariff Order dated 31.03.2022 considering the requests of the Stakeholders modified the morning Peak Hours in winters from 0600-0800 hours. However, subsequently UPCL filed a Petition wherein it mentioned the procedural difficulties, like the possibility of breaching the meter protocols and risking the security of meters, in giving effect to the change in ToD hours approved in the Tariff Order dated 31.03.2022. The Commission in exercise of powers conferred under Regulation 103 & Regulation 104 of the MYT, Regulations 2021 directed that the modification of ToD metering slots as approved in Tariff Order dated 31.03.2022 be kept in abeyance till further orders in this regard, and the ToD metering slots as approved in the Tariff Order dated 26.04.2021 shall continue to be applicable for FY 2022-23 as well.

Since, UPCL under Revamped Distribution Sector Scheme (RDSS), will be required to replace the existing meters with smart meters, hence, it will not be practical to modify the peak hours at this moment as the same may lead to practical difficulties which may lead to consumer disputes. The Commission will take a view on the same when smart meters are installed for industries. Hence, the Commission in this Order has not made any change in the existing Peak and Off-Peak hours and has approved the same as per Tariff Order dated 26.04.2021 as follows:

**Table 5.5: Peak and Off-Peak Hours**

| Season/Time of day | Morning Peak hours | Normal hours | Evening Peak Hours | Off-peak Hours |
|---|---|---|---|---|
| Winters 01.10 to 31.03 | 0600-0900 hrs | 0900-1800 hrs | 1800-2200 hrs | 2200-0600 hrs |
| Summers 01.04 to 30.09 | -- | 0700-1800 hrs | 1800-2300 hrs | 2300-0700 hrs |

As regards the peak hour surcharge and off-Peak hour rebate, the Commission in its Tariff Order dated April 26, 2021 increased the off-Peak hour rebate from 15% to 20% in order to incentivise the consumers to shift the consumption to Off-peak hours. Considering the requests of the stakeholders, the Commission in its Tariff Order dated March 31, 2022 reduced the peak hour surcharge to 30%.

The Commission considering the power deficit situation in the State and cost of power in the market has not made any change in the peak hour surcharge and off-Peak hour rebate and has kept the peak hour surcharge as 30% and Off-peak hour rebate as 20%.

#### *5.1.3.6.1 Prepaid metering*

The Commission recognises that Prepaid Metering is expected to provide better services to the consumers, improve and secure the cash flow of the Petitioner and also lead to reduction in consumer grievance and dissatisfaction to the consumers.

The Petitioner has proposed to continue with the existing terms of the pre-paid supply approved by the Commission for FY 2022-23. The Commission accordingly approves the following conditions for Pre-Paid Metering as approved in Tariff Order dated March 31, 2022:

a) The option of Pre-paid metering shall be available for all categories of consumers upto 25 kW load under LT category. Prepaid Metering shall be mandatory for new Temporary LT connections, for Advertisements/Hoardings and for Government connections upto 25 kW.

   Provided that the option of prepaid metering shall not be available to the Seasonal industries covered under Rate Schedule RTS-5.

b) There shall be a minimum recharge of Rs. 100 and the maximum limit of recharge shall be Rs. 15,000 for both single phase and three phase connections. Validity of the recharge shall be continued till the amount is available in the account of the consumer. Any recharge shall be allowed only when the 20 digit special meter reading code shall be made available by the consumer.

c) As regards the charging for testing of meter, the Petitioner shall recover the amount as approved by the Commission under Schedule of Miscellaneous Charges directly from such prepaid consumers as is done for postpaid consumers and shall not be charged from the recharge amount.

d) The Petitioner shall issue an advertisement in the newspapers within 15 days of the issue of this Order, briefly mentioning salient features of the Prepaid Metering Scheme for LT consumers upto 25 kW to provide an option to the consumer to express their interest to opt for the Prepaid metering scheme latest by June 15, 2023.

It may be noted that the objective of calling applications for Prepaid metering shall be primarily for the purpose of estimation of the requirement of such meters based on the demand of the Scheme. Based on the requests received from the consumers opting for Prepaid metering, UPCL shall implement the Prepaid metering in a phased manner. Further, the Petitioner may also allow prepaid metering services to even those consumers who could not submit their request within the above stipulated time given in the advertisement and wish to opt for it subsequently.

e) The Petitioner is also directed to prepare a Salient Features of the Prepaid Metering Scheme (in 1-2 pages) and circulate the same along with the bills of May, 2023 to all the eligible consumers, i.e. LT consumers upto 25 kW, to facilitate wide circulation as well as to provide salient features of the proposed mechanism of the Prepaid Metering Scheme.

f) In case, the consumer opting for Prepaid Metering have outstanding arrears, the Petitioner shall adjust 20% of the past arrears or 50% of the recharge amount, whichever is higher from the recharge voucher, subject to the maximum of the outstanding arrears. Further, the maximum limit of recharge as mentioned above, shall not be applicable in case of consumers having outstanding arrears and accordingly, such consumers having past arrears will have to take minimum recharge of more than 20% of the outstanding arrears.

g) The Petitioner shall make necessary provisions to provide friendly credit hours/ limit to the consumers, in order to ensure uninterrupted supply to the consumer in the event of expiry of the balance during non-working hours, i.e. night time or during holiday, so as to provide reasonable time to the consumer to procure the recharge voucher at the next possible working hours or working day. However, the charges for the electricity consumed between expiry of balance during non-working hours and subsequent recharge voucher shall be adjusted from the recharge voucher.

h) All the Prepaid meters will be provided with an alarm to indicate low credit.

i) As per the guiding principles and Section 47(5) of the Electricity Act, 2003, the Petitioner shall not charge any security deposit as is required in post-paid connections but price equivalent to the material cost, i.e. cost of meter and associated equipment's shall be charged as material security which shall be returned after adjusting for the depreciation at the time of permanent disconnection. The approved material security deposit (except for BPL domestic) for FY 2023-24 is Rs. 5000/- for single phase connection and Rs. 10,000/- for three phase connection. BPL domestic consumers shall be exempted for payment of material security deposit.

j) The consumer shall be allowed only one transfer from postpaid to prepaid or otherwise in a financial year.

k) Voltage rebate/surcharge, low power factor surcharge and excess load penalty shall not be applicable for prepaid connections.

l) A rebate of 4% of Energy Charges for Domestic Category and 3% of Energy Charges for other categories shall be applicable as per tariff schedule for the consumers availing this scheme and the rebate shall only be applicable after installation and operationalization of Prepaid meters.

Provided that no rebate shall be applicable on (i) of Para 1 of RTS-9, i.e. Temporary Supply for Illumination/Public Address/ceremonies and festivities/ functions/temporary shops not exceeding 3 months.

Provided further that the fixed charge in respect of other domestic consumers [(1.2) of para 2 of the RTS -1] shall be Rs. 60/kW/month.

m) The solar water heater rebate shall be adjusted as follows:-

i. The rebate for first month of implementation of prepaid metering scheme shall be credited immediately on the first recharge. Thereafter, rebate shall be credited on monthly basis if recharge is done every month.

ii. In case recharge is not being done on monthly basis, then based on the capacity of Solar Water Heater installed by the consumer, solar water heater rebate would be credited for all the past months for which the rebate was due either at the time of recharge or when the consumer approaches UPCL.

### *5.1.3.7 Solar Water Heater Rebate*

As per the current provisions, if a consumer installs and uses solar water heating system, rebate of Rs. 100/- p.m. for each 100 litre capacity of the system or actual bill for that month whichever is lower is applicable. During the current proceedings, some of the stakeholders submitted that this rebate of Rs. 100/- p.m. for each 100 litre capacity was fixed long back and the same needs to be revised. Further, some of the stakeholders requested the Commission to change the capacity of Solar Water Heater from 100 litre to 50 litre. The Commission is of the view that the requests made by Stakeholders is reasonable and rebate needs to be increased in order to motivate the consumers to utilise the Green Power which will also aid in Demand Side Management by reducing the Peak demands to some extent. Hence, the Commission has decided to fix a rebate of Rs. 75/- p.m. for each 50 litre capacity of the system. Accordingly, the revised provision with respect to Solar Water Heater Rebate in Tariff Schedule shall be as follows:

***"If a consumer installs and uses solar water heating system, rebate of Rs. 75/- p.m. for each 50 litre capacity of the system or actual bill for that month whichever is lower shall be given subject to the condition that consumer gives an affidavit to the licensee to the effect that he has installed such system, which the licensee shall be free to verify from time to time. If any such claim***

***is found to be false, in addition to punitive legal action that may be taken against such consumer, the licensee will recover the total rebate allowed to the consumer with 100% penalty and debar him from availing such rebate for the next 12 months."***

#### *5.1.3.8 Prompt Payment Rebate*

The existing provisions as regards to Prompt Payment Rebate is as follows:

*(i) A prompt payment rebate of 1.25% of the monthly bill (excluding Taxes and Duties) shall be provided to consumers for payment of electricity bills through various modes of digital payment such as credit cards, debit cards, UPI, BHIM, internet banking, mobile banking, mobile wallets, online Bank Transfer (RTGS/NEFT/IMPS) etc. within 10 days from the date of issuance of the bill/ bill date.*

*(ii) A prompt payment rebate of 0.75% of the monthly bill (excluding Taxes and Duties) shall be provided to consumers for payment of electricity bills not through digital mode but through other modes of payment, namely Cash/Cheque/Demand Draft etc., within 10 days from the date of issuance of the bill/bill date.*

*Provided that the prompt payment rebate shall be subject to cap of Rs 10,000/- per month for LT Consumers and Rs 1,00,000/- per month for HT consumers.*

During the current proceedings, some of the stakeholders have requested the Commission to increase the prompt payment rebate. The Commission considering the requests of the consumers and to motivate the consumers to make the payment promptly has decided to increase the prompt payment from 1.25% to 1.5% for payment of electricity bills to be made through digital mode and from 0.75% to 1% for payment of electricity bills not through digital mode. Accordingly, the revised provisions in the Tariff Schedule with respect to Prompt Payment Rebate approved by the Commission is as follows:

*(i) A prompt payment rebate of 1. 5% of the monthly bill (excluding Taxes and Duties) shall be provided to consumers for payment of electricity bills through various modes of digital payment such as credit cards, debit cards, UPI, BHIM, internet banking, mobile banking, mobile wallets, online Bank Transfer (RTGS/NEFT/IMPS) etc. within 10 days from the date of issuance of the bill/ bill date.*

*(ii) A prompt payment rebate of 1.00% of the monthly bill (excluding Taxes and Duties) shall be provided to consumers for payment of electricity bills not through digital mode but through*

*other modes of payment, namely Cash/Cheque/Demand Draft etc., within 10 days from the date of issuance of the bill/bill date.*

*Provided that the prompt payment rebate shall be subject to cap of Rs 10,000/- per month for LT Consumers and Rs 1,00,000/- per month for HT consumers.*

### *5.1.3.9 Billable Demand for RTS 5-LT and HT Industry*

The existing provisions as regards to Billable Demand is as follows:

*"Billable Demand shall be the actual maximum demand or 80% of the contracted load whichever is higher"*

During the current proceedings, some of the stakeholders as well as SAC members have requested the Commission to reduce the Billable Demand from 80% of the contracted load. The Commission considering the suggestions of the stakeholders and taking into cognisance the prevalent demand-supply scenario in the State, has decided to reduce the Billable Demand from 80% of the contracted load to 75% of the contracted load. Accordingly, the revised provision related to Billable Demand shall be as follows:

*"Billable Demand shall be the actual maximum demand or 75% of the contracted load whichever is higher"*

### *5.1.3.10 Monthly Billing for Domestic Category*

The Commission observed that the UPCL is still raising the bills for some of the domestic consumers on bi-monthly basis. With substantial improvement in infrastructure and billing systems, the Commission is of the view that there is no need to continue with bi-monthly billing and all the consumers under Domestic Category shall be billed on monthly basis. This will not only reduce the burden on small consumers who are required to pay the accumulated amount in two months but will also aid UPCL in realising its dues one month earlier. **The Commission, accordingly, directs the UPCL to raise the bills from the month of April, 2023 onwards of all the domestic consumers on monthly basis.**

### *5.1.3.11 Billing Cycle for RTS 4 – Private Tube Wells/Pumping Sets*

As per the current provisions, the bills for PTW consumers are raised twice a year only, i.e by end of December (for period June to November) and end of June (for period December to May) and the PTW consumers have been facilitated to pay the bills in four months, i.e. by 31st October for bills raised in June and by 30th April for bills raised in December.

During the current proceedings, some of the PTW consumers suggested that the bills should be raised on bi-monthly basis and if payment is made within the due date, rebate of 5% should be provided as prevalent in the neighbouring State of Uttar Pradesh.

The Commission has examined the issue and is of the view that if the bills for PTW are raised on bi-monthly basis and paid within the due date, it will improve the cashflow position of UPCL as well as correct the distortion in PTW sales as reflected in its commercial diary. Hence, the Commission considering the suggestions of PTW consumers has decided to introduce bi-monthly billing for PTW consumers and if payment is made within 30 days from the date of bill, rebate of 5% shall be applicable. Accordingly revised provision in this regard shall be as follows:

*"The bill shall be raised for this category on bi-monthly basis and the consumers will be required to make the payments within 4 months of the bill date, i.e. for bills raised in June, the payment can be made by the consumer either in lump-sum or in parts (not more than four times) till 31st October of the year for which no DPS shall be levied. In case consumer fails to make payment within the specified dates, a surcharge @ 1.25% per month for the period (months or part thereof) shall be payable on the principal outstanding amount of the Bill as per clause 7 of the General Conditions of Supply. However, in case the consumer makes the payment of Bi-Monthly Bill within 30 days from the date of bill, rebate of 5% of the bill amount (excluding Taxes and Duties) shall be provided to such consumers."*

#### *5.1.3.12Consumer category for Electric Vehicle Charging Stations*

The Commission in the Tariff Order dated 18.04.2020 had introduced a new category for Electric Vehicle Charging Stations. In this regard, the Commission would like to clarify that all the category of consumers shall be allowed to charge their Electric Vehicle at their own premises and it shall not be considered as unauthorised activity under the Electricity Act, 2003, provided the load of EV does not exceed the contracted load. For charging of batteries of E-Vehicles at the consumer's own premises, the tariff shall be the same as applicable for the relevant category of connection at such premises from which the E-Vehicle is being charged. However, consumers who wish to install electric vehicle charging station in their premises for exclusive purposes, will have to take a separate connection for EV Charging Station.

The consumers shall apply for increase of its contracted load to UPCL in case its actual maximum demand increases the contracted load on account of EV charging in their premises. UPCL shall revise the contracted load of consumer as per guidelines specified in applicable Regulations. UPCL shall take utmost efforts to upgrade its system as per the requirements of load for EV charging.

### 5.1.4 *Treatment of Revenue Gap*

As concluded in Chapter 5 of the Order, the revenue at existing tariffs leaves a revenue gap of Rs. 870.85 Crore to meet the Net Revenue Requirement for FY 2023-24, post adjustment of the revenue surplus and gap determined after truing up of expenses and revenue based on the audited accounts for FY 2021-22.

The Commission in order to recover the gap has revised the tariffs for FY 2023-24. The approved tariff will be applicable from April 1, 2023 and will be effective till revised by the Commission.

### 5.1.5 *Cross Subsidy*

As per the provisions of Tariff Policy, the Regulatory Commission has to reduce the cross subsidies with respect to the cost of supply in a gradual manner. The Commission in its Tariff Order for FY 2022-23 had computed the cross subsidies for different category of subsidising consumers which were in accordance with the Tariff Policy.

The Commission has now revised the tariffs and has ensured that the cross subsidies have broadly reduced or maintained with respect to previous levels with few exceptions as discussed while discussing the cross subsidy levels at approved tariffs.

### 5.1.6 *Category-wise Tariff Design*

The Commission has designed the category-wise tariffs for full recovery of approved Net Revenue Requirement for FY 2023-24. The category-wise tariffs approved by the Commission are discussed below and are also shown in the Approved Rate Schedule placed at **Annexure-1**. These rates shall be effective from April 1, 2023 and shall continue to be applicable till further revised by the Commission.

### 5.1.7 *RTS-1: Domestic Tariff*

The Commission, while recognising the fact that BPL/lifeline consumers were one of the most economically weaker sections of the consumers, in its Tariff Order for FY 2003-04 had approved a tariff of Rs. 1.50/kWh for such consumers when the average cost of supply was Rs. 2.28/kWh. Considering the fact that the Tariff Policy permits that the tariffs for such BPL/lifeline consumers can be determined at 50% of the average cost of supply, the Commission in order to gradually reduce the cross subsidy and also to enable the licensee to recover some of its Fixed Cost, in its Tariff Order for FY 2011-12 dated May 24, 2011 had introduced a Fixed Charges of Rs. 5/connection/month which was further nominally increased every year.

The energy charges for BPL consumers has been increased from Rs. 1.65/kWh to Rs. 1.75/ kWh for FY 2023-24.

The energy charges for the first slab, i.e. for consumption upto 100 units have been fixed at Rs 3.15/kWh. The energy charges for the second slab, i.e. for consumption between 101-200 units/ month have been fixed as Rs. 4.60/kWh. The energy charges for the third slab, i.e. for consumption between 201-400 units/month have been fixed as Rs. 6.30/kWh and energy charges for the last slab have been fixed at Rs. 6.95/kWh.

For single point bulk supply connections, the energy charges have been increased to Rs. 6.25/kVAh from Rs. 5.40/kVAh and fixed charges has been retained at Rs. 100/kVA/month.

A comparison of the tariff, i.e. existing, proposed by the Petitioner and that approved by the Commission, is given in the Table below:

**Table 5.6: Tariff for Domestic Consumers**

| S. No. | Description | Existing Tariff | | UPCL Proposed Tariff | | Approved | |
|---|---|---|---|---|---|---|---|
| | | Fixed Charge (Per Month) | Energy Charges | Fixed Charge (Per Month) | Energy Charges | Fixed Charge (Per Month | Energy Charges |
| | **RTS-1: Domestic** | | | | | | |
| 1.1 | Life Line Consumers | Rs. 18/Connection | Rs. 1.65/kWh | Rs. 20/Connection | Rs. 1.70/kWh | Rs. 18/Connection | Rs. 1.75/kWh |
| **1.2** | **Other Domestic Consumers** | | | | | | |
| (i) | 0-100 Units/Month | • Upto 1 kW-Rs. 60/kW/Month<br>• Above 1 kW and upto 4 kW -Rs. 70/kW/ month<br>• Above 4 kW-Rs. 80/kW/ month | Rs. 2.90/kWh | • Upto 1 kW-Rs. 65/kW/Month<br>• Above 1 kW and upto 4 kW-Rs. 85 /kW/month<br>• Above 4 kW-Rs. 90/kW/ month | Rs. 3.00/kWh | • Upto 1 kW-Rs. 60/kW/Month<br>• Above 1 kW and upto 4 kW-Rs. 70/ kW/ month<br>• Above 4 kW-Rs. 80/kW/ month | Rs. 3.15/kWh |
| (ii) | 101-200 Units/Month | | Rs. 4.20/kWh | | Rs. 4.55/kWh | | Rs. 4.60/kWh |
| (iii) | 201-400 Units/Month | | Rs. 5. 80 /kWh | | Rs. 6.35/kWh | | Rs. 6.30 /kWh |
| (iv) | Above 400 Units/Month | | Rs. 6.55/kWh | | Rs. 7.15/kWh | | Rs. 6.95/kWh |
| 2 | Single point bulk supply | Rs. 100/kW | Rs. 5.40/kVAh | Rs.125/kW | Rs. 6.15/kVAh | Rs. 100/kVA | Rs. 6.25/kVAh |

### 5.1.8 *RTS 1-A: Concessional Snowbound Area Tariff*

Considering the overall tariff increase required for meeting the revenue requirement of UPCL for FY 2023-24 marginal tariff increase is approved for this category. A comparison of the tariff, i.e. existing, proposed by the Petitioner and that approved by the Commission, is given in the Table below:

**Table 5.7: Concessional Tariff for Snowbound Areas**

| S. No. | Description | Existing Tariff | | UPCL Proposed Tariff | | Approved | |
|---|---|---|---|---|---|---|---|
| | | Fixed Charge (Per Month) | Energy Charges | Fixed Charge (Per Month) | Energy Charges | Fixed Charge (Per Month) | Energy Charges |
| **RTS-1A: Snowbound** | | | | | | | |
| 1. | Domestic | Rs. 18/ Connection | Rs. 1.65/kWh | Rs. 20/ Connection | Rs. 1.75/kWh | Rs. 18/ Connection | Rs. 1.75/kWh |
| 2. | Non-Domestic upto 1 kW | Rs. 18/ Connection | Rs. 1.65/kWh | Rs. 20/ Connection | Rs. 1.75/kWh | Rs. 18/ Connection | Rs. 1.75/kWh |
| 3. | Non-Domestic above 1 kW & upto 4 kW | Rs. 18/ Connection | Rs. 2.40/kWh | Rs. 20/ Connection | Rs. 2.55/kWh | Rs. 18/ Connection | Rs. 2.60/kWh |
| 4. | Non-Domestic above 4 kW | Rs. 30/ Connection | Rs. 3.55/kWh | Rs. 35/ Connection | Rs. 3.70/kWh | Rs. 30/ Connection | Rs. 3.80/kWh |

### 5.1.9 *RTS-2: Non-Domestic Tariff*

For Non-domestic consumers, the Commission has marginally increased the energy charges to enable the licensee to recover its revenue gap. The Commission has separately specified the tariff for concessional sub-category of educational institutions, hospitals and charitable institutions, which shall include:

- Government/Municipal Hospitals;
- Government/Government Aided Educational Institutions; and
- Charitable Institutions registered under the provisions of Income Tax Act, 1961 and whose income is exempted from tax under this Act.

The existing tariff, tariff proposed by the licensee and that approved by the Commission is given in Table below:

**Table 5.8: Tariff for Non Domestic**

| S. No. | Description | Existing Tariff | | UPCL Proposed Tariff | | Approved | |
|---|---|---|---|---|---|---|---|
| | | Fixed / Charges (Per Month) | Energy Charges | Fixed / Demand Charges (Per Month) | Energy Charges | Fixed / Demand Charges (Per Month) | Energy Charges |
| 1 | **Government, Educational Institutions and Hospitals etc.** | | | | | | |
| 1.1 | Upto 25 kW | Rs. 80/ kW | Rs. 4.75/ kWh | Rs.100/kW | Rs 5.40/kWh | Rs. 80/ kW | Rs. 5.40/ kWh |
| 1.2 | Above 25 kW | Rs. 90/ kVA | Rs. 4.50/ kVAh | Rs. 110/kVA | Rs 5.30 /kVAh | Rs. 90/ kVA | Rs. 5.15/ kVAh |
| 2 | **Other Non-Domestic Users** | | | | | | |
| 2.1 | Upto 4 kW and consumption upto 50 units per month | Rs. 75 / kW | Rs. 4.80/ kWh | Rs 85 /kW | Rs. 5.25 /kWh | Rs. 75 / kW | Rs. 5.10/ kWh |
| 2.2 | Others upto 25 kW not covered in 2.1 above | Rs. 95 / kW | Rs. 5.90/ kWh | Rs. 120 /kW | Rs. 7.00 /kWh | Rs. 95 / kW | Rs. 6.70/ kWh |
| 2.3 | Above 25 kW | Rs. 95 / kVA | Rs. 5.90/ kVAh | Rs. 120 /kVA | Rs. 7.00 /kVAh | Rs. 95 / kVA | Rs. 6.70/ kVAh |
| 3 | Single Point Bulk Supply above 75 kW | Rs. 110 / kVA | Rs. 6.00/ kVAh | Rs. 140/ kVA | Rs. 7.10 /kVAh | Rs. 110 / kVA | Rs. 6.80/ kVAh |
| 4 | Independent Advertisement Hoardings | Rs. 120/ kW | Rs. 6.65/kWh | Rs. 150/ kW | Rs 7.90 /kWh | Rs. 120/ kW | Rs. 7.50/kWh |

### 5.1.10 *RTS-3: Government Public Utilities*

The existing tariff, tariff proposed by the licensee and that approved by the Commission is given in the Table below:

**Table 5.9: Tariff for Government Public Utilities**

| Description | Existing Tariff | | UPCL Proposed Tariff | | Approved | |
|---|---|---|---|---|---|---|
| | Fixed / Demand Charges (Per Month) | Energy Charges | Fixed / Demand Charges (Per Month) | Energy Charges | Fixed / Demand Charges (Per Month) | Energy Charges |
| Urban (Metered) | Rs. 100/kVA | Rs. 6.05/ kVAh | Rs. 130/kVA | Rs. 7.40/ kVAh | Rs. 115/kVA | Rs. 6.90/ kVAh |
| Rural (Metered) | Rs. 90/kVA | Rs. 6.05/ kVAh | Rs. 120/kVA | Rs. 7.40/ kVAh | Rs. 105/kVA | Rs. 6.90/ kVAh |

### 5.1.11 *RTS-4: Private Tube Wells/Pump Sets and Agriculture Allied Activities*

The Commission in order to gradually reduce the cross subsidy in this category has increased the energy charge from Rs. 2.15/kWh to Rs. 2.30/kWh for PTW consumers and to Rs. 3.25/kWh for Agriculture Allied Activities.

The existing tariff, tariff proposed by the licensee and that approved by the Commission are given in the Table below:

**Table 5.10: Tariff for Private tube Wells/ Pump Sets**

| Category | Existing Tariff | | UPCL Proposed Tariff | | Approved | |
|---|---|---|---|---|---|---|
| | Fixed/ Demand Charges (Per Month) | Energy Charges | Fixed/ Demand Charges (Per Month) | Energy Charges | Fixed/ Demand Charges (Per Month) | Energy Charges |
| **RTS-4: Private Tube-wells / Pumping sets** | | | | | | |
| Metered | Nil | Rs. 2.15/ kWh | Nil | Rs. 2.35/ kWh | Nil | Rs. 2.30/ kWh |
| **RTS-: 4A: Agriculture Allied Activities** | | | | | | |
| Metered | Nil | Rs. 2.85/ kWh | Nil | Rs. 3.25/ kWh | Nil | Rs. 3.25/ kWh |

### 5.1.12 *RTS-5: Industry*

The Commission while determining the tariff of HT and LT Industries has taken into consideration the average cost of supply and cross subsidy.

Further, as discussed above, the Commission has decided to retain the peak hour rate as 30% higher than the normal hour rate applicable for highest slab, i.e. with load factor above 40% for all the HT industrial consumers and off peak hour rebate as 20%. Further, consumers opting for continuous supply as per eligibility given in this Order shall have to pay 15% additional energy charges as continuous supply surcharge only on energy supply made by UPCL, i.e. the surcharge will not be applicable if power is sourced through open access.

The existing tariff, tariff proposed by the licensee and that approved by the Commission for LT Industry is given in the Table below:

**Table 5.11: Tariff for LT Industry**

| Category | Existing Tariff | | UPCL Proposed Tariff | | Approved | |
|---|---|---|---|---|---|---|
| | Fixed Charges (Per Month) | Energy Charges | Fixed Charges (Per Month) | Energy Charges | Fixed Charges (Per Month) | Energy Charges |
| **RTS-5: Industry** | | | | | | |
| **LT Industry** | | | | | | |
| 1. Contracted Load upto 25 kW | Rs. 165/ kW | Rs. 4.80/ kWh | Rs. 195/ kW | Rs. 5.60/ kWh | Rs. 170/ kW | Rs. 5.45/ kWh |
| 2. Contracted Load more than 25 kW | Rs. 170/ kVA | Rs. 4.50/ kVAh | Rs. 210/ kVA | Rs. 5.30/ kVAh | Rs. 175/ kVA | Rs. 5.15/ kVAh |

The existing tariff and tariff proposed by the licensee and that approved by the Commission for HT Industry is given in the Table below:

**Table 5.12: Existing, Proposed and Approved Tariff for HT Industries**

| S. No. | Category | Load Factor | Existing Tariff | | UPCL Proposed Tariff | | Approved Tariff | |
|---|---|---|---|---|---|---|---|---|
| | | | Energy Charges (Rs./kVAh) | Fixed /Demand Charges (Rs./kVA) | Energy Charges (Rs./kVAh) | Fixed /Demand Charges (Rs./kVA) | Energy Charges (Rs./kVAh) | Fixed /Demand Charges (Rs./kVA) |
| **1** | **HT Industry having contracted load above 88kVA/75 kW (100 BHP)** | | | | | | | |
| 1.1 | Contracted Load up to 1000 kVA | Upto 40% | 4.80 | Rs. 360/kVA of the billable demand | 5.70 | Rs. 440/kVA of the billable demand | 5.50 | Rs. 390/kVA of the billable demand |
| | | Above 40% | 5.20 | | 6.20 | | 5.90 | |
| 1.2 | Contracted Load More than 1000 kVA | Upto 40% | 4.80 | Rs. 430/kVA of the billable demand | 5.70 | Rs. 530/kVA of the billable demand | 5.50 | Rs. 460/kVA of the billable demand |
| | | Above 40% | 5.20 | | 6.20 | | 5.90 | |

### 5.1.13 *RTS-6: Mixed Load*

The Commission has increased the tariff for this category to reduce the level of cross subsidy. The existing tariff, tariff proposed by the licensee and that approved by the Commission is given in the Table below:

**Table 5.13: Tariff for Mixed Load**

| Description | Existing Tariff | | UPCL Proposed Tariff | | Approved Tariff | |
|---|---|---|---|---|---|---|
| | Fixed / Demand Charges Per Month) | Energy Charges | Fixed / Demand Charges Per Month) | Energy Charges | Fixed / Demand Charges (Per Month) | Energy Charges |
| **RTS-6: Mixed Load** | | | | | | |
| Mixed Load Single Point Bulk Supply above 75 kW including MES as deemed licensee | Rs. 120/kVA | Rs. 5.60/kVAh | Rs. 145/kVA | Rs. 6.70/kVAh | Rs. 130/kVA | Rs. 6.50/kVAh |

### 5.1.14 *RTS-7: Railway Traction*

The existing tariff, tariff proposed by the licensee and that approved by the Commission is given in the Table below:

**Table 5.14: Tariff for Railway Traction**

| Description | Existing Tariff | | UPCL Proposed Tariff | | Approved Tariff | |
|---|---|---|---|---|---|---|
| | Fixed / Demand Charges (Per Month) | Energy Charges | Fixed / Demand Charges (Per Month) | Energy Charges | Fixed / Demand Charges (Per Month) | Energy Charges |
| RTS-7: Railway Traction | Rs. 285/kVA | Rs. 4.90/ kVAh | Rs. 320/kVA | Rs. 5.70/ kVAh | Rs. 315/kVA | Rs. 6.10/ kVAh |

### 5.1.15 *RTS-8: Electric Vehicle Charging Stations*

In order to promote Electric Vehicles in the State, the Commission has retained the tariff for this category at existing level.

The existing tariff, tariff proposed by the licensee and that approved by the Commission is given in the Table below:

**Table 5.15: Tariff for Electric Vehicle Charging Stations**

| Description | Existing Tariff | | UPCL Proposed Tariff | | Approved Tariff | |
|---|---|---|---|---|---|---|
| | Fixed / Demand Charges (Per Month) | Energy Charges | Fixed / Demand Charges (Per Month) | Energy Charges | Fixed / Demand Charges (Per Month) | Energy Charges |
| RTS-8: Electric Vehicle | -- | Rs. 5.50/ kWh | -- | Rs. 6.25/ kWh | -- | Rs. 6.25/ kWh |

## 5.2 Revenue for FY 2023-24

Considering the revised tariffs, the Commission has projected revenue at the approved tariffs from each category for FY 2023-24. The summary of category-wise projected revenue for FY 2023-24 is given in the following Table:

**Table 5.16: Summary of Category Wise Projected Revenue at Approved Tariffs**

| S. No. | Category | Sales | Revenue | Average Billing Rate (ABR) |
|---|---|---|---|---|
| | | MU | Rs. Crore | Rs./Unit |
| 1. | RTS-1: Domestic | 3996.99 | 2128.52 | 5.33 |
| 2. | RTS-2: Non Domestic | 1764.11 | 1366.02 | 7.74 |
| 3. | RTS-3: Govt. Public Utilities | 788.02 | 606.48 | 7.70 |
| 4. | RTS-4: Private Tube Wells | 290.81 | 68.81 | 2.37 |
| 5. | RTS-5: Industry | | | |
| | LT Industry | 395.01 | 284.28 | 7.20 |
| | HT Industry | 7273.88 | 5283.82 | 7.26 |
| 6. | RTS-6: Mixed Load | 211.02 | 146.61 | 6.95 |
| 7 | RTS-7: Railway Traction | 88.19 | 60.74 | 6.89 |
| 8 | RTS 8 : EV Charging Stations | 4.00 | 2.50 | 6.25 |
| 9. | Additional Sales (Efficiency improvement) | 42.81 | 28.75 | 6.72 |
| **Total** | | **14854.84** | **9976.53** | **6.72** |

The estimated revenue for FY 2023-24 at approved tariffs works out to Rs 9976.53 Crore, as against the net ARR of 9900.54 Crore worked out after adjusting trued-up surplus/gaps of previous years leaving a surplus of Rs. 75.99 Crore with UPCL. The Commission while designing the tariffs for FY 2023-24 has kept some surplus as due to huge power deficit situations, UPCL will have to buy substantial quantum of power from market and the price of power in short term is on a higher side and, hence, this will avoid any revision of tariff during the mid of the year.

The Commission will consider the actual sales and revenues while carrying out the truing up for FY 2023-24.

## 5.3 Cross Subsidy

As discussed above, the Commission has designed the tariffs for various categories with an objective of gradually reducing the cross subsidy with respect to average cost of supply. The extent of category-wise cross-subsidy at approved tariffs computed at average cost of supply is given in the Table below:

**Table 5.17: Cross Subsidy at Average Cost of Supply for FY 2023-24**

| Category | Approved Average Billing Rate (ABR) | Average Cost of Supply (ACoS) | ABR / ACoS | Cross Subsidy |
|---|---|---|---|---|
| | Rs./kWh | Rs./kWh | % | % |
| RTS-1: Domestic | 5.33 | 6.66 | 80.0% | -20.0% |
| RTS-2: Non Domestic | 7.74 | 6.66 | 116.3% | 16.3% |
| RTS-3: Govt. Public Utilities | 7.70 | 6.66 | 115.6% | 15.6% |
| RTS-4: Private Tube Wells | 2.37 | 6.66 | 35.5% | -64.5% |
| RTS-5: Industry | | | | |
| LT Industry | 7.20 | 6.66 | 108.1% | 8.1% |
| HT Industry | 7.26 | 6.66 | 109.1% | 9.1% |
| RTS-6: Mixed Load | 6.95 | 6.66 | 104.3% | 4.3% |
| RTS-7: Railway Traction | 6.89 | 6.66 | 103.4% | 3.4% |
| RTS 8: EV Charging Stations | 6.25 | 6.66 | 93.8% | -6.2% |

The comparison of Cross Subsidy at approved tariffs with respect to the average cost of supply in Tariff Order for FY 2022-23 and as approved in this Tariff Order for FY 2023-24 is given below:

**Table 5.18: Cross Subsidy at Approved Tariffs in FY 2022-23 and FY 2023-24**

| Category | Cross Subsidy at Approved Tariff for FY 2022-23 | Cross Subsidy at Approved Tariff for FY 2023-24 |
|---|---|---|
| RTS-1: Domestic | -19.8% | -20.0% |
| RTS-2: Non Domestic | 15.9% | 16.3% |
| RTS-3: Govt. Public Utilities | 14.2% | 15.6% |
| RTS-4: Private Tube Wells | -62.7% | -64.5% |
| RTS-5: Industry | | |
| LT Industry | 8.4% | 8.1% |
| HT Industry | 9.2% | 9.1% |
| RTS-6: Mixed Load | 3.2% | 4.3% |
| RTS-7: Railway Traction | 11.8% | 3.4% |
| RTS 8: EV Charging Stations | -6.6% | -6.2% |

The Commission while designing the tariffs for FY 2023-24 has attempted to reduce the cross subsidies for most of the categories with respect to approved tariffs for FY 2022-23 and has ensured to bring the cross-subsidy levels within the range of + 20% as specified in the National Tariff Policy. The cross subsidy for some of the categories have marginally increased due to various tariff rationalisation measures approved by the Commission such as change in ToD hours, change in peak hours tariff, change in voltage rebate and reduction in continuous supply surcharge. The impact of some of these tariff rationalisation measures have not been considered while computing the revenue. Once the actual impact of these measures is available, the same shall be considered at the time of truing up.

Further, it can be seen from the Table above, cross-subsidies of all the subsidising consumers is within the range of 120% as required in the Tariff Policy.

Further, once the cross-subsidy level has been reduced to be within +20%, there is no mandate under the Act or Tariff Policy to reduce it further. The criteria of ± 20 % of the average cost of supply for all the categories including subsidised categories depends upon the consumption mix of the Licensee. However, in case of the Petitioner, the consumption mix is skewed towards subsidising categories having almost two third of total sales, while the consumption by subsidised categories is around one third of the total consumption. Therefore, in case of Petitioner, though the tariff for all the subsidising categories have been within 120% of the overall average cost of supply of the Petitioner, the average tariff for some of the subsidised categories is less than 80% of the overall average cost of supply of the Petitioner.

Hon'ble Appellate Tribunal of Electricity, in its Judgment dated February 28, 2012, in Appeal No. 159 of 2011 has expressed similar views. The relevant extract given in Para 16 of the Judgment is reproduced as under:

> *"... Provision of restricting cross subsidy to +/- 20% in Tariff Policy is applicable to areas where proportion of both the categories, subsidizing and subsidized, are comparable. The same yard stick cannot be applied in areas where consumer mix is highly biased in favour on one category."*

## 5.4 Open Access Charges

Uttarakhand Electricity Regulatory Commission (Terms and Conditions of Intra State Open Access) Regulations, 2015 inter-alia specify wheeling charges applicable on the customers seeking open access through distribution system, based on the category/nature of open access these customers come under in accordance with the Regulations.

In this regard, Regulation 20(2) specifies as under:

*"Wheeling charges payable to distribution licensee, by an open access customer for usage of its system shall be as determined as under:*

*Wheeling Charges = (ARR–PPC–TC) /(PLSD X365) ( Rs./MW/Day)*

*Where,*

*ARR=Annual Revenue Requirement of the distribution licensee for the relevant year*

*PPC= Total Power Purchase Cost of distribution licensee for the relevant year*

*TC = Total transmission charges paid by distribution licensee for State and Inter-State transmission system for the relevant year*

*PLSD= Total Peak load served by the concerned distribution system for the previous year*

*Provided where Open Access is allowed up to contracted load, embedded open access consumer shall pay wheeling charges as determined by the Commission in the following manner:*

*WC Embedded consumer = WC – [FC*0.85*12*1000/365] (in Rs./MW/day)*

*Where,*

*WC Embedded consumer = Net wheeling charges for embedded consumers*

*WC= Wheeling charges as determined by the Commission in accordance with the methodology specified in Regulation 20(2) contained in Chapter 5 of these regulations.*

*FC= Fixed/demand charges in Rs/kVA/month as per rate schedule approved in the Tariff Order for the relevant year. For the purpose of conversion of kVA into kW power factor of 0.85 has been taken.*

*Note: In case Wheeling Charges for Embedded consumer worked out as above becomes negative, such charge shall be zero.*

*Provided that wheeling charges shall be payable on the basis of Approved Capacity.*

*Provided where open access is allowed beyond the contracted load, embedded open access consumer shall pay wheeling charges for the excess load as determined by the Commission in* *the following manner:*

*WC For excess load allowed= (ARR–PPC–TC) /(PLSD X365) (Rs./MW/Day)"*

Thus, as can be seen from the above reading of the Regulations wheeling charges for the open access consumers shall be determined as under:

Wheeling Charges = (ARR–PPC–TC) /(PLSD X365) ( Rs./MW/Day).

ARR for FY 2023-24 as approved by the Commission is Rs. 9747.35 Crore (excluding NTI & truing up impact of FY 2021-22) and after excluding the power purchase cost and Transmission Charges, the net amount works out to Rs. 1451.88 Crore.

The PLSD during FY 2022-23 is 2594 MW.

Hence, in accordance with the methodology provided in the aforesaid Regulations, the wheeling charges payable by customers seeking open access for FY 2023-24 (applicable upto 31st March, 2024) shall be:

**Table 5.19: Wheeling Charges approved for FY 2023-24**

| Description | Rs./MW/day |
|---|---|
| Wheeling Charges | **15,334/-** |

"Embedded open access consumers" who have been allowed open access up to the contracted load shall not pay the wheeling charge as above who shall otherwise pay net wheeling charges calculated in accordance with the methodology specified in the regulations and the same works out to Rs. 2480/MW/day for HT industry consumers having contracted load above 1000 kVA and Rs. 4436/MW/day for HT industry consumers having contracted load upto 1000 kVA. Non-Domestic consumers shall pay wheeling charges of Rs. 12680/MW/day. Moreover, "embedded open access consumers" who have been allowed open access beyond the contracted load shall pay wheeling charges for the excess load equal to Rs. 15334/MW/day. However, where a dedicated distribution system for open access has been constructed for exclusive use of an open access customer, the wheeling charges for such dedicated system shall be worked out by the distribution licensee for its respective system and shall get it approved by the Commission and will be borne entirely by such open access customer till such time the surplus capacity is allotted and used by other open access customers, where after, the cost of the above system will be shared on pro-rata basis depending upon open access capacity allotted to them. Provided that wheeling charges shall not be levied on the open access customers connected to the transmission system at 132 kV and above voltage levels.

The distribution losses applicable to open access customers for FY 2023-24 shall be the pooled average system distribution losses, i.e. 13.25% considered in this Order. Cross subsidy surcharge applicable, in accordance with the Regulations, to open access customers for FY 2023-24 have been determined as Rs. 0.60/kWh for HT industrial consumers and Rs. 1.08/kWh for non-domestic consumers.

**The Petitioner is hereby directed that the wheeling charges and cross subsidy surcharge recovered from open access customers shall be shown separately under the separate head of income in its ARR/Tariff filings.**

# 6. Review of Commercial Performance of UPCL

## 6.1 General

Uttarakhand, the 27th State of India was created on 09.11.2000 as the 10th Himalayan State of the country blessed with abundant natural resources with an approx. 53,483 sq. km area and presently having a population of approximately 117.00 Lakh. The Electricity Distribution Network is managed by Uttarakhand Power Corporation Limited (UPCL) the sole distribution licensee in the State. UPCL had been entrusted to cater to the Transmission & Distribution Sector inherited after the de-merger from UPPCL (erstwhile UPSEB) since 01.04.2001. The Electricity Act, 2003 mandated the separation of Transmission functions under Power Sector Reforms. Consequently, on 01.06.2004, the Power Transmission Corporation of Uttarakhand Limited (PTCUL) was formed to maintain & operate EHV Transmission lines & substations in the State.

In Uttarakhand, UPCL is the sole power distribution utility in the State to cater the sub–transmission & distribution network which includes substations & distribution lines in 13 districts of Uttarakhand namely Dehradun, Pauri, Tehri, Uttarkashi, Rudraprayag, Chamoli, Haridwar, Pithoragarh, Bageshwar, Almora, Nainital, Champawat, & Udhamsingh Nagar, details of which are given below Table 6.1 & 6.2.

**Table 6.1: Detail of Substations (S/s) maintained by UPCL as on 31.12.2022**

| S.No. | Name of District | 33/11 KV S/s | | | 11/0.415 KV S/s | |
|---|---|---|---|---|---|---|
| | | Nos. | No. of Transformers | Total MVA capacity | Nos. | Total MVA capacity |
| **Garhwal Zone** | | | | | | |
| 1 | Dehradun | 65 | 129 | 1146.00 | 9412 | 1056.96 |
| 2 | Uttarkhashi | 14 | 25 | 109.45 | 1899 | 87.79 |
| 3 | Pauri | 34 | 58 | 266.00 | 6104 | 291.63 |
| 4 | Tehri | 17 | 32 | 194.00 | 3972 | 158.72 |
| 5 | Chamoli | 16 | 25 | 123.05 | 2397 | 94.19 |
| 6 | Rudraprayag | 8 | 12 | 62.00 | 1946 | 65.93 |
| **Total Garhwal Zone** | | **154** | **281** | **1900.50** | **25730** | **1755.22** |
| **Haridwar Zone** | | | | | | |
| **7** | **Haridwar** | **68** | **142** | **1399.00** | **21897** | **1274.18** |
| **Kumaon Zone** | | | | | | |
| 8 | Nainital | 31 | 55 | 434.00 | 6588 | 597.39 |
| 9 | U.S.Nagar (Kashipur, Bazpur Jaspur) | 22 | 48 | 446.00 | 8055 | 442.60 |
| 10 | Almora | 28 | 49 | 191.00 | 4448 | 163.02 |
| 11 | Bageshwar | 9 | 13 | 47.50 | 2002 | 63.52 |
| **Total Kumaon Zone** | | **90** | **165** | **1118.50** | **21093** | **1266.53** |
| **Rudrapur Zone** | | | | | | |
| **12** | U.S.Nagar (Rudrapur-1, Rudrapur-2, Sitarganj & Khatima) | 36 | 75 | 721.50 | 10852 | 643.46 |
| 13 | Pithoragarh | 20 | 35 | 170.00 | 3881 | 137.12 |
| 14 | Champawat | 7 | 11 | 59.00 | 1592 | 67.63 |
| **Total Rudrapur Zone** | | **63** | **121** | **950.50** | **16325** | **848.21** |
| **Total UPCL** | | **375** | **709** | **5368.50** | **85045** | **5144.14** |

**Table 6.2: Detail of Lines maintained by UPCL as on 31.12.2022**

| S. No. | Name of District | 33 KV Line (In Km.) | 11 KV Line (In Km.) | LT Line (In Km.) |
|---|---|---|---|---|
| **Garhwal Zone** | | | | |
| 1 | Dehradun | 794.92 | 4811.05 | 11912.68 |
| 2 | Uttarkhashi | 303.30 | 2231.07 | 3176.84 |
| 3 | Pauri | 715.69 | 5491.66 | 8911.81 |
| 4 | Tehri | 428.90 | 4302.92 | 6684.21 |
| 5 | Chamoli | 335.34 | 2662.10 | 3665.10 |
| 6 | Rudraprayag | 170.19 | 1359.38 | 2000.33 |
| **Total Garhwal Zone** | | **2748.34** | **20858.18** | **36350.97** |
| **Haridwar Zone** | | | | |
| **7** | **Haridwar** | **693.44** | **5570.71** | **6777.86** |
| **Kumaon Zone** | | | | |
| 8 | Nainital | 436.87 | 3109.30 | 5006.31 |
| 9 | U.S.Nagar (Kashipur, Bazpur Jaspur) | 310.18 | 2338.98 | 2161.64 |
| 10 | Almora | 545.65 | 4991.47 | 7584.10 |
| 11 | Bageshwar | 186.58 | 1799.95 | 2490.22 |
| **Total Kumaon Zone** | | **1479.28** | **12239.70** | **17242.27** |
| **Rudrapur Zone** | | | | |
| 12 | U.S.Nagar (Rudrapur-1, Rudrapur-2, Sitarganj & Khatima) | 523.98 | 2993.27 | 4317.52 |
| 13 | Pithoragarh | 344.17 | 3360.80 | 4160.01 |
| 14 | Champawat | 140.00 | 1758.73 | 2778.60 |
| **Total Rudrapur Zone** | | **1008.15** | **8112.80** | **11256.13** |
| **Total UPCL** | | **5929.21** | **46781.39** | **71627.23** |

Further, on examination of the details of sub-stations and lines maintained by UPCL as on 31.12.2022 vis-a-vis as on 31.12.2021, it has been observed that UPCL was able to increase its total transformation/sub-station capacity and total line length as detailed below:-

**Table 6.3 : Increase in Assets maintained by UPCL as on 31.12.2022 vis-a-vis 31.12.2021**

| Description | 33 kV | 11 kV | LT |
|---|---|---|---|
| Substation capacity as on 31.12.2021 (in MVA) | 5175 | 4962 | - |
| Substation capacity as on 31.12.2022 (in MVA) | 5369 | 5144 | - |
| **Net Increase in Substation Capacity (in MVA)** | **194** | **182** | **-** |
| Line length as on 31.12.2021 (in Km) | 5796 | 45729 | 69944 |
| Line length as on 31.12.2022 (in Km) | 5929 | 46781 | 71627 |
| **Net Increase in line length (in Km)** | **133** | **1053** | **1683** |

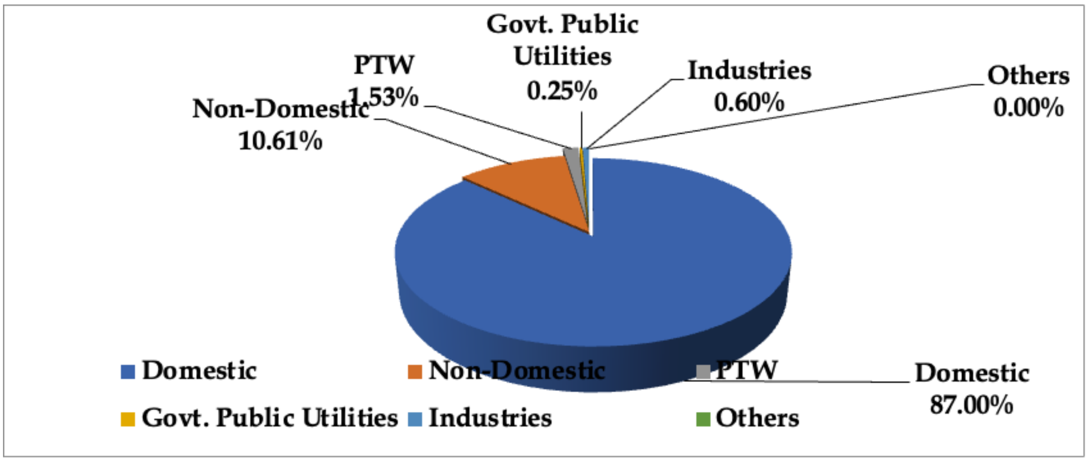
The Distribution network of UPCL as on 31.12.2022 contains four Zones namely Garhwal, Haridwar, Kumaon & Rudrapur having total twelve Circles containing 45 Divisions. The new Division which has been formed in October, 2022 is Nainidanda under Srinagar Circle. The State has a distinct advantage over other comparable States as a small number of consumers consume major share of power for which a Key Consumer Cell (KCC) has been constituted. Hence, a large portion of revenue of the Petitioner comes from these KCC consumers.

The Consumer Mix, Consumption pattern, Contracted/Connected Load pattern & Revenue pattern for FY 2020-21 & FY 2021-22 are elaborated below:

### 6.1.1 *Consumer Mix during FY 2020-21 & FY 2021-22*

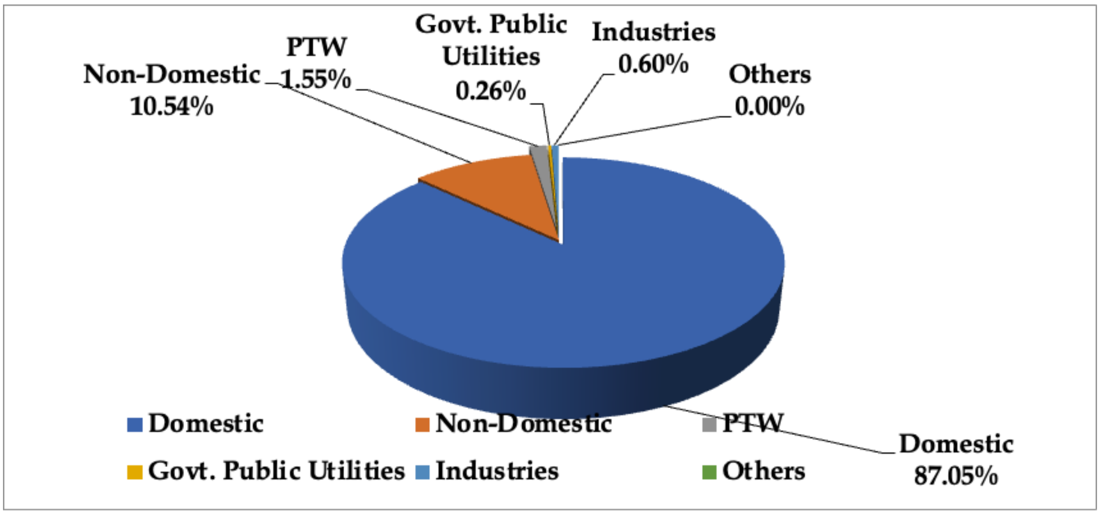
As per the CS-3/CS-4 report of UPCL as on March, 2021, out of the total approximately 26.70 Lakh consumers in the State, there were 87.00%-Domestic consumers, 10.61%-Non-Domestic consumers and only 0.60% consumers of the Industrial category. It is seen that these industrial (HT+LT Industries) consumers accounted for around 50.41% of the total consumption of the State and contribute to about 56.65% of Petitioner's revenue. The following Chart depicts the consumer mix in the State as on March, 2021.

**CHART 1: Consumer Mix (March, 2021)**




As on March, 2022, out of the total approximately 27.50 Lakh consumers in the State, there were 87.05%-Domestic consumers, 10.54%-Non-Domestic consumers and only 0.60% consumers of the Industrial category. It is seen that these industrial (HT+LT Industries) consumers accounted for around 52.35% of the total consumption of the State and contribute to about 57.24% of Petitioner's revenue. The following Chart depicts the consumer mix in the State as on March 2022.

**CHART 2: Consumer Mix (March, 2022)**



On comparing the Consumer Mix as on March, 2022 vis-a-vis March, 2021, it has been observed that out of total increase of 80,707 consumers, majorly 71,486 consumers increased in Domestic category, 6,658 consumers in Non-Domestic category and 1,791 under PTW category. Industrial category experienced rise in 362 consumers.

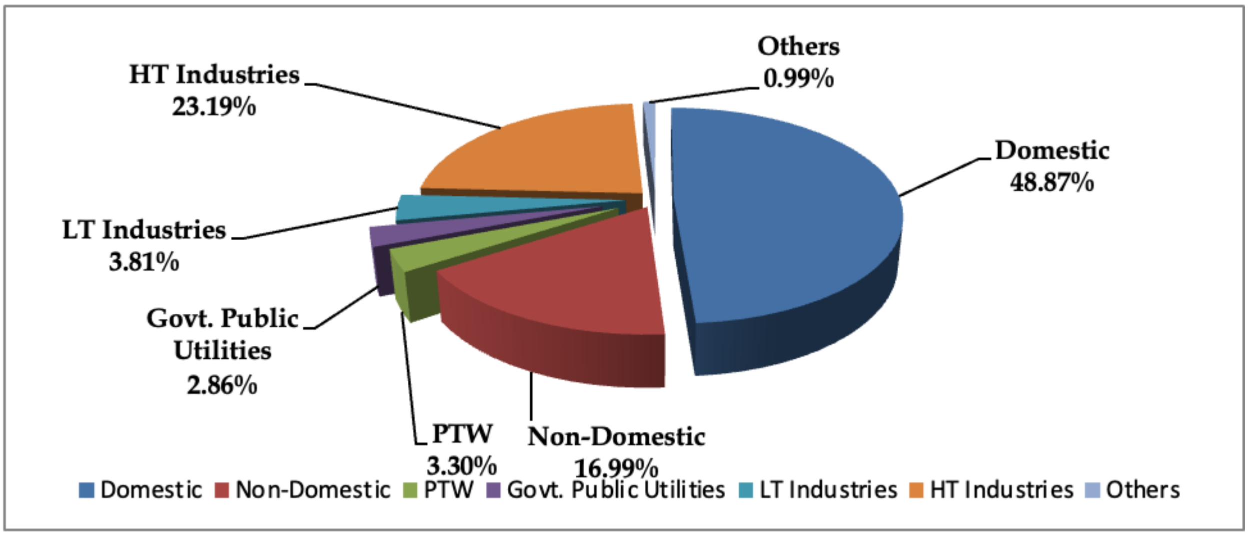
Further, under newly introduced category of 'electric vehicle charging station' 03 nos. consumers were added in FY 2021-22 which were 'Nil' in FY 2020-21.

### 6.1.2 *Consumer Contracted/Connected Load Pattern as on March, 2021 & March, 2022*

As on March, 2021, it was observed that the total Contracted/Connected load in the State was 7459.89 MW. The Contracted/Connected load of Industrial Consumers (HT+LT Industries) was 27% and the Contracted/Connected load of Domestic & Non-domestic consumers was 48.87% & 16.99% respectively.

The following Chart depicts the category-wise Contracted/Connected load in the State as on March, 2021.

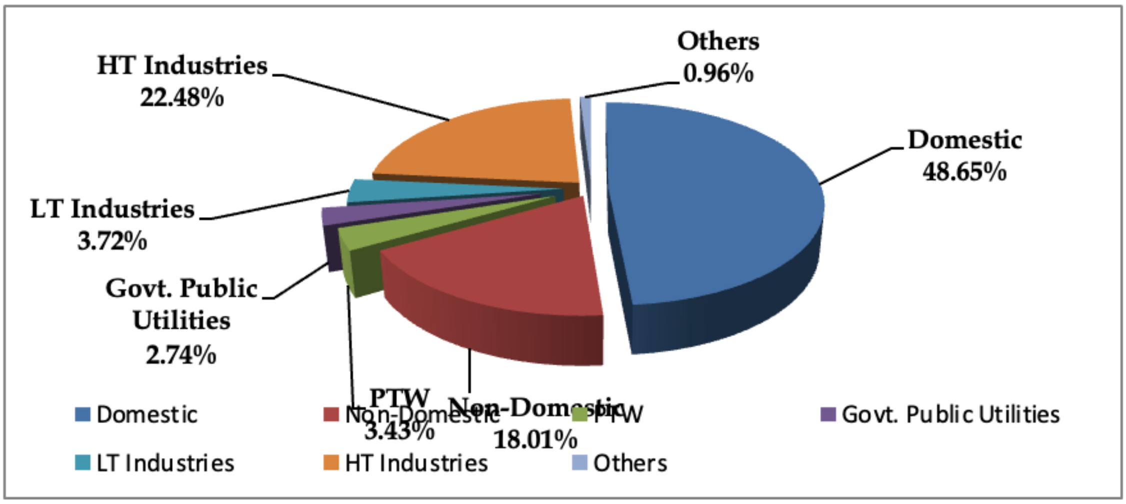
**CHART 3: Consumer Contracted/Connected load (March, 2021)**




As on March, 2022, it was observed that the total Contracted/Connected load in the State was 7888.74 MW. The Contracted/Connected load of Industrial Consumers (HT+LT Industries) was 26.20% and the Contracted/Connected load of Domestic & Non-domestic consumers was 48.65% & 18.01% respectively.

The following Chart depicts the category-wise Contracted/Connected load in the State as on March, 2022.

**CHART 4: Consumer Contracted/Connected Load (March, 2022)**

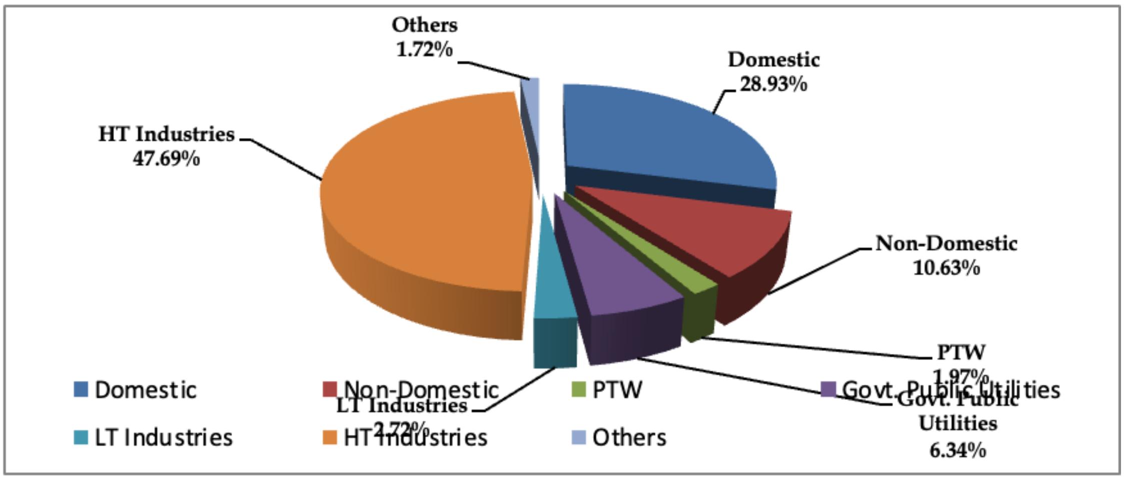



From the above chart, it has been observed that Domestic category constitute the major share followed by Industry category. In FY 2021-22, the Contracted/Connected load of all the categories have increased by some amount with maximum increase in Domestic, Non-domestic and Industries by 192.74 MW, 153.75 MW and 52.85 MW respectively.

### 6.1.3 *Consumption Pattern during FY 2020-21*

The total energy consumption in FY 2020-21 was 11432.59 MU out of which the consumption of Industrial consumers (HT+LT Industries) was 50.41% and for Domestic & Non-Domestic consumers the consumption was 28.93% & 10.63% respectively. The following Chart shows the consumption pattern in the State during FY 2020-21.

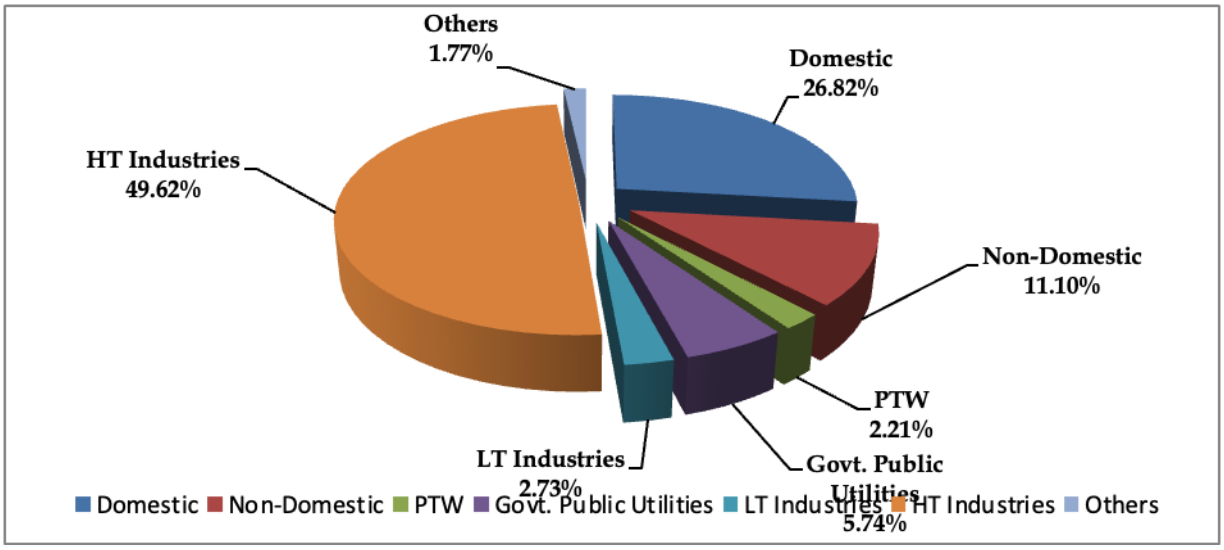
**CHART 5: Consumption Pattern during FY 2020-21**




The total energy consumption in FY 2021-22 was 12518.80 MU. In FY 2021-22, it was observed that with respect to total consumption of the State, the consumption of Industrial consumers (HT+LT Industries) was 52.35% and for Domestic & Non-Domestic consumers the consumption was 26.82% &

11.10% respectively. The following Chart shows the consumption pattern in the State during FY 2021-22.

**CHART 6: Consumption Pattern during FY 2021-22**




On comparing the energy consumption of Industries during FY 2021-22 vis-a-vis FY 2020-21, it has been observed that the energy consumption of Industries and Non-domestic category consumers increased by approx. 791 MU and 175 MU respectively. It has been observed that the energy consumption of PTW reduced by 6.17 MU in FY 2021-22 in comparison to FY 2020-21.

Earlier, the quantum of power traded through exchanges (Open Access) by the embedded Open Access consumers was increasing on year on year basis upto FY 2017-18. However, in FY 2018-19 the quantum power traded through exchanges by the embedded open access consumers decreased vis-a-vis FY 2017-18 level, which had further increased in FY 2019-20 & FY 2020-21. However, in FY 2021-22 & 2022-23 (upto February, 2023) the quantum of power traded through open access by the consumers has decreased drastically vis-a-vis FY 2020-21 level probable reasons for such decline could be High Inter State transaction charges, installation of solar power projects by the industries, regulatory changes w.r.t. Renewable Energy Certificates etc.

The Commission has observed that as open access is sought mainly by industries and are subsidising consumers, therefore, any reduction in revenue from industries would affect the commercial viability of distribution business. Hence, the Petitioner should ensure the quality and reliability of power supply at competitive rates to its consumers otherwise the consumers would be utilising the option of Open Access for meeting their demand at market rates from the Power Exchanges. The details of quantum of power traded through Open Access in last nine years are given in the Table below:

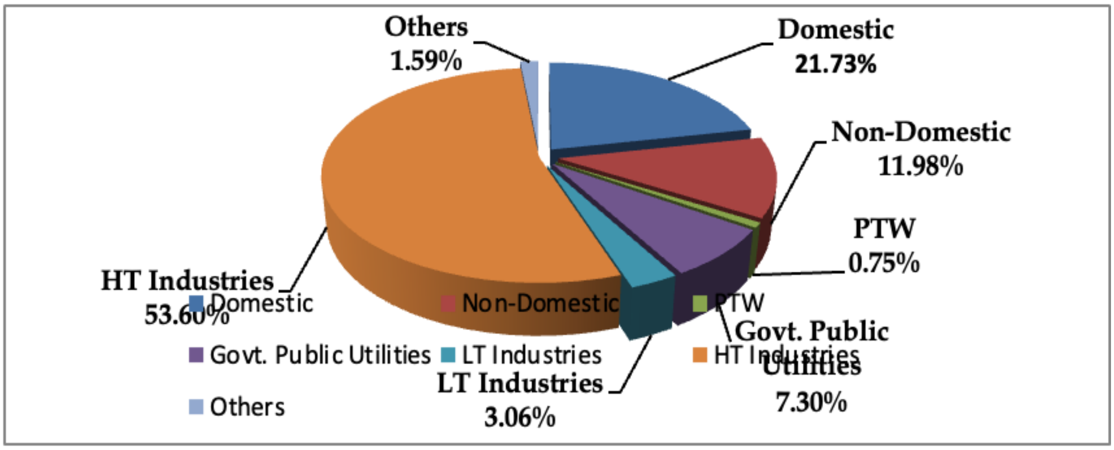
**Table 6.4 : Quantum of Power Traded through Open Access (at NR periphery)**

| Year | Quantum (MU) |
|---|---|
| FY 2014-15 | 181.37 |
| FY 2015-16 | 274.52 |
| FY 2016-17 | 385.81 |
| FY 2017-18 | 440.37 |
| FY 2018-19 | 249.66 |
| FY 2019-20 | 275.45 |
| FY 2020-21 | 370.12 |
| FY 2021-22 | 63.04 |
| FY 2022-23 (upto Feb, 2023) | 17.20 |

### 6.1.4 *Revenue Pattern during FY 2020-21 & FY 2021-22*

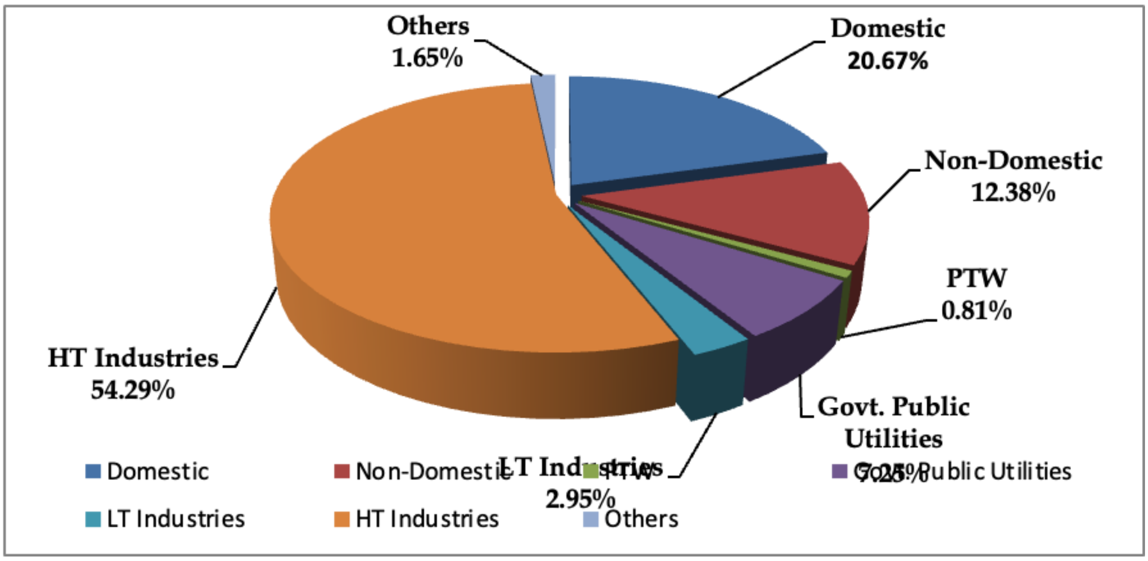
As per CS-4 report of UPCL, the total Revenue assessed in the State during FY 2020-21 was Rs. 683957.66 Lakh. The contribution of Industrial consumers was 56.65% [HT Industrial consumers was 53.60%, LT industrial consumers was 3.06%] whereas Domestic consumers and Non-Domestic consumers were contributing around 21.73% & 11.98% respectively.

**CHART 7: Revenue Mix in FY 2020-21**




Further, as per CS-4 report, the total Revenue assessed in the State during FY 2021-22 was Rs. 783863.09 Lakh. The contribution of Industrial consumers was 57.24% [HT Industrial consumers was 54.29%, LT industrial consumers was 2.95%] whereas Domestic consumers and Non-Domestic consumers were contributing around 20.67% & 12.38% respectively.

**CHART 8: Revenue Mix in FY 2021-22**




On comparing the revenue assessed pattern of FY 2020-21 and FY 2021-22, it is noticed that the total revenue assessed increased by Rs. 99,905.43 Lakh out of which the share of domestic consumers, Non-domestic & Industries were Rs. 13,446.68 Lakh, Rs. 15,093.10 Lakh and Rs. 61,230.05 Lakh respectively.

## 6.2 Commission's Analysis and Directions on Commercial Performances

The Commission has been monitoring & reviewing the performance of the Petitioner based on the information/reports submitted by it. Infact, higher distribution losses in distribution system are detrimental to financial and commercial viability of the Petitioner. Therefore, analysis of Petitioner's performance especially in respect of metering, billing and revenue collection is vital with the focus on reducing the Aggregate Technical and Commercial (AT&C) losses of the Petitioner. The Commission from its very first Tariff Order has been issuing various directions/Orders in this regard from time to time. However, the Petitioner has not been complying with the directions religiously. The Commission had, therefore, decided to monitor the commercial performance of the Petitioner in a more structured manner on a monthly basis and, accordingly, various formats were issued to the Petitioner vide the Commission's letter No. 284 dated 17.05.2012 with the direction to submit the above information in these Formats regularly for each month by 15th day of the next month.

Despite, the specific directions issued by the Commission in its previous Tariff Orders, the Petitioner had neither been submitting the periodical reports timely nor in accordance with the prescribed formats.

Considering the fact that the Petitioner encompasses 35 number of Distribution Divisions in the State at that period of time, the Commission felt the need to monitor UPCL on Distribution Division basis and to quantify the improvement on month on month basis of any of the performance indicators, it would be necessary that Division-wise targets on each parameter be provided by the licensee which would make the whole monitoring process more meaningful. Hence, the Commission vide its letter No. 1622 dated 27.11.2014 issued following revised Commercial Performance Monitoring (CPM) formats directing UPCL to submit information on these formats in hard as well as in soft copy (MS-excel file in CD) on regular basis latest by 25th day of the next month from January, 2015 onwards.

**Table 6.5 : Revised Formats prescribed by the Commission vide letter dated 27.11.2014**

| S. No. | Description | Format |
|---|---|---|
| 1. | No. of Consumers | 1 |
| 2. | Quarterly Targets of NA/NR, IDF/ADF/RDF | 2 |
| 3. | Status of Not Accessible (NA) Consumers (in Percentage) | 2(A) |
| 4. | Status of Not Read (NR) Consumers (in Percentage) | 2(B) |
| 5. | Status of Identified Defective Meters (IDF) (in Percentage) | 2(C) |
| 6. | Status of Appeared Defective Meters (ADF) (in Percentage) | 2(D) |
| 7. | Status of Reading Defective Meters (RDF) (in Percentage) | 2(E) |
| 8. | Quarterly Targets of IDF Meters/Mechanical Meters/Un-metered Consumers/Ghost Consumers | 3 |
| 9. | Status of Identified Defective Meters (IDF) | 3(A) |
| 10. | Status of Un-metered Consumers | 3(B) |
| 11. | Status of Mechanical Meters | 3(C) |
| 12. | Status of Ghost Consumers | 3(D) |
| 13. | Status of Not Billed (NB)/Stop Billed (SB) Cases | 4 |
| 14. | Status of Outstanding Arrears | 5 |
| 15. | MRI Status of KCC Consumers | 6 |
| 16. | Status of Revenue realisation per unit of Energy Sold | 7 |
| 17. | Status of AT&C Losses of UPCL | 8 |

However, the Commission observed that the Distribution Licensee has been inconsistent in furnishing the Commercial Performance Monitoring reports on the aforesaid formats in hard as well as in soft copy (MS-excel file in CD) on regular basis in accordance with the directions, i.e. latest by 25th day of the next month.

However, the Commission observed that the Distribution Licensee has been inconsistent in furnishing the CPM reports in hard as well as soft copy on regular basis. The Commission is of the view that the basic purpose of prescribing the formats by Commission vide its letter dated 27.11.2014 was to obtain the correct data within the stipulated time frame for analysis of the actual performance of UPCL on month-on-month basis vis-a-vis target performance of the Distribution licensee. Non-submission of the information in the prescribed format within the stipulated time frame shows a lackadaisical approach of the Petitioner towards compliance of the provisions of the Act/ Regulations/directions of the Commission.

**Therefore, the Commission directs Petitioner to submit timely monthly Commercial**

**Performance Monitoring reports strictly in the prescribed formats on regular basis, so as to reach the Commission latest by 25th day of the following month and also submit the Quarterly Targets as per prescribed Format - 2 & 3 alongwith the Commercial Performance Monitoring report for the month of April, 2023.**

Further, the Commission has observed that web-site link of the UPCL pertaining to commercial diary data is not being updated promptly and the CS-3/CS-4 data for a particular month is available after a delay of more than two months. In this regard, the Commission in its previous Tariff Order at 8.2.3 had directed UPCL to update and maintain the CS-3 & CS-4 report on its website regularly & promptly within 2 months. Further, the Commission during its meeting held on 02.09.2022 w.r.t. review of compliance of directions had reiterated its aforesaid directions and had cautioned UPCL for ensuring the timely updation of CS-3 & CS-4 reports on its website. However, despite Commission's categorical directions UPCL has shown a lackadaisical approach in prompt updation of the same.

**The Commission cautions the Petitioner that the practices of uploading the delayed CS-3 & CS-4 reports on its website should be strictly avoided, and this should not be repeated in future. In this regard, the Commission directs the Petitioner to update and maintain the CS-3 & CS-4 report on their web-site regularly and promptly within 02 months.**

The Commission's analysis on the information submitted by the Petitioner for the period 01.01.2022 to 31.12.2022 through its various submissions is being discussed in paragraphs mentioned hereunder:

### 6.2.1 *Metering*

The Commission in its earlier Tariff Orders had been repeatedly giving directions to the Petitioner to energise new connections with the static/electronic meters and to replace all old mechanical meters with new electronic/static meters in accordance with CEA Regulations. Infact, the Commission has also directed UPCL to take benefit of centrally funded schemes such as 'Revamped Distribution System Scheme' which encompasses installation of Smart Meters in large scale and provides lucrative funding scheme for the same.

The reports pertaining to various performance parameters on metering and other issues have been analysed and findings thereof are being discussed below:

#### 6.2.1.1 *Replacement of Improper, Non-Functional, Stop/Stuck up defective meters (referred to as Identified defective meters (IDF))*

In this regard, the Commission vide its Tariff Order dated 31.03.2022 had directed the Petitioner to restrict percentage defective meters (IDF) to 3% in plain as well as in hilly areas of the State, failing which the concerned Chief Engineer (Distribution), Superintending Engineer (Distribution), Executive Engineer (Distribution) & Executive Engineer (Test) shall be held responsible for non-compliance of the Commission's directions and appropriate action under the Act/Rules/Regulations may be initiated.

With regard to compliance of the directive, the Petitioner has submitted the following Target vis-a-vis status of IDF cases:-

1. **Quarterly Target of IDF cases for FY 2022-23**

**Table 6.6 : Quarterly Target of Defective Meters (IDF) for FY 2022-23**

| Particulars | At the end of Q-1 | At the end of Q-2 | At the end of Q-3 | At the end of Q-4 |
|---|---|---|---|---|
| IDF cases | 1.90% | 1.71% | 1.58% | 1.44% |

2. **Status of Defective Meters (IDF) as on 31.12.2022**

**Table 6.7 : Status of Defective Meters (IDF) as on 31.12.2022**

| As on | % Defective Meters |
|---|---|
| 31.03.2021 | 2.15% |
| 31.03.2022 | 1.95% |
| 31.12.2022 | 1.51% |

On examination of the Quarterly Targets submitted by UPCL in Format-2, it is observed that the target set for IDF cases at the end of 1st, 2nd quarter of FY 2022-23 were 1.90%, 1.71% and 1.58% respectively against which UPCL has achieved IDF Percentage of 2.23%, 1.76% and 1.51% respectively, which shows that the Petitioner has attempted to meet the target set by itself to some extent.

The Commission opines that the Petitioner has made its efforts for reducing percentage IDF meter to below 3%. However, the Petitioner indeed requires improvement at division level in order to reduce provisional billing cases and aim for achievement of overall target set for Provisional Billing cases i.e. NA/NR, RDF/ADF/IDF cases in the State in accordance with the Orders of the Commission.

Circle-wise number of defective meters reported by the Petitioner in the prescribed format 3(A) is shown in the Table given below:

**Table 6.8 : Status of Defective Meters**

| S. No. | Name of Circle | No. of Defective Meters as on 31.03.2019 | No. of Defective Meters as on 31.03.2020 | No. of Defective Meters as on 31.03.2021 | No. of Defective Meters as on 31.03.2022 | No. of Defective Meters as on 31.12.2022 | % of Defective Meters as on 31.03.2021 | % of Defective Meters as on 31.03.2022 | % of Defective Meters as on 31.12.2022 |
|---|---|---|---|---|---|---|---|---|---|
| 1. | EDC Dehradun (R) | 5572 | 6583 | 4576 | 2570 | 2326 | 1.50% | 0.80% | 0.70% |
| 2. | EDC Roorkee | 5599 | 6794 | 6281 | 4623 | 3328 | 2.96% | 2.11% | 1.48% |
| 3. | EDC Haridwar | 7561 | 7271 | 5683 | 6540 | 3760 | 2.81% | 3.10% | 1.74% |
| 4. | EDC Srinagar | 17725 | 12722 | 10785 | 3331 | 2778 | 3.23% | 1.30% | 1.07% |
| 5. | EDC Karnprayag | | | | 6780 | 6127 | | 7.84% | 6.96% |
| 6. | EDC Dehradun | 1503 | 3521 | 1581 | 4243 | 2890 | 0.75% | 1.96% | 1.31% |
| 7. | EDC Kashipur | 7980 | 5570 | 1675 | 1312 | 3063 | 1.09% | 0.83% | 1.87% |
| 8. | EDC Rudrapur | 6719 | 12428 | 6016 | 5711 | 3279 | 2.45% | 2.24% | 1.25% |
| 9. | EDC Ranikhet | 9512 | 4815 | 6170 | 5999 | 5603 | 3.02% | 2.88% | 2.66% |
| 10. | EDC Haldwani | 4058 | 4046 | 3641 | 3441 | 1604 | 1.47% | 1.34% | 0.61% |
| 11. | EDC Tehri | 6327 | 3718 | 4203 | 3721 | 3505 | 2.55% | 2.19% | 2.03% |
| 12. | EDC Pithoragarh | 4906 | 2586 | 1797 | 964 | 684 | 1.12% | 0.59% | 0.41% |
| **Total** | | **77462** | **70054** | **52408** | **49235** | **38947** | **2.15%** | **1.95%** | **1.51%** |

It has been noticed that in Format 3A, UPCL is furnishing the IDF meters status details of the EDC Karanprayag in the status of EDC Srinagar. However, EDC Karanprayag has been made a new Circle in FY 2019-20 after being separated from the EDC Srinagar.

From the above Table, it can be seen that the number of defective meters has decreased by 10,288 i.e. 49,235 defective meters as on 31.03.2022 to 38,947 defective meters as on 31.12.2022. It has been observed that the percentage defective meters as on 31.12.2022 only against EDC Karnprayag is more than 3%. The percentage defective meters in UPCL's network as on 31.03.2021 & 31.03.2022 were 2.15% & 1.95% respectively which are within the 3% defective meters as restricted by the Commission. However, it has been observed that the percentage defective meters as on 31.03.2022 for EDC Karnprayag was 7.84% which is above the limit of % IDF meters i.e. 3% for plain as well as hilly areas as per directions issued in previous Tariff Order dated 31.03.2022. The Petitioner indeed requires improvement at EDC Karnprayag w.r.t. reduction in percentage defective meters through specific monitoring from the Head Office of the Petitioner and the Superintending Engineer (Distribution) should be made responsible in case percentage defective meters (IDF) has not been restricted below the specified 3% limit.

It is an admitted fact that by expeditious replacement of defective meters on the basis of well laid down defective meter replacement programme, the Petitioner would not only be able to control this menace but shall also comply with the provisions of SOP Regulations.

Further, the Commission has set the IDF percentage target for plain areas and hilly areas separately in the UERC (Standard of Performance) Regulations, 2022 i.e. 2% for plain areas and 3% for hilly areas. The Petitioner should put its all efforts for reducing the IDF cases below 2% in plains areas and 3% in hilly areas where the actual IDF cases are above the target level so that Provisional Billing cases can be minimized and revenue can be enhanced.

**Therefore, the Commission directs the Petitioner to restrict percentage defective meters (IDF) to 2% for plain areas and 3% for hilly areas, failing which the concerned Chief Engineer (Distribution), Superintending Engineer (Distribution), Executive Engineer (Distribution) and Executive Engineer (Test) shall be held responsible for non-compliance of the Commission's directions and appropriate action under the Act/Rules/Regulations may be initiated.**

### 6.2.2 *Billing*

The Commission, vide its earlier Tariff Orders, and various directions issued from time to time in this regard has been directing the Petitioner to improve its quality of billing, bill distribution and revenue collection system. It is noted that the Petitioner has made a beginning in this direction and has developed a system for internet based online view/payment of electricity bill besides bill payment facility also through Common Service Centres (CSCs) situated across the State for its consumers which has not only benefitted the consumers of the State but has also improved the overall billing and bill collection system of the Petitioner. However, the Commission is of the view that still a majority of consumers are located in remote hilly/rural areas and they may not avail internet based online facilities hence, a lot of scope for improvement in billing, bill distribution and bill collection system is required at the Petitioner's end for consumers residing in such areas.

#### *6.2.2.1 Provisional Billing: Status of NA/NR, IDF/ADF/RDF*

The Commission vide its Tariff Order dated 31.03.2022, had issued directions to the Petitioner to reduce the percentage NA/NR cases to below 2% in the entire State latest by 30.09.2022, failing which the concerned Chief Engineer (Distribution), Superintending Engineer (Distribution), Executive Engineer (Distribution) & Executive Engineer (Test) shall be held responsible for non-compliance of the Commission's directions and appropriate action under the Act/Rules/Regulations may be initiated.

The Petitioner has submitted the following information on quarterly target of NA/NR for FY 2022-23 in Format 2 of CPM reports:-

**Table 6.9 : Quarterly Target of NA/NR for FY 2022-23**

| Financial Year | Particulars | At the end of Q-1 | At the end of Q-2 | At the end of Q-3 | At the end of Q-4 |
|---|---|---|---|---|---|
| 2022-23 | NA cases | 1.41% | 1.22% | 1.09% | 0.97% |
| | NR cases | 0.55% | 0.49% | 0.45% | 0.41% |
| | Total NA/NR | 1.96% | 1.71% | 1.54% | 1.38% |

**Table 6.10 : Status of NA/NR submitted in Commercial Performance Monitoring Report**

| Particulars | NA Cases | NR Cases | Total NA/NR |
|---|---|---|---|
| As on 31.03.2022 | 1.66% | 0.93% | 2.59% |
| As on 31.12.2022 | 1.53% | 0.91% | 2.44% |

On examination of Quarterly Targets furnished by the Petitioner vis-a-vis actual progress made in the field as on 31.03.2022, it has been observed that NA/NR cases were 1.66%/0.93%, the total NA/NR cases as on 31.03.2022 were 2.59% which is above the target percentage NA/NR cases of 2% as restricted by the Commission.

On examination of the above Tables, it has been noticed that the Petitioner in FY 2022-23 (upto Dec,2022) has achieved 1.53% NA cases & 0.91% NR cases, the total NA/NR cases 2.44% against the set target of 1.54% for the Q-3 of FY 2022-23. Thus, during FY 2022-23 (upto Dec, 2022), the Petitioner could not achieve the target level of 2% NA/NR as restricted by the Commission.

Hence, the Commission is of the view that the Petitioner indeed requires improvement at each division level in order to reduce the NA/NR cases and aim for achievement of overall target in accordance with the Orders of the Commission. Therefore, UPCL is required to diligently monitor & pursue each Distribution Division rigorously so as to align its actual percentage of NA/NR billing with the targets in accordance with the Commission's Orders/directions.

**The Commission again directs the Petitioner to put its sincere efforts in reducing the percentage NA/NR cases to below 2% in the entire State latest by 30.09.2023, failing which the concerned Chief Engineer (Distribution), Superintending Engineer (Distribution), Executive Engineer (Distribution) & Executive Engineer (Test) shall be held responsible for non-compliance of the Commission's directions and appropriate action under the Act/Rules/ Regulations would be initiated.**

Further, the Commission has observed that the percentage of provisional billing cases namely NA/NR, RDF/ADF/IDF, furnished in prescribed formats 2(A), 2(B), 2(C), 2(D) & 2(E) for FY 2021-22 are still at higher levels vis-a-vis total number of billed consumers as shown in the Table given below:

**Table 6.11 : Status of Provisional billing Viz. NA/NR/IDF/ADF/RDF**

| Status | As on 31st March 2018 | As on 31st March 2019 | As on 31st March 2020 | As on 31st March 2021 | As on 31st March 2022 | As on 31st December 2022 |
|---|---|---|---|---|---|---|
| NA (%) | 3.54 | 4.25 | 1.44 | 1.64 | 1.66 | 1.53 |
| NR (%) | 4.64 | 4.16 | 13.29 | 0.90 | 0.93 | 0.91 |
| IDF (%) | 3.37 | 3.52 | 2.96 | 2.15 | 1.95 | 1.51 |
| ADF (%) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| RDF (%) | 0.98 | 1.95 | 0.96 | 0.93 | 1.10 | 1.10 |
| **Total (%)** | **12.53** | **13.88** | **18.66** | **5.62** | **5.64** | **5.05** |
| **Total Billed Consumers (Nos.)#** | **20,24,578** | **22,03,032** | **23,63,726** | **2,439,959** | **2,521,628** | **2,582,044** |

*#Total billed consumers as furnished by Petitioner in prescribed Format-1.*

From the above Table, it is observed that there has been some reduction in total percentage of NA/NR, IDF/ADF/RDF cases in FY 2022-23 (upto Dec, 2022) vis-a-vis FY 2021-22 i.e. from 5.64% to 5.05%, which is not close to the directions/provisions of the SOP Regulations issued by the Commission. Therefore, it can be said that the Petitioner has to put in concerted efforts to bring the overall provisional billing percentage to within 4% of the total number of consumers in plain areas and 5% for hilly areas of the State.

**Therefore, the Commission again directs the Petitioner to restrict the provisional billing cases within the limit prescribed above as well as in Regulations (i.e. 4% for plain areas and 5% for hilly areas of the State), failing which the concerned Chief Engineer (Distribution), Superintending Engineer (Distribution), Executive Engineer (Distribution) and Executive Engineer (Test) shall be held responsible for non-compliance of the Commission's directions and appropriate action under the Act/Rules/Regulations may be initiated.**

*6.2.2.2 NB & SB Cases*

The Commission, in its Tariff Order dated 31.03.2022, had taken a considerate view and had directed the Petitioner to liquidate and finalise atleast 5% of the NB/SB cases in each quarter and submit quarterly report before the Commission. In absence of the same, action under the provisions of Act/Rules/Regulations may be initiated against the Petitioner.

In this regard, the Commission during the review meeting held on 02.09.2022 expressed its displeasure over the lackadaisical of the petitioner towards liquidation of NB/SB cases and directing for ensuring the compliance in the matter.

The Petitioner's submission in the prescribed Format-4 of Commercial Performance Monitoring Report pertaining to Not Billed (NB) and Stop Billed (SB) is being presented in the Table given below:

**Table 6.12 : Status of NB/SB Cases**

| Status | | As on 03/18 | As on 03/19 | As on 03/20 | As on 03/21 | As on 03/22 | As on 12/22 |
|---|---|---|---|---|---|---|---|
| No. of NB/SB Cases | NB<br>SB | 160409 | 161500 | 158300 | 161580 | 154461 | 143452 |

From the above Table, it is evident that no. of NB/SB have marginally reduced in FY 2022-23 (upto 31.12.2022) w.r.t. cases as on March, 2022, which indicates that the Petitioner has shown least interest in reducing these NB/SB cases. Further, the Commission has observed that the Petitioner was able to liquidate only 7.13% in three quarters of FY 2022-23, whereas, it was required to liquidate atleast 5% in each quarters which is not even half of its target.

Therefore, taking a serious note on the continued non-compliance and under performance by the Petitioner with regard to liquidation and finalisation of NB/SB cases, **the Commission again directs the Petitioner to liquidate and finalise atleast 5% of the NB/SB cases in each quarter and submit quarterly report before the Commission. In absence of the same, action under the provisions of Act/Rules/Regulations may be initiated against the Petitioner.**

### *6.2.2.3 Outstanding Arrears*

The Commission in its Tariff Order dated 31.03.2022 had directed the Petitioner to make sincere efforts in mobilizing its resources throughout the year for collection of Arrears under a structured receivable management programme besides taking corrective actions against the habitual defaulters. The Commission in the said Tariff Order had also directed the Petitioner to submit an Action Plan within a month of issuance of this Order including the steps it proposes to take to collect electricity dues from the beginning of the financial year with same vigour as it normally does in the last quarter of the financial year.

The status of Outstanding Arrears furnished by the Petitioner in the prescribed Format- 5 is given below:

**Table 6.13 : Status of Outstanding Arrears**

| Description | As on 03/19 | | As on 03/20 | | As on 03/21 | | As on 03/22 | | As on 12/22 | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Arrear** | **No.** | **Amount (Rs. Lakh)** | **No.** | **Amount (Rs. Lakh)** | **No.** | **Amount (Rs. Lakh)** | **No.** | **Amount (Rs. Lakh)** | **No.** | **Amount (Rs. Lakh)** |
| Arrear>=5 Lac | 1583 | 65543.38 | 950 | 38597.71 | 2423 | 104928.3 | 3034 | 120128.55 | 2941 | 117344.10 |
| 1=<Arrear<5 Lac | 6246 | 10469.05 | 3940 | 6461.14 | 6675 | 11806.81 | 8547 | 15330.78 | 8844 | 15683.16 |
| 0.5 Lac=<Arrear<1 Lac | 16302 | 11235.01 | 9745 | 6660.57 | 16580 | 11175.78 | 18017 | 12296.83 | 19292 | 13186.90 |
| 0.1 Lac=<Arrear<0.5 Lac | 124701 | 26733.65 | 67139 | 14547.86 | 135154 | 28473.76 | 144588 | 30031.31 | 159343 | 32686.36 |
| 0.05 Lac=<Arrear <0.1 Lac | 96743 | 6897.61 | 54201 | 3861.58 | 112244 | 8002.48 | 127774 | 9118.63 | 141662 | 10092.24 |
| **Total** | **245575** | **120878.71** | **135975** | **70128.86** | **273076** | **164387.12** | **301960** | **186906.10** | **332082** | **188992.76** |

From the above Table, it is evident that the Petitioner has not been able to reduce number of arrears cases and rather the same are increasing on year-on-year basis. The similar pattern can be observed while examining the outstanding arrears of FY 2022-23 (upto December, 2023) where the number of outstanding arrear cases and arrear amount are showing an increasing trend which is alarming and depicting that all is not good with financial/commercial condition of the Petitioner.

The Commission is of the view that the Petitioner has been lackadaisical towards collection of arrears and lacks seriousness in laying down a planned programme/roadmap. This is a grave concern for the financial health of the Petitioner and may weed away the Petitioner's financial viability since 3.32 Lakh cases of arrears (which is around 12.86% of the total billed consumers of the Petitioner) have been pending as on 31.12.2022 with a staggering amount of Rs. 1,889.92 Crore pending recovery by the Petitioner which is about 24.51% of the Petitioner's approved Net ARR for FY 2022-23, i.e. Rs. 7,709.01

Crore.

The comparison of Outstanding Arrears furnished by the Petitioner in the above Table vis-a-vis Outstanding Arrears shown in the Commercial Diary, i.e. CS-4 is given below:-

**Table 6.14 : Status of Outstanding Arrears (Rs. Crore)**

| Description | As on 31.03.2018 | As on 31.03.2019 | As on 31.03.2020 | As on 31.03.2021 | As on 31.03.2022 | As on 31.12.2022 |
|---|---|---|---|---|---|---|
| As per Commercial Performance Monitoring report *(excluding Arrears of amount below Rs. 5,000)* | 930.41 | 1208.78 | 701.29 | 1643.87 | 1869.06 | 1889.92 |
| As per CS-4 report *(including Arrears of amount below Rs. 5,000)* | 1622.62 | 1731.08 | 2287.79 | 2258.16 | 2297.48 | 3061.92 |

The Petitioner is aware of the fact that the CS-3 & CS-4 reports are being referred by Commission for analysing the Commercial Performance of the Petitioner. Moreover, for better transparency it is important that Petitioner should maintain its Commercial Diary data and update the same from time to time on its web-site in the interest of consumers of the State. However, while accessing the web-site for examination of the Commercial Performance Data, it has been found that the CS-3 & CS-4 reports are not being promptly updated on Petitioner's web-site. Despite the Commission's directions, the Petitioner is updating the CS-3 & CS-4 reports with delay.

From the above Table, it has been observed that the Petitioner has not made sincere efforts in recovering its arrears in FY 2021-22 and FY 2022-23 (upto 31.12.2022). The total arrear to be realised as on 31.12.2022 is Rs. 3061.92 Crore which is approx. 39.71% of its approved Net ARR for FY 2022-23. Moreover, on examination of Commercial Performance Monitoring Report as mentioned in Table above, it has been observed that the performance of the Petitioner has deteriorated in FY 2021-22 (upto December, 2022).

The Commission is of the view that the Petitioner has to understand the gravity of the situation and should abstain from its legacy practice of remaining callous about arrears throughout the year and waking up in the last quarter of the Fiscal Year. This by all standards in any commercial organization is an in-appropriate practice and inculcates un-professional work culture in the organisation especially for the young field officers who adapt the same and are misguided by the false belief in the wrong historical practice. Further, the Commission cautions the Petitioner if such trend continues in ensuing years it may result in incorrigible damage to the commercial and financial viability of the Petitioner.

**Therefore, the Commission hereby directs the Petitioner to make sincere efforts in mobilizing its resources throughout the year for collection of Arrears under a structured receivable management programme besides taking corrective actions against the habitual defaulters. The Petitioner is, hereby, once again directed to submit an Action Plan within a month of issuance of this Order including the steps it proposes to take for collecting electricity dues from the beginning**

**of the financial year with same vigour as it normally does in the last quarter of the financial year.**

### 6.2.2.4 *Analysis of Load Factor of High Value Consumers*

The load factor of the consumers, as submitted by the Petitioner in the prescribed Format-6 of Commercial Performance Monitoring Report has been shown in Table given below:

**Table 6.15: Status of Consumers**

| Description | As on 03/18 | As on 03/19 | As on 03/20 | As on 03/21 | As on 08/21 | As on 03/22 | As on 12/22 |
|---|---|---|---|---|---|---|---|
| Total KCC Consumers | 23206 | 23985 | 25123 | 26503 | 27337 | 28853 | 31612 |
| *Abnormal cases | 3390 | 3961 | 6927 | 7325 | 8348 | 5415 | 5636 |
| L.F<10% | 10335 | 10934 | 11616 | 12282 | 11639 | 13947 | 14644 |
| L.F>10% | 12871 | 13051 | 13507 | 14221 | 15698 | 14906 | 16968 |

**Abnormal cases- Consumers exceeding sanctioned demand, Consumers having CT, PT by-pass Tamper Report, unbalanced Tamper Report & any other Tamper Report.*

From the above Table, it has been observed that UPCL has not been able to reduce the number of consumers having load factor less than 10% and the same are continuously increasing on year-on-year basis. Further, number of consumers as on 31.12.2022 having load factor less than 10% was 14644, which is around 46.32% of the total number of consumers analyzed. The Commission is of the view that the consumers having load factor less than 10% are in alarmingly high numbers.

The Petitioner during the review meeting held on 02.09.2022 submitted that they have engaged M/s Mobineers Info. System Pvt. Ltd. for data analysis through various reports of 8,000 consumers.

The Commission opines that the Petitioner should promptly analyse the consumer data w.r.t. 'abnormal cases' i.e. Consumers exceeding sanctioned demand, Consumers having CT, PT by-pass Tamper Report, unbalanced Tamper Report & any other Tamper Report etc.

The total billed consumer base of about 25.82 Lakh consumers in the State (as on 31.12.2022) out of which 31,612 consumers have been analyzed. The Industry consumers which are only about 0.60% of the total consumer base of the Petitioner contribute nearly 60% of its total annual revenues.

**Therefore, the Commission again directs the Petitioner to constitute a cell in its commercial wing for analysis and monitoring of consumer data including low load factor cases, meter tamper cases, etc. The Commission also directs the Petitioner to submit a report on analysis and monitoring of consumer data on monthly basis by 25$^{th}$ of every month in CPM reports.**

### 6.2.2.5 *Status of Revenue realisation per unit sold*

The Commission in its Tariff Order dated 31.03.2022 had directed the Petitioner to ensure that the data furnished in Commercial Performance Monitoring report should match with its Commercial

Diary, i.e. CS-4 data and the Petitioner should ensure that in all future submissions of CPM reports the Average Realisation Rate should be calculated on the basis of recoveries on account of Realisation against energy dues only and the realisation shown should exclude recoveries from duties/cess, etc. Further, the realisation against energy dues should clearly bifurcate realisation against current dues & realisation against past dues, failing which appropriate action shall be initiated against the Petitioner/Licensee.

The status of Revenue Realisation per unit sold furnished by the Petitioner in the prescribed Format-7 is given below:-

**Table 6.16: Status of Revenue Realisation per unit sold**

| Year | Sold Energy (MU) | Total Revenue Realization (Rs. Lakh) | Average Realization Rate (Rs./unit) | Average Power Purchase Cost per Unit sold (Rs./unit) | Approved /Trued-up Average Cost of Supply (Rs/Unit) |
|---|---|---|---|---|---|
| FY 2015-16 | 10298.14 | 524286* | 5.09 | 4.11 | 4.54 |
| FY 2016-17 | 10575.544 | 555300* | 5.25 | 4.63 | 4.69 |
| FY 2017-18 | 11208.82 | 603052* | 5.38 | 4.58 | 4.77 |
| FY 2018-19 | 11826.68 | 637700* | 5.39 | 4.85 | 5.29 |
| FY 2019-20 | 12021.35 | 656362* | 5.46 | 5.65 | 5.94 |
| FY 2020-21 | 11432.59 | 673707* | 5.89 | 4.82 | 5.48 |
| FY 2021-22 | 12518.80 | 699773# | 5.59 | 5.03 | 6.13 |

**Including Duties/Cess/DPS & other recoveries*
*#Excluding Duties/Cess/DPS & other recoveries*

On examination of data provided in Format-7 of reports, it has been observed that data upto FY 2020-21 as illustrated in the table above includes Duties/Cess/DPS & other recoveries and the Commission in this regard vide its previous Tariff Order had directed the Petitioner to ensure that the data furnished in Commercial Performance Monitoring report should match with its Commercial Diary, i.e. CS-4 data and the Petitioner should ensure that in all future submissions of Commercial Performance Monitoring reports the Average Realisation Rate should be calculated on the basis of recoveries on account of Realisation Against energy dues only and the realisation shown should exclude recoveries from duties/cess, etc. Further, the realisation against energy dues should clearly bifurcate realisation against current dues & realisation against past dues, failing which appropriate action shall be initiated against the Petitioner/Licensee.

Further, it has been observed that the Petitioner has attempted to calculate the 'Average Realisation Rate' by excluding Delayed Payment Surcharge, Electricity Duty & Green Energy Cess in Format-7 of CPM Reports. On corelating the data of Total Revenue Realisation excluding the Delayed Payment Surcharge, Electricity Duty & Green Energy Cess furnished in Format-7 of CPM report vis-à-vis the data in CS-4 report of commercial diary, it is observed that the same do not match. The Petitioner is advised to cross-check the same and submit verified data of Total Revenue Realisation in Format-7 of CPM reports after excluding Delayed Payment Surcharge, Electricity Duty & Green Energy

Cess and correlating with CS-4 report of Commercial Diary.

**The Commission again directs the Petitioner to ensure that the data furnished in Commercial Performance Monitoring report should match with its Commercial Diary, i.e. CS-4 data and the Petitioner should ensure that in all future submissions of Commercial Performance Monitoring reports the Average Realisation Rate should be calculated on the basis of recoveries on account of Realisation Against energy dues only and the realisation shown should exclude recoveries from duties/cess, etc. Further, the realisation against energy dues should clearly bifurcate realisation against current dues & realisation against past dues, failing which appropriate action shall be initiated against the Petitioner/Licensee.**

### 6.2.3 *Bill Collection System*

Taking cognizance of various consumer complaints received by the Commission in writing and also during public hearing, the Commission earlier had directed the Petitioner to improve its existing Bill Collection System. Earlier, the Commission vide its Order dated 01.09.2005 had imposed a consolidated penalty of Rs. 1,00,000 and recurring additional penalty of Rs. 2,500 per day on UPCL for non-compliance of its directions with respect to Bill Collection System. Since then, multiple correspondences, directions, Orders have been issued by the Commission and the Petitioner has been submitting justification for the fragmentary progress in the matter.

However, it was only in the year 2017 when the Petitioner filed a Petition before the Commission seeking approval of an investment proposal of Rs. 11.20 Cr. for construction of 158 Bill Collection Centres (BCCs) across the State within a period of one year. The said approval was accorded by the Commission vide its Order dated 15.05.2017 with the direction to complete the construction of BCC within the stipulated time.

Subsequently, the Commission considering progressive attempts of the Petitioner, viz., making available cash counters, mobile bill payment facilities in its field offices/Substations, bill payment through Banks, online payment facilities, integration of Common Service Centres (CSCs) etc., took a lenient view and vide its Order dated 10.04.2019, withdrew the daily penalty of Rs. 2500/- imposed on the Petitioner vide its earlier Order dated 01.09.2005, w.e.f. 01.08.2017. However, the penalty deposited by the Petitioner upto 31.07.2017 was not waived off.

Meanwhile, during periodical monitoring of status of construction of Bill Collection Centers and integration of CSCs, the Commission observed that despite Commission’s emphasis on timely completion of Bill Collection Centers, works of 28 no. of BCCs of Kumaon Zone were not started even after an elapse of more than four and half years from the date of investment approval.

Thereafter, the Commission initiated a *suo-moto* proceedings in the matter of non-compliance of its directions and accordingly at Para 16 of its Order dated 11.02.2022 had directed UPCL that:-

"

16. *Much to the dismay of the Commission, as last and final opportunity in the matter, the Commission accepts the request of the Respondent that it shall complete the work by end of 31st July 2022 and further directs it to furnish monthly progress report before the Commission till completion of the said work."*

Accordingly, the Commission vide its Order dated 31.03.2022 directed the Petitioner to complete the balance works of construction of Bill Collection Centers and ensure integration of all CSCs in the State latest by 31.07.2022, in absence of which, without prejudice to earlier penal actions/stern action under the provisions of the Act/Rules/Regulations would be initiated against it. Further, the Commission directed the Petitioner to make widespread publicity/Advertisement/workshop of the bill collection facilities & list of VLEs operating in the vicinity of various electricity Sub-division/division officers of UPCL across the State.

Further, during the review meeting held on 02.09.2022, the Petitioner submitted that out of total 157 nos. BCCs to be constructed work is pending at only 03 nos. BCCs falling under Kumaon Zone.

The Petitioner in its compliance of directives alongwith its instant Petition has furnished that all 157 nos. BCCs have been completed. Further, Petitioner has submitted that up-keeping and maintenance of the assets at the existing bill collection centers is being done on regular basis.

**The Commission directs the Petitioner to make widespread publicity/Advertisement/ workshop of the bill collection facilities & list of VLEs operating in the vicinity of various electricity Sub-division/division officers of UPCL across the State.**

## 6.3 Energy Audit

The Commission in its earlier Tariff Orders had been reiterating its direction for conducting the energy audit of 11 kV feeders and submit the audit report before the Commission. The Commission in its Tariff Order dated 31.03.2022 had directed the Petitioner to provide/maintain the metering system at each feeder, 'T' points, DTs and consumers in its distribution network for effective energy auditing and accounting. The Petitioner was also directed to submit compliance report in this regard by 30.09.2022, failing which appropriate action may be taken against the Petitioner in accordance with the Act/Rules/Regulations.

During the review meeting held on 02.09.2022, the Petitioner submitted that metering has been completed in all 33 kV substations upto 11 kV and is being maintained. Also about 11,602 Nos. DTs have been metered under IPDS/R-APDRP scheme. Further, the Petitioner had submitted that they are unable to maintain healthy communication from Distribution Transformer Locations due to lack of manpower and AMC. Also there is poor communication from remote locations as modems installed are based on 2 G technology and network companies are now focusing on 4G technology.

Further, the Petitioner submitted that it has proposed Smart Metering under RDSS Scheme wherein smart metering of feeders/DTR/consumers will be done. Under the said scheme 397 no. of 33 kV feeders, 1289 nos. 11 kV feeders, 38,016 nos. DTRs and 15,84,205 no. consumers would be covered.

The Commission during aforesaid review meeting directed the Petitioner to provide & maintain the metering system at each feeder, 'T' points, DTs and consumers in its distribution network for effective energy auditing & accounting and make the compliance of the Commission's aforesaid directions.

The Petitioner in its response to compliance to directives in its instant Petition reiterated its submissions of review meeting held on 02.09.2022 as mentioned below and further submitted that all the Test Divisions have been directed to install meters at 'T' points, if anywhere left, including Agriculture Feeders.

The Commission has taken the serious note that the corporate office is merely issuing/passing the direction to its field offices and not proactively ensuring/monitoring the compliance status of the same from its field offices. The Commission is of the view that the corporate office should not act like the Post Office, i.e. passing the direction of the Commission to its field offices but should also effectively monitor the compliance status of the same and **thus, the Petitioner is accordingly directed not to restrict its responsibilities upto issuing directions to the field units rather it should adopt a proactive approach of compliance monitoring at each division level. Further, the Petitioner is again directed to provide/maintain the metering system at each feeder, 'T' points, DTs and consumers in its distribution network for effective energy auditing and accounting.**

## 6.4 AT&C Losses

From the above comprehensive analysis of metering, billing & collection activities of the Petitioner, it is evident that still a lot of improvement, especially in the areas of provisional billing, liquidation of NB/SB cases, recovery of Outstanding Arrears and prompt revenue realization is required. The AT&C losses of the Petitioner as on 31.12.2022 as per Commercial Performance Monitoring report are 24.62%. The reason for such high AT&C loss is primarily high distribution losses (14.71%) and low collection efficiency (88.39%) till 30.09.2021. The Commission in its previous Orders had also categorically directed the Petitioner to ensure completion of the R-APDRP works within the specified timelines and also to achieve the specified target for reduction of AT&C losses to the extent of

15% in the selected towns within the stipulated timeframe for availing the benefits of conversion of loan into grant. In case, the Petitioner fails to do so, the servicing cost/cost of the loan in whole or part may not be allowed as pass through in the ARR. Similar directions were issued by the Commission in its Order dated 05.10.2016 pertaining to Capital Investment for the Integrated Power Development Scheme (IPDS) Project, Ministry of Power (MoP), Government of India (GoI).

Therefore, the Commission is of the view that with the linkage of cost of funding of Centrally funded Schemes with the AT&C loss achievement, such programs can be construed as a double-edged sword, which might cause adverse financial impact in case the Petitioner fails to achieve the required reduction in AT&C losses of the target area.

The status of AT&C losses of UPCL for the last nine financial years furnished by the Petitioner in the prescribed Format-8 is given below:

**Table 6.17: Status of AT&C Losses**

| Year | Input Energy (MU) | Energy Sold (MU) | Assessment (Rs Lakh) | Collection (Rs Lakh) | Distribution Loss (%) | Approved Distribution Loss (%) | Collection Efficiency (%) | Actual AT&C Loss (%) | Computed AT&C losses (Based on Approved Norms) (%) |
|---|---|---|---|---|---|---|---|---|---|
| FY 2014-15 | 11888.23 | 9685.16 | 418940 | 418388 | 18.53 | 15.50 | 99.87 | 18.64 | 17.19 |
| FY 2015-16 | 12559.60 | 10298.14 | 493267 | 524286 | 18.01 | 15.00 | 106.29 | 12.85 | 16.28 |
| FY 2016-17 | 12780.32 | 10575.54 | 540075 | 555300 | 17.25 | 15.00 | 102.82 | 14.92 | 16.28 |
| FY 2017-18 | 13213.73 | 11208.82 | 609821 | 603052 | 15.17 | 14.75 | 98.89 | 16.11 | 15.82 |
| FY 2018-19 | 13803.71 | 11826.68 | 654424 | 637641 | 14.32 | 14.50 | 97.44 | 16.52 | 15.36 |
| FY 2019-20 | 13880.96 | 12021.35 | 714458 | 656362 | 13.40 | 14.25 | 91.87 | 20.44 | 15.06 |
| FY 2020-21 | 13287.59 | 11432.59 | 683958 | 673707 | 13.96 | 14.00 | 98.50 | 15.25 | 14.77 |
| FY 2021-22 | 14581.68 | 12518.80 | 783863 | 769259 | 14.15 | 13.75 | 98.14 | 15.75 | 14.48 |
| FY 2022-23 (upto Dec, 2022) | 12073.95 | 10297.45 | 674636 | 596311 | 14.71 | 13.50 | 88.39 | 24.62 | 14.24 |

From the above Table, it has been observed that during FY 2021-22 the Petitioner has not made efforts in reducing its distribution losses when compared to distribution losses in previous FY. Moreover, the collection efficiency in FY 2021-22 i.e. 98.14% has reduced vis-a-vis FY 2020-21 level i.e. 98.50% due to which it was not able to bring its actual AT&C losses below the approved AT&C loss levels.

It is evident from the above Table, that the Petitioner has not made its sincere efforts in reducing its distribution losses and increasing the collection efficiency in FY 2021-22 due to which it was not able to bring its distribution losses and AT&C losses below the approved distribution loss and AT&C loss levels.

Further, from the above Table it has been observed that the distribution losses in FY 2022-23 (upto December, 2022) is 14.71% which is more than the approved distribution loss levels. Moreover, the actual AT&C losses for the above period are close to twice the computed AT&C losses (calculated on the basis of approved level of distribution losses & collection efficiency in respective Tariff Orders) due to low collection efficiency and high distribution losses.

From the above Table, it is observed that the collection efficiency in FY 2021-22 & FY 2022-23 (upto Dec, 2022) were 98.14% & 88.39% respectively, in this regard, as discussed in above section of Revenue realisation per unit sold, the petitioner has excluded the realisation against Delayed Payment Surcharge, Electricity Duty & Green Energy Cess in Format-7 of CPM Reports . However, while calculating its AT&C losses respectively the same have been included. This shows that pragmatically the real AT&C losses would be to the tune of much higher than the figures depicted by the distribution licensee in its Commercial Performance Monitoring reports.

Further, with regard to the collection efficiency performance during FY 2022-23 (upto 31.12.2022), the Commission has observed that despite Commission's specific directions for recovery of revenue whole through the year still the collection efficiency data is depicting that the revenue collection drive would be conducted rigorously during the fag end of the financial year only and sincere efforts at Petitioner's end are missing during the initial and mid period of the financial year.

The Commission is of the view that the major component of AT&C losses are the distribution losses which basically comprises of Technical and Commercial losses. Further, the Commission is of the view that since Technical & Commercial losses are more in LT network in comparison to HT network, hence, it is apparent that in order to substantially reduce AT&C losses, the Petitioner needs to strengthen its LT network with energy efficient devices and energy conservation measures.

The Commission has observed that the percentage losses indicated in the Commercial Performance Monitoring Report are an average of losses occurring in HT/EHT and LT consumers. The Commissions is of the view that the marginal AT&C losses occurring at HT/EHT consumers end are compensating the losses occurring at LT consumers end, therefore, the actual losses occurring against LT consumers would be way above the AT&C losses shown in the Table status of AT&C losses given above.

In light of the above, it should be the foremost endeavour of the licensee to reduce the distribution losses at LT level and increase its collection efficiency on priority basis. The Petitioner should take up the following works at the earliest for reducing the AT&C losses:

1. The Petitioner must conduct planned regular actions for early recovery of outstanding arrears.

2. The Petitioner must analyse Key/High value consumers having load factor less than 10% on a regular basis and lay down mechanism for checking inspection/tamper analysis/ condition monitoring of MRI reports and metering equipment.
3. The Petitioner must ensure that all the meters of the consumers are read and their bills prepared and distributed within time. The Petitioner shall also ensure that no provisional bills namely NA/NR are issued for more than two billing cycles in accordance with the provisions of UERC (The Electricity Supply Code, Release of New Connections and Related Matters) Regulations, 2020 and amendments issued from time to time. Divisional head must be held accountable for not controlling provisional billings. The Petitioner should make efforts to always issue computerized bills to its consumers requiring no human intervention.
4. The Petitioner should prepare a time bound plan/programme to replace all the bare overhead conductors with insulated aerial bunched conductors (AB conductor) in theft prone areas alongwith effective monitoring mechanism for its implementation.
5. The Petitioner should also prepare a time bound plan/programme for segregation of rural feeders into Agriculture and Non-Agriculture load basis which would be an effective measure for segregation of theft/pilferage of electricity in Agriculture and Non-Agricultural usage in villages/rural areas.
6. The Petitioner should make extra efforts to get the arrears realised from the defaulting Government departments. The Commission is of the view that the Petitioner should promote and implement the Smart metering so that revenue recovery can be enhanced and problems related to accumulation of arrears is resolved.
7. Replace the GI wire based power distribution system with suitable conductor so that technical losses in the system can be reduced and the same would also help in improving the quality of power supply to the consumers.
8. The Petitioner should ensure that meters are installed at each point of energy accounting and are kept in proper working condition.
9. The Petitioner should also develop GIS based consumer indexing database in areas other than the areas covered under R-APDRP/IPDS, which shall be helpful in providing prompt services to consumer and shall be helpful in planning the new connections, transformer augmentation, phase change, localising fault, supply restoration and other services to consumers necessarily provided by any distribution utility having its vision & mission aligned to provide quality consumer services.

## 6.5 Commission's Analysis and Directions on Financial Performance

The Commission has been monitoring & reviewing the performance of the Petitioner based on the information/reports submitted by it. The Commission in its earlier Tariff Orders carried out the analysis of financial performance of UPCL based on its statement of accounts in certain key areas. In line with the same methodology, the key performance ratios after taking into account the financial performance of UPCL in FY 2021-22 based on the audited financial statements are detailed below.

### 6.5.1 *Liquidity Ratio*

Liquidity ratio analyzes the ability of a company to pay off both its current liabilities as they become due as well as their long-term liabilities as they become current. In other words, these ratios show the cash levels of a company and the ability to turn other assets into cash to pay off liabilities and other current obligations.

Liquidity is not only a measure of how much cash a business has. It is also a measure of how easy it will be for the company to raise enough cash or convert assets into cash. Assets like accounts receivable, trading securities, and inventory are relatively easy for many companies to convert into cash in the short term. Thus, all of these assets go into the liquidity calculation of a company.

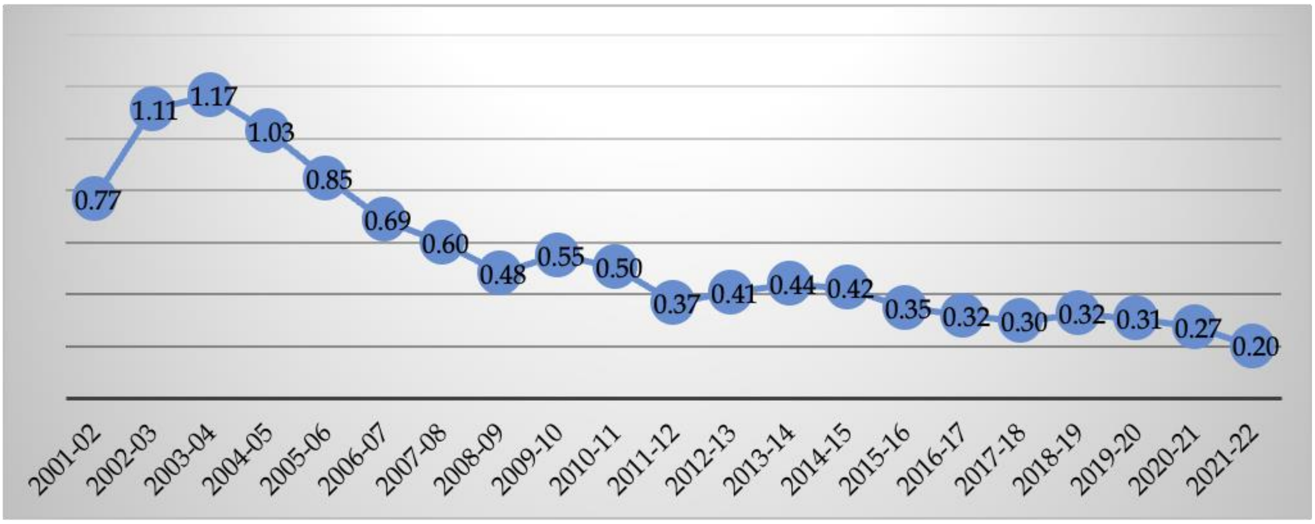
#### *6.5.1.1 Quick Ratio or Acid Test Ratio*

It is the ratio of (current asset – inventories) and current liabilities. The quick ratio or acid test ratio is a liquidity ratio that measures the ability of a company to pay its current liabilities when they become due with only quick assets. Quick assets are current assets that can be converted to cash within 90 days or in the short-term. Cash, cash equivalents, short-term investments or marketable securities and current accounts receivable are considered quick assets excluding inventories.

The quick ratio is often called the acid test ratio. The acid test shows how well a company can quickly convert its assets into cash in order to pay off its current liabilities. It also shows the level of quick assets to current liabilities.

Higher quick ratios are more favourable for companies because it shows that there are more quick assets than current liabilities. A company with a quick ratio of 1 indicates that quick assets equals current liabilities. This also shows that the company could pay off its current liabilities without selling any long-term assets.

**Chart 8: UPCL Quick Ratio from FY 2001-02 to FY 2021-22**



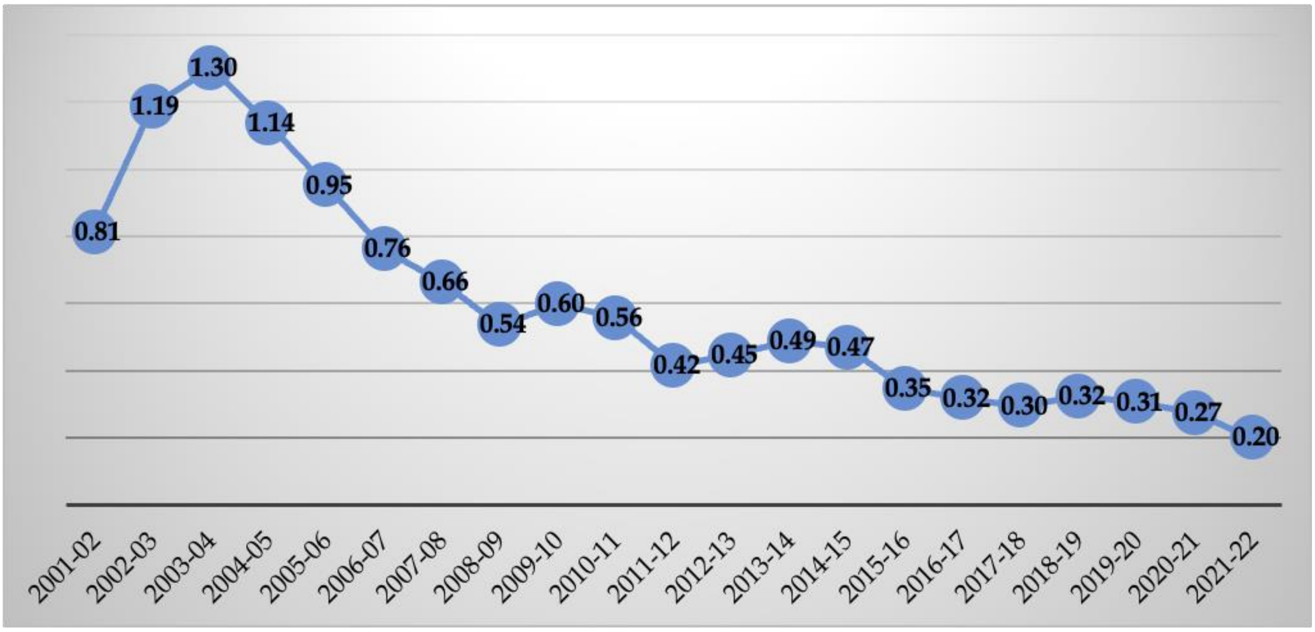

As can be seen from above graph, UPCL's Quick Ratio was almost 1 in the FY 2002-03 & FY 2003-04 and thereafter, shows a downward linear trend in the ensuing years, thus, showing the Corporation's inability to maintain its liquidity over a period of time, the primary reasons for the same could be its inability to realise its dues from the consumers and in turn discharging the current liabilities which are also increasing. Further, based on the financial performance of UPCL in FY 2021-22, the situation has further deteriorated, and the ratio has decreased from 0.27 in FY 2020-21 to 0.20 in FY 2021-22, which does not appears to be a good sign as far as this ratio is concerned.

#### *6.5.1.2 Current Ratio*

It is the ratio of current assets and current liabilities. The current ratio is a liquidity and efficiency ratio that measures a firm's ability to pay off its short-term liabilities with its current assets. The current ratio is an important measure of liquidity because short-term liabilities are due within the next year, thus, implying that a company has a limited amount of time in order to raise the funds to pay for these liabilities. Current assets like cash, cash equivalents, marketable securities and inventories can easily be converted into cash in the short term. This means that companies with larger amounts of current assets will more easily be able to pay off current liabilities when they become due without having to sell off long-term, revenue generating assets.

A higher current ratio is always more favourable than a lower current ratio because it shows the company can more easily discharge the current liabilities. A Current Ratio of less than 1 indicates a high working capital leveraging and highly risky position since it indicates that the Current Liabilities are not fully backed up by the Current Assets and in the event of default, the Company may resort to selling its Assets to meet out its debts.

**Chart 9: UPCL Current Ratio from FY 2001-02 to FY 2021-22**




As can be seen from the above graph, apart from initial few years upto FY 2004-05, UPCL is not able to maintain its current assets in proportion to its current liabilities, thus, showing a highly leveraged position on the part of the Corporation. The current ratio mainly indicates that how much times the short-term liabilities are backed by the current assets, in case of UPCL as can be seen from above graph, in the past five years UPCL is not able to maintain the said ratio to even as low as 0.5 which is way low than the industry standard of 1.

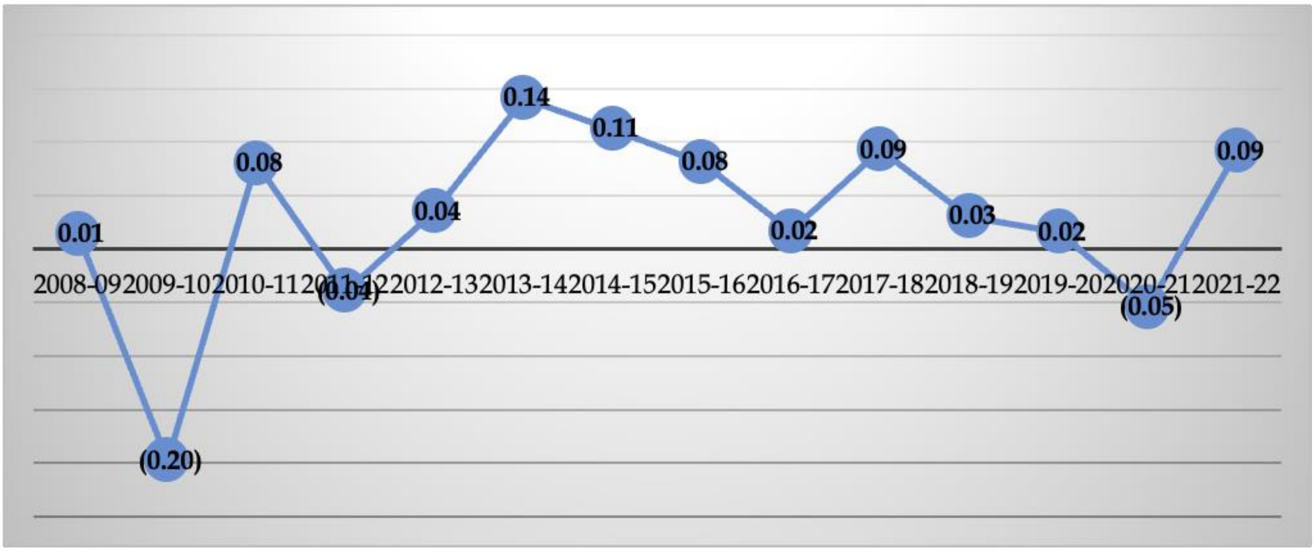
This indicates that for discharging its current liabilities, UPCL will either have to resort to liquidating its long-term assets or borrow additional working capital loans. This also is an indicator that on one side UPCL has failed to recover its current and past dues from the consumers efficiently and on the flip side the current liabilities have been used to finance the long-term assets of UPCL. The Commission has been pointing out towards this issue in its previous Tariff Orders that assets are being financed through current liabilities. UPCL has been claiming every year that internal resources are being used to finance certain asset additions. The internal resources in UPCL's case are nothing but funds which should have been used to discharge its current liabilities like Govt. Dues (Royalty, duties, PDF etc), instead have been utilised in creation of long-term assets.

In this regard, **the Petitioner is directed to carry out the age-wise analysis of its current liabilities outstanding as on 31.03.2022 and based on the ageing analysis determine how much of the same would be required to be discharged and how much excess provision exists in the same so that the same may be reversed and submit the same to the Commission within 3 months from the date of Order.**

### 6.5.1.3 *Operating Cash Flow Ratio*

It is the ratio of cash flow from operation and the current liabilities. It is a measure of how well current liabilities are covered by the cash flow generated from a company's operations. The operating cash flow ratio can gauge a company's liquidity in the short term. Using cash flow as opposed to income is considered a cleaner, or more accurate measure to analyse the financial health of a company & also its operations. The operating cash flow ratio is a measure of the number of times a company can pay off current debts with cash generated in the same time period. A higher number means a company can cover its current debts more times, which is a good thing. Companies with a high or increasing operating cash flow ratio are in good financial health. Those that are struggling to cover liabilities may be in trouble, at least in the short term.

**Chart 10: UPCL Operating Cash Flow Ratio from FY 2008-09 to FY 2021-22**




As can be seen from the above graph, cash flow from operating activities is hardly able to meet its current liabilities. UPCL is struggling to cover its current liabilities, at least in the short term. In FY 2009-10 and FY 2011-12, cash flow operating ratio is negative due to huge losses on account of high distribution losses and poor collection efficicency resulting into negative Cash flow from Operating Activities. Further, in FY 2020-21 this ratio has again become negative. In all the years the ratio is less than 1 which indicates that the company has generated less cash in the period than it needed to pay off its short-term liabilities. This may signal a need for more capital.

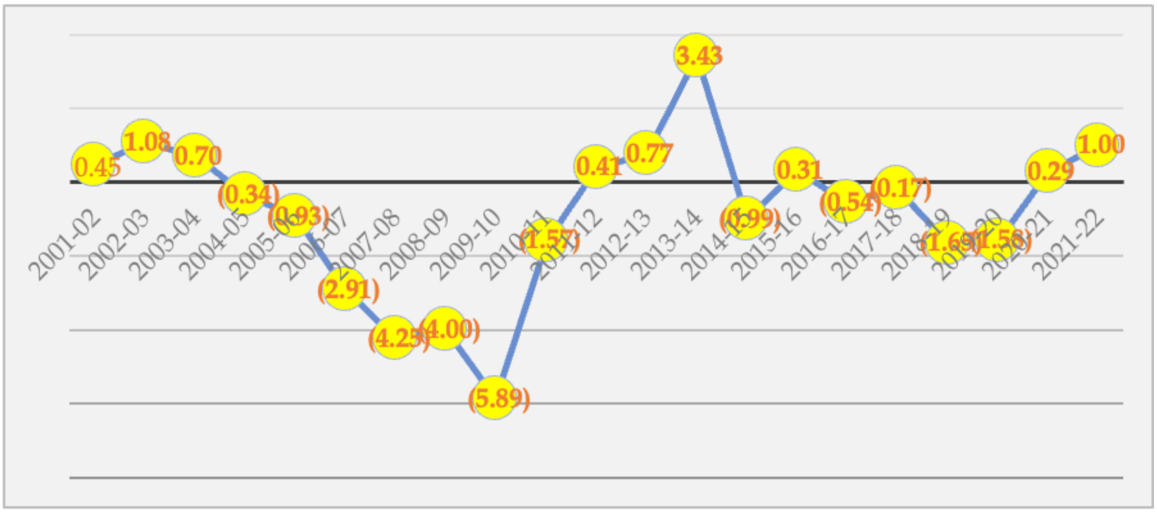
### 6.5.2 *Solvency Ratio*

Solvency ratios, also called leverage ratios, measures a company's ability to sustain operations indefinitely by comparing debt levels with equity, assets, and earnings. In other words, solvency ratios identify going concern issues and a firm's ability to pay its bills in the long term. Solvency ratios focusses more on the long-term sustainability of a company instead of the current liability payments. Better solvency ratios indicate a more creditworthy and financially sound company in the long-term.

#### *6.5.2.1 Interest Coverage Ratio*

It is a ratio of EBIT (operating Income) during a given period and the amount a company spends in interest payment on its debts during the same period. The interest coverage ratio is used to determine how easily a company can pay interest on outstanding debt. Essentially, the interest coverage ratio measures how many times over a company could pay its current interest payment with its available earnings. In other words, it measures the margin of safety a company has for paying interest during a given period, which a company needs in order to survive future (and perhaps unforeseeable) financial hardship should it arise. A company’s ability to meet its interest obligations is an aspect of a company’s solvency, and is, thus, a very important factor in the return for shareholders. The lower a company’s interest coverage ratio is, the more its debt expenses burden on the company. When a company's interest coverage ratio is 1.5 or lower, its ability to meet interest expenses may be questionable. 1.5 is generally considered to be a bare minimum acceptable ratio for a company and a tipping point below which lenders will likely refuse to lend the company more money, as the company’s risk for default is too high. Moreover, an interest coverage ratio below 1 indicates the company is not generating sufficient revenues to service its interest expenses. If a company’s ratio is below 1, it will likely need to spend some of its cash reserves in order to meet the difference or borrow more, which will be difficult for reasons stated above. Otherwise, even if earnings are low for a single month, the company risks falling into bankruptcy. Generally, an interest coverage ratio of 2.5 is often considered to be a warning sign, indicating that the company should be careful not to dip further.

**Chart 11: UPCL Interest Coverage Ratio from FY 2001-02 to FY 2021-22**



As can be seen from the above graph, UPCL was suffering losses in most of the financial years and was hardly able to meet its interest liability. The standard ratio is 1.5 times and it can be seen from the above graph, that only in FY 2013-14 UPCL earned sufficient profit to maintain the ratio above the standard ratio.

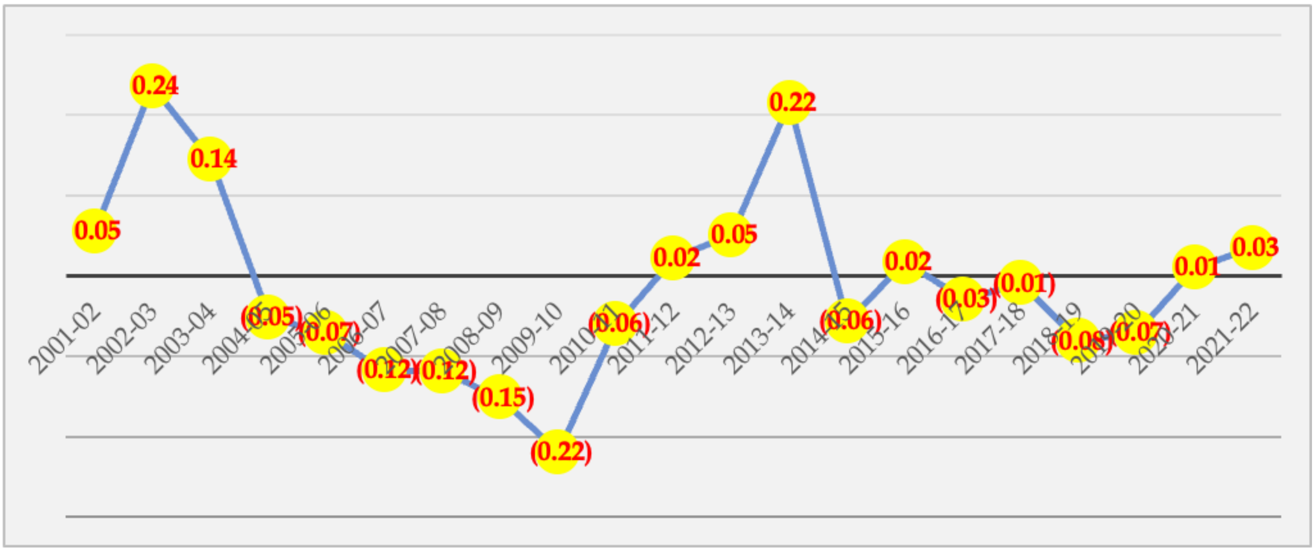
### 6.5.3 *Profitability Ratio*

Profitability ratios compares income statement accounts to show a company's ability to generate profits from its operations. Profitability ratios focus on a company's return on investment in inventory and other assets. These ratios basically show how well companies can achieve profits from their operations. Profitability is also important to the concept of solvency and going concern.

#### *6.5.3.1 Return on Total Assets*

It is a ratio of EBIT during a given period and average Fixed Assets. The ratio is considered to be an indicator of how effectively a company is using its assets to generate earnings before contractual/statutory obligations are paid. The greater a company's earnings in proportion to its assets (and the greater the coefficient from this calculation), the more effectively that company is said to be using its assets. This ratio allows to see the relationship between organisation’s resources and its income, and it can provide a point of comparison to determine if an organization is using its assets more or less effectively than it had done previously.

**Chart 12: UPCL Return on Assets Ratio from FY 2001-02 to FY 2021-22**

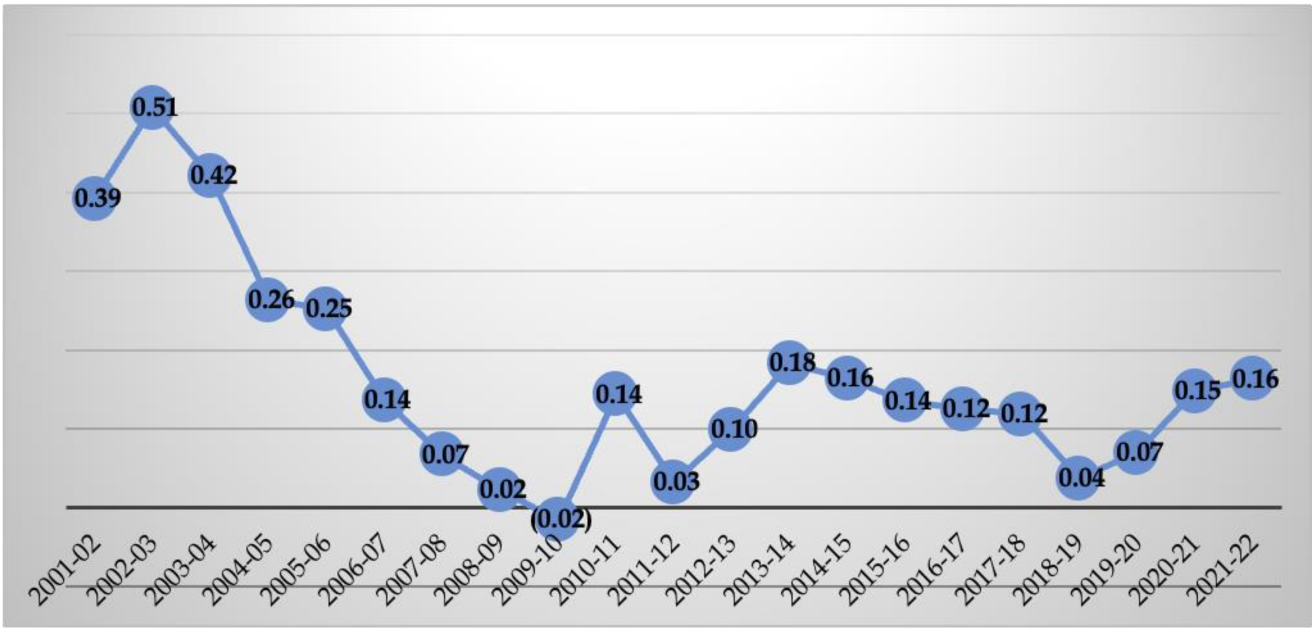



As can be seen from the above graph, UPCL earnings through its operations is not in parity with the investment made in building up its fixed assets over a period of time.

#### *6.5.3.2 Gross Margin Ratio*

Gross margin is the difference of average sales revenue and the average direct cost, ie. Power purchase cost in case of the Petitioner. Accordingly, gross margin ratio is the ratio of gross margin and the operating expenses of the company. Higher gross margin ratios are more favorable indicating that the company will have more money to pay its operating expenses.

**Chart 13: UPCL Gross Margin Ratio from FY 2001-02 to FY 2021-22**



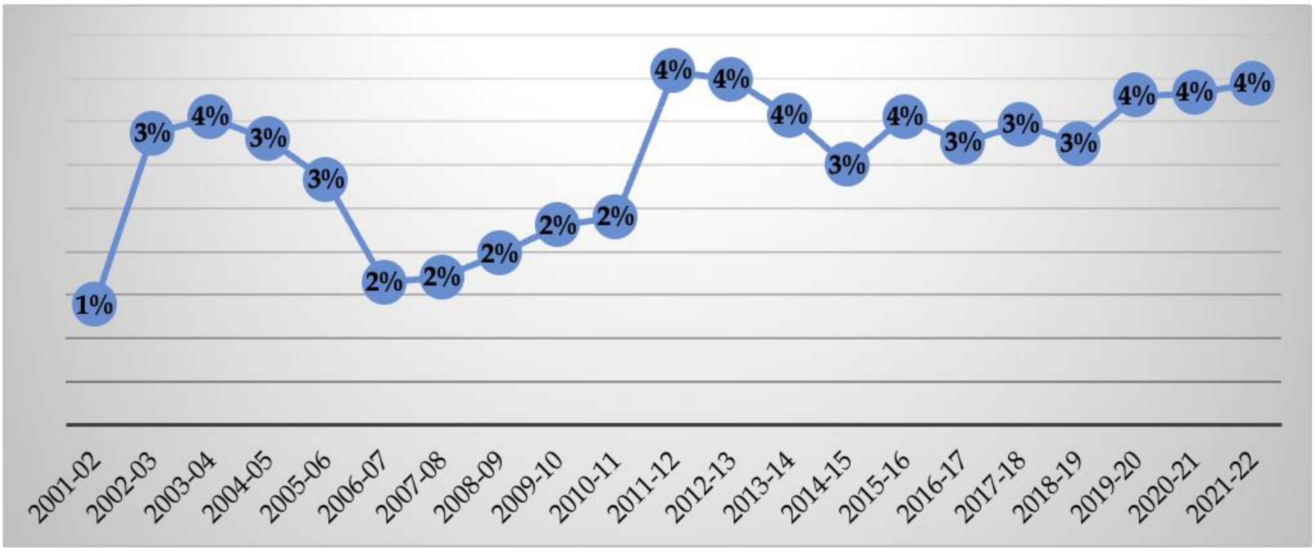

As can be seen from above graph, UPCL is having a positive gross margin ratio except for FY 2009-10. This indicates that the company is able to sell power at a rate higher than the procurement cost of the same, however, the overall ratio is not on the much higher side, with a maximum going upto 0.51 in FY 2002-03, indicating that the company would be left with meagre funds to meet its operational cost other than power procurement expense, and may land up in facing losses over a period of time.

### 6.5.4 *Operating or Activity Ratio*

#### *6.5.4.1 Repair & Maintenance to Net Fixed Assets*

The maintenance expense to fixed assets ratio allows to understand the age or condition of the company's equipment. An increase to a company's repairs and maintenance expense to fixed assets ratio over time can signal ageing equipment or assets that are being pushed to their operating limits.

**Chart 14: UPCL R&M to Net Fixed Asset Ratio from FY 2001-02 to FY 2021-22**



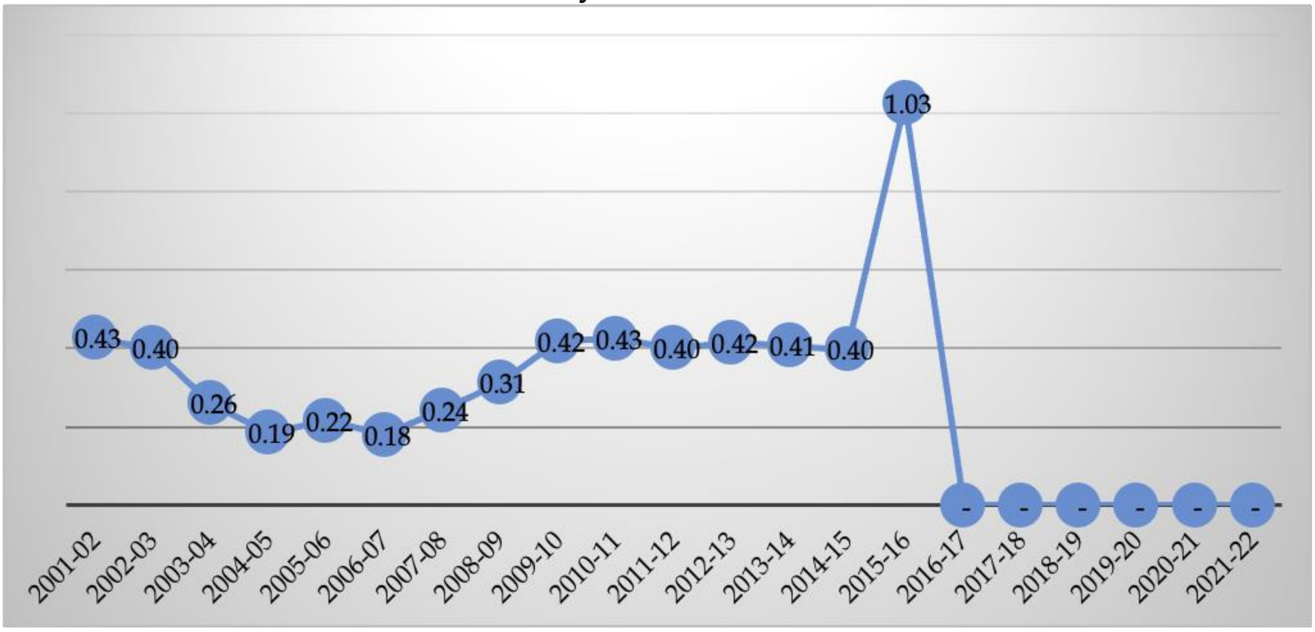

It can be seen from the above graph, that UPCL is incurring R&M expenses on an average of 3% - 4% of the Net Fixed Assets. UPCL appears to be performing fairly on this ratio aspect merely on account of the reason that it has been continuously receiving funds (grants) from GOI under various schemes of MOP, GOI namely APDRP, RAPDRP, IPDS etc. which besides covering development of new substaions/lines also include funding on augmentation/strengthening of old/existing assets, thus, reducing the requirements of Repair & Maintenance of old assets, as the same are either replaced by new assets or are augmented & strengthened.

#### *6.5.4.2 Repair & Maintenance to Inventory Ratio*

This ratio depicts the relation between the R&M expenses to Net Inventory maintained by the Corporation. In case of UPCL, being an Electricity Distribution Company, the inventory is not converted into sales as part of the operations carried out by the entity. Further most of the project works are getting done by the Corporation on turn-key basis, wherein the material and labour is supplied by the Contractor, thus denying the need for maintenance of inventory for said purpose. The maintenance of inventory would be required by the Corporation for the purposes of meeting its requirement of Repair & Maintenance works as may be carried out from time to time during the course of its operation. In view of the above, the calculation of inventory turnover ratio would not hold good for the discoms like UPCL wherein the inventory is being maintained not for the purposes of sale, but to meet out the expenses arising in the course of operation. Hence, a customized ratio has been worked upon to analyse the relation between the inventories maintained by the entity and how much of the same is being actually used during the year for meeting the R&M expenses while carrying out the operations of the entity.

The formulae for the same is as follows: R&M Expenses/Average Inventory.

**Chart 15: UPCL R&M to Inventory Ratio Trend from FY 2001-02 to FY 2021-22**




As can be seen from above graph UPCL is having an average inventory ratio between 0.30 to 0.40, which indicates that almost 40% of the average inventory maintained by the company is being consumed for meeting out the R&M expenses during the year which also suggests that inventory being maintained by UPCL is at a very high level. The capital inventory of Rs. 294.38 Crore as on 31.03.2022 which is around 20.50% of the net additions to the GFA of Rs. 1430.87 Crore during FY 2021-22 suggests that UPCL in FY 2021-22 has converted its inventory for capital works into Fixed Assets as the capital inventory in FY 2020-21 of Rs. 545.71 Crore was almost 50% of the net additions during the said year. The Commission finds inventory levels maintained by UPCL as moderately high.

As can be seen from the above graph, during FY 2015-16, FY 2016-17, FY 2017-18, FY 2018-19, FY 2019-20, 2020-21 and FY 2021-22 the aforesaid ratio has shown an absurd variation. This is because of the reason that in FY 2015-16, FY 2016-17, FY 2017-18, FY 2018-19, FY 2019-20, FY 2020-21 and FY 2021-22 UPCL has shown nil inventory under Current Assets in its audited financial statements, rather it had shown the entire amount under the Fixed Assets as inventory for Capital Works.

In this regard, UPCL has given disclosure in its audited financial statements for showing the entire inventory under Fixed Assets as reproduced below:

*"Based on the consumption pattern of inventory comprising of stores and spares in the past, company is of the view that substantial portion of such inventory shall be consumed in future for construction/erection of the capital assets. Since the identification/determination of inventory to be consumed for other than capital purpose is not possible at this stage, the whole inventory of stores and*

*spares has been classified as "Inventory for Capital Works.*

*The company has not identified any obsolete, slow moving and dead stock except for those lying in the Centralised Stores Division as all the items in the store are usable inspite of the fact that they are very old."*

It appears that inventory levels have been so maintained so as to consume them in future for construction/erection of the capital assets. For future consumption maintaining such inventory level is a risky proposition as not only funds are blocked in purchasing the inventory but also the inventories carry holding costs. There is also a risk of loss/damages and obsolescence in technology if the inventories remain in stock for a long period of time as in power sector technologies are evolving with time.

**Considering this as a prima-facie lapse on the part of the Petitioner with regard to inventory management, the Petitioner is directed to submit the following details within one month of the date of Order failing which appropriate action will be initiated under the Act:**

a) **List of inventory as on 31.03.2022.**
b) **The accounting policies adopted in measuring inventories, including the cost formula used;**
c) **Basis on which inventories issued: FIFO/LIFO/etc. and reason for choosing the same.**
d) **Whether any inventory classification, such as ABC analysis has been done? If yes the same may be submitted and if no, reason for the same may be furnished?**
e) **Whether the inventories are verified physically? If yes, the periodicity of the same, alongwith the report of last physical verification. If physical verification is not being conducted reasons for the same?**

### 6.5.5 *Efficiency Ratio*

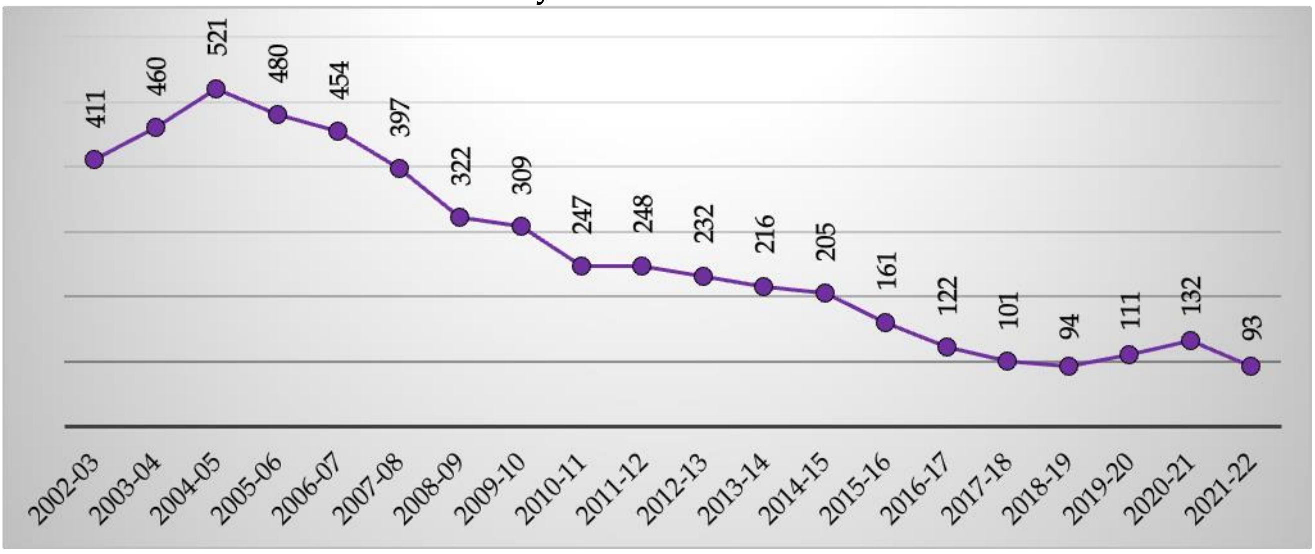
The efficiency ratio is typically used to analyze how well a company uses its assets and liabilities internally. An efficiency ratio can calculate the turnover of receivables, the repayment of liabilities, the quantity and usage of equity, and the general use of inventory and machinery.

#### *6.5.5.1 Average Collection Period*

Number of days of receivable represents collection period or age of receivables for distribution utilities. This measures effectiveness of a distribution utilities credit and collection efforts in allowing credit to customers, as well as its ability to collect cash from them. This comparison is used to evaluate how long customers are taking to pay a company. A low figure is considered best, since it means that a business is locking up less of its funds in accounts receivable, and so can use the funds for other purposes. Also, when receivables remain unpaid for a reduced period of time, there is less risk of payment default by customers. It is calculated based on the following formulae:

Average Collection Period: 365x(Average account receivables÷Revenue from sale of power).

**Chart 16: UPCL Number of days of Receivable from FY 2002-03 to FY 2021-22**




Although, the collection period of receivables of UPCL shows a trend of improvement, it has come down from 520 days in FY 2004-05 to 93 days in FY 2021-22, which is within the range of national average of receivables in FY 2013 of 117 days. The collection period of 93 days reflects that UPCL takes almost 3.1 months to collect its dues. This is an area of concern and needs immediate and corrective action which is not a good sign for utility like UPCL, which is facing cash crunches to meet its obligations of power purchase and other operational expenses. There are other utilities in the country which have a collection period of less than 60 days. **The Petitioner is directed to submit within 3 months, an action plan to improve its collection period.**

### *6.5.5.2 Collection Efficiency Ratio*

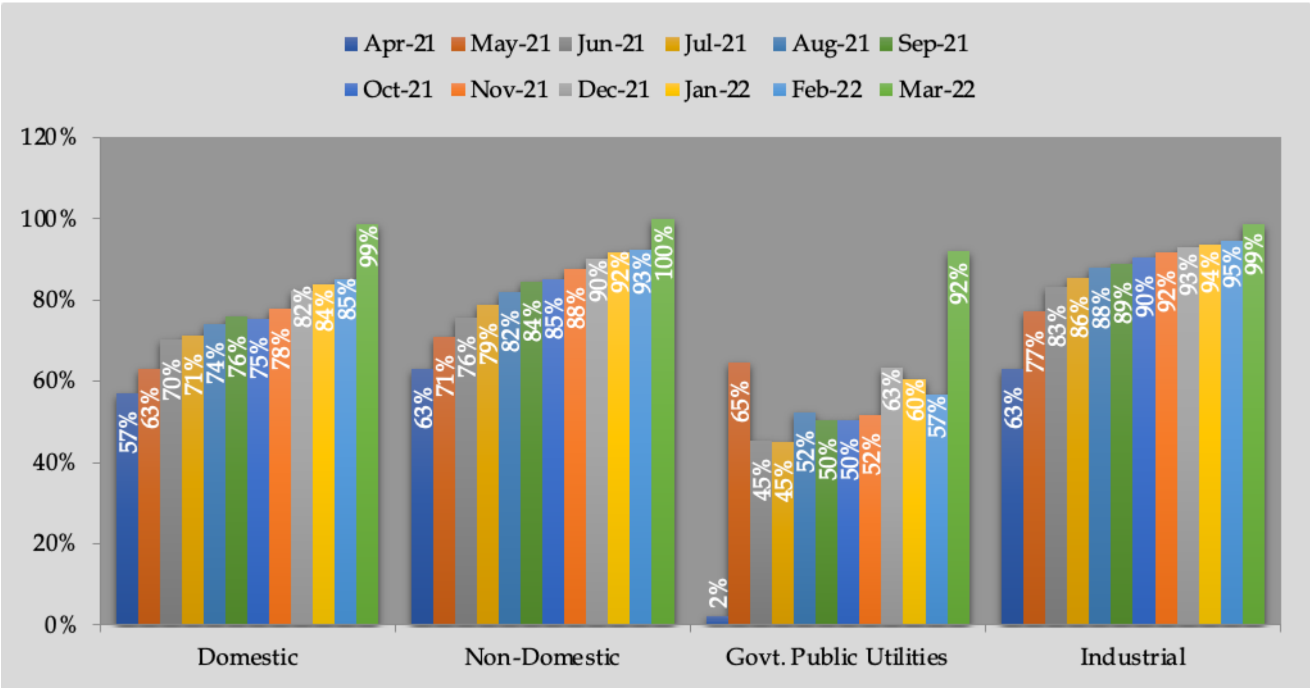
The Collection efficiency ratio represents the efficiency and effectiveness of the dues recovery processes of the entity on periodic basis. With respect to power distribution/retail sector, a higher ratio represents that there are well established procedure for recovery mechanism and the sales of the company are being channelled through metered connections. On the contrary, a lower ratio may represent a very lenient approach of the Corporation in recovering its due from the consumers and lack of stringent processes to deal with the defaulting consumers.

The Commission in its MYT Order dated 27.02.2019, while approving the Business Plan of UPCL for third control period, has approved the collection efficiency for FY 2021-22 as 99.15%.

In the present case, the Commission has calculated the Collection Efficiency ratio of UPCL for FY 2021-22 under the four broad Tariff categories, viz. Domestic Consumers, Non-Domestic Consumers, Industrial Consumers and Govt. Utilities, based on the CS-4 report submitted by UPCL and revenue collection and realization data submitted by it for FY 2021-22 during the current tariff proceedings .

The Collection Efficiency ratio has been calculated based on the following formulae = **Realisation of (Current Assessment+Arrears)÷Current Assessment**

**Chart 17: UPCL Collection Efficiency for FY 2021-22**




As can be seen from the above graph, compared to overall Collection Efficiency approved by the Commission for FY 2021-22 of 99.15%, UPCL has been able to meet the same only in the last month of FY 2021-22 in case of Industrial Consumers and Non-domestic consumers, however, UPCL is barely able to achieve the approved level of collection efficiency for other categories as shown above. Further as can be seen from above, the rising graphs on monthly basis clearly indicates that during the initial months of the year the collection efficiency ranges between 55% to 80%, which is gradually increasing towards the later parts of the year. Moreover, as far as collection from Govt. Utilities is concerned, the same is too lower in the initial months and is ranging in the average of 02%-60% during the year and going upto a maximum of 92% in the month of March'22.

This trend clearly shows that the organization will be facing financial crunches during the initial months due to lack of adequate collection and may have to resort to outside borrowings to meet the cost of operations. This in turn will lead to imposition of additional financial burden on the organization in the form of interest cost and ultimately the effect of inefficiency would have to be borne by the consumers. If proper measures to ensure the timely collection of revenues from the consumers is taken right from the beginning and also timely action against the defaulters are taken then a discipline in collections could have been maintained and the required funds to meet the operational needs of the organization would be readily available in the form of revenue from sales at no extra cost.

It has been observed based on the Petitions submitted by the UPCL and also on the basis of audited financial statements of various years, that UPCL has been resorting to over draft (OD) funding at high rate of interest to meet its operation cost which could surely be avoided if a proper discipline in collection of the assessed revenue is maintained on periodic basis. **In this regard, the Commission directs UPCL to submit a plan to demonstrate as to how it will work in the direction of improving its actual collection so that the gap between the actual collection efficiency and the collection efficiency approved by the Commission may be brought to minimum.**

### 6.5.6 *Conclusion*

After analyzing the data related to the Petitioner's Commercial Performance, it is concluded that the Petitioner has to take immediate action in eliminating Ghost consumers, Provisional billing cases (NA/NR/IDF), replacing mechanical meters which are adversely inflicting upon the Petitioner's commercial & financial viability.

The performance improvement can be done by judiciously allocating the responsibilities in field as well as at Corporate level. Moreover, the Petitioner should understand the significance of Commercial Performance Monitoring Reporting mechanism and should bring sincerity in its approach towards it. Further, a sense of belongingness/ownership has to be inculcated in every employee of the Petitioner's Organisation.

Further, it is imperative to highlight that the Commercial Performance Reporting mechanism not only brings transparency in the system but also is an eye-opener for the Petitioner for taking timely corrective actions. Therefore, authenticity of reports is of paramount importance. The Petitioner is required to strengthen its Commercial Wing so that timely authentic reports are furnished to the Commission and it shall also help in prompt dissemination of information within the organization which shall be beneficial for the Petitioner as well as for consumers of the State.

Considering the business spread of the Petitioner among its constituent divisions, the Commission is of the view that performance monitoring of the Petitioner should be done at its Distribution Division levels. For this purpose, it is imperative that Division-wise target setting on each parameter should be provided by the Petitioner in the first month of the Fiscal Year itself, so that the whole Technical & Commercial monitoring process becomes meaningful with conclusive inference on quantitative improvement on month on month basis.

# 7. Commission's Directives

The Commission in its previous Orders had issued a number of specific directions to the Petitioner with an objective of attaining operational efficiency, efficient manpower deployment and streamlining the flow of information. These objectives would be beneficial not only for the sector but also for the Petitioner's Company, both in terms of short-term and long-term perspective. These directions aim at creating a conducive, competitive and healthy environment for the Petitioner to provide good quality of electricity supply and service to the consumers of Uttarakhand at optimum and affordable costs. This Chapter deals with the compliance status and the Commission's views thereon on the directives issued vide Tariff Order for FY 2022-23 as well as the summary of new directions (given in preceding Chapters of this Order) for compliance and implementation by the Petitioner.

## 7.1 Compliance to the Directives Issued in Tariff Order for FY 2022-23

### 7.1.1 *Performance Report*

The Commission directed the Petitioner to submit the monthly Commercial Performance Monitoring reports strictly as per prescribed formats by the 25th day of the following month and quarterly targets as per prescribed formats -2 & 3 along with Commercial Performance Monitoring report for the month of April, 2022.

***Petitioner's Submissions***

The Petitioner submitted that the commercial performance monitoring report in the prescribed formats for the month of August 2022 has been submitted to the Commission vide letter 4738/CE(Comml.)/UPCL/SE-II/BII (1)/CPM, dated November 17, 2022. The Petitioner further submitted the division-wise quarterly targets for NA/NR/IDF/ADF/RDF/Mechanical Meters/Ghost consumers for FY 2022-23 to the Commission vide letter No 2821/CE (Comml.)/UPCL/SE-II/BII (1) /CPM, dated July 13, 2022. The targets submitted is as shown in the following table:

**Table 7.1: Quarterly targets of NA/NR/IDF/ADF etc. for FY 2022-23**

| Particulars | At the end of Q-1 | At the end of Q-2 | At the end of Q-3 | At the end of Q-4 |
|---|---|---|---|---|
| NA cases | 1.41% | 1.22% | 1.09% | 0.97% |
| NR cases | 0.55% | 0.49% | 0.45% | 0.41% |
| IDF cases | 1.90% | 1.71% | 1.58% | 1.44% |
| Mechanical Meters | Nil | Nil | Nil | Nil |
| Ghost Consumers | Nil | Nil | Nil | Nil |

**Note:** There are no Mechanical Meters and Ghost Consumers available in the system.

The status of performance parameters as of August, 2022 as submitted by the Petitioner is as follows:

**Table 7.2: Status of NA/NR/IDF cases as on Aug., 2022 vis-à-vis June, 2022**

| Particulars | At the end of June, 22 | At the end of August, 22 |
|---|---|---|
| NA cases | 1.82% | 1.82% |
| NR cases | 1.47% | 1.52% |
| IDF cases | 2.23% | 2.00% |

The Commission observes that the Petitioner has not been punctual in its submissions of monthly reports. **Therefore, the Commission directs the Petitioner to submit timely monthly Commercial Performance Monitoring reports strictly in the prescribed formats on regular basis, so as to reach the Commission latest by 25th day of the following month and also submit the Quarterly Targets as per the prescribed Format - 2 & 3 alongwith the Commercial Performance Monitoring report for the month of April, 2023.**

### 7.1.2 *Sales*

The Commission directed the Petitioner to record all the sales on assessment basis from FY 2021-22 in proper format with supporting documents, which shall be scrutinized in future tariff filings and inability to furnish such data may attract appropriate action under the Act.

*Petitioner's Submission*

UPCL submitted that vide its letter no. 1313/UPCL/RM/C-14, dated April 04, 2018, it has already directed all its concerned field officers to carry out the corresponding corrections in sales (units) in cases where sales / billing (Rs.) is withdrawn. The instructions to this effect had also been circulated to the field officers vide UPCL's, dated July 1, 2017.

UPCL further submitted that vide its letter no. 1672/UPCL/RM/C-18, dated April 25, 2022 it had again directed all the field officers to comply with the direction of the Commission.

The Commission has noted the submissions of the Petitioner. The Commission as discussed in Chapter 3 of this Order while approving sales for FY 2021-22 observed the similar anomalies wherein the ABR for some of the categories was less than the energy charge. The Commission has, therefore, carried out necessary adjustment in the revenue and sales in this regard. **The Commission directs the Petitioner to record all the sales on assessment basis from FY 2022-23 in proper format with supporting documents, which shall be scrutinized in future tariff filings and inability to furnish such data may attract appropriate action under the Act against the officers responsible for the same.**

### 7.1.3 *Load Shedding*

The Commission directed the Petitioner to obtain the prior approval of the Commission for load shedding to be carried out continuously for certain number of hours in a day for 15 or more days.

***Petitioner's Submission***

The Petitioner submitted that no load shedding has been carried out by UPCL in any area continuously for certain number of hours in a day for 15 or more days. Further, UPCL submitted that prior approval of the Commission shall be obtained as and when required as per the directions of the Commission. The Petitioner further stated that UPCL has also prepared a policy on power cuts. The policy was approved by the Board of UPCL in the meeting held on July 23, 2015 and submitted the same to the Commission.

The Commission has taken note of the Petitioner's reply. **The Commission, hereby, once again directs the Petitioner to obtain the prior approval of the Commission for load shedding to be carried out continuously for certain number of hours in a day for 15 or more days.**

### 7.1.4 *AT&C Losses*

The Commission directed the Petitioner to submit the division-wise target distribution losses for FY 2021-22 and actual distribution losses for FY 2021-22 by June 30, 2022. Further, the Commission directed the Petitioner to submit the division-wise actual collection efficiency achieved during FY 2021-22 by June 30, 2022.

***Petitioner's Submissions***

The Petitioner in its Petition submitted the desired information was provided vide UPCL's letter no. 2810/UPCL/RM/C-18, dated 12.07.2022.

**The Commission directs the Petitioner to submit the division-wise target distribution losses for FY 2022-23 and actual distribution losses for FY 2022-23 by June 30, 2023. Further, the Commission directs the Petitioner to submit the division-wise actual collection efficiency achieved during FY 2021-22 by June 30, 2022.**

### 7.1.5 *Power Purchase Quantum and Cost*

The Commission directed the Petitioner to seek prior approval of the Commission, in case the variation in power purchase quantum or power purchase cost in any quarter exceeded by more than 5% of the approved power purchase quantum and cost for the respective quarter worked out on pro-rata basis from the total approved quantity and cost for FY 2022-23.

***Petitioner's Submissions***

The Petitioner submitted that Uttarakhand State is presently facing power crisis due to various factors viz less availability of power in the Indian Exchanges because of exceptionally high prices of Coal & Gas on account of international crisis, exceptional temperature rises and consequent demand rise, lower water availability for hydro power plants etc. The incremental power requirement in the first quarter has been a nationwide phenomenon on account of increased economic activity, significant changes in weather leading to creation of low-pressure zones in the Northern Region of the country and overall intense heat wave that gripped almost the entire country. UPCL further submitted the following quarter wise power purchase approved and estimated:

**Table 7.3: Quarterly power purchase for FY 2022-23**

| Quarter of FY 2022-23 | Approved by UERC | | Revised estimate by UPCL | |
|---|---|---|---|---|
| | Power Purchase Quantum (MU) | Power Purchase Cost (Rs. Crore) | Power Purchase Quantum (MU) | Power Purchase Cost (Rs. Crore) |
| April – June | 3782.48 | 1402.16 | 4268.94 | 2127.98 |
| July – September | 4051.88 | 1502.03 | 4152.96 | 1355.77 |
| October –December | 3844.27 | 1425.07 | 4111.36 | 1707.94 |
| January – March | 3678.43 | 1363.59 | 4111.78 | 1754.47 |
| **Total** | **15357.06** | **5692.85** | **16645.04** | **6946.16** |

The Petitioner further submitted that for deviation in power purchase cost and recovery of incremental power purchase cost, UPCL vide its letter no. 222/UPCL/RM/B-25, dated July 20, 2022 had filed a petition before the Commission and the Commission passed an order in the matter on September 28, 2022 approving the recovery of Additional Power Purchase Surcharge amounting of Rs. 379.06 Crore from various categories of consumers for the period from September 1, 2022 to March 31, 2023.

**The Commission, further, directs the Petitioner to seek prior approval of the Commission, in case the variation in power purchase quantum or total power purchase cost in any quarter exceeds by more than 5% of the approved power purchase quantum and cost for the respective quarter worked out on pro-rata basis from the total approved quantum and cost for FY 2023-24 as indicated in the Table below, failing which, the Commission may disallow power purchases so made while Truing up the ARR for FY 2023-24.**

**The Petitioner should put its sincere efforts to procure the deficit energy optimizing the cost of power purchase and reliable power. Further, the procurement should be through transparent process of bidding.**

### 7.1.6 *Fixed Assets Register*

The Commission directed the Petitioner to submit the Fixed Asset Register updated up to FY 2020-21 within 3 months from the date of this Order.

***Petitioner's Submissions***

In compliance to the above directions, the Petitioner submitted the following.

1. The Fixed Assets Registers for the period upto FY 2012-13 had already been submitted to the Commission. These registers were got prepared through a consulting firm, i.e. M/s L.B. Jha & Co., Chartered Accountants, Kolkata.
2. The Fixed Assets Register for the period from FY 2013-14 to FY 2015-16 had been submitted to the Commission vide UPCL's letter no. 1774/UPCL/RM/C-14, dated April 28, 2018.
3. Fixed Assets registers for the FY 2016-17 had been submitted vide UPCL's letter no. 1199/ UPCL/RM/C-14, dated May 15, 2018.
4. Fixed Assets registers for the FY 2017-18 had been submitted vide UPCL's letter no. 3720/UPCL /RM/C-15, dated November 25, 2019.
5. The Fixed Assets Register for FY 2018-19 have been submitted to the Commission vide UPCL's letter no. 2768/UPCL/RM/C-16, dated September 23, 2020.
6. The Fixed Assets Register for FY 2019-20 have been submitted to the Commission vide UPCL's letter no. 1901/UPCL/RM/C-17, dated 14 -07-2021.
7. The work of preparation of fixed assets register for FY 2020-21 was awarded to M/s. RSA & Co. Chartered Accountants, on 13-01-2021. The same has been submitted to the Commission vide UPCL's letter no. 2809/UPCL/RM/C-18, dated July 12, 2022.

**The Commission directs the Petitioner to submit the Fixed Asset Register updated up to FY 2021-22 within 3 months from the date of this Order.**

### 7.1.7 *Reliability Indices*

The Commission once again directs the Petitioner to submit the monthly report on Reliability Indices on regular basis.

***Petitioner's Submissions***

The Petitioner submitted that steps have been taken at Corporate Office to ensure that the said report is submitted to the Commission on regular basis and in time. The report for the month of

September 22 has been submitted to the Commission vide UPCL's letter no. 4811/UPCL/RM/M-SSM, dated November 21, 2022. The targets of reliability indices for FY 2022-23, 2023-24 & 2024-25 as submitted by the Petitioner are as follows:

**Table 7.4: Targets of Reliability Indices in Urban Feeder**

| S.No. | Particulars | FY 2022-23 | FY 2023-24 | FY 2024-25 |
|---|---|---|---|---|
| 1 | SAIFI (Nos./month) | 15.21 | 7.60 | 6.08 |
| 2 | SAIDI (Minutes/month) | 304.17 | 304.17 | 304.17 |
| 3 | MAIFI (Nos./month) | 6.08 | 6.08 | 6.08 |

**Table 7.5: Targets of Reliability Indices in Rural Feeder**

| S.No. | Particulars | FY 2022-23 | FY 2023-24 | FY 2024-25 |
|---|---|---|---|---|
| 1 | SAIFI (Nos./month) | 12.17 | 12.17 | 12.17 |
| 2 | SAIDI (Minutes/month) | 608.33 | 608.33 | 608.33 |
| 3 | MAIFI (Nos./month) | 9.13 | 9.13 | 9.13 |

The actual details of SAIFI, SAIDI & MAIFI are as follows:

**Table 7.6: Actual Details of Reliability Indices**

| Year | SAIFI (No.) | | SAIDI (Minutes) | | MAIFI (No.) | |
|---|---|---|---|---|---|---|
| | Rural | Urban | Rural | Urban | Rural | Urban |
| April, 18 | 35 | 23 | 1120 | 643 | 9 | 7 |
| May, 18 | 49 | 29 | 1631 | 883 | 10 | 8 |
| June, 18 | 47 | 33 | 1326 | 904 | 11 | 11 |
| July, 18 | 49 | 35 | 1350 | 986 | 11 | 11 |
| August, 18 | 45 | 31 | 1303 | 917 | 11 | 11 |
| September,18 | 43 | 30 | 1704 | 965 | 9 | 8 |
| October, 2018 | 34 | 23 | 1182 | 762 | 6 | 7 |
| November, 2018 | 27 | 16 | 825 | 462 | 6 | 6 |
| December,18 | 28 | 19 | 848 | 486 | 6 | 6 |
| January,19 | 33 | 24 | 1098 | 654 | 7 | 6 |
| February,19 | 32 | 23 | 1157 | 658 | 7 | 6 |
| March,19 | 28 | 20 | 890 | 506 | 7 | 5 |
| April,19 | 34 | 25 | 1244 | 677 | 9 | 6 |
| May,19 | 48 | 32 | 1906 | 950 | 11 | 7 |
| June,19 | 49 | 37 | 1819 | 1116 | 11 | 9 |
| July,19 | 63 | 41 | 1566 | 996 | 30 | 12 |
| August,19 | 43 | 32 | 1471 | 809 | 11 | 9 |
| September,19 | 55 | 31 | 1384 | 745 | 16 | 9 |
| October, 19 | 45 | 25 | 996 | 676 | 12 | 7 |
| November,19 | 39 | 21 | 1245 | 593 | 13 | 6 |
| December,19 | 18 | 15 | 853 | 608 | 7 | 6 |
| January,20 | 21 | 18 | 729 | 372 | 7 | 7 |
| February,20 | 19 | 12 | 758 | 475 | 4 | 4 |
| March, 20 | 15 | 9 | 420 | 184 | 6 | 4 |
| April,20 | 28 | 18 | 1006 | 722 | 6 | 5 |
| May,20 | 27 | 17 | 857 | 568 | 6 | 4 |
| June,20 | 39 | 23 | 1127 | 789 | 9 | 7 |
| July,20 | 41 | 25 | 1319 | 865 | 19 | 11 |
| August,20 | 48 | 32 | 1440 | 1006 | 26 | 13 |
| September,20 | 43 | 29 | 1274 | 883 | 22 | 10 |
| October,20 | 57 | 29 | 1252 | 822 | 18 | 8 |
| November,20 | 22 | 19 | 1152 | 730 | 7 | 7 |
| December,20 | 25 | 22 | 1227 | 814 | 9 | 8 |

**Table 7.6: Actual Details of Reliability Indices**

| Year | SAIFI (No.) | | SAIDI (Minutes) | | MAIFI (No.) | |
|---|---|---|---|---|---|---|
| | Rural | Urban | Rural | Urban | Rural | Urban |
| January,21 | 25 | 20 | 1056 | 358 | 10 | 8 |
| February,21 | 23 | 16 | 574 | 238 | 9 | 5 |
| March,21 | 25 | 18 | 748 | 318 | 8 | 6 |
| April,21 | 35 | 25 | 914 | 553 | 10 | 7 |
| May,21 | 38 | 26 | 1073 | 676 | 11 | 8 |
| June,21 | 43 | 29 | 1214 | 691 | 12 | 9 |
| July,21 | 43 | 31 | 1251 | 833 | 14 | 9 |
| Aug,21 | 38 | 29 | 1252 | 674 | 12 | 10 |
| Sep, 21 | 36 | 31 | 974 | 668 | 12 | 10 |
| Oct, 21 | 34 | 25 | 1191 | 809 | 10 | 7 |
| Nov,21 | 29 | 19 | 820 | 418 | 7 | 5 |
| Dec,21 | 32 | 23 | 944 | 552 | 7 | 6 |
| Jan,22 | 33 | 25 | 1191 | 617 | 8 | 7 |
| Feb,22 | 33 | 24 | 1111 | 603 | 9 | 8 |
| March,22 | 34 | 24 | 1297 | 727 | 10 | 8 |
| April, 22 | 43 | 31 | 2065 | 1065 | 12 | 8 |
| May,22 | 56 | 39 | 2026 | 940 | 13 | 8 |
| June,22 | 57 | 38 | 1870 | 987 | 14 | 10 |
| July,22 | 54 | 43 | 1691 | 942 | 12 | 9 |
| August,22 | 52 | 38 | 1779 | 950 | 11 | 8 |
| September, 22 | 48 | 35 | 1242 | 787 | 11 | 8 |

***The Commission has noted the Petitioner's reply on Reliability Indices. The Commission once again directs the Petitioner to submit the monthly report on Reliability Indices on regular basis and also submit the targets of Reliability Indices on the prescribed Format SoP-10 of UERC (Standards of Performance) Regulations, 2022 alongwith its ARR for FY 2024-25.***

### 7.1.8 *Voltage-wise Cost of Supply*

The Commission directed the Petitioner to compute Voltage-wise losses for each category of consumers and submit the data on voltage-wise losses and cost of supply along with next Tariff Petition.

***Petitioner's Submissions***

The Petitioner submitted that presently, voltage wise/category wise losses are not available, and Category wise Tariff has been calculated on the basis of average cost of supply and permissible level of cross subsidy. This is as per Regulation 91 of the UERC Tariff Regulations, 2021. In the absence of availability of voltage wise losses, which is a mix of technical losses and commercial losses, the distribution losses are required to be charged on average basis from all categories of consumers as well as open access consumers. UPCL further submitted that all the Test Division has been directed to install meters at "T" Points, including Agricultural Feeders.

The Commission has noted the Petitioner's reply which is being reiterated by UPCL every year.

**The Commission directs UPCL to submit a comprehensive plan for conducting energy audit for determination of voltage-wise losses and also segregation of voltage-wise costs within 3 months of the date of Order.**

### 7.1.9 *Demand Side Management Measures*

The Commission directed the Petitioner to submit the report on various Demand Side Management measures at regular quarterly intervals to the Commission.

***Petitioner's Submissions***

The Petitioner submitted that upto March, 2017 a total of 38.845 Lakh LED bulbs have been distributed in the State, out of which, 2.02 Lakh 7W LED bulbs to BPL consumers and 1.98 Lakh 7W LED bulbs to other domestic consumers having consumption upto 100 units, have been distributed at subsidized rates. Further, distribution of 9W LED bulbs, 20W LED Tube Light and 50W Energy Efficient Ceiling Fans has also been initiated in the State with effect from April 10, 2017 onwards. The status of distribution as submitted by UPCL is as follows:

**Table 7.7: Details of Energy Efficient Equipments Distributed by UPCL**

| Month | 9W LED Bulbs | 20W EE Tube Lights | 50W 5 Star Rated Fans |
|---|---|---|---|
| April, 17 | 20376 | 323 | 23 |
| May, 17 | 73771 | 899 | 376 |
| June, 17 | 89892 | 1865 | 688 |
| July, 17 | 51633 | 1999 | 141 |
| August, 17 | 93605 | 3914 | 711 |
| September, 17 | 95476 | 4885 | 595 |
| October, 17 | 80530 | 2487 | 158 |
| November, 17 | 77352 | 828 | 37 |
| December, 17 | 75387 | 1544 | 33 |
| January, 18 | 108243 | 2169 | 336 |
| February, 18 | 66282 | 1206 | 137 |
| March, 18 | 198655 | 11636 | 230 |
| April, 18 | 96085 | 267 | 51 |
| May, 18 | 82110 | 595 | 227 |
| June, 18 | 34959 | 2975 | 783 |
| July,18 | 41370 | 17 | 45 |
| August,18 | 120570 | 181 | 62 |
| September,18 | 43576 | 78 | 20 |
| October, 18 | 47569 | 21 | 8 |
| November, 18 | 34696 | 31 | 50 |
| December, 18 | 29236 | 7 | 0 |
| January,19 | 29492 | 42 | 98 |
| February,19 | 37745 | 2 | 48 |
| March,19 | 31548 | 0 | 0 |
| April,19 | 17089 | 10 | 0 |
| May,19 | 12564 | 8 | 0 |
| June,19 | 15139 | 0 | 0 |
| July,19 | 29847 | 102 | 75 |
| August,19 | 27142 | 12 | 242 |
| September,19 | 23607 | 0 | 39 |

**Table 7.7: Details of Energy Efficient Equipments Distributed by UPCL**

| Month | 9W LED Bulbs | 20W EE Tube Lights | 50W 5 Star Rated Fans |
|---|---|---|---|
| October,19 | 23986 | 00 | 08 |
| November,19 | 18692 | 00 | 02 |
| December,19 | 18778 | 00 | 45 |
| January,20 | 16137 | 00 | 32 |
| February,20 | 17337 | 00 | 21 |
| March,20 | 69174 | 00 | 02 |
| April,20 | 5004 | 00 | 0 |
| May,20 | 5657 | 00 | 0 |
| June,20 | 7400 | 00 | 0 |
| July,20 | 10502 | 00 | 00 |
| August,20 | 9757 | 00 | 00 |
| September,20 | 14726 | 00 | 00 |
| October,20 | 4413 | 00 | 00 |
| November,20 | 2931 | 00 | 00 |
| December,20 | 3742 | 00 | 00 |
| January,21 | 4512 | 00 | 00 |
| February,21 | 2063 | 00 | 00 |
| March,21 | 3032 | 00 | 00 |
| April,21 | 809 | 00 | 00 |
| May,21 | 398 | 00 | 00 |
| June,21 | 698 | 00 | 00 |
| July,21 | 867 | 00 | 00 |
| August,21 | 962 | 00 | 00 |
| September,21 | 2,777 | 00 | 00 |
| October, 21 | 913 | 00 | 00 |
| November,21 | 613 | 00 | 00 |
| December,21 | 34 | 00 | 00 |
| January,22 | 69 | 00 | 00 |
| February,22 | 164 | 00 | 00 |
| March,22 | 429 | 00 | 00 |
| April,22 | 0 | 00 | 00 |
| May,22 | 0 | 00 | 00 |
| June,22 | 21 | 00 | 00 |
| July,22 | 12 | 00 | 00 |
| August,22 | 00 | 00 | 00 |
| September,22 | 00 | 00 | 00 |
| October,22 | 00 | 00 | 00 |
| Total | 20,31,155 | 38,103 | 5,323 |

The Commission has taken note of the submissions of the Petitioner. It has been observed that during FY 2022-23, no measures have been taken by UPCL, despite having shortages of electricity. **The Commission, hereby, re-directs the Petitioner to submit the report on various Demand Side Management measures at regular quarterly intervals to the Commission**.

### 7.1.10 *Deficit/Surplus Power*

The Commission directed the Petitioner to bank the surplus energy available during the months of May 2022 to September 2022 and withdraw the same in the months of October 2022 to March 2023 and seek Commission approval of such arrangements.

***Petitioner's Submissions***

The Petitioner submitted that the State's demand has increased substantially post COVID (in the range of 8-15%) which has increased the overall deficit of power in the State. UPCL further submitted that due to the international coal crises and higher gas prices in the national/international market (currently at \$20 to \$23per MMBTU, which earlier touched the level of ≈ \$40 per MMBTU), the consent for procurement of gas to the intra-state gas generators M/s SEPL and M/s GIPL was also not issued as the ECR calculated for the above gas prices goes to as high as Rs. 15 to 25/kWh. In the absence of 321 MW of Gas power and due to the increase in demand there is no availability of substantial surplus power in the months of May 2022 to September 2022 due to which no banking of power was done during these months. However, to secure power on economical rates UPCL has floated Banking Tender after seeking approval from UERC in which following Return Banking arrangement has been offered:

**Table 7.8: Banking Tender as floated during FY 2022-23**

<table>
<tr><th>Months</th><th>Quantum (MW)</th><th>Trader/ Source</th><th>Return (%)</th><th>Trading Margin (Paisa/KWh)</th><th>Effective Return (%)</th></tr>
<tr><td rowspan="2">21st Nov 2022 to 30th Nov 2022</td><td>100</td><td>APPCPL/ BYPL</td><td>104</td><td>1.5</td><td>104.42</td></tr>
<tr><td>100</td><td>HPPC</td><td>105</td><td>0</td><td>105.00</td></tr>
<tr><td rowspan="2">Dec 2022</td><td>50</td><td>APPCPL/ BYPL</td><td>104</td><td>1.5</td><td>104.42</td></tr>
<tr><td>150</td><td>HPPC</td><td>105</td><td>0</td><td>105.00</td></tr>
<tr><td rowspan="2">Jan 2023</td><td>50</td><td>APPCPL/ BYPL</td><td>104</td><td>1.5</td><td>104.42</td></tr>
<tr><td>150</td><td>HPPC</td><td>105</td><td>0</td><td>105.00</td></tr>
<tr><td rowspan="2">1st Feb 2023 to 15th Feb 2023</td><td>50</td><td>APPCPL/ BYPL</td><td>104</td><td>1.5</td><td>104.42</td></tr>
<tr><td>150</td><td>HPPC</td><td>105</td><td>0</td><td>105.00</td></tr>
</table>

UPCL submitted that it has accepted the above offer and has, accordingly, issued LoIs and the power will be retuned back with the premium mentioned above during June 2023 to Sept 2023.

The Commission has noted the submissions of the Petitioner.

### 7.1.11 *Status of NA/NR, IDF/ADF/RDF*

The Commission directed the Petitioner to put in its sincere efforts in reducing the percentage NA/NR cases to below 2% in the entire State latest by September 30, 2022, failing which the concerned Chief Engineer (Distribution), Superintending Engineer (Distribution), Executive Engineer (Distribution) and Executive Engineer (Test) shall be held responsible for non-compliance of the Commission's directions and appropriate action under the Act/Rules/Regulations would be initiated. The Commission also directed the Petitioner to restrict the provisional billing cases within the limit prescribed above as well as in Regulations, failing which the concerned Chief Engineer (Distribution), Superintending Engineer (Distribution), Executive Engineer (Distribution) and Executive Engineer (Test) shall be held responsible for non-compliance of the Commission's directions and appropriate action under the Act/Rules/Regulations may be initiated.

***Petitioner's Submissions***

UPCL submitted that vide its letter No. 1672/UPCL/RM/C-18, dated April 25, 2022, it had directed all the field officers to comply with this direction of the Commission, i.e. to restrict percentage NA/NR cases to 2% latest by September 30, 2022 and submitted quarter wise targets of NA and NR cases for FY 2022-23 as follows:

**Table 7.9: Targets of NA/NR cases for FY 2022-23**

| Particulars | At the end of Q-1 | At the end of Q-2 | At the end of Q-3 | At the end of Q-4 |
|---|---|---|---|---|
| NA cases | 1.41% | 1.22% | 1.09% | 0.97% |
| NR cases | 0.55% | 0.49% | 0.45% | 0.41% |

Status of NA/NR cases as submitted by the Petitioner are as follows:

**Table 7.10: Status of NA/NR cases**

| Particulars | NA cases | NR cases |
|---|---|---|
| As on 31-03-2018 | 3.54% | 4.64% |
| As on 31-03-2019 | 4.25% | 4.16% |
| As on 31-03-2020 | 1.44% | 13.29% |
| As on 31-03-2021 | 1.64% | 0.90% |
| As on 31-03-2022 | 1.66% | 0.93% |
| As on 31-08-2022 | 1.82% | 1.52% |

The Commission has noted the submissions of the Petitioner and **directs the Petitioner to maintain the NA/NR cases to below 2% and submit the compliance report along with tariff petitions.**

### 7.1.12 *Replacement of Improper, Non-Functional, Stop/Stuck up defective or IDF Meters*

The Commission directed the Petitioner to restrict the percentage defective meters (IDF) to 3%, failing which the concerned Chief Engineer (Distribution), Superintending Engineer (Distribution), Executive Engineer (Distribution) and Executive Engineer (Test) shall be held responsible for non-compliance of the Commission's directions and appropriate action under the Act/Rules/Regulations would be initiated. The Commission also directed the Petitioner to submit the status of defective meters for EDC Karnprayag along with the other Electricity Distribution Circles in Format- 3A from April, 2022 onwards.

*Petitioner's Submissions*

UPCL submitted that vide letter No. 1672/UPCL/RM/C-18, dated April 25, 2022, it had directed all the field officers to comply with this direction of the Commission, i.e. to restrict percentage of IDF meters to 3%. Further, the Petitioner submitted the quarter wise targets of IDF cases for FY 2022-23 which at the end of Q1 is 1.90%, at the end of Q-2 is 1.71%, at the end of Q-3 is 1.58% and at the end of Q-4 is 1.44%. Further, the Petitioner submitted that the status of defective meters as on August 31, 2022 is 2.00%.

The Petitioner submitted that it has been providing the status of defective meter separately for EDC Karanprayag along with the other Electricity Distribution Circles.

The Commission has noted the submissions of the Petitioner and **directs the Petitioner to restrict percentage defective meters (IDF) to 2% for plain areas and 3% for hilly areas, failing which the concerned Chief Engineer (Distribution), Superintending Engineer (Distribution), Executive Engineer (Distribution) and Executive Engineer (Test) shall be held responsible for non-compliance of the Commission's directions and appropriate action under the Act/Rules/Regulations may be initiated.**

### 7.1.13 *NB & SB Cases*

The Commission directed the Petitioner to liquidate and finalise atleast 5% of the NB/SB cases in each quarter and submit quarterly report before the Commission. In the absence of the same, action under the provisions of Act/Rules/Regulations may be initiated against the Petitioner.

*Petitioner's Submissions*

UPCL submitted that vide its letter No. 1672/UPCL/RM/C-18, dated April 25, 2022, it had directed all the field officers to liquidate and finalise atleast 5% of NB/SB cases in each quarter. Further, UPCL vide its letter no. 2131/UPCL/RM/L-17, dated May 25, 2022 directed all its field officers to prepare the action plan for disposal of all the NB/SB cases comprising the various activities, permanent disconnection, issuance of notices under Section 3 & 5 of the Uttarakhand (U.P. Government Electricity Undertaking (Dues Recovery) Act, 1958) Adaptation and Modification Order, 2002, writing off of fictitious and irrecoverable arrears.

UPCL submitted that the staus of NB/SB cases for the month of August 2022 has been submitted to the Commission vide letter No. 4738/ CE(Comml.)/UPCL/SE-II/BII (1)/CPM, dated November 17, 2022. The total no. of cases as on November 31, 2022 were 1,49,484.

**The Commission again directs the Petitioner to liquidate and finalise atleast 5% of the NB/SB**

**cases in each quarter and submit quarterly report before the Commission. In absence of the same, action under the provisions of Act/Rules/Regulations may be initiated against the Petitioner.**

### 7.1.14 *Outstanding Arrears*

The Commission directed the Petitioner to make sincere efforts in mobilizing its resources throughout the year for collection of Arrears under a structured receivable management programme besides taking corrective actions against the habitual defaulters. The Petitioner was further directed to submit an Action Plan within a month of issuance of Order including the steps it proposes to take to collect electricity dues from the beginning of the financial year with same vigour as it normally does in the last quarter of the financial year.

***Petitioner's Submissions***

The Petitioner submitted that with a view to collect revenue uniformly throughout the year, UPCL vide letter no. 2503/UPCL/RM/L-17, dated June 18, 2022 has fixed the monthly revenue collection targets in respect of non-Govt. categories of the distribution divisions. These targets were revised vide UPCL's letter no. 4610/UPCL/RM/L17, dated November 10, 2022 considering the approved Additional Power Surcharge. The month wise revised revenue collection targets in respect of Non-Govt. Categories as submitted by the Petitioner are as follows:

**Table 7.11: Monthwise targets of collection for FY 2022-23 (Rs. Crore)**

| Month | Collection |
|---|---|
| April, 22 | 519.22 |
| May,22 | 585.25 |
| June,22 | 695.26 |
| July,22 | 673.28 |
| August,22 | 739.91 |
| September,22 | 738.09 |
| October,22 | 774.58 |
| November,22 | 660.27 |
| December,22 | 716.67 |
| January,23 | 720.27 |
| February,2 | 761.12 |
| March,23 | 850.90 |
| **Total** | **8434.82** |

The Petitioner further submitted that the above revenue collection targets have been fixed keeping in view the actual energy consumed during the previous month. Impact of Additional Power Purchase Cost from September 2022 to March 2023 is also included in the above mentioned targets. UPCL submitted that revenue collection targets in respect of Government category for FY 2022-23 have been fixed equivalent to Rs. 450 Crore and as against these targets, payment of Rs. 200.72 Crore has been received till November 2022 from GoU.

**In view of the above, the Commission, hereby, once again directs the Petitioner to make sincere efforts in mobilizing its resources throughout the year for collection of Arrears under a structured receivable management programme besides taking corrective actions against the habitual defaulters. The Petitioner is, hereby, once again directed to submit an Action Plan within a month of issuance of this Order including the steps it proposes to take to collect electricity dues from the beginning of the financial year with same vigour as it normally does in the last quarter of the financial year.**

### 7.1.15 *Analysis of Load Factors of High Value Consumers*

The Commission directed the Petitioner that KCC consumers having less load factor should be closely monitored and average consumption pattern and abnormality in consumption pattern should be checked and duly analysed. The Commission also directed the Petitioner to check KCC consumers who are repeatedly exceeding their sanctioned/contracted demand and take corrective action in such cases.

***Petitioner's Submissions***

The Petitioner submitted the MRI status of consumers analyzed as follows:

**Table 7.12: MRI Status of Consumers**

| Status | No. of consumers | | | |
|---|---|---|---|---|
| | March, 20 | March, 21 | March, 22 | September, 22 |
| Total Nos. of Consumers | 25123 | 26503 | 28853 | 30559 |
| Consumers having load factor more than 75% | 616 | 812 | 665 | 922 |
| Consumers having load factor more than 50% | 1625 | 2045 | 1783 | 2507 |
| Consumers having load factor more than 30% | 4302 | 4989 | 4753 | 6511 |
| Consumers having load factor more than 20% | 7406 | 8066 | 8140 | 10804 |
| Consumers having load factor more than 10% | 13507 | 14221 | 14906 | 18358 |
| Consumers having load below 10% | 11616 | 12282 | 13947 | 12201 |
| Consumers exceeding sanctioned demand | 4856 | 4655 | 5415 | 6037 |

**The Commission directs the Petitioner to constitute a cell in its commercial wing for analysis and monitoring of consumer data including low load factor cases, meter tamper cases, etc. The Commission also directs the Petitioner to submit a report on analysis and monitoring of consumer data on monthly basis by 25$^{th}$ of every month in CPM reports.**

### 7.1.16 *Status of Revenue realisation per unit sold*

The Commission directed the Petitioner to ensure that the data furnished in Commercial

Performance Monitoring report should match with its Commercial Diary, i.e. CS-4 data and the Petitioner should ensure that in all future submissions of Commercial Performance Monitoring reports, the Average Realisation Rate should be calculated on the basis of recoveries on account of Realisation Against energy dues only and the realisation shown should exclude recoveries from duties/cess, etc. Further, the realisation against energy dues should clearly bifurcate realisation against current dues and realisation against past dues, failing which appropriate action shall be initiated against the Petitioner/Licensee.

***Petitioner's Submissions***

The Petitioner submitted that the desired information shall be provided to the Commission for the period from August 2022 onwards as per direction of Commission.

**The Commission again directs the Petitioner to ensure that the data furnished in Commercial Performance Monitoring report should match with its Commercial Diary, i.e. CS-4 data and the Petitioner should ensure that in all future submissions of Commercial Performance Monitoring reports the Average Realisation Rate should be calculated on the basis of recoveries on account of Realisation Against energy dues only and the realisation shown should exclude recoveries from duties/cess, etc. Further, the realisation against energy dues should clearly bifurcate realisation against current dues & realisation against past dues, failing which appropriate action shall be initiated against the Petitioner/Licensee.**

### 7.1.17 *Billing and Collection System*

The Commission directed the Petitioner to complete the balance works of construction of bill collection facilities and integration of all CSCs in the State latest by July 31, 2022, in absence of which, without prejudice to earlier penal actions, stern action under the provisions of the Act/Rules/ Regulations would be initiated against it. Further, the Commission directed the Petitioner to make widespread publicity/Advertisement/workshop of the bill collection facilities and list of VLEs operating in the vicinity of various electricity Sub-division/division offices of UPCL across the State.

***Petitioner's Submissions***

**A. The Petitioner submitted the status as follows:**

**Package–A** (Garhwal Zone): Under this package, Collection centre facilities were to be provided in 52 Centres of 04 Electricity Distribution Circles and the work is completed.

**Package–B** (Haridwar Zone): Under this package, Collection centre facilities were to be provided in 22 Centres of 02 Electricity Distribution Circles and in all the 22 centres work is completed.

**Package–C** (Kumaun Zone): Under this package, Collection centre facilities were to be provided in 65 Centres of 03 Electricity Distribution Circles and in all the 65 centres work is completed.

**Package-D** (Rudrapur Zone): Under this package, Collection centre facilities were to be provided in 18 Centres of 02 Electricity Distribution Circles. The work has been completed at all the 18 centres.

UPCL in refence to the direction issued by the Commission in the meeting held on September 2, 2022, also submitted that up keeping and maintenance of the assets at the existing bill collection centers of UPCL is being done on regular basis.

The Petitioner further submitted that with a view to improve the existing bill collection system, UPCL had filed a Petition before the Commission for revision of transaction charges of the CSC Limited and reward scheme for VLEs. Commission vide its order dated March 23, 2018 approved the proposal as follows:

a. Transaction charges shall be increased from Rs. 4 to Rs. 8 per electricity bill collected by CSC.

b. Reward scheme for CSC VLEs as follows:

**Table 7.13: Reward Scheme for VLE's**

| Electricity Bill collectionper VLE per month | | Incentive |
|---|---|---|
| 1 | **Upto 100 Nos.** | **Nil (Only Transaction charges of Rs. 8)** |
| 2 | From 101to 200 Nos. | Rs. 1 per bill (apart from transaction charges ofRs. 8) |
| 3 | From 201to 300 Nos. | Rs. 2 per bill (apart from transaction charges of |
| 4 | From 301to 400 Nos. | Rs. 3 per bill (apart from transaction charges ofRs. 8) |
| 5 | From 401to 500 Nos. | Rs. 4 (apart from transaction charges of Rs. 8) |
| 6 | Above 500 Nos. | Rs. 5 (apart from transaction charges of Rs. 8) |

UPCL submitted that they are taking all measures to promote the payment of electricity bills by the consumers to be paid through the CSC counters by sending the bulk SMS to all the consumers whose mobile nos. are registered with UPCL's consumer data base. UPCL submitted that along with M/s CSC it is conducting the promotional activities and making efforts to increase the no. of transactions. The Petitioner also submitted the status of CSC transactions.

As regards widespread publicity/advertisement/workshop of the bill collection facilities, UPCL submitted that following measure are taken at the end of various wings of UPCL for bill collection facility at CSC counters (VLEs):

- Payment option printed on the back side of paper bills includes information of bill payment through CSC.

- SMS sent to consumers regarding digital mode of payments also states about CSC payment option from time to time.
- UPCL's website also shows the CSC mode of payment.
- Flex/Pamplets at Division/Sub-Division offices printed by EE(CM) have already been circulated as per directions from commercial wing.

The Commission has noted the submissions of the the Petitioner in this regard. **The Commission directs the Petitioner to make widespread publicity/Advertisement/workshop of the bill collection facilities & list of VLEs operating in the vicinity of various electricity Sub-division/ division officers of UPCL across the State.**

### 7.1.18 *Departmental Employees*

The Commission directed the Petitioner to reconcile the figures of departmental employees in the commercial data as well as that claimed for calculation of employee in future fillings. As regards the concession provided to these consumers, the Petitioner was directed to show the same separately as expenses in its accounts.

The Petitioner was further directed to ensure compliance of the directions of the Commission given in the Tariff Order dated March 21, 2018, failing which action may be taken against it for non-compliance of the orders of the Commission.

***Petitioner's Submissions***

UPCL submitted that the directions issued by the Commission were circulated to all the concerned officers for compliance vide letter no. 1672/UPCL/RM/C-18, dated April 25, 2022. Further, UPCL vide its letter no. 2160/UPCL/RM/C-18, dated May 28, 2022 specifically directed all its concerned field officers to ensure that the information in respect of departmental employees/ pensioners in commercial diary should be matched with the data in R-APDRP billing software. Further, system has been developed in the accounting system that the concession in electricity provided to the departmental employees is shown separately as an expense.

UPCL submitted that as per Annual Accounts for FY 2020-21 and 2021-22, the concession in electricity provided by UPCL to its employees and pensioners is Rs. 10.20 Crore and Rs. 11.63 Crore respectively.

The Commission has noted the submissions of the Petitioner. **The Commission once again directs the Petitioner to continue showing the expenses incurred on account of concessional supply**

**separately as expenses in its accounts.**

### 7.1.19 *Location of Installation of Meters*

The Commission directed the Petitioner to submit quarterly status report with regard to shifting of meters for all the divisions to the Commission.

***Petitioner's Submissions***

UPCL submitted that vide its letter no. 1672/UPCL/RM/C-18, dated April 25, 2022 and 2159/UPCL/RM/C-18, dated May 28, 2022 it had directed all the field officers to comply with this direction of Commission, i.e. shifting of the meters to the safer location in or around the premises of the consumers.

**The Commission directs the Petitioner to submit quarterly status report with regards to shifting of meters in all divisions to the Commission.**

### 7.1.20 *Bad Debt*

The Commission directed the Petitioner to submit the details of bad debts year wise giving separate details of surcharge waived off.

***Petitioner's Submissions***

1. The Petitioner submitted the details of year wise Bad Debts written off are as follows:

**Table 7.14: Details of Bad Debts Written off**
**(Rs. Crore)**

| Year | Bad debts written off |
|---|---|
| 2001-02 to 2010-11 | - |
| 2011-12 | 10.96 |
| 2012-13 | 44.04 |
| 2013-14 | 47.00 |
| 2014-15 | 37.14 |
| 2015-16 | 56.11 |
| 2016-17 | 33.80 |
| 2017-18 | 47.17 |
| 2018-19 | 59.28 |
| 2019-20 | 24.25 |
| 2020-21 | 132.15 |
| **Total Bad debts written off** | **491.90** |

2. The year wise details of Delayed Payment Surcharge waived off as submitted by UPCL are as follows:

**Table 7.15: Details of Delayed Payment Surcharge waived off (Rs. Crore)**

| S. No | Duration of Scheme | Amount of Surcharge Waived Off | Remark |
|---|---|---|---|
| 1. | 1-10-2021 to 31-03-2022 | 54.57 | As per GoU' order no. 1381/I(2)/2021-06-01/2020-TC-II, दिनांक 30–09–2021 तथा 1869/I(2)/2021-06-01/2020-TC-II, दिनांक 03–01–2022, the amount of surcharge waived off is to be adjusted out of provision for bad and doubtful debts |
| 2. | 19-02-2021 to 18-05-2021 | 36.52 | As per GoU' order no. 285/I(2)/2021-06-01/2020-TC-II, दिनांक 19–02–2021, the amount of surcharge waived off is to be adjusted out of provision for bad and doubtful debts. |
| 3. | 14-04-2020 to 30-06-2020 | 0.76 | As per GoU's order no. 429/I(02)/2020-06/01/2020, दिनांक 21–05–2020, the amount of surcharged waived off shall be reimbursed to UPCL out of CM relief fund. |
| 4. | 08-03-2019 to 31-03-2019 | 2.72 | As per GoU's order no. 471/I(2)/2019-10- 02/2019, dated 08-03-2019, the amount ofsurcharged waived off is to be reimbursed to UPCL. |
| 5. | 18-07-2016 to 30-09-2016 | 0.04 | As per GoU' order no. 876/I(2)/2016/6(1)-23/2016, dated 15-07-2016, the amount of surcharge waived off is to be adjusted out of provision for bad and doubtful debts. |
| 6. | 08-02-2016 to 31-03-2016 | 18.44 | As per GoU's approval dated 08-02-2016, the amount of surcharge waived off is to be adjusted out of provision for bad and doubtful debts. |
| 7. | 05-03-2014 to 15-08-2014 | 7.20 | Amount of surcharged waived off received fromGoU in March, 2016 |
| 8. | 14-12-2012 to 30-06-2013 | 19.42 | Amount of surcharged waived off received fromGoU in March, 2016 |
| 9. | 04-01-2011 to 31-03-2011 | 16.85 | Amount of surcharged waived off received from GoU in March, 2016 |
| 10. | 13-11-2007 to 31-03-2008 | 1.53 | Amount of surcharged waived off received fromGoU in March, 2016 |
| 11. | 15-04-2005 to 14-08-2005 | 0.29 | Amount of surcharged waived off received fromGoU in March, 2016 |

The Commission has noted the submissions of the Petitioner.

### 7.1.21 *Impact of VII Pay Commission*

The Petitioner was directed to maintain separate details of the amount paid as arrears to its employees on account of implementation of the recommendations of VII Pay Commission. The Petitioner was also directed to submit the impact of pay revision separately in its true up claim for the ensuing years.

***Petitioner's Submissions***

The Petitioner submitted that it has provided a sum of Rs. 37.65 Crore towards VII Pay Commission in its books of Accounts for FY 2016-17 (for 15 months, i.e. for the period January 2016 to March 2017). Rs. 20.64 Crore was paid in FY 2017-18. Arrears for the period July 1, 2016 to December 31, 2016 amounting to Rs. 15.06 Crore and arrears of Rs. 1.95 Crore payable to pensioners was paid in FY 2018-19.

The Commission has noted the submissions of the Petitioner.

### 7.1.22 *Conductor Augmentation*

The Petitioner was directed to identify such feeders/spans where the power distribution network is on GI wire and replace them with ACSR or better conductors latest by September 30, 2022 and submit a compliance report under affidavit on the same. The Petitioner was also directed to prepare and submit an action plan for checking and refurbishment of protection systems at various 33/11 kV substations latest by June 30, 2022.

***Petitioner's Submissions***

The Petitioner submitted that UPCL vide its letter No. 1672/UPCL/RM/C-18 dated April 25, 2022 directed all the field officers to comply with the above direction, i.e. to identify such feeders/ spans where the power distribution network is on GI wire and to replace the same with ACSR or better conductor. UPCL also submitted that the work of CT & PT replacement at interface points has been taken up by UPCL, which is under progress. The progress submitted by the Petitioner in the matter is as follows:

**Table 7.16: Progress at Interface Points**

| S. No. | Circle Name | 33 kV outdoor Interface points | | 33 kV Indoor Interface points | | 11 kV Indoor Interface points | |
|---|---|---|---|---|---|---|---|
| | | Total Qty. as per BOQ | Installed | Total Qty. as per BOQ | Installed | Total Qty. as per BOQ | Installed |
| 1 | Srinagar/ Pauri | 87 | 63 | 3 | 3 | 0 | 0 |
| 2 | Tehri/ Uttarkashi | 75 | 78 | 0 | 0 | 0 | 0 |
| 3 | Haridwar | 90 | 103 | 27 | 21 | 0 | 0 |
| 4 | Roorkee | 75 | 81 | 0 | 0 | 9 | 9 |
| 5 | Dehradun (R) | 102 | 102 | 9 | 12 | 0 | 0 |
| 6 | Dehradun (U) | 54 | 60 | 9 | 6 | 0 | 0 |
| **Sub Total (1)** | | **483** | **487** | **48** | **42** | **9** | **9** |
| 1. | Rudrapur | 117 | 117 | 300 | 216 | 18 | 18 |
| 2. | Kashipur | 120 | 120 | 72 | 36 | 0 | 0 |
| 3. | Ranikhet | 54 | 54 | 0 | 0 | 0 | 0 |
| 4. | Pithoragarh | 0 | 0 | 0 | 0 | 0 | 0 |
| 5. | Haldwani | 138 | 138 | 0 | 0 | 0 | 0 |
| **Sub Total (2)** | | **429** | **429** | **372** | **252** | **18** | **18** |
| **Total (1+2)** | | **912** | **916** | **420** | **294** | **27** | **27** |

**Table 7.17: Progress at Consumer end**

| S. No | Circle Name | 33 kV consumers | | 11 kV consumers | |
|---|---|---|---|---|---|
| | | Total Qty. | Installed | Total Qty. | Installed |
| 1 | Srinagar/Pauri | 30 | 9 | 0 | 0 |
| 2 | Tehri/Uttarkashi | 3 | 3 | 6 | 0 |
| 3 | Haridwar | 57 | 36 | 0 | 0 |
| 4 | Roorkee | 12 | 9 | 12 | 9 |
| 5 | Dehradun (R) | 0 | 0 | 0 | 0 |
| 6 | Dehradun (U) | 3 | 6 | 3 | 0 |
| **Sub Total (1)** | | **105** | **63** | **21** | **9** |
| 1. | Rudrapur | 15 | 9 | 0 | 0 |
| 2. | Kashipur | 0 | 0 | 0 | 0 |
| 3. | Ranikhet | 2 | 2 | 0 | 0 |
| 4. | Pithoragarh | 8 | 6 | 6 | 6 |
| 5. | Haldwani | 3 | 0 | 0 | 0 |
| **Sub Total (2)** | | **28** | **17** | **6** | **6** |
| **Total (1+2)** | | **133** | **80** | **27** | **15** |

UPCL further submitted that periodical testing and monitoring of 33/11 kV Sub Stations and protection systems is being carried out by respective Executive Engineer Test. At some substations UPCL has planned to install 40 Nos Circuit Breakers in FY 2022-23. UPCL has also proposed to install 9 nos. 33 kV RMU, 56 nos. 11 kV RMUs and to replace 553 nos. old aged VCBs under RDSS Scheme. As regards direction issued by the Commission in the meeting held on 02-09-2022 regarding replacement of all the GI wire being used in the distribution system for power transfer with ACSR or better conductors, it is to inform that all the Chief Engineer (D) have been directed to replace all the GI wires anywhere left in distribution network with ACSR conductor. About 15 Km. GI wire has been replaced in Narayanbagar Division.

**The Commission has noted the submissions of the Petitioner in this regard. The Petitioner is again directed to continue identifying such feeders/spans where the power distribution network is on GI wire and replace them with the ACSR or better conductors latest by September 30, 2022 and submit a compliance report under affidavit on the same. The Petitioner is also directed to prepare and submit an action plan for checking and refurbishment of protection systems at various 33/11 kV substations latest by June 30, 2022.**

### 7.1.23 *Scrutiny of KCC Data*

The Commission directed UPCL to continue monitoring of KCC data including low load factor cases, meter tamper cases, etc. The Commission directed UPCL to submit the report on analysis and monitoring of KCC data on monthly basis by 25$^{th}$ of every month.

***Petitioner's Submissions***

UPCL submitted that after due approval from the Commission, UPCL vide its letter No.

1674/UPCL/CE/CCP-II/14/2018-19 (Mobineers)/Part-(b), dated March 01, 2019 awarded the work for one-year monthly meter data analysis of various reports of 8000 consumers to M/s Mobineers Info Systems Pvt. Ltd., New Delhi. The said work was extended for one more year vide UPCL's letter no. 1532/UPCL/CE/CCP-II/14/2018-19 (Mobineers)/Part-(b), dated March 10, 2021. Further, UPCL vide its work order no. 590/UPCL/CE/CCP-II/41/2021-22 (Sai Computers), dated 19-09-2022 awarded the work of monthly data analysis for a period of one year to M/s Sai Computers Ltd., Meerut. The data analysis shall cover the following attributes:

- Tamper analysis by way of PT missing, CT short, CT open, CT interchange/reversal, voltage imbalance, current imbalance, neutral disturbed, power failure, magnetic tamper, transactions, 35 kV spark Test, Cover open temper, high voltage/frequency surges.
- Percentage slots for which demand is less than a given percentage when demand is available (Default 5%).
- Percentage black out slots when power is available.
- Current month consumption vs. last month consumption or current month consumption vs. that of same month in the previous year is less than the given percentage (Default 20%).
- Contract demand violation.
- Number of slots for which power factor is less than or more than or in between for a given value.
- Consumption vis-a-vis usage index for the industry (process) wise, based on the data provided. Process-wise load factor will be provided to vendor.
- Ratio of Average/contracted demand, maximum/contracted demand, average/maximum demand, average demand shall be calculated for the number of months as specified from time to time.
- Double meter/Main meter/Independent feeder meter/Net Off meter/Bi-directional meter/ABT meter comparison difference of load survey data for every 30 minutes/15 minutes slot on per day and per month basis where demand and consumption is more than given percentage (Default 3%) for entire months.
- Consumption comparison of main meter with check meter/other end meter in terms of kWh, kVAh, MD on each and every month is to be compiled and checked and if difference of main meter w.r.t. check meter/other end meter is more/less than the standardized value or as fixed by UPCL, the check-out list is to be submitted.

- Any other comparison, detail, analysis, report, etc., in desired format of UPCL from time to time for desired period and in desired timeline shall mandatorily be provided by the contractor.
- Complete analysis of all the consumers' along with reports, recommendations/comments in desired formats complete in all respect shall be submitted by the bidder not later than 25th of every month.
- Contractor shall ensure to do the MRI analysis of consumers having load above 25 kW and shall also ensure that all the HT consumers across the State shall be analyzed atleast three times during the currency of work. The contractor shall also ensure that none of the HT consumer is left out from the analysis due to any reason whatsoever.
- All type of analysis reports shall be submitted by the bidder to respective distribution division and test division of UPCL along with the copy of same to the Nodal Officer/ Engineer In charge of the Project.

The Commission has noted the submission made by the Petitioner and **directs the Petitioner to submit the summary of monthly data analysis report w.r.t. meter tamper and exception cases for the month of December, 2022 made by the agency to the Commission by 25$^{th}$ April, 2023.**

### 7.1.24 *Collection Efficiency*

The Commission directed UPCL to submit the month-wise division-wise details of collection of dues by the 15$^{th}$ of the next month and that action under the Act may be taken against the Executive Engineer of those divisions who are found in default of making collections less than the approved collection efficiency.

***Petitioner's Submissions***

The Petitioner submitted that the Commission vide its Tariff Order dated March 31, 2022 for FY 2022-23 approved the targets of distribution losses, collection efficiency & AT&C Losses as follows:

**Table 7.18: Targets approved by the Commission**

| Year | 2022-23 | 2023-24 | 2024-25 |
|---|---|---|---|
| Distribution Loss | 13.50% | 13.25% | 13.00% |
| Collection Efficiency | 99.15% | 99.15% | 99.15% |
| AT&C Loss | 14.24% | 13.99% | 13.74% |

UPCL further submitted that Ministry of Power, Government of India fixed the following targets of UPCL under Revamped Distribution Sector Scheme:

**Table 7.19: Targets fixed by MoP, GoI under RDSS**

| Year | 2022-23 | 2023-24 | 2024-25 |
|---|---|---|---|
| Distribution Loss | 13.50% | 13.25% | 13.00% |
| Collection Efficiency | 97.00% | 98.00% | 98.90% |
| AT&C Loss | 16.10% | 14.99% | 13.96% |

With a view to achieve the losses as approved by UERC and MoP under RDSS, UPCL vide its letter no. 2503/UPCL/RM/L-17, dated June 18, 2022 fixed the targets of distribution losses @ 10% and AT&C Losses @ 12% for FY 2022-23. These targets were revised vide UPCL's letter no. 4610/UPCL/ RM/L17, dated 10-11-2022 considering the approved Additional Power Surcharge.

UPCL submitted division wise status of actual revenue collection as against the target fixed by corporate office of UPCL in respect of non-Government categories.

UPCL further submitted that monitoring of revenue collection targets is being done at Corporate Office and meetings with field officers are being conducted on regular basis to achieve the targets fixed by Corporate Office. The annual appraisal report of field officers, i.e. SDOs/ EEs/ SEs/ CEs has weightage inter-alia for collection efficiency and officers not meeting the targets loose marks on this account.

The Commission has noted the Petitioner's submission in this regard. **The Commission directs UPCL to submit the month-wise division-wise details of collection of dues by the 15th of the next month and action under the Act may be taken against the Executive Engineer of those divisions who are found in default of making collections less than the approved collection efficiency.**

### 7.1.25 *Procurement of Deficit Energy*

The Petitioner was directed to prepare its power purchase plan for the next year and initiate the bidding process to meet the deficit, if any. The Petitioner was directed to submit an action plan in this regard within 15 days of the date of Order dated April 26, 2021. The Petitioner was also directed to ensure compliance of the Regulations issued by the Commission from time to time, failing which any consequent liability would be to the account of the Petitioner.

***Petitioner's Submissions***

The Petitioner in compliance to the same has submitted the detailed demand and availability scenario for the next 3 years.

UPCL submitted that in the demand and availability forecast the availability of gas power from M/s SEPL and M/s GIPL is not considered as both the plants are under shutdown state since October 2021 due to exorbitant high gas prices. Further, to mitigate the effect of higher demand and low availability in the State, UPCL has proactively & sincerely taken all the efforts and, accordingly, Short/Medium Term/Banking Tenders were floated for the arrangement of deficit power as follows:

- Tender Specification no. 01/CE(Com)/UPCL-01/2022 (Apr-22 to Mar-23).
- Tender Specification no. 02/CE(Com)/UPCL-02/2022 (May-22 to Mar-23).
- Tender Specification no. 03/CE(Com)/UPCL-03/2022 (July-22 to Mar-23).
- Tender Specification no. 04/CE(Com)/UPCL-04/MTPP/2022 (Oct-22 to Mar-24).
- Tender Specification no. 05/CE(Com)/UPCL-05/MTPP/2022 (Oct-22 to Mar-24).
- Tender Specification no. 06/CE(Com)/UPCL-06/2022 (Banking of Energy) (Nov 21 to Sep 2023).
- Tender Specification no. 07/CE(Com)/UPCL-07/2022 (15 October 2022 to March 2023).

That out of the above 07 nos. tenders, LoIs were issued to only 02 nos. traders details of which is as here under:

a. LoI was issued to M/s NVVNL in Tender Specification No. 01/CE(Com)/UPCL- 01/2022 for 100 MW power to meet the deficit of power in the month of May and June 2022 only.
b. LoI was issued to M/s NVVNL in Tender Specification No. 05/CE(Com)/UPCL- 05/MTPP/2022 (Oct-22 to Mar-24) for 100 MW.
c. LoI was issued to M/s APPCPL & M/s UHBVNL, HPPC in Tender Specification No. 06/ CE(Com)/UPCL-06/2022 (Banking of Energy) (Nov-21 to Sep 2023).
d. LoI was issued to M/s TPTCL in Tender Specification no. 07/CE(Com)/UPCL- 07/2022 (15 Oct 2022 to Mar 2023) for supply of power upto 150 MW.

However, the remaining 03 nos. tenders were scrapped mainly due to higher prices offered therein by the traders. Apart from the above efforts, UPCL submitted that it has taken following steps also:

a. Participated in the power sale tender of Nepal Electricity Authority for the period of June-22 to November-22 but the same was later scrapped by NEA itself.
b. Considered the offer submitted by M/s Subhekesha Advisors Pvt. Ltd. a letter of comfort is issued to M/s Subhekesha for procurement of 300 MW RTC power for a period of 3 years starting from October 2022. The same is issued with the rider that it will be applicable only after the prior approval of UERC but the confirmation by trader is still awaited.
c. In spite of the above efforts in pipeline UPCL is also exploring the short term power purchase

through DEEP portal to meet the deficit power requirement.

d. Forecasting and estimation is done considering non-availability of Gas for State based gas plants but the possibility to acquire some gas at reasonable rates is also being explored and UPCL is looking for every opportunity through MoP bidding or from international bidding.

**In view of persistent deficit scenario during the Control Period, the Petitioner should put its sincere efforts to procure the deficit energy optimizing the cost of power purchase and reliable power. Further, the procurement should be through transparent process of bidding.**

### 7.1.26 *Depreciation*

The Commission directed the Petitioner to claim depreciation in line with its practice followed in the accounts as it capitalises the assets on the last day of the Financial Year or submit proper justification that the accounting policy has changed.

***Petitioner's Submissions***

The Petitioner has submitted that Depreciation is charged as per the under mentioned policy of UPCL:

> "*Depreciation is to be charged on pro rata basis on the assets acquired or disposed during the year. Accordingly, depreciation on additions to Fixed Assets during the year is charged on pro rata basis from next month in which the asset is available for use and depreciation on deductions/deletions during the year is charged upto the month in which the asset is disposed/deleted*"

UPCL submitted that depreciation is being computed in the Books of Accounts of UPCL from F.Y. 2019-20 as per the directions of the BOD as per the above-mentioned policy.

The Commission finds no justification to depart from the practice adopted in the previous Tariff Orders of allowing depreciation on the opening balance of GFA. **The Commission directs the Petitioner to claim depreciation in line with its practice followed in the accounts as it capitalises the assets on the last day of the Financial Year or submit proper justification that the accounting policy has changed alongwith justifying the capitalisation claimed as reflected in its accounts with date of capitalisation.**

### 7.1.27 *Energy Audit*

The Petitioner was directed to provide/maintain the metering system at each feeder, 'T' points, DTs and consumers in its distribution network for effective energy auditing and accounting. The

Petitioner was directed to submit compliance report in this regard by September 30, 2022, failing which appropriate action may be taken against the Petitioner in accordance with the Act/Rules/Regulations.

***Petitioner's Submissions***

The Petitioner submitted that 11,602 Nos DTs have been metered under IPDS/R-APDRP scheme. UPCL is unable to maintain healthy communication from Distribution Transformer Locations due to lack of manpower and AMC. Also, there is poor communication from remote locations as modems installed are based on 2G technology and network companies are now focusing on 4G technology. Now UPCL has proposed Smart Metering under RDSS Scheme wherein smart metering of Feeders/DTR/Consumers will be done. Under this scheme 397 no. 33 kV feeders, 1289 Nos. 11 kV feeders, 38,016 Nos. DTRs and 15,84,205 no. consumers will be covered.

As regards direction issued by Commission in the meeting held on 02.09.2022 regarding maintaining the metering system at each feeder, "T" points, DTs and consumers in the distribution network for effective energy auditing & accounting, UPCL submitted that all the Test Divisions have been directed to install meters at "T" Points, if anywhere left, including Agricultural Feeders.

The Commission has taken the serious note that the corporate office is merely issuing/passing the direction to its field offices and not proactively ensuring/monitoring the compliance status of the same from its field offices. The Commission is of the view that the corporate office should not act like the Post Office, i.e. passing the direction of the Commission to its field offices but should also effectively monitor the compliance status of the same and **thus, the Petitioner is, accordingly, directed not to restrict its responsibilities upto issuing directions to the field units rather it should adopt a proactive approach of compliance monitoring at each division level. Further, the Petitioner is again directed to provide/maintain the metering system at each feeder, 'T' points, DTs and consumers in its distribution network for effective energy auditing and accounting.**

### 7.1.28 *Analysis of Current Liabilities*

The Petitioner was directed to carry out the age-wise analysis of its current liabilities outstanding as on March 31, 2021 and based on the ageing analysis determine how much of the same would be required to be discharged and how much excess provision exists in the same so that the same may be reversed and submit the same to the Commission within 3 months from the date of Order.

***Petitioner's Submissions***

The Petitioner submitted that the age-wise position of creditors for power purchase as follows:

**Table 7.20: Age-wise Creditors as submitted by the Petitioner (Rs. Crore)**

| Age | 31-03-2020 | 31-03-2021 | 31-03-2022 |
|---|---|---|---|
| Age 0 to 3 months | 1254.05 | 516.47 | 412.77 |
| Age 3 to 6 months | 17.23 | 2.99 | NIL |
| Age more than 6 months | 186.89 | 133.73 | NIL |
| **Total** | **1458.17** | **653.19** | **412.77** |

The Petitioner also submitted that during FY 2019-20, liability for power purchase dues of Rs. 65.10 Crore toward UPRVUNL and UPJVNL till November 8, 2001 as per the transfer scheme with UPCL was written off.

The Commission has examined the compliance submitted by the Petitioner. **The Petitioner is directed to carry out the age-wise analysis of its current liabilities outstanding as on 31.03.2022 and based on the ageing analysis determine how much of the same would be required to be discharged and how much excess provision exists in the same so that the same may be reversed and submit the same to the Commission within 3 months from the date of Order.**

### 7.1.29 *Average Collection Period and Collection Efficiency Ratio*

The Petitioner was directed to submit within 3 months, an action plan to improve its collection period. The Commission had also directed UPCL to submit a plan to demonstrate as to how it will work in the direction of improving its actual collection even during initial quarters during a financial year so that the gap between the actual collection efficiency and the collection efficiency approved by the Commission may be brought to minimum.

***Petitioner's Submissions***

UPCL submitted that the Commission vide its Tariff Order dated March 31, 2022 for FY 2022-23 approved the targets of distribution losses, collection efficiency & AT&C Losses as follows:

**Table 7.21: Targets approved by the Commission**

| Year | 2022-23 | 2023-24 | 2024-25 |
|---|---|---|---|
| Distribution Loss | 13.50% | 13.25% | 13.00% |
| Collection Efficiency | 99.15% | 99.15% | 99.15% |
| AT&C Loss | 14.24% | 13.99% | 13.74% |

UPCL further submitted that Ministry of Power, Government of India fixed the following targets of UPCL under Revamped Distribution Sector Scheme:

**Table 7.22: Targets approved by MoP, GoI under RDSS**

| Year | 2022-23 | 2023-24 | 2024-25 |
|---|---|---|---|
| Distribution Loss | 13.50% | 13.25% | 13.00% |
| Collection Efficiency | 97.00% | 98.00% | 98.90% |
| AT&C Loss | 16.10% | 14.99% | 13.96% |

With a view to achieve the losses as approved by UERC and MoP under RDSS, UPCL vide its letter no. 2503/UPCL/RM/L-17, dated 18-06-2022 fixed the targets for FY 2022-23 and these targets were revised vide UPCL's letter no. 4610/UPCL/RM/L-17, dated 10-11-2022 considering the Additional Power Purchase Surcharge approved by UERC vide its order dated 28-09-2022, as follows:

a. Input Energy (MU) : 15500.00
b. Billed Energy (MU) : 13950.00
c. Assessment (Rs. Cr.) : 9086.75
d. Collection Target (Rs. Cr.) : 8884.82
e. Distribution Losses (%) : 10.00%
f. AT&C Losses (%) : 12.00%

UPCL further submitted Monitoring of above collection targets is being done at Corporate Office and on the basis of energy received during the previous month, revenue collection targets for the next month are being communicated to the field units by Corporate Office.

UPCL further submitted that vide its letter no. 4542/MD/UPCL/I-7, dated May 1, 2019, it had also fixed the monthly targets of the officers at various levels for checking of consumers, study of consumers as vigilance checks. For recovery of outstanding arrears, UPCL submitted that the connections of defaulting consumers are being disconnected and notices under Section 3 & 5 of the Uttarakhand (U.P. Government Electricity undertakings (Dues Recovery) Act, 1958) Adaptation and Modification order, 2002 are being issued regularly and the same shall be taken-up more promptly for ensuring early recovery of outstanding arrears.

The Commission has noted the Petitioner's submission in this regard and observes that the collection efficiency is still below the norms. **The Petitioner is directed to submit within 3 months, an action plan to improve its collection period. The Commission directs UPCL to submit a plan to demonstrate as to how it will work in the direction of improving its actual collection so that the gap between the actual collection efficiency and the collection efficiency approved by the Commission may be brought to minimum.**

### 7.1.30 *Inventory Management*

The Petitioner was directed to submit the following details within one month of the date of Order failing which appropriate action will be initiated under the Act:

a) List of inventory as on 31.03.2021;

b) The accounting policies adopted in measuring inventories, including the cost formula used;

c) Basis on which inventories issued: FIFO/LIFO/etc. and reason for choosing the same.

d) Whether any inventory classification, such as ABC analysis was done? If yes, the same may be submitted and if no, reason for the same may be furnished;

e) Whether the inventories are verified physically? If yes, the periodicity of the same, along with the report of last physical verification. If physical verification is not being conducted reasons for the same?

***Petitioner's Submissions***

The Petitioner submitted the list of inventories as on 31.03.2021 in centralized stores has been provided to the Commission vide UPCL's letter no. 3652/UPCL/RM/C-17, dated 27-09-2021. The list of inventories as on 31-03-2022 in centralized stores has been provided to the Commission vide UPCL's letter no. 3570/UPCL/RM/C-18, dated 01-09-2022. Accounting policies with respect to measurement of inventory (which is also mentioned in Para 6 under Note no. 29 of Annual Financial Statement of UPCL for FY 2020-21) is as under:

**<u>INVENTORIES FOR CAPITAL WORKS</u>**

1. The Inventory of Stores & Spares are being held both for use in Capital works, and partly for O&M works and not for sale. Therefore, Accounting Standard (AS) 2, "Valuation of Inventories" is not applicable.

2. The stock/stores at centralized store are accounted for at stock issue rate applicable as on the date of issue. Price difference between the cost of stock/stores and value at stock issue rate is transferred to Profit & Loss a/c.

3. Stores & Spares at the centralized store are accounted for at Issue Price. Issue price was fixed in the beginning of the Financial Year 2019-20 on the basis of FOR destination rate (including all taxes) and Price Variation for the immediately preceding year plus 3% annual variation (increasing) and 3% Storage & handling costs of Stores wings. No change in Issue Price was done in FY 2020-21 and the prevailing rates of FY 2019-20 continued in FY 2020-21 till 31.01.2021. Issuance of Stores is being done at Weighted Average Rate since February 2021 for the items procured in FY 2020-21 & for the rest of the items not procured in FY 2020-21, issues are made at Issue Price of FY 2019-20. Issues from Decentralized Stores are also valued at Issue Price.

4. Any shortage/excess of materials found during the physical verification at the year-end are first shown as material short/excess pending investigation till the finalization of investigation and, thereafter, any excess, if established, is shown under the head of income. Similarly, shortages are

either recovered from staff concerned or charged to the profit and loss account as the case may be.

5. Shortage/loss due to theft or any other reason are first debited to the head "Misc. Advance" against staff and are shown as Current Assets till the finalization of enquiry/settlement of the case.
6. Inventory rates are issued on monthly basis as per, monthly weighted average rate.

   a. Submission in the matter of classification of inventory:

      "Almost all the material kept in centralized store are essential for maintaining the supply and interlinked with each other, hence inventory classification has not been done yet in respect to preference purchase of any particular inventory. Department is in process to implement ERP. On implementation of ERP, the decentralized inventory will also come in a single statement and process of classification will be taken."

   b. Yes, the list of inventories as on 31.03.2022 in centralized stores has been submitted to the Commission vide UPCL's letter no. 3570 / UPCL / RM/C-18, dated 01.09.2022.

      The Commission has noted the submissions of the Petitioner.

### 7.1.31 *Improvement of Metering and Billing System*

The Commission, directed the Petitioner to ensure that the bills are delivered to consumers on time and due date for payment of bills should be specified at least 15 days from the date of delivery of bills to the consumers and not from the date of generation of bills.

***Petitioner's Submissions***

As per direction of the Commission bills are being delivered to the consumers on time and the consumers are being allowed clear 15 days' time for making the payment of the bills.

The Commission has noted the submissions of the Petitioner.

### 7.1.32 *Proposal for Consultancy Assignments*

The Commission directed the Petitioner to refrain from carrying out ineffective consultancies, which merely increases its expenditure. The Petitioner was required to make a proper proposal requiring consultancy assignments to be carried out and the benefits that would accrue from the same and then weigh the cost with the benefits failing which the Commission would be constrained to disallow the costs of such assignments.

*Petitioner's Submissions*

The Petitioner submitted that UPCL vide its office letter no. 1672/UPCL/RM/C-18, dated April 25, 2022 directed all the field officers to comply with the direction of Commission.

The Commission has noted the submissions of the Petitioner.

### 7.1.33 *Open Access Charges*

The Commission directed that the wheeling charges and cross subsidy surcharge recovered from open access customers shall be shown separately under the separate head of income in its ARR/ Tariff filings.

*Petitioner's Submissions*

The Petitioner submitted that vide its Office Memorandum No. 424/UPCL/DGM(F)/AH, dated May 20, 2016 had created the following heads of accounts to capture the separate information of wheeling charges and cross subsidy surcharge:

**Table 7.23: Heads of Accounts w.r.t. various Open Access Charges**

| Accounting Head | Description |
|---|---|
| 23.711 | Wheeling charges |
| 23.712 | Cross subsidy surcharge |
| 61.511 | Wheeling charges (L&H Power above 100 HP) |
| 61.512 | Cross subsidy surcharge (L&H Power above 100 HP) |

Further, UPCL vide its O.M. No. 51/UPCL/DGM(F), dated July 17, 2021 has created the following heads of accounts to capture the separate information of Additional Surcharge on Open Access Energy:

**Table 7.24: Heads of Accounts w.r.t. Additional Surcharge**

| Accounting Head | Description |
|---|---|
| 23.712A | Additional Surcharge |
| 61.512A | Additional Surcharge (L&H Power above 100 HP) |

The Commission has noted the submissions of the Petitioner.

### 7.1.34 *Provisions for Bad and Doubtful Debts*

UPCL was directed to reconcile the dues pending with railways within 6 months of the date of the Order and submit the compliance before the Commission. UPCL was also directed to raise the issue of pending dues on Government connections like Public Lamps, Public Water Works and GIS and settle the dues.

***Petitioner's Submission***

The Petitioner submitted that the billing dispute between Railways and UPCL has been resolved and presently there is no dispute in the matter between both the parties.

UPCL is regularly perusing for payment of electricity dues from GoU and GoU has made the following payments in FY 2021-22 & 2022-23:

| | | FY 2021-22 | 2022-23(upto Nov.) |
|---|---|---|---|
| Jal Sansthan | : | Rs. 376.57 Cr. | Rs. 175.72 Cr |
| Government Irrigation System | : | Rs. 116.09 Cr. | Rs. 25.00 Cr. |

The Commission has noted the submissions of the Petitioner. **UPCL is directed to continue raising the issue of pending dues regularly on Government connections like Public Lamps, Public Water Works and GIS and settle the dues.**

### 7.1.35 *O&M Expenses*

The Commission directed UPCL to take note of the suggestions given by the stakeholder of granting a fixed allowance to the staff of UPCL in lieu of official vehicle and also review the present practice being followed by it for allocating official vehicle to its officers and staff. UPCL was also required to submit its report on the same within 2 months of the date of Order.

***Petitioner's Submission***

UPCL submitted that keeping in view the requirement of the job, departmental vehicles are provided to the designated officers of the Company for necessary and effective performance of duties.

The Commission has noted the submissions of the Petitioner.

### 7.1.36 *Cost of power purchase to meet deficit*

The Commission directed UPCL to ensure that actual power purchase cost to meet the deficit should not exceed the rate given by the Commission in the relevant Tariff Orders at State periphery. Any procurement over and above the rate at the State periphery approved by the Commission shall be disallowed unless prior approval for the same is sought by UPCL.

***Petitioner's Submission***

The Petitioner submitted that as against the approved power purchase cost for FY 2022-23, the actual power purchase cost till September 2022 was more than the approved cost. The reason for increase in the rate of actual power purchase cost is extreme weather conditions in various parts of the world leading to high demand and creating wide mismatch between demand and supply of electricity. The another reason was unavailability of power from State Gas based generating stations due to abnormally high price of gas.

The Commission vide its order dated September 19, 2022 approved the procurement of 100 MW RTC Power from May, 2022 to June, 2022.

For deviation in power purchase cost and recovery of incremental power purchase cost, UPCL vide its letter no. 222/UPCL/RM/B-25, dated 20-07-2022 had filed a petition before the Commission and the Commission passed an order in the matter on 28-09-2022 approving the recovery of Additional Power Purchase Surcharge amounting to Rs. 379.06 Crore from various categories of consumers for the period from September 1, 2022 to March 31, 2023.

The Commission vide its Order dated 21-11-2022 approved the power purchase agreement executed between M/s NTPC Vidhyut Vyapar Nigam Limited and UPCL for supply of 350 MW RTC Power during the month of October, 2022 to March, 2024 Rs. 5.41 p.u.

To secure power on economical rates UPCL has floated Banking Tender after seeking approval from the Commission in which following Return Banking arrangement has been offered:

**Table 7.25: Details of Banking Agreement in FY 2022-23**

| Months | Quantum (MW) | Trader/Source | Return (%) | TradingMargin (Paisa/KWh) | EffectiveReturn (%) |
|---|---|---|---|---|---|
| 21st Nov 2022 to 30th Nov 2022 | 100 | APPCPL/ BYPL | 104 | 1.5 | 104.42 |
| | 100 | HPPC | 105 | 0 | 105.00 |
| Dec 2022 | 50 | APPCPL/ BYPL | 104 | 1.5 | 104.42 |
| | 150 | HPPC | 105 | 0 | 105.00 |
| Jan 2023 | 50 | APPCPL/ BYPL | 104 | 1.5 | 104.42 |
| | 150 | HPPC | 105 | 0 | 105.00 |
| 1st Feb 2023to 15th Feb 2023 | 50 | APPCPL/ BYPL | 104 | 1.5 | 104.42 |
| | 150 | HPPC | 105 | 0 | 105.00 |

UPCL has accepted the above offer and, accordingly, issued LoIs. The power will be retuned back with the premium mentioned above during June, 2023 to Sept., 2023.

## 7.2 Compliance to the Directives issued in APR Order for FY 2021-22 dated March 31, 2022

### 7.2.1 *Consultative Committee*

The State Advisory Committee Meeting held on March 9, 2022, the members suggested to establish a consultative forum wherein consumer representatives and Petitioner can more frequently discuss the challenges being faced and try to remedy the problems. The Commission directs UPCL to submit a proposal to the Commission for constitution of such committee within 60 days from this Order.

***Petitioner's Submission***

The Petitioner submitted that the steps has been taken and the proposal in this regard shall be submitted to the Commission shortly. In the absence of guidelines, UPCL is facing difficulty for constitution of the consultative committee as directed by Commission.

The Commission in view of the non-compliance on the part of Petitioner has initiated separate proceedings against the Petitioner under Section 142 of the Electricity Act vide its notice dated 28.02.2023. The Commission shall deal with the issue raised in the above proceedings.

### 7.2.2 *Submitting the Correct Information*

The Commission directed the Petitioner to submit the correct information/figures/data before the Commission within the stipulated time frame after thorough check by the concerned officers of the Petitioner Company and, accordingly, cautions the Petitioner that practices of furnishing the unvalidated/incorrect information before the Commission should be strictly avoided, and this should not be repeated in future else appropriate action under the Act/Rules/Regulations would be initiated.

***Petitioner's Submissions***

The Petitioner submitted that its concerned officers have been directed to properly check the information before submitting the same to the Commission.

The Commission is of the view that merely passing instructions/directions down the organisational hierarchy would not serve the purpose. The information brought before the Commission has to be cross-checked at the corporate level and only correct information should be furnished before the Commission. The Commission is deeply concerned about the superficial replies being furnished by the Petitioner and, thus, cautions the Petitioner that the practices of furnishing the unvalidated/ incorrect information before the Commission should be strictly avoided, and this should not be repeated in future else appropriate action under the Act/Rules/Regulations would be initiated. **Therefore, the Commission directs the Petitioner to submit the correct information/figures/data before the Commission within the stipulated time frame after thorough check by the concerned officers of the Petitioner.**

### 7.2.3 *To update and Maintain the CS-3 & CS-4 report on web-site*

The Commission directed the licensee to update and maintain the CS-3 & CS-4 report on their web-site regularly and promptly within 02 months.

***Petitioner's Submission***

The Petitioner submitted that the steps have been taken to update the commercial diary and the CS-3 & CS-4 statement for the month of September, 2022 has been posted on the website of UPCL. Further, UPCL vide its Office Memorandum No. 3313/UPCL/RM/L-20, dated August 16, 2022 ordered that the commercial diary shall be finalized within 40 days from the end of the month.

Despite the Commission's repeated direction, the Petitioner in this digital era is unable to leverage the power of information technology wherein the exchange/transmission/compilation of information is easier, hassle free and less time consuming. **Therefore, the Commission again directs the licensee to update and maintain the CS-3 & CS-4 report on their website regularly and promptly within 02 months.**

### 7.2.4 *Repair & Maintenance*

UPCL was directed to devise a proper system of internal control which should include how and when an asset should be capitalized and how the accounting treatment should be done including physical verification of the same. UPCL was directed to rectify all the anomalies and Commission's observations within six months from the date of the Order, failing which the Commission shall carry out necessary adjustments along with carrying cost.

***Petitioner's Submission***

The Petitioner submitted that the policy on "Capitalization Process and Repair and Maintenance" has been approved by the Commission vide its letter no. UERC/6/TF-540/2021/22/ 2021/671, dated 12-10-2021. UPCL vide its letter no. 3718/D(Operations)/UPCL/C-4, dated October 25, 2021 directed all its field officers to take action as per the provisions of the policy.

As regards submission of certificates of Electrical Inspector in respect of HT Assets, it is submitted that UPCL has directed all its field officers to rectify the errors in the certificates of Electrical Inspector.

The Commission observes that anomalies are yet to be rectified and, therefore, **UPCL is directed to rectify all the anomalies and Commission's observations within six months from the date of this Order, failing which the Commission shall carry out necessary adjustments along with carrying cost.**

### 7.2.5 *Interest on Working Capital*

UPCL is directed to submit the month wise division wise details of collection of dues by the 15th of the next month and action may be taken against the Executive Engineer of those divisions whose collection efficiency is less than the approved collection efficiency.

***Petitioner's Submission***

The Petitioner submitted the division wise collection efficiency for the period from April, 22 to September, 22.

**UPCL is again directed to submit the month wise division wise details of collection of dues by the 15th of the next month and action may be taken against the Executive Engineer of those divisions whose collection efficiency is less than the approved collection efficiency.**

### 7.2.6 *A&G Expenses*

The Petitioner is directed to properly account for the provisions in appropriate heads of accounts so that the same can be easily identified during the truing up of respective years.

***Petitioner's Submission***

UPCL vide its letter no. 1672/UPCL/RM/C-18, dated April 25, 2022 has directed all the concerned officers to comply with this direction of Commission, i.e. to account for provisions /expenses in appropriate heads of accounts so that the same can be easily identified.

The Commission has noted the submissions of the Petitioner.

### 7.2.7 *AT&C losses*

The Commission directs the Petitioner to submit an Action Plan for implementation of the aforesaid works within a month of issuance of the Order for restricting the AT&C losses at minimum level.

***Petitioner's Submission***

UPCL submitted that it is consistently making efforts to keep AT&C losses in check. To minimize its AT&C losses, following steps are being taken:

1. To replace about 4837 Km of bare conductor with AB cable in theft prone areas.
2. UPCL has also planned to segregate 10 nos. agriculture feeders under this scheme.
3. UPCL has proposed 11 KV new feeders (total length 425 CKm) and 33 KV new feeders (Total

length 9 Km.) against overloaded 11 KV and 33 KV feeders.

4. Augmentation/Re-conductoring of old/ Frayed 33 KV Conductor (342 CKm 33KV).
5. Augmentation/Re-conductoring of old/ Frayed 11KV Conductor (2622 CKm 11KV).
6. Augmentation/Re-conductoring of old/ Frayed LT Conductor (1218 CKm LT).
7. UPCL has also planned Smart Metering under RDSS Scheme wherein smart metering of Feeders/DTR/Consumers will be done for: -
   - 1689 No. feeders,
   - 38,016 Nos. DTRs and
   - 5,84,205 Nos. Consumers (including 5641 nos. Govt. Offices).

Timeline of all the above works was submitted by the Petitioner.

**The Commission has noted the submissions of the Petitioner and directs the Petitioner to submit half yearly status report towards the implementation of the above works.**

## 7.3 Fresh Directives

### 7.3.1 *Continuous Supply*

UPCL is directed to ensure that consumers opting for continuous supply gets uninterrupted supply of electricity except for load shedding required due to emergency break-down/shut-down failing which action may be initiated against it under the Electricity Act, 2003. **(Refer 2.16.3).**

### 7.3.2 *Grace Period*

UPCL is once again directed to ensure compliance of the same failing which action may be initiated against it. **(Refer 2.18.3).**

### 7.3.3 *Smart Metering*

UPCL is hereby directed to ensure to complete the Smart Metering under RDSS Scheme within the stipulated time frame. **(Refer 2.32.3).**

### 7.3.4 *Safety*

UPCL is directed to ensure proper upkeep and maintenance of its infrastructure for better human safety and equipment life enhancement. **(Refer 2.35.3).**

### 7.3.5 *Billing and Payment*

UPCL is directed to submit a plan to recover arrears from the defaulting consumers within one month of the date of the Order. UPCL is also directed to update its website in accordance with the suggestions of the Members of the Advisory Committee so as to enable the consumers the facility to download the bills for earlier months/years within one month of the date of the Order. **(Refer 2.36.2).**

### 7.3.6 *GFA Funding*

The Petitioner is directed to reconcile the funding and submit the reasons for deviations within six months from the date of this Order. **(Refer 3.2.2.1.2).**

### 7.3.7 *Monthly Billing – Domestic*

The Commission, accordingly, directs the UPCL to raise the bills for the month of April 2023 onwards of all the domestic consumers on monthly basis. **(Refer 5.1.3.10).**

## 7.4 Conclusion

Having considered the submissions made by the Petitioner, the responses of various stakeholders and the relevant provisions of the Electricity Act, 2003 and Regulations of the Commission, the Commission hereby approves that:

(i) Uttarakhand Power Corporation Ltd., the distribution and retail supply licensee in the State will be entitled to charge the tariffs from consumers in its licensed area of supply as given in the Rate Schedule for FY 2023-24 annexed hereto as Annexure-1. These Tariffs will be effective from April 01, 2023.

(ii) Uttarakhand Power Corporation Ltd., the distribution and retail supply licensee in the State will realize from consumers of electricity in the State, miscellaneous charges as listed out in Annexure- 2 of this Order and shall not recover any other charge, fee, deposit, etc., unless approved by the Commission.

(iii) The above tariffs shall continue to be applicable till revised by the Commission.

The Petitioner shall forward a report on compliance of the directions given in this Order within the time stipulated for compliance.

| **M.K. Jain**<br>**Member (Technical)** | **D.P. Gairola**<br>**Member (Law)/Chairman (I/c)** |
|---|---|

# 8. Annexures

## 8.1 Annexure 1: Rate Schedule Effective from 01.04.2023

## A. General Conditions of Supply

### 1. Character of Service

i) Alternating Current 50 Hz., single phase, 230 Volts (with permissible variations) up to a load of 4 kW.

ii) Alternating Current 50 Hz, three phase, 4 wire, 400 Volts or above (with permissible variations) for loads above 4 kW depending upon the availability of voltage of supply.

### 2. Conditions for New Connections

i) Supply to new connections of more than 75 kW (88 kVA) and up to 2550 kW (3000 kVA) shall be released at 11 kV or above, loads above 2550 kW (3000 kVA) and upto 8500 kW (10000 kVA) shall be released at 33 kV or above, loads above 8500 kW (10000 kVA) and upto 42500 kW (50000 kVA) shall be released at 132 kV or above, for loads above 42500 kW (50000 kVA) shall be released at 220 kV or above.

ii) All new connections shall be given with meter conforming to CEA Regulations on Installation and Operation of Meters.

iii) All new 3 phase connections above 4 kW shall be released with Electronic Tri-vector Meter having Maximum Demand Indicator.

iv) All new Single Point Bulk Connection shall be given only for Load of more than 75 kW.

v) Consumers having motive loads of more than 5 BHP shall install Shunt Capacitor of appropriate rating and confirming to BIS specification.

vi) All new connections at HT/EHT should be released only with 3 phase 4 wire meters.

### 3. Point of Supply

Energy will be supplied to a consumer at a single point.

### 4. Billing in Defective Meter (ADF/IDF), Meter Not Accessible/ Not Read (NA/NR) and Defective Reading (RDF) Cases

In NA/NR cases, the energy consumption shall be assessed and billed as per average consumption of last one year average consumption (as per the Electricity Supply Code) which shall be subject to adjustment when actual reading is taken. Such provisional billing shall not continue for more than two billing cycles at a stretch. Thereafter, the licensee shall not be entitled to raise any bill on provisional basis. In case of Appear defective meter (ADF) Identified defective meter (IDF) and Reading defect (RDF) cases, the consumers shall be billed on the basis of the average consumption of the past three billing cycles immediately preceding the date of the meter being found or being reported defective (as per the Electricity Supply Code). These charges shall be leviable for a maximum period of two billing cycle in case of bi-monthly billing only during which time the licensee is required to replace the defective meter. Thereafter, the licensee shall not be entitled to raise any bill without correct meters.

The checking and replacement of defective meter cases namely IDF and ADF and defective reading cases namely RDF shall be done by the licensee in accordance with the provisions of the Electricity Supply Code as applicable.

**5. Billing in case of domestic metered consumers in rural/hilly areas whose meters are not being read**

For cases relating to domestic metered consumers in rural/hilly areas, where meter reading is either not being taken regularly or taken randomly over delayed interval of time, the provisional billing under these circumstances for such consumers shall be done at the normative levels of consumption as given below, which shall be subject to annual adjustment based on actual meter reading.

| Category | Normative Consumption |
|---|---|
| Domestic (Rural-Hilly Areas) | 30 kWh/kW/month |
| Domestic (Rural-Other Areas) | 50 kWh/kW/month |

For this purpose, the contracted load shall be rounded off to next whole number. Billing on this basis is subject to annual adjustment and the licensee is to ensure meter reading of such consumers at least once a year.

**6. Billing in New Connection**

For cases such as new connections, where past reading is not available, the provisional billing shall be done at the normative levels of consumption as given below, which shall be subject to adjustment when actual reading is taken.

| Category | Normative Consumption |
|---|---|
| Domestic (Urban) | 100 kWh/kW/month |
| Domestic (Rural-Hilly Areas) | 30 kWh/kW/month |
| Domestic (Rural-Other Areas) | 50 kWh/kW/month |
| Non-domestic (Urban) | 150 kWh/kW/month |
| Non-domestic (Rural) | 100 kWh/kW/month |
| Private Tube Wells | 60 kWh/BHP/month |
| **Industry** | |
| LT Industry | 150 kWh/kW/month |
| HT Industry | 150 kVAh/kVA /month |

For this purpose, the contracted load shall be rounded off to next whole number. Billing on this basis shall continue only for a maximum period of 2 billing cycles, during which the licensee should ensure actual reading. Thereafter, the licensee shall not be entitled to raise any bill without correct meter reading. In all other categories, 1st bill shall be raised only on actual reading.

## 7. Delayed Payment Surcharge (DPS) (for all categories except PTW)

In the event of electricity bill rendered by licensee, not being paid in full by the due date, simple interest in the form of a surcharge @ 1.25% per month on the principal amount of the bill which has not been paid, shall be levied from the due date for each successive month or part thereof until the payment is made in full without prejudice to the right of the licensee to disconnect the supply in accordance with Section 56 of the Electricity Act, 2003. The licensee shall clearly indicate in the bill itself the total amount, including DPS, payable for different dates after the due date, taking month as the unit.

## 8. Solar Water Heater rebate

If a consumer installs and uses solar water heating system, rebate of Rs. 75/- p.m. for each 50 litre capacity of the system or actual bill for that month whichever is lower shall be given subject to the condition that consumer gives an affidavit to the licensee to the effect that he has installed such system, which the licensee shall be free to verify from time to time. If any such claim is found to be false, in addition to punitive legal action that may be taken against such consumer, the licensee will recover tche total rebate allowed to the consumer with 100% penalty and debar him from availing such rebate for the next 12 months.

## 9. Prepaid Metering

Prepaid metering scheme approved by the Commission in this Order shall be applicable. A rebate of 4% of energy charges for Domestic category (RTS-1 and RTS-1A) and 3% of energy charges for other LT consumers shall be allowed to the consumers under the Prepaid Metering Scheme from the date of installation and operationalisation of Prepaid Meters. However, no rebate shall be applicable on RTS-9, i.e. Temporary Supply. Solar water rebate as provided above in the Rate Schedule shall be applicable on prepaid consumers also subject to fulfillment of conditions provided therein.

## 10. Voltage Rebate/ Surcharge

(i) For consumers having contracted load upto 75 kW/88 kVA - If the supply is given at voltage above 400 Volts and upto 11 kV, a rebate of 5% would be admissible on the Energy Charge.

(ii) For consumers having contracted load above 75 kW/88 kVA – In case the supply is given at 400 Volts, the consumer shall be required to pay an extra charge of 10% on the bill amount calculated at the Energy Charge.

(iii) For consumers having contracted load above 75 kW/88 kVA – In case of supply at 33 kV the consumer shall receive a rebate of 3.5% on the Energy Charge.

(iv) For consumers having contracted load above 75 kW/88 kVA and receiving supply at 132 kV and above, the consumer shall receive a rebate of 7.5% on the Energy Charge.

(v) All voltages mentioned above are nominal rated voltages.

(vi) No rebate or surcharges would be applicable on consumers having pre-paid connections."

**11. Low Power Factor Surcharge (not applicable to Domestic, PTW categories and also to other categories having kVAh based Tariff)**

(i) On the consumers without Electronic Tri Vector Meters, who have not installed shunt capacitors of appropriate ratings and specifications, a surcharge of 5% on the current energy charges shall be levied.

(ii) On consumers with Electronic Tri Vector Meters, a surcharge of 5% on current energy charges will be levied for having power factor below 0.85 and upto 0.80 and a surcharge of 10% of current energy charges will be levied for having power factor below 0.80.

(iii) No surcharge would be applicable on consumers having pre-paid connections.

**12. Prompt Payment Rebate**

(i) A prompt payment rebate of 1.50% of the monthly bill (excluding Taxes and Duties) shall be provided to consumers for payment of electricity bills through various modes of digital payment such as credit cards, debit cards, UPI, BHIM, internet banking, mobile banking, mobile wallets, online Bank Transfer (RTGS/NEFT/IMPS) etc. within 10 days from the date of issuance of the bill/ bill date.

(ii) A prompt payment rebate of 1.00% of the monthly bill (excluding Taxes and Duties) shall be provided to consumers for payment of electricity bills not through digital mode but through other modes of payment, namely Cash/Cheque/Demand Draft etc., within 10 days from the date of issuance of the bill/bill date.

Provided that the prompt payment rebate shall be subject to cap of Rs 10,000/- per month for LT Consumers and Rs 1,00,000/- per month for HT consumers.

## 13. Excess Load/Demand Penalty (Not applicable to Domestic, Snow bound and PTW categories)

In case of consumers where electronic meters with MDI have been installed, if the maximum demand recorded in any month exceeds the contracted load/demand, charges for such excess load/ demand shall be levied equal to twice the normal rate of fixed/demand charge as applicable. Such excess load penalty shall be levied only for the month in which maximum demands exceeds contracted load. However, no excess load penalty would be applicable on consumers having pre-paid connections.

***Example***:

(i) For consumers where fixed charges on the basis of contracted load/demand have been specified:

Contracted load 30 kW, Maximum Demand 43 kW,

Excess Demand 43-30=13 kW, Rate of Fixed Charges= Rs. 120/kW

Fixed Charges for contracted load = 30 x 120=Rs. 3600

Fixed Charges for excess load = 13x (2 x120) =Rs. 3120

Total Fixed Charges = 3600+3120= Rs. 6720

(ii) For industrial consumers billed on billable demand:

Contracted demand 2500 kVA, Maximum Demand 2800 kVA, Billable Demand =2800 kVA

Excess Demand =2800-2500=300 kVA, Rate of Demand Charges= Rs. 460/kVA

Demand Charges for contracted demand =2500 x 460=Rs. 1150000

Demand Charges for excess demand = 300x (2 x 460) =Rs. 276000

Total Demand Charges = 1150000+276000= Rs. 1426000

## 14. Single Point Bulk Supply for Domestic, Non Domestic and Mixed Load Categories

(i) Single Point Bulk Supply connection shall only be allowed for Sanctioned/Contracted Load above 75 kW with single point metering for further distribution to the end users. However, this shall not restrict the individual owner/occupier from applying for individual connection from UPCL. In case the individual owner/occupier avails individual connection, the tariff as applicable for that category shall be levied.

(ii) The person who has taken the single point supply shall be responsible for all payments of electricity charges to the Licensee. He is authorized to bill the end consumers as per the approved tariff for the single point bulk supply of the concerned category as per the Rate

Schedule and the distribution licensee shall ensure the compliance of the same.

(iii) The person who has taken the single point supply shall also be deemed to be an agent of Licensee to undertake distribution of electricity for the premises for which single point supply is given under seventh proviso to section 14 of the Electricity Act, 2003 and distribution licensee shall be responsible for compliance of all provisions of the Act and Rules & Regulations thereunder within such area.

(iv) Single Point Bulk Supply under "Domestic" shall only be applicable for Residential Colonies/Residential Multistoreyed Buildings including common facilities (such as Lifts, Common Lighting and Water Pumping system) of such Residential Colonies/ Residential Multistoreyed Buildings. In case these Residential Colonies/Residential Multistoreyed Buildings also have some shops or other commercial establishments, the tariff of Mixed Load shall be applicable for such premises subject to conditions provided in the Rate Schedule of Mixed Load Category.

(v) Single Point Bulk Supply Under "Non-Domestic" shall only be applicable for Shopping Complexes/Multiplex/Malls.

## 15. Rounding off

(i) The contracted load/demand shall be expressed in whole number only and fractional load/demand shall be rounded off to next whole number.

***Example:***

Contracted/Sanctioned Load of 0.15 kW shall be reckoned as 1 kW for tariff purposes. Similarly, contracted/sanctioned load of 15.25 kW/kVA shall be taken as 16 kW/kVA.

(ii) All bills will be rounded off to the nearest rupee.

## 16. Other Charges

Apart from the charges provided in the Rate of Charge and those included in the Schedule of Miscellaneous Charges, no other charge shall be recovered from the consumer unless approved by the Commission.

# B. Tariffs

## RTS-1: Domestic

**1. Applicability**

This schedule shall apply to supply of power to:

(i) Residential premises (including premises of Departmental Employees & Pensioners of UPCL, PTCUL and UJVN Ltd.) for light, fan, power and other domestic purposes including common facilities (such as Lifts, Common Lighting and Water Pumping system).

(ii) Single Point Bulk Supply above 75 kW for Residential Colonies, Residential Multi-storeyed buildings where energy is exclusively used for domestic purpose including common facilities (such as Lifts, Common Lighting and Water Pumping system) of such Residential Colonies/Residential Multistoreyed Buildings.

(iii) Places of worship, i.e. Mandir, Masjid, Gurudwara, Church, etc. (only for standalone places of worship and not for the places of worship which have other facilities such as Dharamshala, Community Hall, Dormatories, etc. attached with it).

(iv) Gaushalas/Gausadans and Dairy Farms having load upto 4 kW and consumption upto 600 kWh/ month.

(v) Home-stay registered under Deendayal Upadhyay Home-Stay Development Policy Rules, 2018.

(This rate schedule shall also be applicable to consumers having contracted load upto 2 kW as also consumption upto 200 kWh/month and who are using some portion of the premises mentioned above for non-domestic purposes. However, if either contracted load for such premises is above 2 kW or consumption is more than 200 kWh/month, then the entire energy consumed shall be charged under the appropriate Rate Schedule unless such load is segregated and separately metered).

**2. Rate of Charge**

| Description | Fixed Charges* | Energy Charges |
|---|---|---|
| 1) Domestic | | |
| 1.1)BPL/Life line consumers | | |
| Below Poverty Line and Kutir Jyoti having load upto 1 kW and consumption upto 60 units per month | Rs. 18/ connection/month | Rs. 1.75/kWh |
| 1.2) Other Domestic Consumers | | |
| Upto 100 units per month | • Upto 1 kW-Rs. 60/kW/Month<br>• Above 1 kW and upto 4 kW-Rs. 70/kW/month<br>• Above 4 kW-Rs. 80/kW/month | Rs. 3.15/kWh |
| 101-200 units per month | | Rs. 4.60/kWh |
| 201-400 units per month | | Rs.6.30/kWh |
| Above 400 units per month | | Rs. 6.95/kWh |
| 2) Single Point Bulk Supply | Rs. 100/kVA/month | Rs. 6.25/kVAh |

** Fixed Charges based on sanctioned load*

## RTS-1A: Snowbound

### 1. Applicability

This schedule shall apply to supply of power to:

(i) Domestic and non-domestic consumers in snowbound areas.

(ii) This Schedule applies to areas notified as snowbound/snowline areas by the concerned District Magistrate.

### 2. Rate of Charge

| Description | Fixed Charges | Energy charges |
|---|---|---|
| 1) Domestic | Rs. 18/connection/month | Rs. 1.75/kWh |
| 2) Non-domestic upto 1 kW | | Rs. 1.75/kWh |
| 3) Non-domestic more than 1 kW & upto 4 kW | | Rs. 2.60/kWh |
| 4) Non-Domestic more than 4 kW | Rs. 30/connection/month | Rs. 3.80/kWh |

3. All other conditions of this Sgchedule shall be same as those in RTS-1.

## RTS-2: Non-Domestic

### 1. Applicability

This schedule should apply to supply of power to:

1.1 (i) Government/Municipal Hospitals.

(ii) Government/Government Aided Educational Institutions.

(iii) Charitable Institutions registered under the Income Tax Act, 1961 and whose income is exempted from tax under this Act.

1.2 Small Non Domestic Consumers with connected load upto 4 kW and consumption upto 50 units per month.

1.3 Other Non-Domestic Users including single point bulk supply above 75 kW for shopping complexes/multiplex/malls including common facilities (such as lifts, common lighting and water pumping system).

1.4 Independent Advertisement Boards/Hoardings - All commercial (road side/roof top or on the side of the buildings etc.) standalone independent advertisement hoardings such as private advertising sign posts/sign boards/sign glows/flex that are independently metered through a separate meter.

### 2. Rate of Charge

| S. No. | Description | Fixed Charges | Energy Charges |
|---|---|---|---|
| 1.1 | (i) Government/Municipal Hospitals.<br>(ii) Government/Government Aided Educational Institutions.<br>(iii) Charitable Institutions registered under the Income Tax Act, 1961 and whose income is exempted from tax under this Act. | | |
| | (a) Upto 25 kW | Rs. 80/ kW | Rs. 5.40/ kWh |
| | (b) Above 25 kW | Rs. 90/ kVA | Rs. 5.15/ kVAh |
| 1.2 | **Other Non-Domestic Users** | | |
| | (b) Small Non-Domestic Consumers with connected load upto 4 kW and consumption upto 50 units per month*. | Rs. 75 / kW | Rs. 5.10/ kWh |
| | (b) Others upto 25 kW not covered in 1.2(a) above. | Rs. 95 / kW | Rs. 6.70/ kWh |
| | (c) Above 25 kW | Rs. 95 / kVA | Rs. 6.70/ kVAh |
| 1.3 | Single Point Bulk Supply** | Rs. 110 / kVA | Rs. 6.80/ kVAh |
| 1.4 | Independent Advertisement Hoardings. | Rs. 120/kW | Rs. 7.50/kWh |

** If consumption exceeds 50 units/month, then on the entire energy consumed tariff as per sub-category 1.2(b) shall be charged.*

*** For loads above 75 kW for shopping complexes/multiplex/malls.*

**3. Other Conditions**

3.1 ToD Meters shall be read by Meter Reading Instrument (MRI) only with complete dump with phasor diagram, Tamper Reports, full load survey reports etc. shall be downloaded for the purpose of complete analysis.

3.2 All consumers above 25 kW shall necessarily have ToD Meters.

3.3 No meter shall be read at zero load or very low load. Licensee shall carry appropriate external load and shall apply the same, wherever, necessary to take MRI at load.

3.4 Copy of MRI Summary Report shall be provided alongwith the Bill. Full MRI Report including load survey report shall be provided on demand and on payment of Rs. 15/ Bill.

## RTS-3: Govt. Public Utilities

### 1. Applicability

This schedule shall apply to supply of power to:

(i) Public lamps including street lighting system, traffic control signals, lighting of public parks, etc. The street lighting of Harijan Bastis and villages are also covered by this Rate Schedule.

(ii) State Tubewells, World Bank Tubewells, Pumped Canals and Lift irrigation schemes, Laghu Dal Nahar etc.,

(iii) Irrigation system owned and operated by any Government department.

(iv) Public Water Works, Sewage Treatment Plants and Sewage Pumping Stations functioning under Jal Sansthan, Jal Nigam or other local bodies and Plastic Recycling Plants.

### 2. Rate of Charge

| Category | Fixed Charges* | Energy Charge |
|---|---|---|
| Urban (Metered) | Rs. 115/kVA/month | Rs. 6.90/ kVAh |
| Rural (Metered) | Rs. 105/kVA/month | Rs. 6.90/ kVAh |

** The Urban and Rural differentiation will apply only for supply of power to 1(i) & 1(iv) above.*

### 3. Maintenance Charge for Public Lamps

In addition to the "Rate of Charge" mentioned above, a sum of Rs. 10/- per light point per month shall be charged for operation and maintenance of street lights covering only labour charges where all material required will be supplied by the local bodies. However, the local bodies will have the option to operate and maintain the public lamps themselves and in such case no maintenance charge will be charged.

### 4. Provisions of Street Light Systems

In case, the maintenance charge, as mentioned above, is being charged then the labour involved in the subsequent replacement or renewals of lamps shall be provided by the licensee but all the material shall be provided by the local bodies. If licensee provides material at the request of local body, cost of the same shall be chargeable from the local body.

The cost involved in extension of street light mains (including cost of sub-stations if any) in areas where distribution mains of the licensee have not been laid, will be paid for by the local bodies.

## RTS-4: Private Tube Wells/ Pumping Sets

### 1. Applicability

This schedule shall apply to supply of power to private tube-wells/pumping sets for irrigation purposes and for incidental agricultural processes confined to chaff cutter, thrasher, cane crusher and rice huller only. However, the tariff applicable for RTS-4 shall only be applicable if such incidental agricultural processes are being carried out for agricultural produce of the connection sanctioned for irrigation purposes.

### 2. Rate of charge

| Category | Fixed Charges Rs./BHP/Month | Energy Charges Rs./kWh |
|---|---|---|
| RTS 4: PTW (Metered) | Nil | 2.30 |

### 3. Payments of bills and Surcharge for Late Payment

The bill shall be raised for this category on bi-monthly basis and the consumers will be required to make the payments within 4 months of the bill date, for example for bills raised in June, the payment can be made by the consumer either in lump-sum or in parts (not more than four times) till 31st October of the year for which no DPS shall be levied. In case consumer fails to make payment within the specified dates, a surcharge @ 1.25% per month for the period (months or part thereof) shall be payable on the principal outstanding amount of the Bill as per clause 7 of the General Conditions of Supply. However, in case the consumer makes the payment of Bi-Monthly Bill within 30 days from the date of bill, rebate of 5% of the bill amount (excluding Taxes and Duties) shall be provided to such consumers.

## RTS-4A: Agriculture Allied Activities

### 1. Applicability

This schedule shall apply to supply of power for use in nurseries growing plants/saplings, polyhouses, fisheries and other units growing flowers/vegetables and fruits including mushroom cultivation which does not involve any kind of processing of product except for storing and preservation.

### 2. Rate of charge

| Category | Fixed Charges Rs./BHP/Month | Energy Charges Rs./kWh |
|---|---|---|
| RTS 4(A): Agricultural Allied Services | Nil | 3.25 |

## RTS-5: LT and HT Industry

### 1. Applicability

This schedule shall apply to supply of power to:

(i) Industries and/or processing or agro- industrial purposes, power loom as well as to Arc/Induction Furnaces, Rolling/Re-rolling Mills, Mini Steel Plants and to other power consumers not covered under any other Rate Schedule.

(ii) The vegetable, fruits, floriculture & Mushroom integrated units engaged in processing, storing and packaging in addition to farming and those not covered under RTS-4A shall also be covered under this Rate Schedule.

### 2. Specific Conditions of Supply

(i) All connections shall be connected with MCB (Miniature Circuit Breaker) or Circuit Breaker/Switch Gear of appropriate rating and BIS Specification.

(ii) The supply to Induction and Arc Furnaces shall be made available only after ensuring that the loads sanctioned are corresponding to the load requirements of tonnage of furnaces. The minimum load of 1 Tonne furnace shall in no case be less than 400 kVA and all loads will be determined on this basis. No supply will be given for loads below this norm.

(iii) Supply to Steel Units shall be made available at a voltage of 33 kV or above through a dedicated individual feeder only with check meter at sub-station end. Difference of more than 3%, between readings of check meter and consumer meter(s), shall be immediately investigated by the licensee and corrective action shall be taken.

(iv) Supply to all new connections with load above 1000 kVA should be released on independent feeders only with provisions as at (iii) above.

| Description | Energy Charge | | Fixed /Demand Charge per month |
|---|---|---|---|
| 1. LT Industry having contracted load upto 75kW (100 BHP) | | | |
| 1.1 Contracted load up to 25 kW | Rs. 5.45/kWh | | Rs. 170/ kW of contracted load |
| 1.2 Contracted load more than 25 kW | Rs. 5.15/kVAh | | Rs. 175/ kVA of contracted load |
| 2. HT Industry having contracted load above 88 kVA/75 kW (100 BHP) | Load Factor# | Rs./kVAh | |
| 2.1 Contracted Load up to 1000 kVA | Upto 40% | 5.50 | Rs. 390/kVA of the billable demand* |
| | Above 40% | 5.90 | |
| 2.2 Contracted Load More than 1000 kVA | Upto 40% | 5.50 | Rs. 460/kVA of the billable demand* |
| | Above 40% | 5.90 | |

** Billable demand shall be the actual maximum demand or 75 % of the contracted load whichever is higher.*

*#For tariff purposes Load Factor (%) would be deemed to be =*

$$\frac{\text{Consumption (excluding the energy received through open access) during the billing period}}{\text{Maximum Demand or Contracted Demand whichever is less x No. of hours in the billing period}} \times 100$$

*Provided that in cases where maximum demand during the month occurs in a period when open access is being availed by the consumer, then maximum demand for the purpose of computation of load factor shall be that occurring during the period when no open access is being availed.*

## 3. Time of Day Tariff

(i) The rates of energy charge given above for LT industry with load more than 25 kW and HT industry shall be subject to ToD rebate/surcharge.

(ii) ToD Meters shall be read by Meter Reading Instrument (MRI) only with complete dump with phasor diagram, Tamper Reports, full load survey reports etc. shall be downloaded for the purpose of complete analysis and bills shall be raised as per ToD rate of charge.

(iii) No meter shall be read at zero load or very low load. Licensee shall carry appropriate external load and shall apply the same, wherever, necessary to take MRI at load.

(iv) Copy of MRI Summary Report shall be provided along with the Bill. Full MRI Report including load survey report shall be provided on demand and on payment of Rs. 15/ Bill.

(v) ToD Load shall be as under:

| Season/Time of day | Morning Peak hours | Normal hours | Evening Peak Hours | Off-peak Hours |
|---|---|---|---|---|
| Winters 01.10 to 31.03 | 0600-0900 hrs | 0900-1800 hrs | 1800-2200 hrs | 2200-0600 hrs |
| Summers 01.04 to 30.09 | -- | 0700-1800 hrs | 1800-2300 hrs | 2300-0700 hrs |

The, ToD Rate of Energy Charges shall be as under:

**For LT Industry**

| Energy Charge during | | |
|---|---|---|
| **Normal Hours** | **Peak Hours** | **Off-peak Hours** |
| Rs. 5.15/kVAh | Rs. 6.70/kVAh | Rs. 4.12/kVAh |

**For HT Industry**

| Load Factor* | Energy Charge during | | |
|---|---|---|---|
| | **Normal Hours** | **Peak Hours** | **Off-peak Hours** |
| Upto 40% | Rs. 5.50/kVAh | Rs. 7.67/kVAh | Rs. 4.40/kVAh |
| Above 40% | Rs. 5.90/kVAh | Rs. 7.67/kVAh | Rs. 4.72/kVAh |

** Load Factor shall be as defined in Clause 2 above.*

**4. Seasonal Industries**

Where a consumer having load in excess of 18 kW (25 BHP) and ToD meter and avails supply of energy for declared Seasonal industries during certain seasons or limited period in the year, and his plant is regularly closed down during certain months of the financial year, he may be levied for the months during which the plant is shut down (which period shall be referred to as off-season period) as follows:

(i) The tariff for 'Season' period shall be same as "Rate of Charge" as given in this schedule.

(ii) Where actual demand in 'Off Season' Period is not more than 30% of contracted load, the energy charges for "Off-Season" period shall be same as energy charges for "Season" period given in Rate of Schedule above. However, the contracted demand in the "Off Season" period shall be reduced to 30%.

(iii) During 'Off-season' period, the maximum allowable demand will be 30% of the contracted demand and the consumers whose actual demand exceeds 30% of the contracted demand in any month of the 'Off Season' will be denied the above benefit of reduced contracted demand during that season. In addition, a surcharge at the rate of 10% of the demand charge shall be payable for the entire 'Off Season' period.

**Terms and Conditions for Seasonal Industries**

(i) The period of operation should not be more than 9 months in a financial year.

(ii) Where period of operation is more than 4 months in a financial year, such industry should operate for at least consecutive 4 months.

(iii) The seasonal period once notified cannot be reduced during the year. The off-season tariff is not applicable to composite units having seasonal and other categories of loads.

(iv) Industries in addition to sugar, ice, rice mill, frozen foods and tea shall be notified by

Licensee only after prior approval of the Commission.

**5. Factory Lighting**

The electrical energy supplied under this schedule shall also be utilised in the factory premises for lights, fans, coolers, etc. which shall mean and include all energy consumed for factory lighting in the offices, the main factory building, stores, time keeper's office, canteen, staff club, library, creche, dispensary, staff welfare centres, compound lighting, etc.

**6. Continuous and Non-continuous supply**

(i) Continuous Process Industry as well as non continuous process industrial consumers connected on either independent feeders or industrial feeder can opt for continuous supply. For industrial feeder, all connected industries will have to opt for continuous supply and in case any consumer on industrial feeder does not wish to opt for continuous supply, all the consumers on such feeder will not be able to avail continuous supply. Such Industrial consumers who opt for continuous supply shall be exempted from load shedding during scheduled/unscheduled power cuts and during restricted hours of the period of restriction in usage approved by the Commission from time to time, except load shedding required due to emergency breakdown/shutdown.

(ii) Consumers who are existing Continuous Supply Consumers shall continue to remain Continuous Supply Consumers and they need not apply again for seeking continuous supply. Such consumers shall pay 15% extra energy charges, in addition to the energy charges given above, w.e.f. April 01, 2023 till March 31, 2024. However, in case of any pending dispute with UPCL in the matter of continuous supply on certain feeders, those consumers will have to apply afresh, for availing the facility of continuous supply, by April 30, 2023.

(iii) The existing consumers who are new applicants for continuous supply of power (including those who are applying afresh as per above) can apply for seeking the continuous supply option at any time during the year. However, continuous supply surcharge for such consumers shall be applicable with effect from May 1, 2023 till March 31, 2024. UPCL shall provide the facility of continuous supply within 7 days from the date of application, subject to fulfilment of Conditions of Supply.

(iv) In case of re-arrangement of supply through independent feeder, UPCL shall provide the facility of continuous supply from the date of completion of work of independent feeder subject to fulfilment of Conditions of Supply and the Continuous Supply Surcharge on such consumers shall be applicable from the date of energisation of aforesaid independent feeder till March 31, 2024, irrespective of actual period of continuous supply option.

(v) In case of a new consumer (new connection) opting continuous supply, 15% extra energy charges as Continuous Supply Surcharge shall be applicable from the date of new connection till March 31, 2024, irrespective of the actual period of continuous supply.

(vi) The existing consumers availing continuous supply option, who wish to discontinue the continuous supply option granted to them earlier, will have to communicate, in writing, to UPCL latest by April 30, 2023 and they shall continue to pay continuous supply surcharge alongwith the tariff approved in this Order till April 30, 2023. Further, in this regard, if due to withdrawal by one consumer from availing continuous supply option on a particular feeder, supplying to other continuous supply consumers as well, the status of other continuous supply consumers on that feeder is affected, then UPCL shall inform all the affected consumers in writing, well in advance.

(vii) The Continuous Supply Surcharge shall not be applicable on the power procured by the industrial consumers through open access.

(viii) UPCL shall not change the status of a continuous supply feeder to a non-continuous supply feeder.

(ix) UPCL/PTCUL shall take up augmentation, maintenance and overhauling works on top priority, specially in the sub-stations where circuit breakers, other equipment, etc. are in dilapidated condition and, thereby, shall ensure minimisation of interruptions of the continuous supply feeders.

(x) UPCL/PTCUL shall carry out periodical preventive maintenance of the feeders supplying to continuous supply consumers. The licensees shall prepare preventive maintenance schedule, in consultation with continuous supply consumers, well in advance, so that such consumers can plan their operations accordingly.

(xi) The Licensee should show the energy charges and continuous supply surcharge thereon separately in the bills.

**7. Demand Charges for HT Industry**

If the minimum average supply to any HT Industry Consumers is less than 18 hours per day during the month, the Demand Charges applicable for such HT Industry Consumer shall be 80% of the approved Demand Charges for HT Industry.

## RTS 6: Mixed Load

### 1. Applicability

This schedule applies to single point bulk supply connection of more than 75 kW where the supply is used predominantly for domestic purposes (with more than 60% domestic load) and also for other non-domestic purposes. This schedule also applies to supply to MES.

### 2. Rate of Charge

The following rates shall apply to consumers of this category

| Fixed Charges | Energy Charges |
|---|---|
| Rs. 130/kVA/month | Rs. 6.50/kVAh |

### 3. Other conditions

Apart from the above, other conditions of tariff shall be same as those for RTS-1 consumers. However, excess load penalty shall be applicable as per clause 13 of General Conditions of Supply.

## RTS 7: Railway Traction

### 1. Applicability

This schedule applies to Railways utilizing power for traction purposes.

### 2. Rate of Charge

The following rates of energy and demand charge shall apply to this category:

| Demand Charges | Energy Charges |
|---|---|
| Rs./kVA/month | Rs./kVAh |
| Rs. 315/- | Rs. 6.10 |

### 3. Other conditions

Apart from the above, other conditions of tariff shall be same as those for General HT Industries under RTS-5 consumers except applicability of ToD tariff and surcharge for continuous supply.

## RTS 8: Electric Vehicle Charging Stations

### 1. Applicability

This schedule applies to Public Electric Vehicle Charging Stations set up for providing Electric Vehicle Charging facilities on commercial basis.

### 2. Rate of Charge

The following rates of energy and demand charge shall apply to this category:

| FixedCharges | Energy Charges |
|---|---|
| Rs./kW/month | Rs./kWh |
| --- | Rs. 6.25 |

## RTS-9: Temporary Supply

**1. Applicability**

(i) This schedule shall apply to temporary supplies of light, fan and power loads for all purposes including illumination/public address/ceremonies and festivities/functions/ temporary shops not exceeding three months.

(ii) This schedule shall also apply for power taken for construction purposes including civil work by all consumers including Government Departments. Power for construction purposes for any work / project shall be considered from the date of taking first connection for the construction work till completion of the work / project.

**However, use of electricity through a permanent connection sanctioned for premises owned by the consumer for construction, repair or renovation of existing building, shall not be considered as unauthorised use of electricity as long as the intended purpose/use of the building/apartments being constructed is same/permissible in the sanctioned category of the connection.**

**2. Rate of Charge**

The rate of charge will be corresponding rate of charge in appropriate Schedule Plus 25%. The appropriate rate schedule for the temporary supplies for cane crusher upto 15 BHP given for maximum period of four (4) months will be RTS-5.

## 8.2 Annexure 2: Schedule of Miscellaneous Charges

<table>
<tr><th>Sl. No.</th><th colspan="3">Nature of Charges</th><th>Unit</th><th>Approved (Rs.)</th></tr>
<tr><td rowspan="3">1</td><td colspan="3">Checking and Testing of Meters</td><td></td><td></td></tr>
<tr><td colspan="3">a. Single Phase Meters</td><td>Per Meter</td><td>100.00</td></tr>
<tr><td colspan="3">b. Three Phase Meters</td><td>Per Meter</td><td>150.00</td></tr>
<tr><td rowspan="3"></td><td colspan="3">c. LT Tri-vector Meters</td><td>Per Meter</td><td>700.00</td></tr>
<tr><td colspan="3">d. 11 kV Tri-vector Meters</td><td>Per Meter</td><td>2,000.00</td></tr>
<tr><td colspan="3">e. 33 kV Tri-vector Meters</td><td>Per Meter</td><td>2,500.00</td></tr>
<tr><td>2</td><td colspan="3">Initial testing of Bidirectional / Net Meters</td><td></td><td></td></tr>
<tr><td rowspan="5"></td><td colspan="3">a. Single Phase Meters</td><td>Per Meter</td><td>200.00</td></tr>
<tr><td colspan="3">b. Three Phase Meters</td><td>Per Meter</td><td>300.00</td></tr>
<tr><td colspan="3">c. LT Tri-vector Meters</td><td>Per Meter</td><td>1000.00</td></tr>
<tr><td colspan="3">d. 11 kV Tri-vector Meters</td><td>Per Meter</td><td>1500.00</td></tr>
<tr><td colspan="3">e. 33 kV Tri-vector Meters</td><td>Per Meter</td><td>2000.00</td></tr>
<tr><td rowspan="3">3</td><td colspan="3">Replacement of Meters</td><td></td><td></td></tr>
<tr><td colspan="3">a. Installation of Meter and its subsequent removal in case of Temporary Connections</td><td>Per Job</td><td>150.00</td></tr>
<tr><td colspan="3">b. Changing of position of Meter Board at the consumer's request</td><td>Per Job</td><td>200.00</td></tr>
<tr><td rowspan="3">4</td><td colspan="3">Checking of Capacitors (other than initial checking) on consumer’s request:</td><td></td><td></td></tr>
<tr><td colspan="3">a. At 400 V/ 230 V</td><td>Per Job</td><td>300.00</td></tr>
<tr><td colspan="3">b. At 11 kV and above</td><td>Per Job</td><td>500.00</td></tr>
<tr><td>5</td><td colspan="3">Charges for special reading of consumer meter</td><td>Per Job</td><td>100.00</td></tr>
<tr><td rowspan="6">6</td><td rowspan="3">Nature of Charges</td><td rowspan="3">Unit</td><td colspan="3">Miscellaneous Charges* (Rs.) for Disconnection/Reconnection</td></tr>
<tr><td rowspan="2">Permanent Disconnection on consumer’s request</td><td colspan="2">For Non-payment of Dues</td></tr>
<tr><td>Disconnection</td><td>Reconnection</td></tr>
<tr><td>a. Consumer having load above 100 BHP/75 kW</td><td>Per Job</td><td>1000.00</td><td>500.00</td><td>500.00</td></tr>
<tr><td>b. Industrial and Non Domestic consumers upto 100 BHP/75 kW</td><td>Per Job</td><td>600.00</td><td>300.00</td><td>300.00</td></tr>
<tr><td>c. All other categories of consumers</td><td>Per Job</td><td>300.00</td><td>150.00</td><td>150.00</td></tr>
</table>

## 8.3 Annexure 3: Public Notice

**UTTARAKHAND POWER CORPORATION LTD.**
(A Govt. of Uttarakahnd Undertaking) (Corporate Identity No. U40109UR2001SGC025867)
Victoria Cross Vijeta Gabar Singh Bhawan, Kanwali Road, Dehradun-248001
Telephone: 0135-2768895, Fax: 0135- 2768867, Email ID:- cgmupcl@yahoo.co.in, Website: www.upcl.org

**PUBLIC NOTICE**

**Inviting Comments on the Petition for True-up for FY 2021-22 and Annual Performance Review for FY 2022-23 and determination of Tariff for FY 2023-24 filed by UPCL before the Uttarakhand Electricity Regulatory Commission**

**Salient Points of the ARR/Tariff Petition**

1. Uttarakhand Power Corporation Limited (UPCL), the sole Distribution and Retail Supply Licensee in the State, has filed a Petition before Uttarakhand Electricity Regulatory Commission (UERC or Commission) for approval of its Annual Revenue Requirement (ARR) for FY 2023-24 and determination of tariff for FY 2023-24 and has sought revision in Retail Tariffs to be charged from different category of electricity consumers in the State for FY 2023-24.
2. Through the above Petition, UPCL has also sought truing up of expenses for FY 2021-22 (based on audited accounts). The summary of the revised ARR and the revised revenue Gap for FY 2021-22 and projected ARR from FY 2023-24 & projected Revenue gap for FY 2023-24 are given in the following Table:

*(Figures in Rs. Crore)*

| Sl. No. | Particulars | FY 2021-22 | | FY 2022-23 | | Projected by UPCL |
|---|---|---|---|---|---|---|
| | | Approved by the Commission | Final truing up claimed by UPCL | Approved by the Commission | Revised Estimates submitted by UPCL | FY 2023-24 |
| **A.** | **Expenditure** | | | | | |
| 1 | Power Purchase Expenses# | 5269.47 | 5047.91 | 5269.47 | 7084.88 | 6796.5 |
| 2 | UJVN Ltd. Arrears Gap /(Surplus) | -27.61 | 178.87 | -27.61 | | |
| 3 | SLDC charges | 288.11 | 290.95 | 288.11 | 304.29 | 408.52 |
| 4 | Transmission Charges- PTCUL | | | | | |
| 5 | Transmission Charges- PGCIL | 614.55 | 734.51 | 614.55 | 718.84 | 775.34 |
| 6 | O&M expenses | 595.28 | 641.37* | 595.27 | 718 | 770.99 |
| 7 | Interest charges (including interest on consumer security deposit) | 128.06 | 148.75 | 128.06 | 169.53 | 158.74 |
| 8 | Guarantee Fee | 1.24 | 0.24 | 1.24 | 0.24 | 0.24 |
| 9 | Depreciation | 178.8 | 246.98 | 178.8 | 296.15 | 311.54 |
| 10 | Return on Equity | 117.87 | 138.76 | 117.87 | 168.43 | 183.3 |
| 11 | Interest on Working Capital | 121.86 | 117.42 | 121.86 | 117.96 | 140.24 |
| 12 | Provisions for Bad and Doubtful Debt | | 115.18 | | | |
| 13 | Net Impact of Loss/(Gain) Sharing | - | -59.38* | | | |
| 14 | Additional Claim of Pending Certificates till last year | - | 123.42 | | | |
| **15** | **Gross Expenditure** | **7287.64** | **7724.98** | **7287.63** | **9578.32** | **9545.41** |
| **B.** | Less: Non-tariff Income | 282.72 | 304.73 | 282.72 | 272.5 | 272.5 |
| | True up impact of previous year Gap/(Surplus) | 620.30 | 620.30 | 620.3 | 8.61 | 1121.51^ |
| C. | **Aggregate Revenue Requirement** | **7625.22** | **8040.55** | **7625.22** | **9314.43** | **10394.42** |
| D. | Revenues from Existing/Approved Tariffs | **7364.51** | **7124.33** | **7684.78** | - | **8887.29** |
| **E.** | **Revenue Gap/(Surplus) (C –D)** | **260.71** | **916.22*** | **-59.55** | - | **1507.13** |

***#including Water tax & RPO***
***^including Carrying Cost of Rs. 205.30 Crore***
****Petitioner has revised normative A&G Expenses which shall result in revised gap of Rs. 906.34 Crore.***

3. UPCL has, accordingly, projected a total revenue gap of Rs. 1507.13 Crore including truing up impact for FY 2021-22.
4. For FY 2023-24, UPCL has projected the distribution loss level of 13.25% based on the loss trajectory approved by the Commission in its MYT Order dated 31.03.2022. It is also to mention that for projecting the power purchase cost for FY 2023-24 from UJVN Ltd. stations (Except Vyasi) and Central Sector Generating Stations, UPCL has prorated actual Fixed Cost excluding arrears of first 6 months of FY 2022-23 and then has added the arrears for 6 months to arrive at Fixed Cost for FY 2023-24. Further, the variable cost has been projected based on the per unit rate of the actual variable cost excluding arrears for the first six months of FY 2022-23 and then has added the arrears for 6 months to arrive at Variable Cost for FY 2023-24. Inter-state transmission charges (PGCIL charges) have been projected on "per unit basis", i.e. power projected to be procured from outside based on the actual per unit cost paid (excluding arrears) for FY 2021-22. For Intra-state transmission charges (PTCUL charges) and SLDC charges, UPCL has considered the ARR approved by the Commission for FY 2023-24 in its MYT Order dated 31.03.2022.
5. UPCL has proposed to recover the revenue gap of Rs. 1507.13 Crore relating to true up for FY 2021-22 and projected ARR & tariff for FY 2023-24 through tariff hike in the FY 2023-24. UPCL has, accordingly, proposed an average tariff hike of 16.96% in the existing retail tariffs of consumers.
6. Further, PTCUL, SLDC and UJVN Ltd. have also submitted their ARR and Tariff Petition for the FY 2023-24 before the Commission. If all the claims as proposed are accepted by the Commission, it would necessitate a hike of 28.57% in consumer tariffs for FY 2023-24.
7. UPCL has proposed to revise the applicable tariffs for FY 2023-24 to meet the revenue gap of Rs. 1507.13 Crore.

**The tariff proposals are as below:**

| Category | Fixed / Demand Charges | | Energy Charges | |
|---|---|---|---|---|
| | Existing | Proposed | Existing | Proposed |
| **RTS-1: Domestic** | | | | |
| 1.1 Life Line Consumers | 18/Connection/month | 20/Connection/month | 1.65 Rs/kWh | 1.70 Rs/kWh |
| 1.2 Other Domestic Consumers | | | | |
| (i) Upto 100 Units/month | Upto 1 kW :<br>60 Rs./kW/month<br>Above 1 kW and up to 4 kW :<br>70 Rs./kW/month<br>Above 4 kW :<br>80 Rs./kW/month | Upto 1 kW :<br>65 Rs./kW/month<br>Above 1 kW and up to 4 kW:<br>85 Rs./kW/month<br>Above 4 kW :<br>90 Rs./kW/month | 2.90 Rs/kWh | 3.00 Rs/kWh |
| (ii) 101-200 Units/month | | | 4.20 Rs/kWh | 4.55 Rs/kWh |
| (iii) 201-400 Units/month | | | 5.80 Rs/kWh | 6.35 Rs/kWh |
| (iv) Above 400 Units/month | | | 6.55 Rs/kWh | 7.15 Rs/kWh |

| | | | | |
|---|---|---|---|---|
| 1.3. Single Point Bulk Supply above 75 kW | 100 Rs/kVA/month | 125 Rs/kVA/month | 5.40 Rs/kVAh | 6.15 Rs/kVAh |
| **RTS-1A: Snowbound** | | | | |
| Domestic | 18 Rs/Con/Month | 20 Rs/Con/Month | 1.65 Rs/kWh | 1.75 Rs/kWh |
| Non-Domestic upto 1 kW | 18 Rs/Con/Month | 20 Rs/Con/Month | 1.65 Rs/kWh | 1.75 Rs/kWh |
| Non-Domestic above 1 kW & upto 4 kW | 18 Rs/Con/Month | 20 Rs/Con/Month | 2.40 Rs/kWh | 2.55 Rs/kWh |
| Non-Domestic above 4 kW | 30 Rs/Con/Month | 35 Rs/Con/Month | 3.55 Rs/kWh | 3.70 Rs/kWh |
| **RTS-2: Non-Domestic** | | | | |
| 1. (i) Government/Municipal Hospitals (ii) Government/Government Aided Educational Institutions (iii) Charitable Institutions registered under the Income Tax Act, 1961 and whose income is exempted from tax under this Act. | | | | |
| 1.1 Upto 25 kW | 80 Rs/kW/month | 100 Rs/kW/month | 4.75 Rs/kWh | 5.40 Rs/kWh |
| 1.2 Above 25 kW | 90 Rs/kVA/month | 110 Rs/kVA/month | 4.50 Rs/kVAh | 5.30 Rs/kVAh |
| **2. Other non-Domestic/Commercial Users** | | | | |
| 2.1 Small shops (Load upto 4 KW & consumption upto 50 units pm) | 75 Rs/kW/month | 85 Rs/kW/month | 4.80 Rs/kWh | 5.25 Rs/kWh |
| 2.2 Upto 25 kW other than above | 95 Rs/kW/month | 120 Rs/kW/month | 5.90 Rs/kWh | 7.00 Rs/kWh |
| 2.3 Above 25 kW | 95 Rs/kVA/month | 120 Rs/kVA/month | 5.90 Rs/kVAh | 7.00 Rs/kVAh |
| 3. Single Point Bulk Supply above 75 kW | 110 Rs/kVA/month | 140 Rs/kVA/month | 6.00 Rs/kVAh | 7.10 Rs/kVAh |
| 4.0 Independent Advertisement Hoardings | 120 Rs/kW/month | 150 Rs/kW/month | 6.65 Rs/kWh | 7.90 Rs/kWh |
| **RTS-3: Govt. Public Utilities** | | | | |
| 1. Metered (Urban) | 100 Rs/kVA/month | 130 Rs/kVA/month | 6.05 Rs/kVAh | 7.40 Rs/kVAh |
| 2. Metered (Rural) | 90 Rs/kVA/month | 120 Rs/kVA/month | 6.05 Rs/kVAh | 7.40 Rs/kVAh |
| **RTS-4: Private Tube-wells / Pumping sets** | | | | |
| 1. Metered | - | - | 2.15 Rs/kWh | 2.35 Rs/kWh |
| **RTS-4 A: Agriculture Allied Activities** | | | | |
| 1. Metered | - | - | 2.85 Rs/kWh | 3.25 Rs/kWh |
| **RTS-5: LT & HT Industry** | | | | |
| LT Industries- Contracted load upto 75kW (100 BHP) | | | | |
| 1.1 LT Industries (Upto 25 kW) | 165 Rs/kW/month | 195 Rs/kW/month | 4.80 Rs/kWh | 5.60 Rs/kWh |
| 1.2 LT Industries (above 25kW & upto 75 kW) | 170 Rs/kVA/month | 210 Rs/kVA/month | 4.50 Rs/kVAh | 5.30 Rs/kVAh |
| HT Industries (above 75 KW/88KVA) | | | | |
| 2.1 Contracted load upto 1000 kVA | | | | |
| 1- Load factor upto 40% | 360 Rs/kVA of billable demand | 440 Rs/kVA of billable demand | 4.80 Rs/kVAh | 5.70 Rs/kVAh |
| 2-Load factor above 40% | 360 Rs/kVA of billable demand | 440 Rs/kVA of billable demand | 5.20 Rs/kVAh | 6.20 Rs/kVAh |
| 2.2 Contracted load above 1000 kVA | | | | |
| 1- Load factor upto 40% | 430 Rs/kVA of billable demand | 530 Rs/kVA of billable demand | 4.80 Rs/kVAh | 5.70 Rs/kVAh |
| 2-Load factor above 40% | 430 Rs/kVA of billable demand | 530 Rs/kVA of billable demand | 5.20 Rs/kVAh | 6.20 Rs/kVAh |
| **RTS-6: Mixed Load** | | | | |
| Mixed Load Single Point Bulk Supply above 75 kW including MES | 120 Rs/kVA/month | 145 Rs/kVA/month | 5.60 Rs/kVAh | 6.70 Rs/kVAh |
| **RTS-7: Railway Traction** | | | | |
| Railway Traction | 285 Rs/kVA/month | 320 Rs/kVA/month | 4.90 Rs/kVAh | 5.70 Rs/kVAh |
| **RTS-8: Electric Vehicle Charging Station** | | | | |
| Electric Vehicle Charging Station | - | - | 5.50 Rs/kWh | 6.25 Rs/kWh |

**ToD charges for the industries:**

| Industries | Rate of charge during | | |
|---|---|---|---|
| | Normal hours | Peak hours | Off-peak hours |
| LT Industries | Rs. 5.30/kVAh | Rs. 6.89/kVAh | Rs. 4.24/kVAh |
| HT Industries with Load Factor | | | |
| Upto 40% | Rs. 5.70/kVAh | Rs. 7.98/kVAh | Rs.4.56/kVAh |
| Above 40% | Rs. 6.20/kVAh | Rs. 8.06/kVAh | Rs. 4.96/kVAh |

8. In addition, UPCL has also proposed following:
(a) Continuation of prepaid metering scheme.
(b) Average 4.50% hike in BPL/Lifeline consumers.
(c) Average 8-12% hike in all slabs of other Domestic category.
(d) Average 19-20% hike in Non-domestic category.
(e) Average 18-19% hike in LT Industrial category.
(f) Average 19% hike in HT Industrial category.
(g) Proposed Green Power Scheme for RTS-5 HT Industry with load above 88 kVA/75 kW (100 BHP) to supply green power to interested consumers and sought determination of green power tariff.
(h) Continuation of Separate Tariff for Electric Vehicle Charging.
(i) Separate Tariff category (RTS-4A - Fisheries) has been proposed.
(j) Continuation of existing rebate on online payment of electricity bills.

9. Detailed Petition can be seen free of cost on any working day at the Commission's office or at the offices of Chief Engineer (Commercial) at Victoria Cross Vijeta Gabar Singh Urja Bhawan, Kanwali Road, Dehradun/Chief Engineer (Distribution), Garhwal Zone, UPCL, 120-Haridwar Road, Dehradun/Chief Engineer (Distribution), Kumaon Zone, UPCL, 132-KV Substation, Kathgodam, Haldwani/ Chief Engineer (Distribution), Haridwar Zone, UPCL, Roshnabad, Haridwar / Chief Engineer (Distribution), Udham Singh Nagar Zone, UPCL, 33KV Sub-Station, Sector-2, SIDCUL, Pantnagar, Rudrapur-263153. Relevant extracts can also be obtained from the above mentioned offices of the Petitioner.
10. The Petition is also available at the website of the Commission **(www.uerc.gov.in)** and at the Petitioner's website **(www.upcl.org).**
11. Responses/suggestions, if any, are sought from consumers and other stakeholders on the Petition. Responses may be sent to the Secretary, Uttarakhand Electricity Regulatory Commission, either in person, or by post at 'Vidyut Niyamak Bhawan', Near ISBT, PO-Majra, Dehradun-248171 or through e-mail to secy.uerc@gov.in by **31.01.2023.** Responses/suggestions, if any, may also be dropped at the drop boxes installed at every sub-stations of UPCL in an envelope addressed to Secretary, Uttarakhand Electricity Regulatory Commission by **31.01.2023.**

**No.: 565/1/EE/CM/UPCL/A2 Dt.: 02/01/2023** **Managing Director**

**"SAVE ELECTRICITY IN THE INTEREST OF THE NATION" / Use L.E.D. Bulb to save Electricity ( Toll Free No 1912)**
"Pay Electricity Bill Online 24x7 from www.upcl.org" (for information on Electricity theft, Informer may report to Toll Free No. 1800 180 4185 / Fax: 0135-2760911)

## 8.4 Annexure 4: List of Respondents

| Sl. No. | Name | Designation | Organization | Address |
|---|---|---|---|---|
| 1. | Sh. Munish Talwar | - | M/s Asahi India Glass Ltd. | Integrated Glass Plant, Village-Latherdeva Hoon, Manglaur-Jhabrera Road, P.O. Jhabrera, Tehsil Roorkee, Distt. Haridwar, Uttarakhand. |
| 2. | Sh. Man Singh | General Manager (Engg.) | M/s Vista Furnishing Ltd. | Plot No. 1B, Sector-10, Integrated Industrial Estate, SIDCUL, Distt. Haridwar-249403 |
| 3. | Lt. Col. J.S. Pundir (Retd.) | - | - | House No. 18/1, Lane No. 2, Turner Road, Clement Town, Dehradun. |
| 4. | Sh. Rajeev Gupta | - | M/s KVS Castings Pvt. Ltd. | Works: B-25-29, Industrial Estate, Bazpur Road, Kashipur-244713, Distt. Udhamsingh Nagar. |
| 5. | Sh. R.K. Singh | Head (CPED and Construction & E) | M/s Tata Motors Ltd. | Plot No.-1, Sector-11, Integrated Industrial Estate, SIDCUL, Pantnagar-263153, Udhamsingh Nagar. |
| 6. | Sh. Puneet Mohindra | President (Finance & Admn.) | M/s Kashi Vishwanath Steels Pvt. Ltd. | Narain Nagar Industrial Estate, Bazpur Road, Kashipur-244713, Distt. Udham Singh Nagar. |
| 7. | Sh. B.V.R.C. Purushottam | Director | Fisheries Department | Govt. of Uttarakhand, Secretariat, Dehradun. |
| 8. | Sh. Amber Agarwal | - | M/s Devarpan Foods Pvt. Ltd. | Narain Nagar, Bazpur Road, Kashipur-244713, Distt. Udhamsingh Nagar. |
| 9. | Sh. Pawan Agarwal | Vice-President | Uttarakhand Steel Manufacturers Association | C/o Shree Sidhbali Industries Ltd., Kandi Road, Kotdwar, Uttarakhand. |
| 10. | Sh. Vineet Kumar Sangal | President | M/s Kumaon Garhwal Chamber of Commerce & Industry Uttarakhand | Chamber House, Industrial Estate, Bazpur Road, Kashipur, Udhamsingh Nagar. |
| 11. | Sh. Shakeel A. Siddiqui | Legal Advisor | M/s Galwalia Ispat Udyog Pvt. Ltd. | Narain Nagar Industrial Estate, Bazpur Road, Kashipur-244713, Distt. Udham Singh Nagar. |
| 12. | Sh. Divyanshu Bhatt | Advocate | Law Offices of Divyanshu Bhatt, Counsel for M/s Bharti Airtel Ltd. | 1st Floor, C-1058, Sector-B, Mahanagar, Lucknow-226006, Uttar Pradesh. |
| 13. | Sh. A.K. Bajaj | - | - | Address : G-104, Sri Ram Residency, Beldi Salhapur, Haridwar Highway, Roorkee-247667, Haridwar. |
| 14. | Sh. Kartikay Tomar | Partner | M/s PSR Innovations LLP | Village-Gopipura, Post-R.T.C. Hempur, Kashipur-244716, Distt. Udham Singh Nagar. |
| 15. | Sh. Kapil | President | Bahadarabad Cooperative Fisheries Jivi Committee | Ahmedpur Grant, Vikaskhand-Bahadarabad, Tehsil & Distt. Haridwar. |
| 16. | Sh. Nepal Singh Kashyap | President | District Cooperative Fisheries Development & Marketing Federation | Narsan, District-Haridwar-247670, Uttarakhand. |

| Sl. No. | Name | Designation | Organization | Address |
|---|---|---|---|---|
| 17. | Sh. Adarsh Jaiswal | Senior Manager (E&I) | M/s Ambuja Cement Ltd. (Unit-Roorkee) | Village Lakeshwari, P.O. Sikandarpur Bhainswal, Tehsil Roorkee, Distt. Haridwar-247661, Uttarakhand. |
| 18. | Sh. Digvijay Singh Bisht | President | Nainital Hotels and Restaurants Association | Nainital. |
| 19. | Sh. Ajay Bhargava | Secretary | Hotel Association of Mussoorie | Hotel Surya Kiran, Mall Road, Mussoorie, Dehradun. |
| 20. | Sh. Nisheeth Kumar Maheshwari | Advocate | - | Badrinath Marg, Near Jhanda Chowk, Kotdwar–246149, Pauri Garhwal. |
| 21. | Sh. Sanjay Aggarwal | President | Mussoorie Hotel Association | Hotel Mall Palace, Mall Road Jhulaghar, Mussoorie, Dehradun. |
| 22. | Sh. Sukkha Singh Virk | Sanchalak | Udhamsingh Nagar District Co-operative Bank Ltd. | Address : Village-Chattarpur, Rudrapur, Udhamsingh Nagar. |
| 23. | Sh. Teeka Singh Saini | Block President | Bhartiya Kisan Union | Office-33, Katoratal, Kashipur, Distt. Udhamsingh Nagar. |
| 24. | Sh. Sanjay Kumar Adhlakha | Director | M/s Ambashakti Glass India Pvt. Ltd. | Plot No. 41, Sector 3, IIE, Pantnagar, Rudrapur-263153, Distt. Udhamsingh Nagar. |
| 25. | Sh. Ashok Shukla | - | M/s V.N. Plastics Pvt. Ltd. | Khasra No. 231, Village-Nalheri Dehviran, Roorkee-247665, Haridwar, Uttarakhand. |
| 26. | Sh. Bhagwan Rawat | Convenor | Jan Manch Sor (Paani Panchayat) | Office-Syalvada, Saraswati Vihar Colony, Pithoragarh-262501, Uttarakhand. |
| 27. | Sh. Girish Joshi | District President (Youth Cell) | Uttarakhand Kranti Dal | District Office-Tildhukri, Pithoragarh, Uttarakhand. |
| 28. | Sh. Harindra Kumar Garg | Chairman | SIDCUL Manufacturers Association of Uttarakhand | SMAU Office, 4th Floor, Pentagon Mall, SIDCUL, Haridwar. |
| 29. | Sh. Deepak Gupta | Hony. Secretary | Uttarakhand Hotels and Restaurant Association, | Deep Hotel, Camel's Back Road, Kulri, Mussoorie–248179, Dehradun. |
| 30. | - | - | M/s BST Textile Mills Pvt. Ltd. | Plot 9, Sector 9, IIE, SIDCUL, Pantnagar, Rudrapur-263153, Distt. Udham Singh Nagar. |
| 31. | Sh. Umakant Dwivedi | - | - | Newpiyana Ward, District Pithoragarh, Uttarakhand. |
| 32. | Sh. T.N. Pant | Advocate | - | Pithoragarh. |
| 33. | Sh. Avadhesh Kumar Verma | Chairman | Uttar Pradesh Rajya Vidyut Upbhokta Parishad | A-1391/7, Indira Nagar, Lucknow, Uttar Pradesh. |
| 34. | Sh. Ramesh Joshi | State President | Suraj Sewa Dal | Office-Kaulagarh Road, Sirmaur Marg, Dehradun. |
| 35. | Sh. Harjinder Singh | State President | Janta Dal (Secular)-Uttarakhand | Office-278, Khurbuda, Dehradun-248001. |
| 36. | Sh. Shanti Prasad Bhatt | - | Uttarakhand Kranti Dal | Residence-124, Mitralok Colony, Ballupur Road, Dehradun, Uttarakhand. |
| 37. | Sh. Ramesh Chand | President | Khedajatt Sehkari Matasya Jivi Samiti Ltd. | Office- Khedajatt Post Khaas, Vikas Khand-Narsan, Roorkee, Haridwar, Uttarakhand. |

| Sl. No. | Name | Designation | Organization | Address |
|---|---|---|---|---|
| 38. | Sh. Balendra Kumar | President | Sehkari Matasya Jivi Samiti Ltd.-Nagla Aimad | Address-Nagla Aimad, Vikas Khand-Narsan, Tehsil-Roorkee, Haridwar, Uttarakhand. |
| 39. | Ms. Nuresa Ansari | District President | All India Democratic Women's Association (AIDWA) | Office-81, New Park Road, Gandhigram, Dehradun-248001. |
| 40. | Sh. Rajendra Kumar Chaudhary | General Secretary | Uttarakhand Congress Committee | Address-423/35, Civil Lines, Roorkee, Distt. Haridwar. |
| 41. | Sh. Sunil Kumar Gupta | Editor | Teesri Aankh ka Tehalka | 16, Chakrata Road (Tiptop Gali), Dehradun-248001. |
| 42. | Sh. Rakesh Kumar Bhatia | - | M/s Patelnagar Industries Association | E-8, State Industrial Estate, Patelnagar, Dehradun. |
| 43. | Sh. K.G. Behl | President | All India Consumer Council & SNS-Uttarakhand | 8-A, Nemi Road, Dalanwala, Dehradun. |
| 44. | Sh. Sanjay Chaudhary | Zonal President (Garhwal) | Bhartiya Kisan Union (Tikait) | Village-Nagla Salaru, Post Off.-Gurukul Narsan, Distt. Haridwar. |
| 45. | Shri Pravin Ahire | Plant Head | M/s Finolex Cables Limited | Plot no. K1&K2, AIS Indl. Estate, Village-Latherdevahoon, Manglour, Jhabrera Road, P.O.-Jhabrera, Tehsil-Roorkee, Haridwar-247665, Uttarakhand. |
| 46. | Ms. Ruby Goyal | - | - | Chaman Vihar, Phase-2, Near Niranjanpur Mandi, Dehradun. |
| 47. | Sh. Pradeep Kukreti | Secretary | Sanyukta Nagrik Sangathan-Dehradun | Office-34, Phase-1, THDC Colony, Pathribagh, Dehradun. |
| 48. | Sh. Vijay Singh Verma | - | - | Village-Delna, P.O.-Jhabrera, Haridwar-247665. |
| 49. | Sh. Yogesh Kumar Jindal | Director | M/s Galwalia Ispat Udyog Pvt. Ltd. | Narain Nagar Industrial Estate, Bazpur Road, Kashipur-244713, Distt. Udham Singh Nagar. |
| 50. | Sh. Arvind Rana | - | - | Village-Turka Tisor, P.O.-Sitarganj, Distt. Udhamsingh Nagar. |
| 51. | Sh. Manish Jindal | - | Ramraj Farm | Bazpur-262401, Distt. Udhamsingh Nagar. |
| 52. | - | - | Raja Farm | Village-Bhagwantpur, P.O.-Dhanauri, Kashipur, Distt. Udhamsingh Nagar. |
| 53. | Sh. Jarnail Singh | - | - | Village-Bindukheda, Rudrapur, Distt. Udhamsingh Nagar. |
| 54. | Sh. Dinesh Pant | - | - | Village-Chattarpur, Rudrapur, Distt. Udhamsingh Nagar. |
| 55. | Sh. Jay Prakash | - | - | Village-Kailashpuri, P.O.-Sitarganj, Distt. Udhamsingh Nagar. |
| 56. | Mohd. Salman, S/o Sh. Dilshad Husain | - | - | Address-Mahuakhera Ganj, Kashipur-244713, Distt. Udhamsingh Nagar. |
| 57. | Sh. Dheeraj Singh | - | - | Village-Chhinki, Tehsil-Khatima, Distt. Udhamsingh Nagar. |
| 58. | Sh. Yuvraj Talwar | - | Ashoka Farms | Tehsil-Khatima, Distt. Udhamsingh Nagar. |
| 59. | Sh. Kapil Talwar | - | Talwar Farms | Tehsil-Khatima, Distt. Udhamsingh Nagar. |
| 60. | Sh. Vineet Agarwal | - | - | Village-Jaitpur, P.O.-Kundeshwari, Kashipur, Distt. Udhamsingh Nagar. |

| Sl. No. | Name | Designation | Organization | Address |
|---|---|---|---|---|
| 61. | Sh. Aditya Prakash | - | - | Village-Jaitpur, P.O.-Kundeshwari, Kashipur, Distt. Udhamsingh Nagar. |
| 62. | Sh. Suresh Singh | - | - | Village-Dhimarkhera, Nagar Panchayat-Kelakheda, Tehsil-Bajpur, Distt. Udhamsingh Nagar. |
| 63. | Smt. Shanti Devi | - | - | Village-Tharu Tisor, P.O.-Sitarganj, Distt. Udhamsingh Nagar. |
| 64. | Sh. Nand Rana | - | - | Ward No. 01, Chinti Majra, P.O.-Sitarganj, Distt. Udhamsingh Nagar. |
| 65. | Sh. Sukhdev Singh | - | - | Village-Veeru Nagla, Rudrapur, Distt. Udhamsingh Nagar. |
| 66. | Mohd. Yasin | - | - | Pahadi Colony, Bazpur-262401, Distt. Udhamsingh Nagar. |
| 67. | Sh. Furkan Ali, S/o Sh. Shamshad Husain | - | - | Address-Mahuakhera Ganj, Kashipur-244713, Distt. Udhamsingh Nagar. |
| 68. | Sh. Prem Singh | - | - | Village-Dharampur, Rudrapur, Distt. Udhamsingh Nagar. |
| 69. | Ms. Komal Rana | - | - | Village-Naugawan Thaggu, Naugaon, Block-Khatima, Tehsil-Khatima, Distt. Udhamsingh Nagar. |
| 70. | - | - | M/s Aqua & Agro Farming | Village-Patrampur, Tehsil-Jaspur, Distt. Udhamsingh Nagar. |
| 71. | Sh. Anurag Singh | - | - | Village-Kiratpur, Rudrapur, Distt. Udhamsingh Nagar. |
| 72. | Sh. Manish Kumar | - | - | Tehsil-Bazpur, Distt. Udhamsingh Nagar. |
| 73. | Sh. Nawab | - | - | Village-Mundia Kalan, Tehsil-Bazpur, Distt. Udhamsingh Nagar. |
| 74. | Sh. V. Singh | - | - | Distt. Udhamsingh Nagar. |
| 75. | Sh. Narendra Kumar, S/o Sh. Shambhu Lal | - | - | Lane No. 5, Krishna Nagar, Roorkee, Haridwar. |
| 76. | Sh. Amar S. Dhunta | General Secretary | RTI Club-Uttarakhand | Off.–827/1, Sirmaur Marg, Kaulagarh Road, Dehradun-248001. |

## 8.5 Annexure 4: List of Participants in Public Hearings

**List of Participants in Hearing at Rudrapur on 22.02.2023**

| S.No. | Name of the Participants | Designation | Organization | Postal Address |
|---|---|---|---|---|
| 1. | Sh. Shakeel A. Siddiqui | Legal Advisor | M/s Kashi Vishwanath Textile Mill (P) Ltd. | 5th Km. Stone, Ramnagar Road, Kashipur-244713, Distt. Udham Singh Nagar. |
| 2. | Sh. Mukesh Tyagi | - | M/s Voltas Ltd. | Plot No. 2-5, Sector-8, IIE, Pantnagar Industrial Area, Rudrapur-263153, Distt. Udhamsingh Nagar |
| 3. | Sh. Teeka Singh Saini | Block President | Bhartiya Kisan Union | Office-33, Katoratal, Kashipur, Distt. Udhamsingh Nagar |
| 4. | Sh. Sheetal Singh | - | - | Village-Jagatpur Patti, P.O. Shivrajpur, Jaspur, Distt. Udhamsingh Nagar |
| 5. | Sh. Baljinder Singh Sandhu | District General Secretary | Bhartiya Kisan Union | Office-33, Katoratal, Kashipur, Distt. Udhamsingh Nagar |
| 6. | Sh. Manoj Khantwal | Head (HR) | M/s Green Panel India Ltd. | Plot No. 2, Sector-9, IIE, Rudrapur-263153, Distt. Udhamsingh Nagar |
| 7. | Sh. R.S. Yadav | President | M/s India Glycols Ltd. | A-1, Industrial Area, Bazpur Road, Kashipur-244713, Distt. Udham Singh Nagar. |
| 8. | Sh. Vineet Kumar Sangal | President | M/s Kumaon Garhwal Chamber of Commerce & Industry-Uttarakhand | Chamber House, Industrial Estate, Bazpur Road, Kashipur, Udhamsingh Nagar. |
| 9. | Sh. Madhup Mishra | Vice President | M/s India Glycols Ltd. | A-1, Industrial Area, Bazpur Road, Kashipur-244713, Distt. Udham Singh Nagar. |
| 10. | Sh. Laxmikant Sharma | - | M/s Aurangabad Auto Engineering Pvt. Ltd. | Sector-9, Plot No.-7H, Sidcul, Pantnagar-263153, Distt. Udham Singh Nagar. |
| 11. | Sh. Om Prakash | - | M/s Imperial Auto Industries | Plot No. 48, Sector-11, IIE, Sidcul, Rudrapur-263153, Distt. Udhamsingh Nagar |
| 12. | Sh. Amit Goel | - | M/s Ashok Leyland Ltd. | Plot No. 1, Sector-12, IIE, Sidcul, Rudrapur-263153, Distt. Udhamsingh Nagar |
| 13. | Sh. Naresh | - | M/s Aica Laminates India Pvt. Ltd. | Plot No. 23-26 and 45-48, Sector-5, IIE, Sidcul, Pantnagar, Rudrapur-263153, Distt. Udhamsingh Nagar |
| 14. | Sh. R.K. Gupta | - | M/s Polyplex Corporation Ltd. | Lohia Head Road, Village Amau, Khatima-262308, Distt. Udhamsingh Nagar |
| 15. | Sh. Rajeev Gupta | - | M/s Kashi Vishwanath Steels Pvt. Ltd. | Narain Nagar Industrial Estate, Bazpur Road, Kashipur-244713, Distt. Udham Singh Nagar |
| 16. | Sh. Virat Seth | - | M/s Tata Motors Ltd. | Plot No.-1, Sector-11, Integrated Industrial Estate, SIDCUL, Pantnagar-263153, Distt. Udhamsingh Nagar. |

| S.No. | Name of the Participants | Designation | Organization | Postal Address |
|---|---|---|---|---|
| 17. | Sh. Sanjay Kumar Adhlakha | Director | M/s Ambashakti Glass India Pvt. Ltd. | Plot No. 41, Sector 3, IIE, Pantnagar, Rudrapur-263153, Distt. Udhamsingh Nagar |
| 18. | Sh. Sukha Singh Virk | - | - | Village & P.O. Chattarpur, Rudrapur, Distt. Udham Singh Nagar |
| 19. | Sh. Nipun Mahajan | Manager (Engg.) | M/s G.S. Pharmbutor Pvt. Ltd. | Plot No 58, 59, 66 & 67, Sector-3, IIE, Pantnagar, Rudrapur-263153, Distt. Udhamsingh Nagar |
| 20. | Sh. Rampal Bisht | - | M/s G.S. Pharmbutor Pvt. Ltd. | Plot No. 58, 59, 66 & 67, Sector-3, IIE, Pantnagar, Rudrapur-263153, Distt. Udhamsingh Nagar |
| 21. | Sh. Ram Kumar Agarwal | - | M/s Umashakti Steels Pvt. Ltd. | Village-Vikrampur, Post Off.-Bazpur–262401, Distt. Udhamsingh Nagar |
| 22. | Sh. Harvinder Singh | - | M/s ALF Engineering Pvt. Ltd. | Plot No. 74-A, Sector-11, Sidcul, IIE, Pantnagar, Rudrapur-263153, Distt. Udhamsingh Nagar |
| 23. | Sh. Kapil Talwar | Fish Farmer | Talwar Farms | Tehsil-Khatima, Distt. Udhamsingh Nagar. |
| 24. | Sh. Vineet Agarwal | Fish Farmer | - | Village-Jaitpur, P.O.-Kundeshwari, Kashipur, Distt. Udhamsingh Nagar. |
| 25. | Sh. N.C. Singh | Fish Farmer | Raja Farm | Village-Bhagwantpur, P.O.-Dhanauri, Kashipur, Distt. Udhamsingh Nagar. |
| 26. | Sh. D.K. Singh | - | M/s Omega Icehill Pvt. Ltd. | Plot No. 37, Sector-4, IIE, Sidcul, Pantnagar, Rudrapur-263153, Distt. Udhamsingh Nagar |
| 27. | Sh. Amarendra Patel | - | M/s Manjushree Technopack Ltd. | Plot No. 22(b) 23 23(a), IIE, SIDCUL, Pantnagar, Distt. Udhamsingh Nagar. |
| 28. | Sh. Ajeet Sharma | - | M/s SRF Ltd. | Plot No. 12, Ramnagar Road, Kashipur, Distt. Udham Singh Nagar |
| 29. | Sh. Balbeer Singh | - | - | Dhakia No. 1, Kashipur-244713, Distt. Udham Singh Nagar |
| 30. | Sh. Mahesh Chandra Pant | - | - | Dariya Nagar, Ward No. 37, Rudrapur, Distt. Udham Singh Nagar |
| 31. | Sh. V.S. Gangwar | - | - | Awas Vikas Colony, Rudrapur-263153, Distt. Udham Singh Nagar |
| 32. | Sh. Ramanjeet Singh | - | - | Hotel Channi Raja, Mall Road, Nainital. |
| 33. | Sh. Hemant Pathak | - | - | Gaujajali, Haldwani, Nainital. |
| 34. | Sh. Ajay Bansal | - | - | Teachers Colony, Subhash Nagar, Ward No. 8, Bazpur-262401, Distt. Udham Singh Nagar |
| 35. | Sh. Umesh Sharma | - | M/s Voltas Ltd. | Plot No. 2-5, Sector-8, IIE, Pantnagar Industrial Area, Rudrapur-263153, Distt. Udhamsingh Nagar |

## List of Participants in Hearing at Pithoragarh on 24.02.2023

| S.No. | Name of the Participants | Designation | Organization | Postal Address |
|---|---|---|---|---|
| 1. | Sh. Umakant Dwivedi | - | - | New Piyana, Near Plaza Hotel, Pithoragarh |
| 2. | Sh. Manoj Chauhan | - | - | Chauhan Medical Store, Pithoragarh |
| 3. | Sh. Govind Singh Bisht | - | - | New Bajeti Shivaji Nagar, Pithoragarh |
| 4. | Sh. Mohan Singh | - | - | Village-Bisa Bajer, P.O. Bisa Bajer, Pithoragarh |
| 5. | Sh. T.N. Pant | Advocate | - | Pant Bhawan, Takana, Pithoragarh. |
| 6. | Sh. Kishan | Sabhasad | Nagarpalika | Kharkot, Pithoragarh. |
| 7. | Sh. Chandrashekhar Martoliya | - | - | Rai, Pithoragarh. |
| 8. | Sh. Neeraj Gururani | - | - | Aincholi, Pithoragarh. |
| 9. | Sh. Vipin Chandra Joshi | - | - | Village-Toli, P.O.-Toli, Gurna, Pithoragarh. |
| 10. | Sh. Ajay Prasad | - | - | Meldungri, Pithoragarh. |
| 11. | Sh. Anil Kumar | - | - | Pithoragarh. |
| 12. | Sh. Mohan Bhatt | - | - | Siltham Zila Panchayat, Pithoragarh. |
| 13. | Sh. Dinesh Kapdi | - | - | Sabhasad, Dhanaura Ward and President, Nagar Mandal, Dhanaura Ward, Pithoragarh. |
| 14. | Sh. Hemant Singh Bisht | Zonal President | Gauran Desh | Village-Majhera, P.O.-Nakote, Pithoragarh. |
| 15. | Sh. Yogesh Chandra Bhatt | - | - | Village-Jakh, P.O. Jakh Puran, Pithoragarh. |
| 16. | Sh. Vikram Valmiki | - | - | Takana Colony, Pithoragarh. |
| 17. | Sh. Subhash Singh Bisht | - | - | Takana, Pithoragarh. |
| 18. | Sh. Bhagwan Rawat | - | - | GIC Road, Pithoragarh. |
| 19. | Sh. Sushil Khatri | - | - | Simalgair Bazar, Pithoragarh. |
| 20. | - | - | Social Welfare Society | Punetha Niwas, Takana Road, Pithoragarh. |
| 21. | Sh. Shamsher Mehar, GDSM | Pradesh Mantri | Udyog Vyapar Pratinidhi Mandal-Uttarakhand | 101, Krishnapuri, Tanakpur Road-262501, Pithoragarh. |

## List of Participants in Hearing at Srinagar on 27.02.2023

| S.No. | Name of the Participants | Designation | Organization | Postal Address |
|---|---|---|---|---|
| 1. | Sh. Rajveer Singh | Dy. Director | Fisheries Department | Office-Garhwal Region, Pauri (Garhwal). |
| 2. | Ms. Suman Lata Rawat | Anganbadi Worker | - | Nursery Road, Ward No. 6, Srinagar (Garhwal), Uttarakhand |
| 3. | Ms. Sunita | Anganbadi Worker | - | Brahman Mohalla-2, Srinagar (Garhwal), Uttarakhand |
| 4. | Sh. Mukesh Rawat | - | - | Bhaktiyana, Near SSB, Srinagar (Garhwal), Uttarakhand |
| 5. | Sh. Apal Raturi | President | Hotel Association | Hotel Sriyantra Tapu, Srinagar (Garhwal), Uttarakhand |
| 6. | Sh. Naresh Nautiyal | - | - | Gayatri Medical Store, Srikot, Srinagar (Garhwal), Uttarakhand |
| 7. | Sh. Atar Singh Aswal | - | - | Hotel Devlok, Srinagar (Garhwal), Uttarakhand |
| 8. | Sh. Bimal Prasad Bahuguna | President | Retired Employees Association-Srinagar | Upper Bhaktiyana, Pauri Road, Srinagar (Garhwal), Uttarakhand |
| 9. | Sh. Pankaj Sati | - | Zila Panchayat | New Dang, Ward No. 12, Srinagar (Garhwal), Uttarakhand |
| 10. | Sh. D.S. Bhandari | - | - | Srikot, Ganganali, Srinagar (Garhwal)-246178, Uttarakhand |
| 11. | Sh. Udayram Lakheda | - | - | Nursery Road, Ward No. 6, Srinagar (Garhwal), Uttarakhand |
| 12. | Sh. Sehdev Singh Bisht | - | - | Kesharpur, Srinagar (Garhwal), Uttarakhand |
| 13. | Sh. A.D. Pandey | - | - | Village & Post-Ufalda, Srinagar (Garhwal), Uttarakhand |
| 14. | Sh. Mohan Singh Kunwar | - | - | Village & Post-Ufalda, Srinagar (Garhwal), Uttarakhand |
| 15. | Sh. Pradeep Chauhan | - | - | Lower Bhaktiyana, Pauri Road, Srinagar (Garhwal), Uttarakhand |
| 16. | Sh. Mohal Lal | Retd. Asstt. Engineer (Meter) | UPCL | Nursery Road, Near 132 kV Substation, Srinagar (Garhwal), Uttarakhand |
| 17. | Sh. Sandeep Singh Rawat | - | - | Village-Nakot, P.O. Kirti Nagar, Pauri Garhwal-249161, Uttarakhand |

**List of Participants in Hearing at Dehradun on 01.03.2023**

| S.No. | Name of the Participants | Designation | Organization | Postal Address |
|---|---|---|---|---|
| 1. | Sh. Pankaj Gupta | President | Industries Association of Uttarakhand | Mohabewala Industrial Area, Dehradun-248110 |
| 2. | Sh. Rajiv Agarwal | - | M/s Industries Association of Uttarakhand | Mohabewala Industrial Area, Dehradun-248110 |
| 3. | Sh. Sanjeev Kumar | Office Executive | M/s Industries Association of Uttarakhand | C/o Satya Industries, Mohabbewala Industrial Area, Dehradun |
| 4. | Sh. Padam | - | - | Near ISBT, MDDA Colony, Dehradun |
| 5. | Sh. Ashok Saini | - | - | Mohit Vihar, Near Niranjanpur Mandi, Dehradun |
| 6. | Sh. Narendra Malik | - | - | 100/2, Bell Road, Clementown, Dehradun |
| 7. | Sh. Vinod Sharma | - | - | House No. 28/16A, Lane No. 3, Turner Road, Clementown, Dehradun |
| 8. | Sh. Satyapal Singh | - | - | 60, Hill View Colony, Dehradun |
| 9. | Sh. Pawan Agarwal | Vice-President | M/s Uttarakhand Steel Manufacturers Association | C/o Shree Sidhbali Industries Ltd., Kandi Road, Kotdwar, Uttarakhand |
| 10. | Sh. Sanovar | - | - | Lane No. 3, Vijay Park Extension, Near Ballupur, Dehradun |
| 11. | Sh. Suresh Chand Bansal | - | M/s Kukreti Steel Ltd. | Jasodharpur Industrial Area, Kotdwar |
| 12. | Sh. Munish Talwar | - | M/s Asahi India Glass Ltd. | Integrated Glass Plant, Village-Latherdeva Hoon, Manglaur-Jhabrera Road, P.O. Jhabrera, Tehsil Roorkee, Distt. Haridwar, Uttarakhand. |
| 13. | Sh. Gulshan Khanduja | - | M/s Shree Ganesh Roller Flour Mills | Mohabewala Industrial Area, Subhash Nagar, Dehradun |
| 14. | Sh. Shashi Kant Singhal | - | M/s Shree Sidhbali Industries Ltd. | Kandi Road, Kotdwar, Uttarakhand. |
| 15. | Sh. Vijay Singh Verma | - | - | Village-Delna, P.O. Jhabrera, Roorkee-247665, Haridwar |
| 16. | Sh. Katar Singh | President | Bhartiya Kisan Club | Village-Sultanpur Sabatwali, P.O. Jhabrera-247665, Tehsil-Roorkee, Haridwar. |
| 17. | Sh. Sunil Kumar Gupta | Editor | Teesri Aankh ka Tehalka | 16, Chakrata Road (Tiptop Gali), Dehradun-248001 |
| 18. | Sh. Munendra Badoni | - | Fisheries Department | Dehradun |
| 19. | Sh. Nitin Mittal | - | M/s Instrument & Systems | 30, Mohabewala Industrial Area, Dehradun-248110 |
| 20. | Sh. Shanti Prasad Bhatt | - | Uttarakhand Kranti Dal | Residence-124, Mitralok Colony, Ballupur Road, Dehradun, Uttarakhand. |
| 21. | Ms. Sulochana Istwal | - | - | 10, Court Road, Dehradun |

| S.No. | Name of the Participants | Designation | Organization | Postal Address |
|---|---|---|---|---|
| 22. | Ms. Babita | - | - | Village-Bistipur, P.O. Jhabrera, Roorkee, Haridwar |
| 23. | Sh. Nand Kishore | - | - | Village-Sherpur Khelmau, P.O. Khas, Tehsil-Roorkee, Block-Narsan, Haridwar |
| 24. | Sh. Vijendra Singh | - | - | Village-Tanshipur, P.O. Mangalore, Tehsil-Roorkee, Haridwar |
| 25. | Sh. Ramesh | - | - | Village-Bistipur, P.O. Jhabrera, Tehsil-Roorkee, Haridwar |
| 26. | Sh. Rakesh Bhatia | State Chairman | Indian Industries Association | E-8, Govt. Industrial Area, Patel Nagar, Dehradun. |
| 27. | Sh. Ramesh Joshi | State President | Suraj Sewa Dal | Office-Kaulagarh Road, Sirmaur Marg, Dehradun. |
| 28. | Sh. Sunil Uniyal | President | M/s Uttarakhand Industrial Welfare Association | 222/5, Gandhi Gram, Dehradun-248001, Uttarakhand. |
| 29. | Sh. Nepal Singh Kashyap | President | District Cooperative Fisheries Development & Marketing Federation | Mangalore, Roorkee, District-Haridwar-247670, Uttarakhand. |
| 30. | Sh. Ramesh Chand | President | Khedajatt Sehkari Matasya Jivi Samiti Ltd. | Office-Khedajatt Post Khaas, Vikas Khand-Narsan, Tehsil-Roorkee, Haridwar, Uttarakhand. |
| 31. | Sh. Sushil Kumar | - | - | Society Road, Laksar, Haridwar |
| 32. | Sh. Adarsh Jaiswal | Senior Manager (E&I) | M/s Ambuja Cement Ltd. (Unit-Roorkee) | Village Lakeshwari, P.O. Sikandarpur Bhainswal, Tehsil Roorkee, Distt. Haridwar-247661, Uttarakhand. |
| 33. | Sh. Ajay Pandey | - | - | Jogiwala, Dehradun |
| 34. | Sh. Deepak Dhaundiyal | - | - | Lower Nehrugram, Nanda Devi Enclave, Phase-2, Dehradun |
| 35. | Sh. Amit Verma | - | M/s Finolex Cables Ltd. | Plot no. K1&K2, AIS Indl. Estate, Village-Latherdevahoon, Manglour, Jhabrera Road, P.O.-Jhabrera, Tehsil-Roorkee, Haridwar-247665, Uttarakhand. |
| 36. | Sh. Rajendra Chaudhary | General Secretary | UKPCC | Address-423/35, Civil Lines, Roorkee, Distt. Haridwar. |
| 37. | Sh. K.L. Sundriyal | General Secretary | M/s Prantiya Electrical Contractors Association-Uttarakhand | 2(4/3), New Road, Near Hotel Relax, (Amrit Kaur Road), Dehradun. |
| 38. | Sh. Sanjay Aggarwal | President | Mussoorie Hotel Association | Hotel Mall Palace, Mall Road Jhulaghar, Mussoorie, Dehradun. |
| 39. | Sh. Ashish Goel | Joint Secretary | Mussoorie Hotel Association | Hotel Mall Palace, Mall Road Jhulaghar, Mussoorie, Dehradun. |
| 40. | Sh. Sanjay Chaudhary | Zonal President (Garhwal) | Bhartiya Kisan Union (Tikait) | Village-Nagla Salaru, Post Off.-Gurukul Narsan, Distt. Haridwar. |
| 41. | Sh. Kamaldeep Kamboj | - | - | G-3, Janpath Shopping Complex, Chakrata Road, Dehradun |
| 42. | Sh. K.G. Behl | President | All India | 8-A, Nemi Road, Dalanwala, |

| S.No. | Name of the Participants | Designation | Organization | Postal Address |
|---|---|---|---|---|
| | | | Consumer Council & SNS-Uttarakhand | Dehradun. |
| 43. | Sh. Arvind Jain | - | - | Raghunathpuram, Near Bhuddhi, Shimla Bypass Road, Dehradun |
| 44. | Ms. Ruby Goel | - | - | Chaman Vihar, Phase-2, ITBP Road, Dehradun |
| 45. | Sh. Harjinder Singh | - | - | Office-278, Khurbuda, Dehradun-248001. |
| 46. | Sh. Hari Om Pali | - | - | 101/8, Govindgarh, Dehradun |
| 47. | Sh. Manish Oli | - | - | 34, Kailash Puri, ONGC Hospital, Chakrata Road, Dehradun |
| 48. | Sh. Vijay Kumar | - | - | 91, THDC Colony, Dehradun |
| 49. | Sh. Deepak Sharma | Secretary | Shastri Enclave Welfare Society | Shastri Enclave, Haridwar Road, Dehradun |
| 50. | Sh. Vishwa Mitra Gogia | - | - | 36, Panchsheel Park, Chakrata Road, Dehradun-248006 |
| 51. | Sh. Insarul Hak | - | - | 14/8, Turner Road, Clementown, Dehradun |
| 52. | Sh. Veeru Bisht | - | - | Mohanpur, Post Off.-Premnagar, Dehradun-248007 |