

Before

UTTARAKHAND ELECTRICITY REGULATORY COMMISSION

Miscellaneous Application No. 42 of 2024

In the matter of:

Petition for fixation of voltage wise distribution loss or reduction of approved distribution loss for open access captive solar power plants under Uttarakhand State Solar Policy-2023.

In the matter of:

Uttarakhand Renewable Energy Development Agency (UREDA) ... Petitioner
AND

In the matter of:

Uttarakhand Power Corporation Ltd. (UPCL) ... Respondent

CORAM

Shri M. L. Prasad	Member (Technical)- Chairman (I/c)
Shri Anurag Sharma	Member (Law)

Date of Hearing: July 09, 2024

Date of Order: October 28, 2024

This Order relates to the Petition dated 07.06.2024 filed by Uttarakhand Renewable Energy Development Agency (hereinafter referred to as “Petitioner” or “UREDA”) for fixation of voltage wise distribution loss or reduction of approved distribution loss for open access by captive solar power plants under Uttarakhand State Policy- 2023.

1. Background

- 1.1. The Government of Uttarakhand vide notification dated 13.04.2023 issued Uttarakhand Solar Policy 2023 (hereinafter referred to as “Solar Policy, 2023”) wherein ambitious target of installation of solar energy based power plants within the State having cumulative capacity of 2500 MW has been fixed. Out of these 2500 MW, a target of 1100 MW has been specified for

Utility scale Solar PV plants which has been further divided into following categories:

Type I	Projects selected as per the competitive bidding process for selling power to Discom for meeting its RPO Obligation as specified by UERC from time to time
Type II	Projects set up on private land for captive use or sale of power to third party within or outside the state or project setup on private land under REC Mode.
Type III	Projects set up on government land for captive use or sale of power to third party within or outside the state or projects set up on government land under RE Mode.
Type IV	Projects set up outside the state for selling power to Discom for meeting its RPO Obligation as specified by UERC from time to time.
Type V	Projects set up on private land for selling power to Discom for meeting its RPO Obligation as specified by UERC from time to time.

Further, in accordance with the provisions of Clause 7.6 of said Solar Policy 2023, Captive solar plants have been exempted from paying transmission and wheeling charges and it is also stated that the Commission shall notify Green Open Access regulations in alignment with 'Green Energy Open Access' rules to provide clarity on banking provisions, charges, processes, and computation methodology for open access charges. Subsequently, the Commission vide notification dated 18.10.2023 issued UERC (Green Energy Open Access) Regulations, 2023.

2. Petitioner's submission

- 2.1. The Petitioner vide its Petition submitted that it is a Nodal Agency for Ministry of New and Renewable Energy, GoI for deployment of renewable energy based power plants and State Designated Agency of Bureau of Energy Efficiency, GoI for implementation of various energy conservation activities and programmes in the State of Uttarakhand.
- 2.2. The Petitioner submitted that Government of Uttarakhand vide notification dated 13.04.2023 issued Uttarakhand Solar Policy, 2023 and set a cumulative target of 1100 MW for Utility scale Solar Plants and 1400 MW for distributed Solar plants by December 2027. The Petitioner further submitted that the said the Solar Policy further segregated Utility scale Solar Plants under five type, one of which are projects set up on private land for captive use or sale of power to third party within or outside the State or project setup on private land under REC Mode.
- 2.3. The Petitioner submitted that it has been receiving several applications/requests from interested parties who are willing to set up solar power plants on their respective private land/property and make captive consumption. The Petitioner also submitted that the GoUk has approved the format of Application form and SoP for allotment of Solar Power Plants capacity under type-II

category of State Policy. Subsequently, the Petitioner published RfP for establishment of Solar PV Plants under Type II category against which 11 number of applications having cumulative capacity of 75.31 MW has been received and 9 nos. of captive solar power plants having cumulative capacity of 22.81 MW have been allowed to developers after recommendation of Technical and Financial Committee and approval by State Level Steering Committee in accordance with the provisions of Solar Policy. Remaining 2 nos. of captive solar power plants with a cumulative capacity of 52.50 MW are under the process of allotment. Details of the allotted captive solar power plants are as follows:

S. No.	Name of Developer	Capacity (in KW)
1.	Kashi Vishwanath Steel Pvt Ltd	15000
2.	Evincea Renewables Pvt Ltd	2000
3.	Technox Engineering and Services Pvt Ltd	300
4.	Sara Sae Pvt Ltd,	275
5.	Technox Engineering and Services Pvt Ltd	200
6.	Sara Sae Pvt Ltd,	520
7.	Kashi Vishwanath Steel Textile Mill(P) Limited	2270
8.	Evincea Renewables (Three) Pvt Ltd	2000
9.	Devarpan Foods Pvt Ltd	249
Total		22814

- 2.4. The Petitioner submitted that in the Energy conclave meeting held on 05.12.2023 under the Chairmanship of Hon'ble Chief Minister of Uttarakhand, several interested participants/ investors/associations related to the energy sector particularly interested in setting up solar power plants under Type-II category of Solar Policy, 2023, requested the Hon'ble Chief Minister of Uttarakhand to reduce the distribution loss which is approved by the Commission vide its Order dated 30.03.2023 relating to True up for FY 2021-22, Annual Performance Review for FY 2022-23 & APR for FY 2023-24. The Petitioner submitted that distribution loss trajectory approved by the Commission for FY 2023-24 and FY 2024-25 is 13.25% and 13% respectively which is a flat percentage fixed irrespective of the distribution line voltage level.
- 2.5. The Petitioner submitted that a meeting was conducted on 10.04.2024 by the Secretary (Energy), GoUk with MD UPCL, MD UJVN Ltd., Director UREDA and MD Kashi Vishwanath Steel Pvt. Ltd. to discuss the distribution loss approved by the Commission with comparison of approved distribution loss percentages of other SERCs. In the meeting UREDA was directed to file a Petition before the Commission for fixation of voltage wise loss or reduction of distribution loss in consonance with the losses fined by HPERC and PSERC for open access captive solar power

plants. The distribution loss approved by the aforesaid SERCs are as follows:

S.No.	State	Distribution Loss (%)		
		11 kV	33 kV	66 kV
1.	Himanchal Pradesh	8	6	4
2.	Punjab	40% of distribution losses (12.30%), which works out to 4.92%, in addition to Transmission Loss of 2.42%.	15% of distribution losses (12.30%), which works out to 1.85%, in addition to Transmission Loss of 2.42%.	
3.	Uttarakhand	13.25% for the Year FY 2023-24 13.00% for the Year FY 2024-25		

- 2.6. The Petitioner submitted that a flat approved Distribution Loss percentage has been approved by the Commission for FY 2023-24 at 13.25% and 13.00% for FY 2024-25, irrespective of the voltage level, which is inequitable for the solar power plant developers of different capacities who all are currently subjected to a flat distribution loss rate irrespective of the fact that they shall feed electricity into distribution line having varied distribution voltage levels. Consequently, such criteria of flat percentage of distribution losses is discouraging to promotion of solar power generation in the State of Uttarakhand which has an ambitious target of achieving 1100 MW by the year 2027 in the Utility Scale Solar category.
- 2.7. The Petitioner submitted that the allottees raised their grievances with respect to the flat approved rate of distribution losses and complained about the fact of non-determination of voltage wise distribution losses in the State, which is in stark contrast to fixation of distribution losses for different voltage levels in other States such as Himachal Pradesh and Punjab SERCs.
- 2.8. The Petitioner requested the Commission to determine the respective percentage of voltage wise losses and pass such further order, as may be deemed fit keeping in view the facts and circumstances of the case.

3. Respondent's replies and Petitioner's rejoinders

- 3.1. The Commission had forwarded the copy of the Petition to Uttarakhand Power Corporation Limited (hereinafter referred to as "UPCL" or "Respondent" or "Licensee") for its comments in the matter. UPCL vide its letter dated 06.07.2024 submitted its reply to the Commission which was forwarded to UREDA for its counter reply. UREDA vide its letter dated 10.07.2024 submitted its rejoinder. The Commission has dealt with the reply and rejoinder of the parties in the following paragraphs of this Order.

- 3.2. The Respondent submitted that it is not possible for it to determine the voltage wise losses precisely and accurately. Further, the losses may be determined once the smart metering works is done under RDSS scheme. The Respondent also submitted that the main objective of the RDSS scheme is the modernization of distribution network, replacement of consumers' meters with smart meters and metering of DTR etc. After implementation of smart metering, UPCL will be able to determine the voltage wise losses precisely and accurately at all voltage levels. UPCL also requested the Commission to take appropriate decision in the matter in light of the fact that the Respondent currently does not have data on voltage wise losses.

UREDA vide its rejoinder dated 10.07.2024 submitted that the submission of the Respondent is vague, misleading and an attempt to escape from the process of determination of voltage wise losses and it shows the Respondent's apathetic and impassive attitude to undertake the process of the determination of voltage wise losses. The Petitioner submitted that only because of the Respondent's neglect to undertake the said task, the prospective captive solar power plant generators under Type-II of the Solar Policy 2023, shall have to bear the brunt of absorbing distribution losses fixed at 13% for FY 2024-25, irrespective of the voltage level into which the electricity shall be fed. UREDA also submitted that since last many years, the task of undertaking and fixing voltage wise distribution losses has been kept in abeyance by UPCL. Now, the Respondent submitted that the losses may be determined once the smart metering works has been done under the RDSS scheme. The Petitioner submitted that the process of undertaking and fixing voltage wise distribution losses is pending on the part of the Respondent even before the introduction of the smart metering under the RDSS scheme, and, therefore, to state that losses may be determined once smart metering works has been done under RDSS scheme is only a frivolous excuse devoid of any substantive merit.

UREDA submitted that during the proceedings of ARR for FY 2023-24 the Respondent had submitted that with a view to achieve the losses as approved by the Commission and MoP under RDSS, UPCL vide its letter no. 2503/UPCL/RM/L-17 dated June 18, 2022 had fixed the targets of distribution losses @ 10% for FY 2022-23. The above submission by the Respondent was an admission of taking into consideration the RDSS Scheme for fixing target of distribution losses @ 10% for FY 2022-23 itself.

Therefore, the submission by the Respondent that losses may be determined once smart metering works has been done under RDSS scheme is self-contradictory and is an

evasive submission to escape from undertaking the process the voltage wise distribution losses and fixation of respective percentages. UREDA also submitted that the RDSS scheme is no hurdle to the Respondent to undertake and complete the process of voltage wise losses precisely and accurately. Moreover, the Respondent has not even prescribed any fixed timeline as to when it shall finally implement the smart metering network under the RDSS scheme. Until then, the prospective captive solar power plant generators shall be at mercy of the Respondent and bear fixed distribution losses irrespective of the voltage level used by them.

The uncertainty is causing great apprehension to the current allottees under the Type-II category and is discouraging to the prospective captive solar power plant developers, and therefore consequently UREDA as a nodal agency, is facing difficulties in instilling confidence in the prospective captive solar power plant developers. The Respondent should act in harmony and in consonance with UREDA to help it in achieving the target of 2500 MW by the year 2027 in the State of Uttarakhand and thereby promote green and sustainable energy and cater to the growing needs of energy consumption of the State and the nation as a whole.

UREDA requested the Commission to direct the Respondent to undertake and complete the process of voltage wise distribution losses in a time bound manner and until the said process is completed, as an interim measure, order be passed to the effect to reduce the existing approved distribution losses for the captive solar power plant developers under Type-II category of Solar Policy, 2023, on the lines of orders of Himachal Pradesh and Punjab SERCs.

4. Commission's Analysis, view and decision

- 4.1. The present Petition has been filed by UREDA under provisions of Section 61, Section 62 and Section 86 of the Electricity Act, 2003 (the Act, 2003) read with relevant regulations of the Uttarakhand Electricity Regulatory Commission (Tariff and Other Terms for Supply of Electricity from Non-Conventional and Renewable Energy Sources and Non-Fossil based Co-generation stations) Regulations, 2023 (RE Regulations, 2023) for fixation of voltage wise distribution loss for open access captive solar power plants under the Solar Policy, 2023.

Section 61(h) of the Act, 2003 specifies that the appropriate Commission shall frame the terms and conditions for determination of tariff in such a way that promotes co-generation and generation of electricity from renewable sources of energy. Further, as per section 86(1)(e) of the Act, 2003 the appropriate Commission is required to promote co-generation and

generation of electricity from renewable sources of energy by providing suitable measures for connectivity with the grid and sale of electricity to any person while Section 62 of the Act plays a role in tariff determination, it does not exclusively focus on Open Access charges.

Regulation 42(2) of RE Regulations, 2023 specifies that distribution losses in distribution system shall be adjusted in kind based on the principles specified in UERC (Terms and Conditions of Intra-State Open Access) Regulations, 2015 as amended from time to time.

- 4.2. The Commission conducted a hearing on the Petition on 09.07.2024. Both the parties reiterated their submissions before the Commission. The Commission heard both the parties and carefully considered their written submissions. After examining the relevant material available on records, issues raised by the Petitioner in the Petition and in the rejoinder, reply of the Respondent, the analysis of the Commission are dealt in the subsequent paragraphs of this Order.
- 4.3. UPCL vide its submission dated 06.07.2024 has expressed its inability to determine the voltage wise losses precisely till completion of smart metering works under RDSS scheme in Uttarakhand and submitted that after implementation of smart metering, UPCL will be in a position to determine the voltage wise losses accurately at all voltage levels.

In the matter, the Commission observed that a meeting was conducted by Secretary (Energy), GoUk on 10.04.2024 with MD UPCL, MD UJVN Ltd. and Director UREDA to discuss the distribution losses approved by the Commission with comparison of approved distribution losses by other SERCs and voltage wise determination of distribution losses of UPCL. Further, the Commission vide its previous years Tariff Orders has been directing UPCL to conduct comprehensive study for determination of voltage wise losses. However, UPCL has repeatedly failed to comply with the directions of the Commission. Further, from the submission of UREDA, it appears that during the aforesaid meeting UPCL remained silent in the matter instead of sharing the factual position before the participants of the meeting, i.e. its incapableness to determine voltage wise losses at the current juncture. The Commission cautions the Respondent that being a commercial organization it is expected to avoid taking different stands on the same issue at different platforms and rather it should express the factual position in bonafide manner in all the matters.

- 4.4. UREDA has requested the Commission to determine the respective percentile of voltage wise

losses in the varying voltage level distribution lines.

In the matter, it is pertinent to mention that the open access for transmission of solar energy between two points is governed by Regulation 3 of UERC (Green Energy Open Access) Regulations, 2023. Further, with regard to energy losses, Regulation 10 of UERC (Green Energy Open Access) Regulations, 2023 specifies as follows:

“Energy losses of the transmission and distribution system shall be applicable to the Green Energy Open Access customers as specified by the Commission from time to time.”

Further, Regulation 29(2) of UERC (Terms & conditions of Intra State Open Access) Regulations, 2015 specifies as follows:

“(2) Distribution losses: System distribution losses, as determined by the Commission in its tariff order for the relevant year, shall be payable in kind by the open access customers.”

From a plain reading of the above Green Energy Open Access Regulation, it can be understood that the energy losses specified by the Commission for the transmission and distribution system shall be squarely applicable to the Green Energy Open Access customers also. Further, in accordance with the provision of Regulation 29(2) of the Intra State Open Access Regulations, 2015, the Commission determines distribution losses in the Tariff Order of UPCL. It is noteworthy that the Commission in the Tariff Order has not determined the voltage wise distribution losses, for the reasons stated therein, and, accordingly, as per the aforesaid Regulation the same shall be applicable to Open Access consumers. In case any deviation from the said methodology is sought, then the same would require an amendment to the existing Regulations under Section 181 of Electricity Act, 2003 which cannot be done through an Order. Accordingly, the request of the Petitioner cannot be accepted and is hereby rejected.

Moreover, the voltage wise distribution losses referred to by the Petitioner approved by HPERC and PSERC cannot be applied in toto to the voltage levels in Uttarakhand as the voltage wise losses depends on the voltage wise line lengths and also the terrain having such lines. HPERC has approved the distribution losses as 9.5% for FY 2024-25 and from the submissions of the Petitioner it is evident that PSERC has approved a loss level of 12.30% for FY 2023-24 against which the Commission has approved a distribution loss of 13% for FY 2024-25. Hence, accepting the Petitioner's submissions would not be proper, in the absence of any

study to this effect. Further, the same will have adverse implications on not only UPCL but on the end consumers as well.

4.5. In this regard, it would be relevant to point out that the Commission in its Tariff Order dated March 28, 2024 has directed 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. The Commission has taken a serious concern on this issue which has been pending for years and UPCL is directed to adhere strict compliances to the directions of the Commission failing which action may be initiated against it under the Act.

4.6. Ordered accordingly.

(Anurag Sharma)
Member (Law)

(M.L. Prasad)
Member (Technical)- Chairman (I/c)