

Before

UTTARAKHAND ELECTRICITY REGULATORY COMMISSION

Misc. Application No. 57 of 2018

In the matter of:

Application seeking permission to setup Solar Power Plant of capacity 40 MW at Haripura Dam (27.34 MW) and Tumaria Dam (13.50 MW) in District Udham Singh Nagar, Uttarakhand, on Net Metering basis for captive consumption by Department of Irrigation, Government of Uttarakhand.

In the matter of:

Irrigation Department, GoUK

... Petitioner

AND

In the matter of:

Uttarakhand Power Corporation Ltd.

Uttarakhand Renewable Energy Development Agency (UREDA)

... Respondents

CORAM

Shri Subhash Kumar Chairman

Date of Hearing: August 07, 2018

Date of Order: August 29, 2018

This Order relates to the Petition filed by Irrigation Department, GoUk (hereinafter referred to as "Petitioner") under Regulation 49 and 50 of UERC (Tariff and Other Terms for Supply of Electricity from Non-conventional and Renewable Energy Sources) Regulations, 2013 (hereinafter referred to as "RE Regulations, 2013") seeking permission to setup Solar Power plants at Haripura Dam and Tumaria Dam having capacity of 27.34 MW and 13.50 MW respectively on Net-metering basis for captive use so that the electricity supplied by UPCL to the Irrigation Department be adjusted with the units of electricity generated from the proposed Solar Power Plant fed into the UPCL Grid.

1. Background & Petitioner's submissions

- 1.1. The Petitioner submitted that it is a consumer of electricity operating 1559 nos. of tube wells and 220 nos. of Lift Canal Irrigation Projects at various places in the State of Uttarakhand. The Petitioner also submitted that it pays about Rs. 46 Crore per annum to UPCL towards its annual consumption of more than 71 MUs of electricity.
- 1.2. The Petitioner submitted that GoUK vide its notification no. 1044/I/2013-5/14/2009 dated 27.06.2013 had issued Uttarakhand Solar Power Policy-2013 (the Solar Policy, 2013) with a target to install 100 GW Solar Power Projects by 2022. The Solar Power Projects proposed to be setup under the aforesaid solar policy are categorized in four types as under:-
 - The first type is reserved for UPCL for meeting their Renewable Purchase Obligation (RPO) targets and the projects will be selected through the tariff based competitive bidding process.
 - The second type relates to projects to be set up on private land for captive/3rd party sale/under REC mode.
 - The third type is similar to the second type with a difference that under the third type, Govt. land will be used and will be given to developer who shall provide maximum free power per MW to the Government of Uttarakhand.
 - Solar projects under Jawaharlal Nehru National Solar Mission, GoI will be setup under type four of solar policy.
- 1.3. The Petitioner submitted that under the third type, it is willing to make available its land of 27.343 hectare land at Haripura Dam and 13.50 hectare land at Tumaria Dam district Udham Singh Nagar to a qualified and eligible developer selected through a tender process for the installation/commissioning and maintenance of the Solar Power Plants. It shall be agreed between the Petitioner and eligible developer by way of an agreement which shall come into force at a later date to operate the Solar Power Plant for a period of 25 years. The ownership of the Solar Power Plant shall be transferred by the eligible developer to the Petitioner after the said period of 25 years. The electricity generated from Solar Plant shall be transmitted into the Grid maintained and operated by UPCL on net metering basis.

- 1.4. The Petitioner submitted that UPCL supplies electricity and raises Bill against the electricity consumed at various tube wells and Irrigation Projects belonging to the Petitioner. Further, the purpose of such arrangement is that the electricity supplied by UPCL to the Irrigation Department be adjusted in accordance to the units of electricity generated from the proposed Solar Power Plants fed into the UPCL Grid. The Bill/payment for the difference of units of electricity, if any, shall be paid by Irrigation Department to the UPCL.
- 1.5. The Petitioner submitted that a meeting was held on 26.02.2018 with UPCL and UREDA. During the meeting UREDA submitted that only 500 kW of electricity generated from Solar Energy on Net metering basis can be transmitted in the grid of UPCL wherein opinion/recommendation of UPCL was still awaited. Further, a consensus was arrived that permission from Government of Uttarakhand (GoUk) shall be sought in the matter and an application will be submitted before the Commission requesting to increase the limit upto 40 MW in type 3 category.
- 1.6. The Petitioner submitted that a DPR for Rs. 204.20 Crore has been prepared to set up the proposed solar power plants and 70.087 MUs of electricity would be generated. The electricity so generated from the proposed power plants shall be used for captive consumption and shall save as amount of Rs. 12.60 Crore per year which ultimately shall be a gain to the public exchequer. Further, after setting up of the proposed solar power plants, the 27.343 hectare of government land shall stand clearly demarcated and shall thereby offer safety to from illegal encroachments.
- 1.7. The Petitioner also submitted that the production of Solar Energy in the State of Uttarakhand is deficient in as much as the RPO (Renewable Power Obligation) target is not achieved annually and therefore UPCL requires electricity from Solar Energy to be transmitted into the Grid from the proposed Solar Plant of Petitioner. Further, the need of the hour is shifting from conventional sources of generation of power to more sustainable means such as renewable energy sources. Generating electricity from renewable energy offers significant public health benefits and is in interest of the protection of the environment. The Government of India has made international commitments to generate electricity through renewable sources and has set an ambitious renewable energy target of achieving 175 GW capacity by 2022 out of which 100 GW of energy shall be generated from solar energy. Setting up of 40 MW Solar Plant by the Petitioner is in the interest of the State of Uttarakhand and the Country overall keeping in view

India's international commitments.

2. Respondents' submissions and Petitioner's reply

- 2.1. UREDA vide its letter dated 04.08.2018 submitted that GoUK vide its notification dated 29.06.2013 has notified Uttarakhand Solar Energy Policy-2013 and the maximum capacity of solar plant which can be allocated to any applicant under the Solar Policy is 50 MW. Further, the Solar Policy, 2013 provides four categories under which solar projects are to be setup and one of the categories is for the projects to be setup on government land for captive/3rd party sale. The Petitioner is willing to install Solar Power plant of cumulative capacity of 40 MW on the land which is under the possession of the Petitioner. Further, the Electricity Act, 2003 also allows the generating company or person to construct, maintain or operate a captive generating plant and dedicated transmission lines for captive use. UREDA also submitted that electricity bills of the tune of Rs. 46 Crore are being paid by the Petitioner annually. The energy generated from the solar power plants is proposed to be adjusted in electricity bill of Irrigation Department which will save GoUK money for payment of their electricity bills. UREDA requested the Commission to allow the power generated from proposed Solar Power Plants to export into the grid under net metering arrangement.
- 2.2. UPCL submitted that the Petition has been filed under Regulation 49 & 50 of RE Regulations, 2013 which pertain to removal of any difficulty and power to relax the provisions in the Regulations, however, the Petitioner has failed to prove as to how the present Petition is within the ambit of RE Regulations, 2013. Further, UPCL submitted that it has already provided its opinion/recommendation to the Petitioner vide letter dated 24.05.2018. It has been submitted that UPCL can execute a Power Purchase Agreement with the Petitioner for the supply of power from proposed 40 MW Solar Power Plant at the rates specified by the Commission from time to time only after the registration of such power plant by UREDA.

3. Commission's Analysis and view

- 3.1. The present Petition has been filed by Department of Irrigation, GoUK under Regulation 49 & 50 of RE Regulations, 2013 seeking permission of the Commission to set up Solar Power Plants at Haripura Dam and Tumaria Dam having capacity of 27.34 MW and 13.50 MW respectively on Net-metering basis for captive use so that the electricity supplied by UPCL to the Irrigation

Department be adjusted in accordance to the units of electricity generated from the proposed Solar Power Plant fed into the UPCL Grid. The Commission has gone through all submission made by the Petitioner as well as the Respondents. The Commission has dealt with the submission of the parties in the subsequent paras.

- 3.2. The Petitioner submitted the minutes of the meeting held on 26.02.2018 under the Chairmanship of Principal Secretary (Irrigation, GoUK) and attended by the representatives of UPCL and UREDA. It was observed that during the meeting, UREDA informed the participants about the types of solar projects specified under the Solar Policy, 2013 and various options available with the Irrigation department. The Commission also observed that during the meeting it was decided to develop the proposed solar PV plants under Type-III and supply the generated power under Type-II from such plants for captive use. It was decided in the meeting that action may be taken based on Type-III plants, however, injection of energy in UPCL's grid on net-metering basis may be done under Type-II. However, UREDA vide its comment dated 04.08.2018 has submitted that the plants have been proposed to be installed by Irrigation department for captive use under Type-III of the solar policy. There appears to be a contradiction in the two submissions. UREDA's representation does not speak of Type-II projects. As per the solar Policy notified by the State Government, the only difference between Type-II and Type-III projects is the land where such projects are set up. If they are set up on private land it is covered under Type-II and if it is set up on Government land it is covered under Type-III. However, purpose for which solar projects are set up is the same in both the two categories, i.e. for captive use or sale of power to third party within or outside the State or project set up under REC mode. The Solar policy does not refer to the net metering mechanism under Type-II or Type-III projects and the issue appears to have been mixed up by the Petitioner.
- 3.3. The Petitioner requested the Commission to increase the ceiling limit of installed capacity for the small solar PV plants from 500 kW to 40 MW under net metering arrangement so that electricity supplied by UPCL at various tube wells and Irrigation Projects belonging to Irrigation Department be adjusted with the units of electricity generated from the proposed Solar Power Plant fed into UPCL Grid.

With regard to adjustment of electricity supplied and injected into the Grid, Regulation 42(2) of RE Regulations, 2013 provides as follows:

42. Connectivity and Metering arrangement for grid interactive roof top and small solar PV plants

(1) xxx

(2) xxx

(3) *Supply of electricity to the consumer(s) from the licensee's sources and that to the licensee's distribution system from the roof-top solar PV sources shall be measured either by two separate meters, the readings which shall be used in each billing period for settlement on net basis or alternatively by an export-import type meter suitable for directly measuring the net exchange."*

It is to be noted that the existing regulations provide for the adjustment of the import and export of the electricity from the same premises/location where two separate meters shall be installed to net off the energy imported and exported from the Grid or alternatively, an export-import meter shall be installed for directly measuring the net exchange of energy whereas in the present case, the Petitioner has proposed for settlement of the electricity consumed at various locations with the energy exported into the grid from proposed plants. This arrangement is known as 'Virtual Metering' wherein the energy injected into the grid from solar power plant(s) installed at different location is set off against the energy consumed at other premises under the ownership of the same person/consumer. Based on the aforesaid discussion, the Commission is of the view that RE Regulations, 2013 does not provides for the virtual net metering. Further, with the existing IT infrastructure available with the distribution licensee, it would not be practically feasible for it to adjust the energy consumed at various locations with the energy injected into the grid from different location(s).

Moreover, Regulation 35 (2) of RE Regulations, 2013 specifies as follows:

"35. Grid interactive roof top and small solar PV plants

(1) xxx

(2) *Roof-top Solar PV sources can be installed for injecting into the distribution system of a licensee by any Eligible consumer.*

Provided, the maximum installed capacity of rooftop PV solar power plant & small solar PV plant at the premises of eligible consumer shall not be more than 500 kW."

Accordingly, it is clear from the aforesaid Regulation that the roof top & small solar PV plants having capacity only upto 500 kW can be installed under net metering arrangement.

Further, in the matter of M/s Distribution Solar Power Association & M/s Amplus Solar Power (P) Ltd. v/s UPCL & UREDA with regard to seeking permission for establishment of rooftop based solar plants on net metering basis with capacity higher than 500 kW, the Commission vide its Order 27.06.2018 has already explained the reasons for ceiling the maximum installed capacity to be installed under net metering arrangements. It would be difficult for licensee to manage the impact of unexpected injection of power into the licensee's grid in case the installed capacity for rooftop and small Solar PV power plants upto the sanctioned load or more than that is allowed under net metering. The relevant extract of the said Order is as follows:

"3.3 xxx

Accordingly, apart from the promotion of co-generation and generation of electricity from renewable sources of energy, the Commission is required to encourage efficiency, enforce standards with respect to quality, continuity and reliability of service of licensees. It is also to be noted that in compliance to MYT Regulations applicable from time to time, the licensee is required to submit power procurement plan for the business plan period. In case net metering is allowed upto the sanctioned load of a consumer, it will be difficult for licensee to project energy requirement for the ensuing years which will affect licensee's ARR. Moreover, unexpected injection of power into the licensee's grid may result in grid instability, disturbance which will affect the quality, continuity and reliability of service provided by the licensee.

3.4 xxx

3.5 xxx

However, the RE Regulations have been framed to facilitate development of Rooftop Solar Plants for supply of power to the discom under the net metering arrangement and the capacity restriction of 500 kW provided therein was so envisaged keeping in view the MNRE guidelines in this regard for rooftop solar projects and also considering the grid conditions in the State so that excess power from these rooftop solar installations is fed into the licensee's grid."

- 3.4. The Petitioner has submitted that it is willing to make available the land to a qualified and eligible developer selected through a tender process for the installation and maintenance of the Solar PV plants. The Petitioner has also submitted that the production of Solar Energy in the State of Uttarakhand is deficient in as much as the RPO targets is not achieved annually and therefore, UPCL requires electricity from Solar Energy to be transmitted into the Grid from the

proposed Solar Plants of the Petitioner. Accordingly, it requested the Commission in accordance with Regulation 50 of RE Regulations, 2013 to permit the development of proposed plants on net metering basis.

The Commission appreciates the concern of the Petitioner regarding Renewable Purchase Obligation targets for the licensee and utilisation of the vacant land under the possession of Irrigation Department for development of Solar PV plant. Further, as discussed above, the RE Regulations have put a ceiling on maximum installed capacity for Grid interactive rooftop and Small solar PV plants under net metering model and reasoning for the same has already been given in above paras of this Order. Notwithstanding the net metering model, the Commission is of the view that the Petitioner may get the solar PV plant developed through the successful/eligible developer selected through a tariff based competitive bidding process and the Petitioner may execute a Power Purchase Agreement with UPCL for the supply of entire solar power to be generated from such plants at a tariff which shall be 10% higher than the tariff quoted by L-1 bidder provided that in no case, PPA for purchase of power by UPCL shall be executed at the tariff exceeding the ceiling tariff as specified by the Commission from time to time in accordance with the prevailing Regulations.

Furthermore, with regard to the request of the Petitioner seeking relaxation under regulations 50 of RE Regulations 2013, the Hon'ble APTEL in the matter of Ratnagiri Gas and Power Pvt. Ltd. v. CERC & Anr. (Appeal No. 130/2009) dated 25.3.2011 enunciated upon the cause and need for relaxing the regulations by the Commission. Relevant para of the said order is reproduced hereunder:

"18.1 The Regulations of the Central Commission and the decisions of the Tribunal and the Supreme Court confer the judicial discretion to the Central Commission to exercise power to relax in exceptional case. However, while exercising the power to relax there should be sufficient reason to justify the relaxation and non-exercise of discretion would cause hardship and injustice to a party or lead to unjust result."

- 3.5. On examining the Petition and the subsequent submission made by the Petitioner and on the basis of above discussion, it is observed that since the Petitioner has failed to establish the merits of the Petition in light of the provisions of the Act/Regulations, the question of hardship & injustice to the party, relevant for considering relaxation in regulations, is immaterial and hence, the thought of seeking relaxation in regulations is farfetched. In view of the above

discussion, the Commission does not find any merit in the submission of the Petitioner and hereby decides to reject the Petition. However, as discussed above, the Petitioner may consider commissioning a solar PV plant and sign a PPA with UPCL for injection of power generated from such generating plants into the grid.

3.6. Ordered accordingly.

(Subhash Kumar)
Chairman