## Before

# UTTARAKHAND ELECTRICITY REGULATORY COMMISSION

# Petition No. 33 of 2019

## In the matter of:

Application seeking approval of Uttarakhand Electricity Regulatory Commission on the Model Power Purchase Agreement between Uttarakhand Power Corporation Limited and selected bidders for setting of Grid connected Solar PV Power Projects.

#### In the matter of:

Uttarakhand Power Corporation Ltd. ... Petitioner

#### In the matter of:

Uttarakhand Renewable Energy Development Agency (UREDA)

# CORAM

Shri D.P. Gairola	Member (Law)
Shri M.K.Jain	Member (Technical)

# Date of Order: September 02, 2019

This Order relates to the Petition filed by Uttarakhand Power Corporation Ltd. (hereinafter referred to as "UPCL" or "Petitioner" or "Licensee") seeking approval of the Model Power Purchase Agreement (PPA) to be executed by it with the selected bidders for procurement of power from selected bidders of Grid connected Solar PV power plants.

## 1. Background

1.1 The Petitioner has filed the Petition under Section 86(1)(b) of the Electricity Act, 2003, Regulation 39(3) of UERC (Conduct of Business) Regulations, 2014 and clause 5.1, 5.2 & 5.4 of the license conditions of the Distribution and Retail Supply license dated 20.06.2003 issued by the Commission, seeking approval of the Commission on the Model PPA for purchase of energy generated from the Solar PV power plants to be developed by selected

... Respondent

bidders in the State of Uttarakhand.

- 1.2 The Government of Uttarakhand (GoUk) vide notification no. 1044/I/2013-15/14/2004 dated 27.06.2013 notified the "Solar Energy Policy of Uttarakhand 2013" (hereinafter referred to as "Solar Policy, 2013"). As per the Solar Policy, 2013 GoUk/UREDA shall invite proposals from time to time for selection of Solar Power projects through tariff based competitive bidding process.
- 1.3 UPCL vide letter no. 2207/UPCL/Com/RPO/D(F) dated 02.06.2018 provided its consent to UREDA for arrangement of 200 MW Solar power requirement to achieve Solar RPO for FY 2018-19. Accordingly, UREDA conducted a tariff based competitive bidding process for selection of the developers in the State of Uttarakhand for the development of Solar PV power plants. Through the tariff based competitive bidding, 208 nos. of bidders have been selected for the development of such projects. Further, these 208 nos. of selected bidders are required to execute a PPA with UPCL in accordance with the terms and conditions of RE Regulations, 2018.

Accordingly, UPCL prepared a Model PPA to be signed with the selected bidders and has requested the Commission to approve the Model PPA and allow UPCL to sign the PPA with selected bidders.

# 2. **Petitioner's submission**

- 2.1 The Petitioner submitted that as per the provisions of the Electricity Act, 2003 read with provisions of UERC (Conduct of Business) Regulations, 2014 and Distribution and Retail Supply License, it is required to get the prior approval of the Commission on the Draft Power Purchase Agreement proposed to be entered into with the Generating Company.
- 2.2 UPCL submitted that UREDA conducted a tariff based competitive bidding for selection of successful bidders for development of Solar PV power plants in the State of Uttarakhand under Solar Policy, 2013. UPCL also submitted that UREDA vide letter no. 932/UREDA/03(1)-SPV-214-2/UPCL RPO/2019-20 dated 18.07.2019 has provided a list of 208 nos. of successful bidders alongwith the rate discovered in the bidding for setting up Solar PV power plants in the State of Uttarakhand with the request to sign the PPA with the developers at the earliest.

## 3. **Respondent's reply and Petitioner's rejoinder**

- 3.1 The Commission had forwarded the copy of the Petition to UREDA as it was the Nodal Agency in the State, for its comments, if any, in the matter. UREDA vide its letter dated 09.08.2019 submitted its reply to the Commission which was forwarded to UPCL for their counter reply. UPCL vide its letter dated 27.08.2017 submitted its rejoinder. The Commission has dealt with the reply and rejoinder of the parties in the subsequent paragraphs.
- 3.2 UREDA vide its reply dated 09.08.2019 submitted that in the first phase of bidding, maximum numbers of Solar PV power project developers amongst total selected 208 nos. of developers have applied as Proprietary firms or Partnership firm. Hence, the specific words mentioned in the PPA, i.e. registered under the Company's Act, should be left blank which shall be, accordingly, filled during the signing of PPA as per their actual status.

The Petitioner vide its rejoinder dated 27.08.2019 agreed with the view of UREDA in the matter and, accordingly, agreed to make necessary changes in accordance with the status of the generator.

3.3 UREDA submitted that the selected developers are the Permanent Resident of Uttarakhand and the proposed locations for the projects by them are in the hilly region of Uttarakhand and the grid feasibility of these projects will be given by the Executive Engineer of UPCL. Therefore, the PPA should be signed at district level by Executive Engineer of UPCL.

The Petitioner submitted that the capacity of the plants for which PPAs are to be signed is of larger capacity. Further, the implementation & billing of solar plants are intricate in nature and same can be handled aptly at HQ level. Therefore, there is possibility of mistakes if PPAs are signed at division level.

3.4 UREDA submitted that as per notification no. 23/22/2019-R&R dated 28.06.2018 of MoP, the Letter of Credit in payment security system should be added mandatory in the PPA.

The Petitioner agreed to open LC as Payment Security mechanism equivalent to average monthly billing of the Solar Plant.

3.5 UREDA, with regard to inter connection facility, submitted that the Commission may allow developers for evacuation of power on 33 kV, UPCL Grid in case 33 kV line is closer

to Solar Power plant site for cumulative projects greater than 1 MW subject to grid feasibility.

The Petitioner submitted that any power evacuation cannot be permitted on 33 kV trunk lines from grid substations to 33/11 kV substation. However, power can be evacuated on 33 kV also but line is to be constructed to nearest 33/11 kV substation or grid substation as per technical feasibility. Further, tapping on 33 kV trunk line is not permitted, however, it is permitted on 11 kV as per regulations.

#### 4. Commission's Views & Decisions

#### 4.1 Legal Requirement for approval of PPA

- 4.1.1 A PPA is a legal document incorporating operational, technical & commercial provisions to be complied in accordance with the relevant rules & regulations.
- 4.1.2 Section 86(1)(b) of the Electricity Act, 2003 stipulates that one of the function of the Commission is to regulate electricity purchase and procurement process of the distribution licensees including the price at which electricity shall be procured from the generating companies or licensees or from other sources through agreements for purchase of power for distribution and supply within the State.
- 4.1.3 Further, the Distribution and Retail Supply License issued by the Commission lays down certain conditions of license, which amongst others also has the following:

*"5.1 The Licensee shall be entitled to:"* 

(a) ...

(b) Purchase, import or otherwise acquire electricity from any generating company or any other person under Power Purchase Agreements or procurement process approved by the Commission; ... "

## (Emphasis added)

- 4.1.4 Further, Regulations 7(2) & 7(3) of UERC (Tariff and other Terms for Supply of Electricity from Non-Conventional and Renewable Energy Sources) Regulations, 2018 (RE Regulations, 2018) specifies that:
  - "(2) The distribution licensee on an offer made by the said RE based Generating Stations and Cogenerating Stations may enter into a power purchase agreement in conformity with these Regulations and relevant provisions of other Regulations and the Act. However, if the

distribution licensee intends to purchase power from such generator it shall sign the PPA within two months of offer made by the generating company. Otherwise, if the distribution licensee is not willing to purchase power from such generator it shall intimate the same to the generating company within one month of offer made by it.

Provided that where a grid interactive roof top and small Solar PV plant, is installed in the Premises, by a third party who intends to sell net energy (i.e. after adjustment of entire consumption of owner of the premise) to the distribution licensee, a tripartite agreement will have to be entered into amongst the third Party, the Eligible Consumer and such Distribution Licensee.

(3) The distribution licensee shall make an application for approval of power purchase agreement entered into with the generating company in such form and manner as specified in these regulations and UERC (Conduct of Business) Regulations, 2014 as amended from time to time within one month of the date of signing the PPA."

# (Emphasis added)

4.1.5 Accordingly, in accordance with the requirements of the Act and Regulations referred above, UPCL as a distribution licensee is required to seek approval from the Commission of the PPAs entered or proposed to be entered by it with the power generators.

# 4.2 Consistency of the PPA with the Regulations

4.2.1 Regulation 6(7) of RE Regulations, 2018 specifies as under:

"All Power Purchase Agreements signed by the generating stations existing on the date of notification of these regulations shall be amended in accordance with these regulations, if inconsistent with these Regulations and such amended PPAs shall be valid for entire life of the RE Based Generating Stations and Co-generating Stations."

4.2.2 Hence, all the PPAs to be entered into by UPCL are required to be amended in accordance with RE Regulations if they are inconsistent with the provisions of RE Regulations, 2018. Accordingly, PPAs proposed to be executed between UPCL and the generators are examined for consistency and conformity with the relevant provisions of the Electricity Act, 2003 & RE Regulations, 2018.

## 4.3 Commission's Analysis of the Model PPA and Order on the same

4.3.1 The Model PPA is to be executed between UPCL and the selected developers for supply

of power to UPCL from the Solar PV power projects having capacity ranging from 100 kW to 5 MW situated in the different district of Uttarakhand. Further, the Commission has observed that UREDA had invited tariff based bids for cumulative 200 MW solar power capacity. However, total 237 nos. (184.35 MW) of bids were received. After scrutiny of these proposals, only 208 nos. (148.85 MW) of bids were found eligible for which PPA is to be executed.

- 4.3.2 The Commission observed that certain clauses in the Model PPA submitted by UPCL are inconsistent with the provisions of the Act/Regulations. Such observations have been discussed in the subsequent sub-paragraphs. UPCL is directed to take note of the same and incorporate necessary corrections while executing the PPAs with the project developers.
  - a) As discussed in above paragraph 3.2 of this Order, most of the selected project developers amongst the total 208 nos. of selected developers had applied as Proprietary firms or Partnership firms. Therefore, the specific words mentioned in the PPA, i.e. registered under the Company's Act is required to be left black and shall be, accordingly, filled during the signing of PPA as per the actual status of the selected developer.

Further, the Commission has observed that the Petitioner has used the terminology 'generating company' at many places in the Model PPA. The same is required to be changed in accordance with the above discussion.

b) Clause 1.1 of the Model PPA provides the definition of 'Bill meter' as follows:

"'Bill Meter' means Import and Export Meter on the basis of which energy bills shall be raised by the Solar Photovoltaic Power Plant/UPCL."

Regarding type of Meter to be used for energy accounting, Central Electricity Authority vide its CEA (Installation and Operation of Meters) Regulations, 2006 as amended from time to time has provided the definition of "Main Meter" as follows:

"'Main Meter' means a meter, which would primarily be used for accounting and billing of electricity"

Accordingly, Main Meter is to be used for accounting as well as billing of electricity by the Generator /UPCL. Accordingly, the clause 1.1 shall be read as follows:

"'Main Meter' means Import and Export Meter on the basis of which energy accounting and billing of electricity shall be done by the Solar Photovoltaic Power Plant/UPCL"

Further, based on the above modification in the Model PPA, UPCL is required to replace word 'Bill Meter' with 'Main Meter' in all the clauses of the Model PPA.

c) The Model PPA does not define 'Due Date'. Accordingly, following clause shall be inserted after Clause 1.3:

"1.3(a) "Due date" shall mean the thirtieth (30<sup>th</sup>) day after a Monthly Bill or a Supplementary Bill is faxed/mailed/handed over to the Buyer and confirmed telephonically by the Buyer and by which date such Monthly Bill or Supplementary Bill is payable by Buyer. "

d) Clause 1.4 of the Model PPA provides definition for "Export Meter" as follows:

"'Export Meter' means Bill Meter installed at interconnection point for measurement of Active Energy, Maximum demand and Power factor for Energy exported to the Solar Photovoltaic Power Plant's from UPCL 33/11 kV ..., Uttarakhand."

Since as per the definition of "Main Meter" read with Clause 2.3, billing of energy/export shall be carried out by the generator based on readings from export/import meters, therefore, the definition of export meter is required to be corrected and shall be read as follows:

"'Export Meter' means Main Meter installed at the interconnection point for measurement of Active Energy, Maximum demand and Power Factor for energy exported from the Solar Photovoltaic Power Plant to UPCL 33/11 kV Substation..., Uttarakhand."

e) Clause 1.7 of the Model PPA provides for "Import Meter" as follows:

"'Import Meter' means Bill Meter installed at interconnection point for Measurement of Active Energy, Maximum demand and Power factor for Energy imported from the Solar Photovoltaic Power Plant's to UPCL 33/11 kV..., Uttarakhand"

Since as per the definition of "Main Meter" read with Clause 2.3, billing of energy/export shall be carried out by the generator based on readings from export/import meters, therefore, the definition of import meter is required to be corrected and shall be read as follows:

"Import Meter' means Main Meter installed at the interconnection point for

measurement of Active Energy, Maximum demand and Power Factor for energy imported by the Solar Photovoltaic Generating Station from UPCL 33/11 kV Substation..., Uttarakhand."

f) Clause 2.1 of the Model PPA provides as follows:

"UPCL shall accept and purchase entire/surplus .... (kW/MW) of power made available to UPCL system from Solar Photovoltaic Power Plant @ Rs. ..... intimated vide letter no. .... Dated..... (Annexure-IX) after the bidding process conducted by UREDA. Above rate of sale of Power shall be applicable only if the Solar Photovoltaic Power Plant commissions its plant on or before .... However, if the plant is commissioned after ...., the rate of sale of power would be as determined by the UERC for the year of commissioning if such rates are lower than the tariff agreed to in the PPA otherwise tariff agreed in this PPA shall continue."

The Petitioner has referred Annexure-IX in the aforesaid clause. However, the same is not enclosed with the Model PPA. The Petitioner is directed to ensure that all the annexure are properly filled and enclosed while executing PPA with the selected bidders.

Further, the Commission vide Order dated 01.02.2019 had extended the control period of the benchmark capital cost & generic tariff as declared by the Commission for FY 2018-19, upto June, 2020. The relevant extract of the Order dated 01.02.2019 is as follows:

"Therefore, based on UREDA's request vide its letter dated 23.01.2019, the Commission allows extension of benchmark capital cost and generic tariff for FY 2018-19 upto June, 2020 for upcoming Solar PV Power Plants (cumulative capacity of 200 MW) beyond which no extension shall be allowed for whatsoever reason"

Accordingly, if such plants are commissioned after 30<sup>th</sup> June, 2020, the rate of sale of power would be as determined by the Commission for the year of commissioning, if such rates are lower than the tariff agreed to in the PPA otherwise tariff agreed in the PPA shall continue. In view of the above, the Petitioner is required to make necessary changes in the aforesaid clause.

g) Clause 8.3 of the Model PPA provides as follows:

"The cost of laying the transmission line upto the 33/11 kV ..., Uttarakhand owned,

maintained and operated by UPCL/STU, the required bay, terminal equipments and associated synchronization equipments, etc. shall be borne as per clause 41(3) of UERC regulation 2018 by the owner."

With regard to connectivity, Regulation 41 of RE Regulations, 2018 specifies as follows:

# "41. Evacuation of Power

- (1) Distribution Licensees shall provide connectivity to the RE Based Generating Stations having capacity upto 25 MW at its nearest distribution sub-station preferably within a range of 10 kilometers from the location of such generating station. They may further mutually agree to provide connectivity at appropriate voltage level subject to technical feasibility and technical standards for construction of electrical lines and connectivity with the grid as may be specified by CEA.
- (2) XXX
- (3) In case RE based Generating Stations exercise the option to construct the evacuation system including the line upto the nearest substation of Transmission/Distribution Licensee, the required bay, terminal equipments, associated synchronization equipments and above pooling switching station, if any, etc. the cost of such evacuation system shall be borne by such generating stations:

Provided that such Generating Stations may also get the work of construction of the power evacuation system carried out by State transmission/distribution licensee;

Provided further that the land for extending the bay shall be provided by the owner of the transmission or distribution sub-station, as the case may be, free of cost."

It is to be noted that although RE based generators have an option to construct the evacuation system including the line upto the nearest sub-station of the distribution licensee, it is responsibility of the distribution licensee to provide the connectivity to the RE Based Generating Stations having capacity upto 25 MW at its nearest distribution sub-station as per aforesaid regulation.

Further, it is pertinent to mention that if the generator opts to construct the evacuation infrastructure, at its own cost, it shall be allowed a normative tariff of 12 paise/kWh over and above the tariff determined through tariff based competitive bidding for the respective successful bidder in accordance with the Regulation 15(1)(c) of RE Regulations, 2018.

With regard to the evacuation of power/connectivity, the Commission has gone through the submission of the Petitioner as well as the Respondent. In the matter, the Commission is of the view that if any such developer is willing to connect its plant to the nearest 33 kV UPCL, in that case the line is to be constructed by the developer till the substation as per technical feasibility and prevailing regulations.

With regard to UREDA's submissions that the developers may be allowed evacuation of power on 33 kV, UPCL Grid, in case 33 kV line is closer to Solar Power plant site for cumulative projects greater than 1 MW subject to grid feasibility, it is held that tapping 33 kV line will not be prudent. However, the RE Regulations 2018 provides the option to more than one generating stations to construct, at their own cost, a common evacuation infrastructure including pooling switching station, in accordance with Regulation 15(1)(C) read with Regulation 41 of the Regulations, for evacuation of their generation. The same may also be explored by the solar developers.

Accordingly, based on the above discussion, the Petitioner is advised to amend Clause 8.3 of the Model PPA, if required, considering the financial viability of both the connectivity arrangements after providing an option to the developers in accordance with the RE Regulations, 2018.

h) Clause 26.1 of the Model PPA provides for "Force Majeure" as follows:

"If any party hereto is wholly or partially prevented from performing any of its obligations under this agreement by reason of or due to lighting, earthquake, riots, floods, invasion, insurrection, rebellion, mutiny, tidal wave, civil unrest, epidemics, explosion, the order of an court, judge or civil authority, change in State or National law, war, any act of God or a public enemy, or any other similar or dissimilar cause reasonable beyond its exclusive control and not attributable to its neglect, then in any such event, such party shall be excused from whatever performance is prevented by such event, to the extensor prevented, and such party shall not be liable for any damage, sanction or loss for not performing such obligations."

The same shall be read as follows:

"26.1 Force Majeure Event" means, with respect to any party, any event or circumstance which is not within the reasonable control of, or due to an act or omission of, that party and which, by the exercise of reasonable care and diligence, that party is not able to prevent, including, without limiting the generality of the foregoing:

- *(i)* Lightning, storm, earthquakes, flood, natural disaster and action of the natural elements;
- (ii) Acts of public enemy, blockades, insurrections, riots, revolution and sabotage;
- (iii) Unavoidable accident, including but not limited to fire, explosion, radioactive contamination and toxic dangerous chemical contamination;"
- 4.3.3 As far as execution of PPA at district level by the Executive Engineer of UPCL is concerned, the Commission agrees with the comments of the Petitioner that the implementation & billing of solar plants are intricate in nature and same can be handled appropriately at Headquarter level. In the matter, the Commission directs UPCL to execute the PPA within ten working days expeditiously from the receipt of the application/NoC from successful bidder/UREDA as the case may be.
- 4.3.4 UPCL is directed to amend the Model PPA in accordance with the observations of the Commission in this Order and sign the PPA with the developers after incorporating the same and submit the same to the Commission within one week of signing of each PPA. Further, the Commission also directs the Petitioner to file separate Petitions seeking approval for execution of PPA with the successful bidders having allotted capacity of more than 2 MW.
- 5. Ordered accordingly.

(M.K. Jain) Member (Technical) (D.P. Gairola) Member (Law)