

Before

UTTARAKHAND ELECTRICITY REGULATORY COMMISSION

Petition No. 17 of 2016

In the matter of:

Application seeking approval of the Commission on the Draft Power Purchase Agreement between Uttarakhand Power Corporation Ltd. and M/s Avani Bio Energy Pvt. Ltd. (33 kV Grid Sub-station at Kunatta, Pithoragarh, Uttarakhand).

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Application seeking approval of the Commission on the Draft Power Purchase Agreement between Uttarakhand Power Corporation Ltd. and M/s Avani Bio Energy Pvt. Ltd. (33 kV Grid Sub-station at Raiagar, Tripuradevi, Pithoragarh, Uttarakhand).

In the matter of:

Uttarakhand Power Corporation Ltd. ... Petitioner

AND

M/s Avani Bio Energy Pvt. Ltd. ... Respondent

CORAM

Shri Subhash Kumar Chairman

Shri K.P. Singh Member

Date of Hearing: June 7, 2016

Date of Order: July 8, 2016

The Order relates to the Petitions filed by Uttarakhand Power Corporation Ltd. (hereinafter referred to as "UPCL" or "Petitioner") seeking approval of two PPAs executed by it with the project developer (hereinafter referred to as "Generators" or "Respondents") for procurement of power from Biomass Gasifier based power plants.

1. Background & Submissions

1.1 The Petitioner vide its Petitions dated 19.05.2016 submitted 2 PPAs seeking approval of the Commission. The Commission forwarded the copy of the Petitions to the project developer for submission of comments on the same. The Commission also decided to hold a hearing in the

matter on 07.06.2016.

1.2 In response to UPCL's Petitions, the Respondent vide e-mail dated 02.06.2016 submitted its comments. M/s Avani Bio Energy Pvt. Ltd. submitted that two 10 kW each power plants at two different locations are being implemented by it. However, the Petitioner has mistakenly assumed two plants at the same location. The Respondent submitted that these plants are planned to be commissioned simultaneously at the following sites:

- a. Avani Campus, PO Tripuradevi, Via Berinag, Dist. Pithoragarh, Kumaon-262531, Uttarakhand.
- b. Avani site in Village Simalta, Section Gangolihat, Dholchhina-raiagar road, Distt. Pithoragarh, Kumaon-262532.

Further, M/s Avani Bio Energy Pvt. Ltd. also submitted that Pincode of its head quarter mentioned in the draft PPAs needs to be corrected as 262531.

1.3 M/s Avani Bio Energy Pvt. Ltd. submitted that Clause 1.7 of the draft PPAs providing definition of import meter mentions 33 kV grid substation-Landhora, which is likely an error, since Landhora is geographically too far from the place of power generation and expected interconnection point.

1.4 The Respondent submitted that the renewable energy technology used in these plants is "Biomass Gasifier" based on Pine Needles. However, the Petitioner has erroneously mentioned the same as biogas based plants. During the hearing, the Respondent submitted that the Pine forest in the State produces Pine Needles in abundance which shall be used for power generation through biomass gasifier. The Respondent also submitted that implementation of such plants not only creates employment opportunity to local villagers but would also have added benefits of minimising fire hazards being faced during summer season.

1.5 M/s Avani Bio Energy Pvt. Ltd. also submitted that the proposed power plants are renewable energy projects on an extremely small scale (10 kW) relative to an average power plant. Therefore, the extent of reporting requirements such as daily/hourly generation reports may be commensurately lenient to ease administrative manpower requirements.

1.1 During the hearing, the Respondent submitted that both the power plants are likely to commence generation during the month of July or August, 2016.

1.2 Since the matters filed in the two Petitions were similar, the Commission vide its Order dated

2. Commission's Views & Decisions

2.1 Legal Requirement for approval of PPA

2.1.1 A PPA is a legal document incorporating operational, technical & commercial provisions to be complied in accordance with the relevant rules & regulations.

2.1.2 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 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.

2.1.3 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)

2.1.4 Regulation 39 of UERC (Conduct of Business) Regulations, 2014 specifies as under:

"(1) The distribution licensee shall file with the Commission in complete form copies of all Power Purchase Agreements already entered into by it.

(2) The distribution licensee to establish to the satisfaction of the Commission that the purchase of power by it is under a transparent power purchase procurement process and is economical and the power is necessary to meet its service obligation.

(3) The Distribution licensee shall apply to the Commission for approval of the draft Power Purchase agreement that it proposes to enter into with the suppliers. The Commission may pass orders:

(a) Approving the agreement; or

(b) Approving the agreement with modifications proposed to the terms of the agreement; or

(c) Rejecting the agreement.

...."

2.1.5 Further, Regulations 7(2) & 7(3) of the UERC (Tariff and other Terms for Supply of Electricity from Non-Conventional and Renewable Energy Sources) Regulations, 2013 (RE Regulations, 2013) read with third amendment of the same specifies as under:

“(2) The distribution licensee on an offer made by the said RE based Generating Stations and Co-generating Stations shall enter into a power purchase agreement in conformity with these Regulations and relevant provisions of other Regulations and the Act. The distribution licensee shall sign the PPA within two months of offer made by the generating company, failing which the generating company may approach the Commission for suitable remedy.

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 station in such form and manner as specified in these regulations and Uttarakhand Electricity Regulatory Commission (Conduct of Business) Regulations, 2004 as amended from time to time.”

(Emphasis added)

2.1.6 Accordingly, in accordance with the requirement of the Act and Regulations referred to above, UPCL as a distribution licensee was required to seek approval of the PPAs entered or proposed to be entered by it from the Commission.

2.2 Consistency of the PPA with the Regulations

2.2.1 Regulation 6(7) of RE Regulations, 2013 specifies as under:

“Except as provided in the Second Proviso to sub-Regulation (1) of Regulation 2 above, 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.”

2.2.2 Hence, all the PPAs entered into by UPCL are required to be amended in accordance with RE Regulations if they are inconsistent with the provisions of RE Regulations, 2013. Accordingly, PPAs executed between UPCL & the above mentioned Respondent is examined for consistency and conformity with the relevant provisions of the Electricity Act, 2003 & RE Regulations, 2013.

2.3 Commission's Analysis of the PPAs and Order on the same

2.3.1 Details of Draft PPAs to be executed by UPCL with the Respondent and submitted before the Commission for approval are as follows:

S. No.	Respondent's Name	Project Name/ Location	Capacity (kW)	Tariff (Rs./kWh)	Date of PPA
1	M/s Avani Bio Energy Pvt. Ltd.	"Biomass Gasifier" (based on Pine Needles) PO Tripuradevi, Via Berinag Dist. Pithoragarh	10.00	Levelling Tariff in accordance with RE Regulations	-
2	M/s Avani Bio Energy Pvt. Ltd.	"Biomass Gasifier" (based on Pine Needles) Vill. Simalta, Section Gangolihat, Dholchhina-raiagar road Dist. Pithoragarh	10.00	Levelling Tariff in accordance with RE Regulations	-

2.3.2 The PPAs submitted by UPCL have been examined in light of the relevant rules & regulations. The Commission observed that certain clauses in the PPAs submitted by UPCL are inconsistent with the provisions of the Act/Regulations. Such clauses have been discussed in the subsequent Paragraphs. UPCL is required to take note of the same and incorporate necessary corrections in the respective PPAs.

2.3.3 Further, both the PPAs submitted by UPCL are same except locations of the plant and corresponding connecting sub-stations. The Commission noted that there is some ambiguity in location of plant as submitted in the PPA and submission made by the Respondent.

Before the analysis and decision on the PPAs the Commission has analysed the submissions made by the Petitioner and the Respondent in the matter of location of the proposed power plant and corresponding connecting substations. Both the PPAs submitted by UPCL specify location of the power plant at Vill-Tripuradevi, Berinag, Distt. Pithoragarh, Uttarakhand. However, from the Technical Feasibility Report (TFR) submitted by the Respondent in respect of the power plants the Commission observes that these two plants are being proposed to be commissioned as follows-

- (i) One 10 kW Biomass Gassifier Power Plant at Avani Campus, P.O. Tripuradevi, via Berinag, Distt. Pithoragarh, Uttarakhand-262531 having connecting sub-station namely, 33 kV Sub-Station, Raiagar, Uttarakhand.
- (ii) Another 10 kW Biomass Gassifier Power Plant at Village Simalta, Section Gangolihat, Dholchhina-Raiagar Road, Distt. Pithoragarh, Uttarakhand-262532 having connecting sub-station namely, 33 kV Sub-Station, Kunatta, Uttarakhand.

Further, 33 kV sub-station Landhora mentioned at Clause 1.7 of the PPA of the plant having 33 kV connecting Sub-Station, Raiagar appears to be incorrect and required to be corrected by the Licensee.

The above mentioned anomalies in respect of basic information/details included in the PPA point out casual approach of licensee in filing of the Petitions before the Commission. Licensee should take note of these observations and is hereby cautioned to avoid repetition of such trivial errors in all future Petitions.

Since both the PPAs are similar, accordingly, analysis and decisions on the same have been discussed as follows:

2.3.4 PPA for the Plant at PO Tripuradevi, Via Berinag Distt. Pithoragarh And PPA for the Plant at Village Simalta, Section Gangolihat Distt. Pithoragarh

- a. At preamble and Clause no. 1.4 & 1.7 of the PPA, name of the plant has been mentioned as "Biogas based power plant", however, as pointed out by the Respondent it should be replaced by "Biomass Gasifier" based power plant. Moreover, name and type of plant mentioned at Clause 2.1 of the PPA is quite ambiguous it should be explicitly specified alongwith the type of fuel used, if any, such as Pine Needle in this particular case.
- b. Address and Pincode of the head office of the Respondent should be corrected as pointed out by the Respondent.
- c. Preamble of the aforesaid PPA provides that the Generating Company agrees to purchase power for its auxiliaries from UPCL in a situation when the Generating Company is not in a position to generate electricity to meet its own requirement or for start up of the plant and UPCL agrees to supply such power to plant at retail tariff as per Regulations/Orders specified by the Commission. The said Clause is not consistent with Regulation 45 of RE Regulations, 2013 as the Regulations provides for netting of energy which the Generating Station procures from Distribution Licensee to meet its own requirement or for startup power, from the electricity sold to the Distribution Licensee on month on month basis. Hence, the said conditions in the PPA are required to be modified in accordance with the Regulations.
- d. Clause 2.2 of the PPA refers to Regulation 45 of the RE Regulations, 2013 for the purpose of energy accounting, however, it should be replaced by relevant Regulation 44 of the RE Regulations, 2013. Further, as discussed above, for the purposes of

adjustment/accounting of energy drawn from UPCL to meet generator's own requirement or for startup power relevant Regulation 45 of the RE Regulations, 2013 shall be applicable.

- e. Clause no. 7.1 & 7.2 of the PPA provides that certain general as well as technical specification are mentioned at Annexure-I of the PPA. However, no such information have been mentioned at Annexure-I. **Such information/specification should have been finalised and be furnished alongwith the Application for approval of draft PPA. Licensee should take note of all such shortcoming in its PPA in all future Applications.**
- f. Clause 8.8 of the PPA provides that the Generator and UPCL shall, operate and maintain the interconnection and parallel operation facility in accordance with accepted good engineering practices in the electricity industry and the SGC as amended from time to time. In this regard, the Commission is of the view that CEA (Safety requirements for Construction, Operation & Maintenance of Electrical Plants and Electric Lines) Regulations, 2011, CEA (Technical Standards for construction of Electric Plants and Electric Lines) Regulations, 2010, CEA (Technical Standard for Connectivity in the Grid) Regulations, 2007 & CEA (Measures relating to Safety and Electric Supply) Regulations, 2010 read with amendments issued from time to time, are in place for construction, connectivity and safety aspects. Hence, licensee should ensure including said regulations in the PPA.
- g. Clause 20.3 of the PPA stipulates that:

"20.3 UPCL reserves the right to terminate this agreement upon one months notice to the Generating Company, if the Generating Company's facility fails to commence production of electric power within three months from the planned commercial operation date mentioned in Annexure 1."

However, Annexure-I to the PPA does not specify any date of commercial operation as mentioned above. UPCL is required to make necessary correction in this regard.

- h. The respondent has submitted that being a small scale power plant reporting requirements such as daily/hourly generation reports may be commensurately lenient to ease administrative manpower. In this regard, Regulation 6 of the RE Regulations, 2013 specifies as under:

"6. Obligations and Duties of the Generating Station

(1).....

(2) *The RE Based Generating Stations and Co-generating Stations shall:*

(a) *Submit the technical details concerning the generation and/or transmission as may be specified by the Authority/Commission for carrying out studies relating to cost and efficiency.*

(b) *Submit the information in respect to generation, demand met, capacity availability, capacity utilization factor, auxiliary consumption, specific heat rate and specific oil consumption or on any other parameters etc. as may be directed by the Commission.*

(c) *Shall Establish a communication and data transfer system with State Load Dispatch Centre and Co-ordinate with State Load Dispatch Centre and the Regional Load Dispatch Center in respect to;*

(i) *Scheduling*

(ii) *Exchange of data of quantity of electricity transmitted through the grid.*

(iii) *Real time grid operation and dispatch of electricity in accordance with IEGC and State Grid Code."*

(Emphasis added)

The Commission observed that provision of communication and data transfer systems with State Load Dispatch Centre have been provided in the existing RE Regulations, 2013 so as to facilitate and ensure sharing of information in accordance with the applicable regulations for grid security. Accordingly, the Commission is of the view that periodical reporting by the generating stations, irrespective of capacity and type of the power plants cannot be avoided/waived/eased not only for effective monitoring of electrical parameters of plants but has also been necessitated for scheduling of generation by SLDC as and when required. Hence, the contention of the Respondent is not accepted as the same is not in accordance with the provisions of the regulations in this regard.

3. Accordingly, both UPCL and the generator are directed to incorporate the changes discussed above in the draft PPA and sign the PPA and submit the copy of the signed PPA before the Commission within 15 days of the date of the Order.

4. Ordered accordingly.

(K.P. Singh)
Member

(Subhash Kumar)
Chairman