

PUNJAB STATE ELECTRICITY REGULATORY COMMISSION
SITE NO. 3, BLOCK B, SECTOR 18-A, MADHYA MARG, CHANDIGARH

Petition No. 73 of 2021
Date of Order: 10.03.2022

Approval of the power procurement process of Punjab State Power Corporation Ltd. (PSPCL) in terms of the Amendment-2 dated 20.08.2021 to the Power Purchase Agreement (PPA) dated 31.01.2002 entered between Punjab Genco Ltd and PSPCL in respect of 1 MW High Rate Bio-Methanation Power Generation facility at Haibowal Dairy Complex, Ludhiana.

In the matter of: Punjab State Power Corporation Ltd. The Mall, Patiala,
Punjab - 147001.

Petitioner

Versus

Punjab Energy Development Agency (PEDA), Solar Passive Complex, Plot No. 1&2, Sector-33 D, Chandigarh-160020.

Respondent

Present: Sh. Viswajeet Khanna, Chairperson
Ms. Anjali Chandra, Member
Sh. Paramjeet Singh, Member

ORDER

1. Punjab State Power Corporation Limited (PSPCL) has filed the present petition under Section 86(1)(b) of the Electricity Act 2007 read with the PSERC (Power Purchase and Procurement Process of Licensees) Regulations 2012 and Regulation 46 of PSERC (Conduct of Business) Regulations 2005 for approval of the power procurement process from the Bio-Methanation Power Project of Punjab Genco Ltd. The submissions of PSPCL are summarized as under:

- a) That PSPCL is undertaking the generation and distribution of electricity in the State of Punjab and is a distribution licensee under the provisions of the Electricity Act, 2003. Prior to the reorganization and vesting of the distribution and retail supply functions in PSPCL, the erstwhile Punjab State Electricity Board (PSEB) was undertaking the procurement of power from third parties besides generation of electricity by its generating stations.
- b) That PEDA is a state nodal agency for promotion and development of Renewable Energy Programs/Projects in the State of Punjab and the Punjab Genco Limited (Punjab Genco), a generating company incorporated under the Companies Act, is wholly owned by PEDA.
- c) That on 31.01.2002, the erstwhile PSEB (now PSPCL) executed a PPA with Punjab Genco, for supply of 1 MW power from its Bio-Methanation power project located at Haibowal Dairy Complex Ludhiana, at a rate of Rs. 3.01/kWh with an annual escalation of 3% upto 31.03.2006. Subsequently, on 08.02.2006 vide Amendment no.1 to the PPA, it was agreed between the parties that the annual escalation @3% would be applicable upto 31.03.2007, thereafter no escalation will be allowed and for the remaining duration of the agreement the purchase price shall be equal to the purchase price applicable for year 2006-07 i.e. at the rate of Rs. 3.487/kWh.
- d) The PPA was applicable for a term of 20 years i.e. upto 30.01.2022. However, in terms of Article 12 of the PPA, the period could be extended further for a term of

10 years from the date of expiry, through mutual agreement. And, pursuant to the negotiations, the parties have mutually agreed for an extension for a period of 7 years w.e.f 31.01.2022 at the same rate i.e. Rs. 3.487/kWh as fixed in terms of Amendment No. 1. Accordingly an Amendment No. 2 to the PPA has been executed on 20.08.2021.

e) That MNRE has been implementing several demonstration projects of High Rate Bio-Methanation processes to demonstrate the various technologies for the conversion of different types of waste into energy. The Bio-Methanation Project in the present case has been set up as one of the demonstration sub projects under the United Nations Industrial Development Organisation (UNIDO) and Global Environment Facility (GEF) assisted projects on High Rate Bio-Methanation Processes being executed by the MNRE. This project has been developed on the land provided by MC Ludhiana where there is abundant quantity of cattle dung available for the project. This project qualifies as both a Biogas based plant and a Waste to energy conversion plant because it utilizes waste cattle dung for generation of electricity and organic fertilizer. Also, the New and Renewable sources of Energy (NRSE) Policy, 2012 implemented by the GoP provides as under:

“2.1 NRSE are defined as Small hydro upto 25MW, Biomass including Cogeneration, Solar Photovoltaic, Solar Thermal, Urban, Municipal and Industrial solid / liquid Wastes, Biomethanation, Gasification, Wind and New NRSE sources like fuel cells/Hydrogen/Biofuels etc. of any capacity. This form of energy would mitigate carbon

dioxide emissions and combat climate change. Given the geographical location of the State of Punjab, and its access to various sources of energy, the State would promote investment through private/public sector participation in the following areas:

2.4 Urban, Municipal and Industrial Liquid / Solid Waste: At present about 5000 Metric Tons of Municipal, Urban and Industrial solid waste is being produced every day in the urban areas of the State. Introducing scientific processing and treatment of this quantity of waste would add to power generation besides being environmentally benign. Such projects shall be supported on different waste streams in the State. It is proposed to achieve a target of 50 MW power generation in this sector by 2022.”

f) That, the above mentioned tariff in the present case enables PSPCL to effectively meet its Non-Solar RPO targets. Also, the above tariff of Rs. 3.487/kWh is fixed for the entire period of the PPA and is economical.

g) In the above background, it is respectfully prayed that this Hon'ble Commission may be pleased to:

“(a) Declare that the Amendment No. 2 dated 20.08.2021 to the PPA dated 31.01.2002 (as read with Amendment No. 1) and the procurement of electricity from 1 MW Bio-methanation Plant of Punjab Genco Limited stands approved in the facts and circumstances mentioned hereinabove on the tariff, terms

and conditions contained in the PPA (as read with Amendment 1&2);

(b) Pass such further order or orders as this Commission may deem just and proper in the circumstances of the case..”

2. The petition was admitted vide Commission’s Order dated 13.01.2022, with directions to PEDDA to file its reply to the petition within 2 weeks. In compliance thereof PEDDA vide its reply dated 02.02.2022 submitted that the prayer made by PSPCL may be allowed and Amendment no. 2 dated 20.08.2021 to the PPA dated 31.01.2002 for procurement of power from Bio-Methanation power project set up by Punjab Genco Ltd at Haibowal be approved for a further period of 7 years at the existing tariff of Rs. 3.487/kWh. The parties have been heard on 23.02.2022.

3. Analysis and Decision

The Commission has examined the submissions made by the petitioner PSPCL and the respondent PEDDA. The petition is for approval of PSPCL’s power procurement process, in terms of the Amendment no.2 dated 20.08.2021, entailing an extension in the period to the PPA dated 31.01.2002, executed with the Punjab Genco Ltd. The Commission refers to the relevant Sections of the Electricity Act and PSERC Regulations framed under the powers conferred therein for regulating the Power Purchase and Procurement process of the Licensee, which specifies as under:

The Electricity Act, 2003

“86. Functions of State Commission:

(1) The State Commission shall discharge the following functions, namely: -

(b) 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;

(e) promote cogeneration 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, and also specify, for purchase of electricity from such sources...

181. Powers of State Commissions to make regulations:

(1) The State Commissions may, by notification, make regulations consistent with this Act and the rules generally to carry out the provisions of this Act.

(2)

PSERC (Power Purchase and Procurement Process of Licensee) Regulations 2012:

“10 Criterion for Power Purchases

(i).....

(ii) While effecting power purchase, the Distribution Licensee(s) shall adhere to the principle of least cost plan (least financial cost to the Distribution Licensee), the ultimate objective being to make available secure and reliable power supply at economically viable tariffs to all consumers while satisfying power supply planning and security standards.

.....
13. Power Purchase Arrangements or Agreements

Any new long term power purchase arrangement or agreement and amendments to existing PPA entered into by Distribution Licensee(s), shall be subject to prior approval of the Commission under section 86 of the Act, in respect of:-

(i) Necessity;

(ii) Reasonability of cost;

.....
(viii) Conformity with policy directives of the State Government and policies issued by the Government of India viz. National Electricity Policy, Tariff Policy, long term and short term power procurement guidelines.”

Thus, for approval of any new long term power purchase arrangement and amendments to existing PPA entered into by Distribution Licensee, the Commission is mandated to examine the same on the criteria of its necessity, reasonability of cost and conformity with policy directives of the State Government and policies issued by the Government of India. The Commission proceeds to analyse the same as hereunder:

3.1 PSPCL has submitted that, the Punjab Genco's Project in the present case has been set up as one of the demonstration sub projects under the United Nations Industrial Development Organisation (UNIDO) and Global Environment Facility (GEF) assisted projects on High Rate Bio-Methanation Processes being executed by the MNRE. This project qualifies as both a Biogas based plant and a Waste to energy conversion plant because it utilizes waste cattle dung for generation of

electricity and organic fertilizer. The procurement of power from this project enables PSPCL in meeting its Non-Solar RPO and is also beneficial for the public interest. Also, the said tariff of Rs. 3.487/kWh fixed for the entire period of the PPA is economical.

The Commission observes that PSPCL is finding it hard to meet the RPO targets prescribed by the Commission under Sections 86 (1)(e) of the Electricity Act 2003 and the Regulations framed under Section 181 of the Electricity Act, 2003. The Commission vide Notification dated 02.01.2019 had prescribed Non-Solar RPO of 8.0% for the FY 2021-22 and RPO of 9.5% for the FY 2022-23 which is set to increase in the ensuing period. The Commission is of the view that the power procurement arrangement of PSPCL from Punjab Genco's 1 MW demonstration project setup under the United Nations Industrial Development Organisation (UNIDO) and Global Environment Facility (GEF) assisted projects on High Rate Bio-Methanation Processes being executed by the MNRE would contribute to the fulfilment of its RPO targets and would also be instrumental in promoting other similar projects which are environment friendly. Further, the uniform tariff of Rs. 3.487/kWh (i.e. continuation of the existing tariff without any escalation for the duration of agreement) from a Biogas based and/or a Waste to energy conversion plant also appears to be reasonable.

In view of the above, the Commission decides to approve the PSPCL's said proposal for continuation/extension of its power procurement arrangement with the Punjab Genco's 1MW Bio-Methanation demonstration power project at Haibowal Ludhiana

w.e.f 31.01.2022 for a period of 7 years at the rate of Rs. 3.487/kWh as fixed in terms of Amendment No. 1 to the PPA.

The petition is disposed of in terms of the above.

Sd/-
(Paramjeet Singh)
Member

Sd/-
(Anjuli Chandra)
Member

Sd/-
(Viswajeet Khanna)
Chairperson

Chandigarh
Dated:10.03.2022

