

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

Petition No. 40 of 2023
Date of Order: 18.12.2023

Petition for approval of the procurement process of Punjab State Power Corporation Limited and the Supplementary Power Purchase Agreement in respect of the aggregate capacity of 9.8 MW power from the 8 Mini Hydel Plants of Punjab Genco Limited installed on Abohar and Bathinda Branch Canals.

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

..... Petitioner

Versus

Punjab Genco Limited, Solar Passive Complex, Plot
No. 1 and 2, Sector 33D, Chandigarh- 160020

...Respondent

Commission: Sh. Viswajeet Khanna, Chairperson

Sh. Paramjeet Singh, Member

Petitioner: Ms. Poorva Saigal, Advocate

Ms. Reeha Singh, Advocate

Ms. Anumeha Smiti, Advocate

Respondent: Sh. Aditya Grover, Advocate

ORDER

1. The Petitioner, Punjab State Power Corporation Limited (**PSPCL**) has filed the instant petition for approval of its Procurement process under section 86(1)(b) & (e) of the Electricity Act, 2003 read with the applicable provisions under the PSERC (Power Purchase and

Procurement Process of Licensees) Regulations, 2012 and Regulation 46 of the PSERC (Conduct of Business) Regulations, 2005. It has been submitted that:

- 1.1 PSPCL, a distribution licensee under the provisions of the Electricity Act, 2003, has been procuring electricity including from RE Sources to meet the power supply requirements of the State. The Respondent Punjab Genco Limited (**PGL**) is a wholly owned subsidiary of Punjab Energy Development Agency (PEDA).
- 1.2 On 26.10.1998, PSPCL (erstwhile PSEB) entered into a PPA with PGL for purchase of power generated from 8 Mini Hydel Plants (**MHPs**) with an aggregate capacity of 9.8 MW for duration of 10 years from the date of execution of the PPA, at the rate of Rs. 2.73 per KWH applicable for the year 1998-99 with an annual Escalation @ 5% applicable from 1st day of April for each year. Subsequently, on 21.10.1999, a Supplementary PPA (SPPA) -1 was signed for extending the duration of the PPA to 20 years, with the provision for extension by another ten (10) years through mutual agreement. It was also specified that the annual escalation will be admissible for a period of 10 years only from the date of signing of the PPA. Thereafter, on 07.08.2000 and 13.10.2016, the SPPA-II and SPPA-III were signed, providing for revisions in the clauses pertaining to 'Billing Procedure and Payments', 'Plant wise Year of Commissioning vis-à-vis applicable rates' and 'definition of Interconnection Point' etc.
- 1.3 On 26.04.2018, PEDA requested for extension of the duration of the Agreement on the same tariff for another 10 years. In the

meantime, on 09.08.2018, the Commission passed an Order in Suo Moto Petition No. 23 of 2018 determining the Levelised Generic Tariff for Small Hydro Power Projects of Below 5 MW for FY 2018-19 as Rs. 6.05/kWh.

1.4 PSPCL accepted the proposal of extension of the duration of the PPA dated 26.10.1998 for 5 years instead of 10 years on the existing applicable tariff without escalation and on 18.12.2018, executed the Supplementary PPA- IV reading as under:

“As per provisions of Clause 12.0.0 (Duration) of Supplementary PPA-I, the duration of the PPA is extended as under:-

Except when terminated by default, this agreement is hereby extended for a further period of five (05) years w.e.f 26.10.2018 on existing tariff applicable on 8 no. MHP's installed on Abohar Branch Canal and Bathinda Branch canal. The project wise applicable existing tariff is as under:

a) Projects installed on Abohar Branch

Sr. No.	Name of Plant	Rate (Rs./kWh)
1.	Narangwal MHP	4.445
2.	Dalla MHP	4.445
3.	Tugal MHP	4.445
4.	Chupki MHP	4.445

b) Projects installed on Bathinda Branch

Sr. No.	Name of Plant	Rate (Rs./kWh)
1.	Khatra MHP	4.030
2.	Kanganwal MHP	3.841
3.	Bowani MHP	3.833
4.	Jagera MHP	3.650

Above rates will be applicable for the whole duration (i.e. extended period of further 5 years) of the Agreement i.e. 26.10.2018 to 25.10.2023. No escalation is applicable as per terms and conditions of PPA.”

- 1.5 On 18.09.2020, the Commission passed an Order in Petition No. 26 of 2020 (Suo-Motu) determining the useful life and generic tariff for various renewable energy technologies/projects for the FY 2020-21, specifying the Useful Life of SHPs as 40 Years and Levelised Tariff for SHPs of below 5MW Capacity as Rs 4.30/kWh. Further, on 08.07.2021, the Commission passed an Order in Petition No. 34 of 2021 wherein it decided to continue the ceiling generic tariff as determined *vide* Order dated 18.09.2020 in Petition No. 26 of 2020 (Suo-Motu) till the finalisation of the generic tariff for RE Projects for the FY 2021-22.
- 1.6 On 11.01.2023, PSPCL executed a PPA with an MHP of M/s Thind Power Private Limited, for purchase of 2 MW power at the fixed tariff of Rs. 3.75/kWh without any escalation for 35 years. The said arrangement has been approved by the Commission *vide* its Order dated 19.12.2022 in Petition No. 26 of 2022.
- 1.7 On 19.01.2023, this Commission passed an Order in Suo-Moto Petition No. 34 of 2021 discontinuing the practice of determination of annual generic tariffs for Renewable Energy Projects to be commissioned in the State of Punjab.
- 1.8 On 03.03.2023, PGL wrote a letter to PSPCL seeking extension of the said Arrangement (as read with the Supplementary PPA-IV) for another five years at the existing tariff. It is submitted that

the capital cost of the 8 MHPs at the time of commissioning was Rs. 60 crores. Further, when the capital expenditure of Rs. 30 crores was incurred in the R&M, the depreciated value of the projects was Rs. 27.50 crores. Accordingly, the capital cost of the 8 MHPs had got reduced from the initial cost of Rs. 60 crores. Therefore, PSPCL constituted a committee for negotiation of tariff with PGL as regards the 8 MHPs.

- 1.9 On 03.05.2023, PGL wrote a revised letter to PSPCL offering a revised tariff for the 8 MHPs, and requested for extension in the duration of the PPA for a further period of 15 years at the negotiated tariff. The letter dated 03.05.2023, *inter-alia*, reads as under:

“Further, after the negotiation committee meeting held with PSPCL, further discussion were held at the level of ACS, NRSE after which it was directed to request PSPCL to sign the amendment to the Supplementary PPA with PGL for a further duration of 15 years at a tariff as tabulated below:

Sr. No.	Name of MHP	Capacity	Offered Rate (Rs./KWh)
Abohar Branch Canal			
1.	MHP-Chupki	1.5 MW	4.00
2.	MHP- Narangwal	1.5 MW	4.00
3.	MHP- Tugal	1.5 MW	4.00
4.	MHP- Dalla	1.0 MW	4.00
Bathinda Branch Canal			
5.	MHP- Bowani	1.0 MW	3.75
6.	MHP-Khatra	1.0 MW	3.75
7.	MHP-Kanganwal	1.3 MW	3.75
8.	MHP-Jagera	1.0 MW	3.658

All these MHP's are operational after major R&M carried out by PGL and feeding power to 66KV/132KV Grid Sub-stations of PSPCL. It is requested

to issue necessary instructions for approval and signing of supplementary PPA at the above proposed tariff for a further period of 15 years.”

Further, on 05.05.2023, PGL clarified that the tariff rate for the Jagera MHP is to be read as Rs. 3.65/kWh instead of Rs. 3.658/kWh.

1.10 On 18.05.2023, PSPCL agreed to the extension of the duration of the PPA dated 26.10.1998 as read with the proposed Supplementary PPA-V for a period of 15 years at the tariff proposed in the letters dated 03.05.2023 & 05.05.2023 (without escalation), subject to the approval of the Commission. It is submitted that the benefits of the contracted capacity of 9.8 MW power from the 8 MHPs shall accrue towards fulfilment of PSPCL's RPO targets in terms of the PSERC (Renewable Purchase obligations and its compliance) Regulations, 2022. Also, the tariff ranging from Rs. 3.65 to Rs.4.00 is economical and is commensurate with the prevalent rate in the market. As stated above, the Commission has already approved a tariff of Rs. 3.75/kWh (without escalation) for M/s Thind Power in the year 2022.

1.11 It is therefore prayed that the Commission may:

- a) Declare that the procurement of an aggregate 9.8 MW power from the 8 MHPs of Punjab Genco Limited stands approved at the tariff ranging from Rs. 3.65 to Rs.4.00 on the terms & conditions contained in the PPA dated 26.10.1998 as read with the proposed Supplementary PPA – V.
- b) Pass such further order or orders as the Commission may deem just and proper in the circumstances of the case.

2. After considering the averments made by the Petitioner, the Petition was admitted vide the Commission's Order dated 19.07.2023 with directions that the Notice be issued to the respondent to file its reply, if any, to the petition. In response, PGL filed its reply on 02.08.2023, submitting as under:

2.1 PGL has gone through the draft supplementary PPA-V (proposed to be entered between the Petitioner-PSPCL and the Respondent-PGL), which provides for amendment in the existing tariffs w.e.f. 24.10.2023, applicable for a further period of 15 years i.e. upto 23.10.2038. However, PSPCL has inadvertently mentioned the tariff as the existing applicable tariff instead of the negotiated tariff, which requires to be rectified.

2.2 Believing that there is no other change in the draft Supplementary PPA-V vis-à-vis the existing PPA, PGL has no further objections on the approval of the same as sought for by PSPCL in the instant Petition and also agrees to the tariff's for MHPs.

2.3 The Commission may allow the procurement process of PSPCL and the Supplementary PPA-V in respect of the aggregate capacity of 9.8 MW power from the 8 Mini Hydel Plants of PGL installed on Abohar and Bathinda Branch Canals.

3. In the hearing held on 23.08.2023, the Commission observed that the proposed tariffs for the already depreciated projects does not seem to be justified in view of the tariff of Rs. 3.75/kWh recently allowed for the new project of M/s Thind Power Pvt. Ltd. in Petition No. 62 of 2022. On this both the parties sought time to review the same.

4. On 29.09.2023, PGL filed an IA No. 19 of 2023 requesting for early hearing and disposal of the matter with the submission that a meeting was held between PSPCL and PGL on 20.09.2023 and both the parties have mutually arrived at the re-negotiated tariffs tabulated below:

S.No.	Name of Mini Hydel Plant	Capacity	Rate proposed in SPPA	Re-negotiated Rate (Rs.)
1.	Abohar Branch Canal			
	MHP-Chupki	1.5 MW	4.00	3.75
	MHP-Narangwal	1.5 MW	4.00	3.75
	MHP-Tugal	1.5 MW	4.00	3.75
	MHP-Dalla	1.0 MW	4.00	3.75
2.	Bathinda Branch Canal			
	MHP-Bowani	1.0 MW	3.75	3.75
	MHP-Khatra	1.0 MW	3.75	3.75
	MHP-Kanganwal	1.3 MW	3.75	3.75
	MHP-Jagera	1.0 MW	3.65	3.65

PSPCL vide an additional affidavit dated 03.10.2023 also confirmed that, PSPCL & PGL have reviewed the negotiated tariff and have consented to sign a Supplementary PPA on the reviewed tariff ranging from Rs. 3.65–3.75/kWh for a further period of 15 years.

5. On 01.12.2023, PGL further submitted that:
- 5.1 During the hearing held on 11.10.2023, the Commission vide order dated 16.10.2023, directed PSPCL to file calculation sheet of tariff rates considering the depreciated value of the projects. Accordingly, PSPCL vide communication dated 02.11.2023 requested PGL to provide the calculation sheets with regard to the tariff so arrived at the depreciated rates.
- 5.2 PGL has carried out a massive R&M of all the 8 MHPs incurring a total R&M cost to the tune of Rs. 42.05 Crores for optimum

utilization of these MHPs. This cost is to be counted towards the capital expenditure and thus becomes a part of the capital costs of the project.

- 5.3 As per the prevailing CERC Regulations 2020, the life cycle of a Hydel project has been determined as 40 years and since the projects under reference have already lived a life of 25 years, therefore the remaining 15 years of operation are yet to be lived.
- 5.4 In terms of CERC 2020 Regulations adopted by the Commission PGL has carried out an exercise for calculating the deserving tariff for the projects under reference. As per the calculations a tariff of Rs. 4.32/- kWh has been arrived for these 8 MHPs, for which a consolidated PPA entered into by PSPCL has eventually expired with the efflux of time.
- 5.5 It is pertinent to mention that PSPCL is also having two similar MHPs of 0.8 MW capacity leased out to M/s Kotla Renewables Private Limited at Nidampur (Sangrur) and Thuhi (Patiala) established in the year 1985-86 approx. Considering the R&M cost towards the CAPEX, PSPCL has rendered a tariff of Rs. 3.94/kWh to these projects, which has been duly approved by the Commission vide order dated 16.12.2020 in petition no. 17 of 2020.
- 5.6 Although, the 8 impugned MHPs set up by PGL deserves a tariff @ Rs. 4.32/kWh, however a much lesser negotiated tariff has been agreed mutually between PSPCL and PGL @ Rs. 3.65/ kWh (for 1 project) and Rs. 3.75/kWh for the remaining 7 MHPs, thus, it will be a mutually beneficial situation for all in case the tariff mutually decided is approved.

6. In the hearing held on 06.12.2023 both the parties requested for approval of the impugned power procurement arrangement at the mutually agreed re-negotiated rates of Rs. 3.65-3.75/kWh for a further period of 15 Years. After hearing the parties, the Order was reserved.

7. Analysis and Decision of the Commission:

The Commission has examined the submissions made by the parties. The Petition is for seeking approval for extension in PSPCL's power procurement arrangements of an aggregate capacity of 9.8 MW hydro power from the 8 MHPs setup by PGL on the Abohar and Bathinda Branch Canals under Section 86(1)(b) of the Electricity Act read with PSERC (Power Purchase and Procurement Process of Licensee) Regulations 2012.

The Commission refers to the relevant provisions of the Electricity Act and PSERC Regulations framed there under for regulating the Power Purchase & Procurement process of the Licensee, which mandates the Commission to examine the same on the criteria of its 'Necessity & Conformity with the Government Policies' and 'Reasonability of Cost'. The Commission examines the same as under:

a) Issue of 'Necessity' & 'Conformity with the Government Policies':

PSPCL's plea is that the proposed extension in period of the impugned contracted capacity of 9.8 MW power from PGL's 8 MHPs shall benefit it towards fulfilling the RPO targets in terms of the PSERC (Renewable Purchase obligations and its compliance) Regulations, 2022.

The Commission observes that PSPCL's power procurement arrangement from PGL's MHPs is in place since 1998 and is accounted for fulfillment of its RPO obligations mandated under the

Electricity Act read with PSERC Regulations. Since, PSPCL is still striving hard to meet its mandated RPO targets, the extension in period of procurement of RE power from these MHPs for a further period of 15 years fulfils the criteria of 'Necessity' & 'Conformity with the Government Policies'.

b) Issue of the 'Reasonability of Cost':

The parties have initially proposed the negotiated tariff for the extended period in the range of Rs. 3.65/kWh to Rs. 4.00/kWh in place of the last applicable tariff of Rs. 3.65/kWh to Rs. 4.45/kWh. However, pursuant to the Commission's observation that the proposed tariffs for the already depreciated projects does not seem to be justified in view of the tariff of Rs. 3.75/kWh recently allowed for a new plant set up by M/s Thind Power Project, the parties have proposed the re-negotiated proposed tariff of Rs. 3.65/kWh for the Jagera MHP and Rs. 3.75/kWh for other 7 MHPs.

PGL also submitted that though its projects deserve a tariff @ Rs. 4.32/kWh considering the massive R&M works carried by it at the cost of Rs. 42.05 Crore on the said 8 MHPs thus incurring an increase in the capital cost of the projects, it has agreed to supply power to PSPCL at a lower tariff of Rs. 3.65-3.75/kWh.

The Commission observes that the normative useful life of Small Hydro Projects is 40 Years. PGL's plea of spending Rs. 42.05 Crore after the operational period of only 25 years does not seem justified and that too without reporting and asserting an extension in the normative useful life of these projects. Even after spending such a huge amount and escalating the capital cost of the projects to Rs. 6.33 Cr/MW by their own admission i.e. over 80% of the normative cost of Rs. 7.8 Cr//MW estimated by CERC for a new

SHP, GENCO continues to project the residual life of these projects as 15 years, which in any case was already available even without the additional expense. However, since the parties have mutually agreed to a re-negotiated tariff of Rs. 3.65-3.75/kWh i.e. at or less than the tariff of Rs. 3.75/kWh recently allowed by the Commission for the MHP of M/s Thind Power Pvt. Ltd. in Petition No. 62 of 2022, the Commission accepts the same to be reasonable in cost.

In view of the above, the Commission allows PSPCL's proposal for procurement of 9.8 MW from PGL's MHPs for an extended period of 15 years without any escalation as under:

S. No.	Name of MHP	Capacity	Rate
<i>Abohar Branch Canal</i>			
1.	MHP-Chupki	1.5 MW	Rs.3.75/kWh
2.	MHP- Narangwal	1.5 MW	
3.	MHP- Tugal	1.5 MW	
4.	MHP- Dalla	1.0 MW	
<i>Bathinda Branch Canal</i>			
5.	MHP- Bowani	1.0 MW	Rs.3.75/kWh
6.	MHP-Khatra	1.0 MW	
7.	MHP-Kanganwal	1.3 MW	
8.	MHP-Jagera	1.0 MW	Rs.3.65/kWh

The Commission also wishes to point out that it does not approve the detailed terms and conditions of the 'PPA/SPPA', which are to be decided by the contracting parties with mutual consent.

The petition is disposed of accordingly.

Sd/-
(Paramjeet Singh)
Member

Sd/-
(Viswajeet Khanna)
Chairperson

Chandigarh

Dated: 18.12.2023