

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

Petition No. 30 of 2020
Date of Order: 29.10.2020

Petition under Regulation-9 of PSERC (Terms and Conditions for determination of Generation, Transmission, Wheeling and Retail Supply Tariff) Regulations, 2014 and Section 40 of the Electricity Act, 2003 - seeking regulatory approval for system improvement initiatives for 400 kV transmission network for the year 2020-2023 – construction of 400 kV substation at Ropar through open tender without going into TBCB.

In the matter of: **AND**
Punjab State Transmission Corporation Limited, The Mall, Patiala - 147001
.Petitioner

Present: Ms. Kusumjit Sidhu, Chairperson
Ms. Anjali Chandra, Member

ORDER

1. Punjab State Transmission Corporation Limited (PSTCL) has filed the present Petition seeking approval for the Construction of 400 kV Substation Ropar through open tender instead of the Tariff Based Competitive Bidding (TBCB) Mode, the schedule of which has been already approved in CIP for MYT Control Period of 2020-23. The petition was admitted vide Order dated 07.10.2020 and after hearing the representative appearing on behalf of PSTCL on 22.10.2020, Order was reserved.

2. PSTCL has submitted that presently installed capacity of ISTS connected with Punjab is 8530 MVA and therefore some 400 KV grid

with its connectivity with Northern Grid network shall be required. The Board of Directors in its 55th meeting held on 07.08.2019 decided to undertake the above work in two phases and decided to exempt 400 KV substation Ropar from TBCB mode. The Under Secretary Power, Punjab Govt. has also intimated vide letter dated 29.07.2020 that keeping in view the huge savings involved, the State Govt. concurs with the proposal of PSTCL to undertake the project through Open Tender instead of TBCB Mode as a special case. PSTCL has submitted that there are huge savings if the project is undertaken through Open Tender instead of TBCB mode and has submitted as under:

- a) The Threshold limit fixed by PSERC to get the project executed on Tariff Based Competitive Bidding (TBCB) Mode is Rs. 50 Crores.
- b) The cost of Construction of 400 KV Substation Ropar (Phase –I), is approx. Rs. 99.74 Crores. Till date no project having value less than Rs. 250 Crore has been executed on TBCB basis. Being a smaller project, it may or may not get response from bidders. In case of no response, expenditure incurred on publication, formation of SPV which is Rs. 70 Lacs (approx.) shall be to PSTCL account. The Bid Process Coordination Charges are normally waived off by BPC in case of no response. However, in case BPC decides otherwise, Bid Process Coordination charges (Rs. 1 Crores approx.) shall also have to be borne by PSTCL.
- c) The experience in case of Patran Grid on TBCB mode has not been good at all. The Transmission Charges allowed to the company are Rs. 28.27 Crore for the year 2019-20 and is almost in the same bracket for each year for 35 years. In case the

project of Rs 100 Crore value is executed through PSTCL Capex model, the financial cost of the project for 35 years shall work out to be only Rs 9 Crore per year. If PSTCL add O&M charges (Rs 3.5 Crore per year), the total cost works out to be Rs 12.5 Crore per year, which is less than the cost of the project in TBCB mode.

- d) Considering the existing load flow studies i.e. loading of both the transformers is only 52% as such 2*500 MW 400/220/33KV Auto-transformers have been planned in this project. In case the project is executed through TBCB, PSTCL would not be able to augment the capacity of the Substation by increasing the number of Power Transformers in future and the system will remain underutilized and this shall result in higher tariff.
- e) The proposed Substation is within the boundary of GGSSTP plant and handing over this land to TBCB awardee will create security issues.
- f) GGSSTP Ropar plant is having evacuation voltage at 220 KV level and is not being dismantled immediately. With shutting down of GGSSTP, PSPCL has to ensure equivalent LTA and enhancement of ATC/TTC limit and accordingly feasibility of the interchangeability is essential. Accordingly, 220 KV bus of GGSSTP Ropar shall be coupled with 220 KV bus of 400 KV proposed station at Ropar. This will facilitate the discretion of PSPCL to run GGSSTP or not. The Bus Coupling shall not be possible in case of TBCB mode. Also, in case, PSPCL decides to go for Super Critical Thermal Units in place of existing units of GGSSTP, which shall have evacuation on 400 KV, then this substation will act as Generating Station Substation and will be

transferred to Generation wing of PSPCL. In TBCB mode transfer of Substation to Generation wing of PSPCL will not be possible.

- g) PSTCL already has maintenance gang for 400 KV System. Accordingly, PSTCL shall not be burdened with any additional expenses for maintenance of the new Transmission System. However, in case of TBCB, the bidding company shall consider maintenance charges to the tune of 5-8%.
- h) The project of 400 KV Ropar has been allowed by NRSTC by tapping 400 kV Ludhiana- Koldam Line and in all eventualities, the Ropar- Ludhiana bay shall be declared an ISTS Bay and will earn the revenue of about Rs. 32 Lakh per year, which shall go otherwise to the account to TBCB firm.
- i) In case of TBCB, bidders generally quote the tariff considering 80% loading of the transformers, whereas as per load flow studies carried out by Planning cell, the loading of both the 500 MVA 400/220/33 kV Auto-transformers is only 52% and shall result in higher tariff.
- j) The scope of work remains the same as approved by the Commission in the Petition No. 19 of 2019 (Business Plan Including Capital Investment Plan of PSTCL for MYT Control Period From FY 2020-21 TO FY 2022-23). The Board of Directors of PSTCL has approved the exemption of construction of 400 KV Substation Ropar from TBCB Mode and the State Government has also concurred with the proposal of PSTCL to undertake the Project through Open Tender instead of TBCB Mode as a special case.

Commission's Decision

3. The Commission vide notification No. PSERC/Secy./132 dated 05.11.2018 had decided that intra-state transmission projects costing more than Rs. 50 Crore shall be developed by State Govt./STU through tariff based competitive bidding. However, in view of the reasons/advantages elaborated by PSTCL for executing the construction of 400 kV Substation Ropar through Open Tender in place of the TBCB Mode and the concurrence given by the State Government for the same, the Commission decides to relax the provisions of the Commission's notification No. PSERC/Secy./132 dated 05.11.2018 for the said project to that extent.

The petition is disposed of accordingly.

Sd/-

(Anjuli Chandra)

Member

Sd/-

(Kusumjit Sidhu)

Chairperson

Chandigarh

Dated: 30.10.2020