

HIMACHAL PRADESH ELECTRICITY REGULATORY COMMISSION, SHIMLA

IN THE MATTER OF:-

Development of Intra-State Transmission System through Tariff Based Competitive Bidding Process in the State of Himachal Pradesh.

Decided on: 21st May, 2022

**CORAM: Hon'ble Sh. Devendra Kumar Sharma, Chairman
Hon'ble Sh. Bhanu Pratap Singh, Member
Hon'ble Sh. Yashwant Singh Chogal, Member (Law)**

ORDER

Section 63 of the Electricity Act, 2003 provides for adoption of the Tariff determined through transparent process of bidding in accordance with the guidelines issued by the Central Government.

2. The Ministry of Power in its Guidelines dated 15.03.2021 recommended adoption of Tariff Based Competitive Bidding for Intra State Transmission projects in the larger interest of consumers which reduces the burden on Government finances and scarce Government fund can be spared for other priority sectors. Also, it encourages use of advanced technology for improving cost and efficiency.
3. Para 5.3 of the National Tariff Policy states that development of Intra-State Transmission System shall be executed through competitive bidding route provided for the projects costing above a Threshold Limit, which shall be decided by the State Commission.
4. Therefore, in view of the aforesaid statutory provisions, it has become necessary to develop the Intra-State Transmission System through competitive bidding route for the projects costing above a Threshold Limit.
5. The Commission in accordance with para 5.3 of National Tariff Policy, notified the Staff Paper on development of Intra –State Transmission System through Tariff Based Competitive Bidding Process in the State of Himachal Pradesh on 26.02.2022.

6. As per provision of Rule 3 of the Electricity (Procedure for Previous Publication) Rules, 2005, the Commission invited public objections and suggestions by way of insertions in two News papers i.e. “Hindustan Times” and “Dainik Bhasker” and the full text of the draft staff paper was made available on the Commission’s website: www.hperc.org. The Commission, vide letter no. HPERC-H(1)-3/2021-Vol-I-MoP-3341-46 dated 09.03.2022, requested the major Stakeholders, including State Government, Directorate of Energy, Himachal Pradesh Power Transmission Corporation Limited, Himachal Pradesh Electricity Board Limited, Himachal Pradesh Power Corporation Limited and Consumer Representative to send their objections/suggestions on the aforesaid Staff Paper on or before 30th March, 2022.
7. The Commission received suggestions/objections on the Staff Paper from the following stakeholders:
- (a) M/s Sterlite Power Transmission Limited, Gurugram through its Chief Manager.
 - (b) The Himachal Pradesh Power Transmission Corporation through its General Manager (C&D).
8. **Consideration of written submissions made by the stakeholders and Commission’s view.-**

The relevant issues and concerns submitted by the aforesaid objectors have been carefully gone through and the Commission now proceeds to consider the objections and various suggestions made with respect to the staff paper and finalize its views on the subject, as follows.-

(A) Applicability of Tariff Based Competitive Bidding .-

Comments :-

- (i) M/s Sterlite Power Transmission Limited has submitted that once the Threshold Limit is specified, shall be applicable to all new and augmentation projects or any packages including both.
- (ii) The Himachal Pradesh Power Transmission Corporation has objected to the proposal for clubbing of the cost of Sub-station and transmission lines to calculate the threshold value.

Commission's view :-

The Commission observes that to make a provision for applicability of Tariff Based Competitive Bidding, only for new projects or for both new as well as augmented projects as suggested by the Stakeholder, may create confusion especially when the jurisdiction of the Commission is only to fix the Threshold Limit, for intra-State Transmission Projects to be developed under the Tariff Based Competitive Bidding route, in accordance with para 5.3 of National Tariff Policy. The Commission finds it appropriate that the special exclusions in the scope of such projects to be executed under Tariff Based Competitive Bidding route shall be decided by the Central Government or as provided in the guidelines of Ministry of Power or provided in any other law in force. Further, the Commission also finds it appropriate that all Intra-State Transmission projects, above the Threshold Limit as fixed by it, shall be developed through Tariff Based Competitive Bidding (TBCB) in accordance with the guidelines issued or adopted by the State Government.

As far as the splitting of works for proposed Sub-station and its associated proposed transmission line is concerned, the Commission feels that such spiting of works must be avoided and accordingly decides to retain the provision that the Threshold Limit shall be applicable for execution of transmission line or Sub-station or both transmission line and Sub-station as a package where the proposed Sub-station is associated with the proposed transmission line.

**(B) Timelines to implement the Tariff Based Competitive Bidding.-
Comments :-**

M/s Sterlite Power Transmission Limited has submitted that it would be good for the industry that TBCB implementation for State starts early and suggested to implement the TBCB guidelines in State of Himachal Pradesh from 1st April 2022.

Commission's view :-

The Commission observes that the present proposal is only limited to fix the Threshold Limit in accordance with para 5.3 of the National Tariff Policy for the Transmission Projects to be executed under Tariff Based Competitive Bidding route. The suggestion made by the Stakeholder is not subject matter of the draft proposal. Therefore, the Commission declines to accept the suggestion of stakeholder in this regard.

**(C) Reduction in Transmission Tariff.-
Comments :-**

The Himachal Pradesh Power Transmission Corporation has submitted that the amount saved in Regulated Tariff Mechanism is huge alongwith assured Return of Equity to the Government which shall be re-invested in the State by the Utility for the betterment of transmission system. The high tariff in Tariff Based Competitive Bidding shall ultimately burden the consumers of the State. The Himachal Pradesh Power Transmission Corporation supported their suggestion by comparing the cost of 400/220kV Sub-station established at Kala Amb which has been adopted by Central Electricity Regulatory Commission under Tariff Based Competitive Bidding route. It has further been submitted that the tariff of more than 51 Crore per annum has been adopted by Central Electricity Regulatory Commission for 36 years. If the project was implemented under Regulated Tariff Mechanism, with a project cost of INR 200 Crores in the year 2017, the Annual Fixed Cost (AFC) of project comes as 38 Crores in first year and it reduces to 15 Crores in 15 years gradually and eventually levelling around 15 Crores. The Himachal Pradesh Power Transmission Corporation has also submitted that as per the TBCB guidelines for Transmission Service by Ministry of Power, Bid Process Coordinator (BPC) in case of TBCB projects shall charge a professional fee @1% of estimated cost of the project subject to minimum of Rs. 5 Crore and maximum of Rs. 15 Crore. In case of no

participation or cancellation of bidding this amount is to be adjusted under Regulated Tariff Mechanism (RTM).

Commission's View :-

The present proposal of the Commission is limited to fix the Threshold Limit in accordance with para 5.3 of National Tariff Policy. The Ministry of Power, Government of India has issued guidelines on 10th August, 2021 where it has been mentioned that the intra-State Transmission Projects shall be developed by State Government through Competitive Bidding route where the costing of projects is above a Threshold Limit as decided by the SERCs. The Ministry of Power, Government of India vide its letter dated 15th March, 2021, has also strongly recommended the Tariff Based Competitive Bidding route for development for intra-State Transmission Projects wherein it has also observed that the tariff discovered through competitive bidding process are lower by around 30-40% than the cost-plus tariff.

The Confederation of Indian Industries (CII) in its Report titled "New Age Power Systems for 21st Century India: Challenges, Solutions and Opportunities" based on an analysis of a total of 101 transmission projects (including 58 Regulated Tariff Mechanism and 43 Tariff Based Competitive Bidding projects) shows that the Tariff Based Competitive Bidding projects typically offer 30% lower tariff than same project awarded on Regulated Tariff Mechanism basis. Another inherent benefit of Tariff Based Competitive Bidding projects mode of development is that it has encouraged private sector participation, which has resulted in lowering the burden on Government finances and risk sharing with private players, adoption of innovative technology with private participation etc. Based on the past experience of various inter-State and intra-State projects executed through Tariff Based Competitive Bidding process, it is observed that the competitive bidding route yielded a reduction in tariff ranging from 41% to 56%

vis-à-vis cost-plus tariff. Some of the prominent projects are listed below:

Scheme Name/ Project	Winning Levellised Tariff (Rs. Crore)	Cost Plus Levellised Tariff (Rs. Crore)	Reduction w.r.t. Cost Plus Tariff (%)
Transmission System (TS) Gadarwara STPS (2x800 MW) of NTPC (Part-B)	257	527	51%
TS Gadarwara STPS (2x800 MW) of NTPC (Part-A)	290	593	51%
Khargone TPP 1320 MW	159	310	49%
Construction of Ajmer (PG)-Phagi 765 KVD/C Line	61	118	48%
Jam Khambaliya pooling station and interconnection of Jam khambaliya a pooling station	33.67	66.51	49%
Transmission System associated with LTA applications from Rajasthan SEZ Part-B (Fategarh-II Transco Limited)	71.56	158.39	55%
Transmission System associated with RE Generations at Bhuj-II, Dwarka & Lakadia (Lakadia Banaskantha Transco Limited)	83.46	141.27	41%
Transmission System associated with LTA application from Rajasthan SEZ (Part-D) (Bikaner-Khetri Transmission Limited)	100.05	229.54	56%
Transmission System for Ultra Mega Solar Park, district Jaisalmer Rajasthan (Fatehgarh-Bhadla Transmission Limited)	38.02	83.87	55%
Transmission of electricity for Eastern Region Strengthening Scheme -XXI (ERSS-XXI)	138.58	252	45%
Strengthening of Transmission System beyond Vemagiri	359.26	762.57	53%
Transmission System Strengthening associated with Vindhyachal-V	210.99	421.36	50%

As far as the issue of charging a professional fee @1% of estimated cost of the project subject to minimum of Rs. 5 Crore and maximum of Rs. 15 Crore by the Bid Process Coordinator is concerned, the State Government for intra-State transmission projects may notify STU or any other Organisation/State PSU as Bid Process Coordinator (BPC) and prescribed the professional fee as it find appropriate. This fee has to be mentioned in the bid document and shall recover from the developer who is finally identified (selected) and assigned the task of developing the project.

Moreover, this suggestion is not related to the present proposal to fix the Threshold Limit by the Commission for TBCB in intra-State transmission system.

Therefore, the Commission does not agree to the submission made by the HPPTCL that the regulated tariff mechanism is a better option instead of TBCB mode for development of intra-State transmission system.

(D) Risk Analysis for Tariff Based Competitive Bidding in intra-State Transmission System.-

Comments :-

The Himachal Pradesh Power Transmission Corporation has submitted that in the staff paper under Regulated Tariff Mechanism the cost overrun in projects is being capitalized by way of increased Tariff in Annual Revenue Requirement (ARR) and in Tariff Based Competitive Bidding route risk of such scheduled delay, overrun of cost is to the account of developer except Force Majeure events. The Himachal Pradesh Power Transmission Corporation has further submitted that the project delays have been majorly because of delay in getting forest related approvals due to complete ban on tree cutting imposed by Hon'ble Supreme Court in Himachal Pradesh and Right of Way issues. Most of initial investigations and time-consuming activities are to be done by BPC in TBCB mode also as per Sr. No. 4.3 & 4.4 of TBCB guidelines for Transmission service issued by GoI. As such reduction of delay by just introduction of TBCB is not achievable as many a times these activities are in scope of BPC.

Commission's View :-

The Commission does not agree with the submission of the Himachal Pradesh Power Transmission Corporation. It has already been explained in preceding paragraph that based on the past experience of various inter-State and intra-State projects executed through Tariff Based Competitive Bidding process, the tariff discovered through this mode resulted 30-40% lower tariff compared to the cost plus approach.

Moreover, as per CII report, it is observed that the competitive bidding route yielded a reduction in tariff ranging from 41% to 56% vis-à-vis cost-plus tariff which implies that such reduction in tariff is only possible when the Transmission Projects are being executed efficiently, timely and with cost saving approach. The Commission also observes that the objection as raised by the Stakeholder in this regard does not affect the fixation of Threshold Limit by the Commission as mandated in Tariff Policy.

(E) Data for calculation of Threshold Limit.-

(a) The Himachal Pradesh Power Transmission Corporation has submitted that the proposed Threshold Limit has been calculated on the basis of actual investment data (Award Cost) towards cost of projects at Rs. 45 Crore for new transmission projects (i.e. complete package for line and Sub-station) to be developed through TBCB process. In this regard, the following suggestions have been made by the Himachal Pradesh Power Transmission Corporation for calculating/fixing threshold for TBCB projects -

- (i) Most of the projects given in Table 8 of draft paper have been awarded in years 2017-18, there has been considerable price rise since 2017 to 2022. The same has not been considered.
- (ii) The similar works being executed in phased manner to align the works to match with upcoming generation projects have been considered as separate works thereby reducing the average value much lower than actual value.
- (iii) The award value of works has been used instead of DPR cost which doesn't reflect the actual value of work.
- (iv) The cost of Sub-station and transmission lines has been clubbed to calculate the threshold value.

It is submitted by the Stakeholder i.e. HPPTCL that estimated cost of works in aggregated manner works out as under (prepared on 2016 cost base):-

1. Sub-station-INR 106.83 Crore
2. Line-INR 72.18 Crore

The HPPTCL further suggested to fix the Threshold Value (by considering 40% price escalation) as follows-

1. Sub-station-INR 125 Crore
2. Line-INR 100 Crore

The minor LILO portion shall be considered as part of Sub-station under threshold value of INR 125 Crore.

- (b) M/s Sterlite Power Transmission Limited suggested that they agree with the proposed threshold limit of INR 45 Crore by the Commission for new Sub-stations and transmission line projects to be developed through TBCB mode (based on the actual investment cost data of projects) to increase private sector participation of the infrastructure projects.

Commission's View:-

The Commission has considered the data as submitted by the Himachal Pradesh Power Transmission Corporation to propose threshold limit in the Staff paper. As far as considering the DPR cost with escalation factor is concerned, the Commission also observes that the Detailed Project Reports (DPRs) are basically a preliminary document wherein the estimated cost(s) of works are considered. The HPPTCL has submitted the cost of works/projects on actual basis which is fair and reasonable approach for calculation of Threshold Limit. Further, the Commission declines to accept the submission of HPPTCL to enhance the proposed Threshold Limit of Rs. 45 Crore on account of any price escalation and accordingly, decides to retain the Threshold Limit as 45 Crore.

**(F) Exclusion of Transmission Projects to be executed under Tariff Based Competitive Bidding.-
Comments :-**

The Himachal Pradesh Power Transmission Corporation has submitted the following:-

- (a) The Himachal Pradesh being special category State is in receipt of Externally Aided Funds from Central Govt. In order to protect the

interest of the State, the works proposed by HPPTCL under such schemes shall not be included for execution under TBCB irrespective of value of work.

- (b) Further, the project be executed under TBCB only if STU is having issues in raising funds for execution of works, otherwise the projects be executed under regulated tariff mechanism. This can be decided at the time of approval of CAPEX on case to case basis.

Commission's View :-

The Commission has already proposed that the Transmission Projects of Strategic and National importance may be allowed under Regulated Tariff Mechanism by the Commission. The Commission feels that the scope of the proposal is limited to fix the Threshold Limit for Intra-State Transmission Projects to be developed under the Tariff Based Competitive Bidding route.

To exclude the projects from TBCB scope as suggested by HPPTCL is concerned, the same may be decided by the Central Government or as provided in the guidelines of Ministry of Power or provided in any other law in force. Therefore, the Commission finds it appropriate not to consider any exclusion of Projects, as suggested by HPPTCL, at this stage.

(G) Miscellaneous Comments.-
Comments:-

- (i) The Sterlite Power Transmission Limited, Gurugram has submitted that it is imperative that for efficient and economical development of transmission capacity in the State under TBCB, the transmission schemes, new and augmentation, be planned/ designed and bid out with corresponding upstream and downstream elements. This would also obviate coordination and interface issues. The mechanism also ensures that the individual elements don't remain stranded, due to coordination issues and/or delay of other elements. Request for proposal dated 02.01.2020 of Madhya Pradesh State has referred in his suggestion.

(ii) The Sterlite Power Transmission Limited also submitted that the construction of 220/132 kV, 2x100 MVA Sub-station at Paonta Sahib by D/C LILO of 220 kV Khodri-Mazri line can be considered for implementation as Intra State TBCB project.

Commission's View:-

The issues raised by the stakeholder are not relevant since the present proposal is limited to specify the threshold limit for intra-State transmission projects to be developed on TBCB mode.

The Commission, after the consideration of the objections and suggestions made by the stakeholders in writing and in exercise of powers conferred under Sections 181 read with Sections 61, 66 & 86 of the Electricity Act, 2003 and in pursuance to Clause 5.3 of the Tariff Policy, 2016, decides to finalize the Threshold Limit of Rs. 45 Crore for development of the Intra-State Transmission Projects i.e. transmission line or Sub-station or both transmission line and Sub-station as a package where the proposed Sub-station is associated with the proposed transmission line.

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(Yashwant Singh Chogal)	(Bhanu Pratap Singh)	(Devendra Kumar Sharma)
Member(Law)	Member	Chairman