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Consultative paper on Development of Intra-State Transmission System through Tariff Based Competitive Bidding.

(Comments/suggestions invited on or before 20-09-2023)

1. Introduction

The Transmission System in Tamil Nadu comprises of a network of 765 / 400 / 230 / 110 /66 kV Transmission lines along with the 765 / 400 / 230 / 110 /66 kV sub-stations. Electricity demand in the State is increasing due to growth of industries & urbanization. The Transmission System needs to be reliable, cater present and futuristic load requirements. Accordingly, a robust network of Transmission lines and Substations is to be established to cater to the load requirements. There is also need to maintain the Power Quality, Network Reliability and integrate Power system at the National Grid.

Transmission system shall be developed in a cost efficient manner and there is need to adopt best practices and ensure competition amongst the participant transmission system developer. The competition will bring new technology/ innovation, achieve reduction in Tariff and aims to complete projects in timely manner. Accordingly, a concept Paper for Development of Intra-State Transmission System through Tariff Based Competitive Bidding (TBCB) process is introduced for seeking the comments/suggestions of the various stakeholders.

2. Legal Provisions

1. The Electricity Act, 2003 is the basic framework for Electric supply industry in India, with the objective as follows:

“An Act to consolidate the laws relating to generation, transmission, distribution, trading and use of electricity and generally for taking measures conducive to development of electricity industry, promoting competition therein, protecting interest of consumers and supply of electricity to all areas, rationalisation of electricity tariff, ensuring transparent policies regarding subsidies, promotion of efficient and environmentally benign policies ...”

Further, the State Commission has been vested with the responsibility to determine the Tariff for Generation, Supply, Transmission under Section 86 of the Electricity Act, which is as below:

“Section 86. (Functions of State Commission)-

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

(a) determine the tariff for generation, supply, transmission and wheeling of electricity, wholesale, bulk or retail, as the case may be, within the State...”

As regards to Determination of Tariff by bidding process, Section 63 of the Act provides regulatory provisions for adoption of the Tariff determined through transparent process of bidding, as follows:

“Section 63. (Determination of tariff by bidding process):

Notwithstanding anything contained in section 62, the Appropriate Commission shall adopt the tariff if such tariff has been determined through transparent process of bidding in accordance with the guidelines issued by the Central Government.”

2. The Tariff Policy, 2016 notified by the Central Government under the Section 3 of the Electricity Act 2003 states that the 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. The guideline 5.3 of the Policy provides that-

“5.3 The tariff of all new generation and transmission projects of company owned or controlled by the Central Government shall continue to be determined on the basis of competitive bidding

as per the Tariff Policy notified on 6 th January, 2006 unless otherwise specified by the Central Government on case to case basis.

Further, intra-state transmission projects shall be developed by State Government through competitive bidding process for projects costing above a threshold limit which shall be decided by the SERCs.”

3. The section 5.3.10 of the National Electricity Policy, 2005 notified by the Central Government states that special mechanisms would be created to encourage private investment in transmission sector so that sufficient investments are made for achieving the objective of demand to be fully met. Further, the section 5.8.9 states that role of private participation in generation, transmission and distribution would become increasingly critical in view of the rapidly growing investment needs of the sector. The Central Government and the State Governments need to develop workable and successful models for public private partnership. This would also enable leveraging private investment with the public sector finances. Mechanisms for continuous dialogue with industry for streamlining procedures for encouraging private participation in power sector need to be put in place.

4. Subsequently, the Hon'ble Supreme Court of India in their judgement dated 23-11-2022 in C.A.No. 1933 of 2022 directed all the SERCs to frame regulations under section 181 of the Electricity Act within 3 months of its order. The relevant portions of the judgement is reproduced as below:

“130.”We are cognizant of the fact that in matters dealing with electricity regulation, the regulatory commissions and the transmission utilities are usually bogged down by factors such as technological uncertainty, requirement of heavy investment and issues of right of way. The ad-hoc functioning of the transmission utilities is also attributable to the lacunae in the regulations guiding the exercise of their functions. The Electricity Act 2003 was enacted with the objective of providing the States with sufficient flexibility to regulate the intra-state electricity system and simultaneously provided the regulatory commissions with the power to determine tariffs. Though the Government, both at the Centre and in the States, have framed statutory policies and guidelines regulating the electricity sector, we have noticed that the Regulatory Commissions have not framed the necessary regulations to put into effect the principles prescribed under the Act.

131. We direct all State Regulatory Commissions to frame Regulations under Section 181 of the Act on the terms and conditions for determination of tariff within three months from the date of this judgment. While framing these guidelines on determination of tariff, the Appropriate Commission shall be guided by the principles prescribed in Section 61, which also includes the NEP and NTP. Where the Appropriate Commission(s) has already framed regulations, they shall be amended to include provisions on the criteria for choosing the modalities to determine the tariff, in case they have not been already included. The Commissions while being guided by the principles contained in Section 61 shall effectuate a balance that would create a sustainable model of electricity regulation in the States. The Regulatory Commission shall curate to the specific needs of the State while framing these regulations.

Further, the regulations framed must be in consonance with the objective of the Electricity Act 2003, which is to enhance the investment of private stakeholders in the electricity regulatory sector so as to create a sustainable and effective system of tariff determination that is cost efficient so that such benefits percolate to the end consumers.

5. The Ministry of Power, Government of India in their Guidelines dated 15/03/2021 recommended adoption of TBCB for Intra State Transmission projects in the larger interest of consumers. This 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. Relevant Clause of these guidelines are as below:

“6. In line with provisions of the Tariff Policy 2016, generally inter-state transmission systems are developed through competitive bidding only, except for certain categories of transmission system as specified in the Tariff Policy 2016. With adoption of Tariff Based Competitive Bidding for development of transmission system, following key benefits have been observed:

i) Lower Tariff compared to Cost Plus: With large number of bidders participating in development of a transmission project, discovered tariff for a transmission project can be lower than cost-plus tariff by about 30- 40%.

ii) Less burden on government finances: It will attract private investments for development of projects and scarce government fund can be spared for other priority sectors.

iii) Risk sharing: It encourage risk sharing with private sector. Innovative Technology: It encourages use of advanced technology for improving cost and efficiency.”

6. Further, the Ministry of Power vide F.No.04/01/2023-RCM, dated 21-08-2023 has requested the few states including Tamil Nadu to notify the threshold limit for intra-state transmission projects to be developed through the competitive bidding process.

7. The Regulation 16 of the TNERC (Conduct of business Regulations), 2004 empowers the Commission to initiate any proceedings suo-motu with due notice issued to the party concerned.

3. Current Practice

The Tamil Nadu Electricity Regulatory Commission (herein after called 'Commission') has notified TNERC (Terms and Conditions for the determination of Tariff) Regulations, 2005 and amendments thereon from time to time, which specified the terms and conditions for determination of various tariff viz. Generation, Transmission and Distribution businesses. Further, the Commission had also notified the TNERC (Terms and Conditions for Determination of Tariff for Intra state Transmission / Distribution of Electricity under MYT Framework) Regulations, 2009.

In line with the above Regulations, the Transmission Charges are being determined by the Commission from time to time on Cost plus basis under Regulated Tariff Mechanism.

4. Need for TBCB in Intra-State Transmission System

The discovered tariff for transmission project under TBCB can be lower than the tariff determined under Regulated Tariff Mechanism with the participation of many bidders. In the Regulated Tariff Mechanism route, the STU has the provisions to pass the cost of escalation owing to construction delay or any other operational factors as way of increased tariff in ARR. Whereas, in the TBCB route, the risk of projects such as scheduled delay, overrun cost, etc. except force majeure events, will be borne by the developers. It is also to be noted that the report by the Confederation of Indian Industry (CII) on "New age power systems for 21st century India: Challenges, Solutions

and Opportunities” says that the tariff based competitive bidding projects typically offer around 30% lower tariffs than the same project awarded on a regulated tariff mechanism.

In view of the above benefits, the transmission projects under TBCB route should be encouraged and Commission feels that the TBCB mode of development of transmission projects appear to be more appropriate for medium and large projects and therefore, a threshold limit is required to be determined above which the transmission projects could be developed only through TBCB mode.

5. Determination of Threshold Limit

In view of the background and reasons mentioned above, the Commission proposes to initiate Suo Motu proceedings for fixation of Threshold limit for development of Intra-State Transmission projects under Tariff Based Competitive Bidding in accordance with the Clause 5.3 of the Tariff Policy dated 28th January 2016.

The development of Intra State Transmission system in Tamil Nadu involves development of various types of Sub-Stations including GIS and AIS Sub-Stations, laying of Over Head Transmission Lines and underground cables at 400 kV/230 kV/110 kV level. It is proposed that bulk ordering and bunching of Projects similar in nature should be exercised to encourage participation from maximum bidders and achieve benefits of economies of scale. The Guideline 5.3 of Tariff Policy, 2016 empowers the State Commission to determine the threshold limit for Intra-State projects to be implemented under TBCB route. It is also pertinent to mention that Project costing below a certain threshold may not encourage participation from maximum participants and may not yield benefits of cost saving through TBCB route.

The Commission feels that while fixing the threshold limit for development of transmission projects, it should be taken into account that the project should neither be too small as it will not attract competitive tariff, nor too large as it will leave only few

selected big developers to qualify, thus curtailing competition. Therefore, while deciding the threshold limit of the transmission projects, it has to be kept in mind that the project cost is neither too small nor too large.

In the approval of the Capital Investment Plan of the TANTRANSCO's Transmission Projects in the Commission's Transmission tariff order No 08 of 2022 in T.P.No.2 of 2022, dated 09-09-2022, it is seen that project cost of the most of the major projects is more than Rs.200 Crores.

The States such as Assam, Haryana, Punjab, etc. have introduced TBCB mechanism for their Intra-State Transmission System and the details are as below:

Sl. No.	State Commission	Date of Order/Notification	Threshold Limit (Rs.)
1	Assam ERC	Notification dated 14-01-2019	225 Crores and above for Transmission Lines and 160 Crores and above for Sub-Stations
2	Gujarat ERC	Order dated 07-03-2023	100 Crores and above (excluding land cost)
3	Haryana ERC	Order dated 26-04-2021	100 Crores and above
4	Joint ERC (J&K and Ladakh)	Notification dated 01-05-2023	100 Crores and above
5	Odisha ERC	Notification dated 15-10-2022	100 Crores and above (except 400 kV and above voltage projects and projects of strategic importance)
6	Maharashtra ERC	Notification dated 10-02-2023	500 Crores and above (excluding land cost)

7	Punjab State ERC	Notification dated 05-11-2018	50 Crores and above
8	Rajasthan ERC	Order dated 07-09-2022	250 Crores and above

In view of the above, 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, the Commission proposed to fix the threshold limit of **INR 200 Cr** for Intra State transmission projects. Above this threshold limit, all new and augmentation of Intra-State Transmission projects shall be developed through Tariff Based Competitive Bidding (TBCB) in accordance with the guidelines to be issued by the State Transmission Utility (STU).

Provided that the mode of execution of transmission projects (TBCB or cost plus basis) of 400 kV and above voltage level may be decided by the STU in consultation with the Government of Tamil Nadu on case to case basis.

Provided further that transmission projects of strategic importance, as identified by STU in consultation with Government of Tamil Nadu may be executed on cost plus basis.

The Commission may revise the threshold limit through special order, as and when required, based on suggestions from STU/Government of Tamil Nadu through a consultative process.

6. Other Conditions

The STU in consultation with the Government of Tamil Nadu may take steps for bundling/packaging of projects to be executed under TBCB, creation of payment security mechanism, development of single window clearing mechanism, formulation of Standard Bidding Document (SBD) and selection of Bid Process Coordinator (BPC) in line with the SBD & guidelines issued by the Ministry of Power, Government of India from time to time. STU shall frame guidelines in this regard and notify the same in this

regard within two months from the issue of final Order on this Suo Motu proceedings after approval of the Commission.

7. Suggestions/Comments of the Stakeholders

The Commission invites comments/suggestions from the various stakeholders in this regard and the same may be sent to the Secretary, Tamil Nadu Electricity Regulatory Commission, 4th Floor, SIDCO Corporate Office building, Thiru.Vi.Ka Industrial Estate, Guindy, Chennai - 600 032 on or before 20-09-2023.

Sd/- dated 04-09-2023
Secretary,
Tamil Nadu Electricity Regulatory Commission