# Maharashtra State Transmission Utility (STU)

Guidelines for Selection of Transmission Projects to be executed under Tariff Based Competitive Bidding Framework within State of Maharashtra

In accordance with

Maharashtra Electricity Regulatory Commission (Multi Year Tariff) Regulations, 2024



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Abbreviation					
BOOT	Build, Own, Operate and Transfer				
Capex	Capital Expenditure				
CSR	Corporate Social Responsibility				
DPR	Detailed Project Report				
EMS	Energy Management System				
GoI	Government of India				
GOM	GOM Government of Maharashtra				
HTLS	HTLS High-Temperature Low-Sag Conductor				
HVDC	High Voltage Direct Current				
IDC	Interest During Construction				
ISTS	Inter-State Transmission System				
MERC	Maharashtra Electricity Regulatory Commission				
MYT	Multi Year Tariff				
RFP	FP Request for Proposal				
RI	Reinstatement				
RTM	Regulated Tariff Mechanism				
SBD	Standard Bid Documents				
SOR	Schedule of Rates				
SPV	Special Purpose Vehicle				
STU	STU State Transmission Utility				
ТВСВ	Tariff Based Competitive Bidding				
TSA	Transmission Service Agreement				
TSP	Transmission Service Provider				



# Guidelines for Selection of Transmission Projects to be executed under Tariff Based Competitive Bidding Framework within State of Maharashtra

#### 1. Preamble

- 1.1. The promotion of competition in the electricity industry in India is one of the key objectives of the Electricity Act, 2003. Development of a transmission system is essential both for encouraging competition and for creating electricity markets. These guidelines are aimed at identifying transmission projects within the State of Maharashtra for facilitating competition procurement, wider participation in providing transmission services and tariff determination through a process of tariff-based bidding.
- 1.2. Tariff based Competitive Bidding Guidelines for identifying Transmission Projects within the State of Maharashtra have been framed considering the provisions of Section 63 of the Act, Threshold limit and other conditions laid out by Maharashtra Electricity Regulatory Commission in Maharashtra Electricity Regulatory Commission (Multi Year Tariff) Regulations, 2024 for development of for Intra-State Transmission System through Tariff Based Competitive Bidding.

### 2. Scope of the Guidelines

- 2.1. These guidelines provide a transparent and objective methodology for identifying Intra-State transmission projects within the State of Maharashtra.
- 2.2. These guidelines shall be applicable from April 1, 2025.
- 2.3. These guidelines shall apply for procurement of transmission services for transmission of electricity through tariff based competitive bidding, through the mechanisms described in these guidelines and to select the bidder who will acquire SPV for a new Intra-State Transmission System

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- and to build, own, operate and transfer the specified transmission system elements.
- 2.4. The Ministry of Power, through its letter dated August 6, 2021, issued revised Standard Bid Documents (SBDs), which include the Request for Proposal (RFP) for the selection of a Transmission Service Provider (TSP) via the TBCB process to establish ISTS projects, as well as the Transmission Service Agreement (TSA) for the development and operation of ISTS systems for electricity transmission through the TBCB route. These SBDs shall be adopted for the development of Intra-State Transmission projects under the TBCB process within the State of Maharashtra, with appropriate modifications to the SBDs, following approval from the State Government and MERC, for awarding Intra-State transmission projects.
- 2.5. The contract period for the Intra-State transmission projects shall be 35 years or as per the Maharashtra Electricity Regulatory Commission (Multi Year Tariff) Regulations, 2024.
- 2.6. Providing transmission services would include all activities related to survey, detailed project report formulation, arranging finance, project management, obtaining transmission license, obtaining right of way, forest clearance, environment clearance, statutory and other necessary clearances, site identification, land acquisition and payment of compensation, design, engineering, quality control, procurement of material, construction, erection, testing and equipment, commissioning, maintenance and operation of transmission lines and/or substations and/or switching stations and/or HVDC links including terminal stations and HVDC transmission line. It will be in such a manner that the required transmission services as specified in the bid document are provided from execution of the project up to completion and commissioning and its subsequent maintenance and operation so that the facilities are available as per the target for recovery

of full transmission charges as quoted by the selected bidder during the e-reverse bidding and adopted by the MERC.

### 3. Threshold limit and Other Conditions for TBCB Intra-State Transmission Projects as per MERC MYT Regulations, 2024

- 3.1. Regulation 75.3 of the Maharashtra Electricity Regulatory Commission (Multi Year Tariff) Regulations, 2024, mandates that all the new Intra-State transmission systems that exceeds the specified Threshold Limit and meet the other conditions outlined in the MERC MYT Regulations, 2024, shall be developed through TBCB in accordance with the guidelines issued by the Central Government under Section 63 of the Act.
- 3.2. MERC in its MYT Regulations, 2024 has specified the Threshold Limit for Intra-State Transmission System to be developed through Tariff Based Competitive Bidding as Rupees Two Hundred (200) Crore excluding land cost and Reinstatement (RI) Charges.
- 3.3. Other conditions outlined in the MERC MYT Regulation, 2024, that has to be met for consideration of developing Intra-Sate transmission projects through TBCB is as follows: -
  - 1) All new Intra-State Transmission Systems excluding the schemes involving the upgradation / augmentation of Assets forming part of the existing Transmission Licensee and excluding the schemes, which appears in the Licence of the Transmission Licensee, costing Rupees Two Hundred (200) Crore or more excluding land cost and RI Charges shall be implemented by STU through Tariff Based Competitive Bidding in accordance with the competitive bidding guidelines notified by the Central Government from time to time.
  - 2) This Threshold Limit shall be applicable for all new Intra-State Transmission Systems Projects and Projects where MERC's earlier approval is not valid or cancelled by the MERC, as the case may

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be.

- 3) The entire Intra-State independent transmission systems including any upstream/downstream project shall be designed as single project for inviting bids for development of project through Tariff Based Competitive Bidding.
- 4) In case the STU intends to implement any Intra-State Transmission System above the Threshold Limit through cost-plus approach under Section 62 of the Act, due to some specific reasons such as project is of critical nature (e.g., Transmission System being developed for Defence, Railways, Airport, etc.) or the Project that may lead to ownership or interface issues, i.e., the ownership of new Intra-State Transmission System cannot be delineated from the assets of existing transmission assets, the STU shall obtain prior approval of the MERC for the same. Further, in case the STU intends to implement any Intra-State Transmission System below the Threshold Limit through Tariff Based Competitive Bidding, due to some specific reasons, STU may decide to implement such projects through Tariff Based Competitive Bidding with valid reasons to do so and with prior approval of the MERC.

#### 4. Selection of Projects to be implemented under TBCB

4.1. All new Intra-State Transmission Systems excluding the schemes involving the upgradation / augmentation of Assets forming part of the existing Transmission Licensee and excluding the schemes, which appears in the Licence of the Transmission Licensee, costing Rupees Two Hundred (200) Crore or more excluding land cost and RI Charges shall be implemented by STU through Tariff Based Competitive Bidding in accordance with the competitive bidding guidelines notified by the Central Government from time to time. In order to assess as to whether the scheme is upgradation/augmentation of assets forming part of the existing Transmission Licensee, following criteria shall be

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applied:

<u>Upgradation of Assets:</u> The term upgradation of assets means modifying or replacing existing transmission system components to improve their performance, efficiency, or reliability without necessarily increasing capacity. The type of schemes under upgradation for assets could be including, but not limited to:

- Replacing old conductors with high-capacity conductors (e.g., HTLS conductors).
- Upgrading control and protection systems to digital or smart grid technologies.
- Increasing voltage levels on existing transmission lines (e.g., from 132 kV to 220 kV).
- Conversion of OH to UG & vice-a-versa to improve their performance, efficiency, or reliability without necessarily increasing capacity,
- Conversion from Single to Twin Conductors,
- Upgradation to counter technological obsolescence,
- Creation of Multiple voltage levels,
- AIS to GIS conversion.

<u>Augmentation of Assets:</u> The term augmentation of assets means adding new components to an existing transmission system to increase its capacity. The type of schemes under augmentation for assets could be including, but not limited to:

- Installation of additional transformers or reactive power compensators.
- Extension of existing substations or lines.

It is clarified that the construction of new independent sub-stations along with associated lines within the vicinity of existing sub-station will be considered as New Projects to taken up under TBCB. Further, the

- schemes related to construction of sub-stations at the infrastructure under the licensee of transmission licensees along with construction / re-orientation of transmission lines for level creation shall be considered as augmentation schemes.
- 4.2. As per the provisions of MERC MYT Regulations, 2024, all Intra-State Independent transmission systems, along with any upstream or downstream projects shall be designed as a single project for Inviting bids for project development through TBCB. Based on the various projects considered in STU 10 Year Plan, the Projects will be appropriately designed as single project considering the upstream or downstream projects in order to decide as to whether the Project is to be implemented under TBCB route or RTM route.
- 4.3. The most important aspect for project to be considered under TBCB is Project Cost excluding Land Cost and Reinstatement Charges. Typically, the Land Cost and Reinstatement Charges vary across the State and depends upon location of the Project. However, there will not be substantial difference in equipment cost of the Project across the State. Hence, in order to assess as to whether the Cost of the Project excluding Land Cost and RI Charges is exceeding Rs 200 Crore or not, tentative cost of the transmission project needs to be estimated. The Base Tentative Base Cost of the Project only for deciding whether the project falls under TBCB or not shall be estimated by considering the latest Schedule of Rates of MSETCL as submitted to MERC for arriving at the base cost of various equipment, material and civil works. In case certain items are not available in SOR, the costs of such items shall be considered based on latest Purchase Orders placed for similar items duly escalating upto the current price level. Once the Base Cost of the Project is estimated based on this approach, following costs involved in the Project shall be computed as follows and added to the Base Cost:
  - Centages of 7% as per MERC Capex Regulations

- Crop Compensation as per GOM circular
- Spares as per MERC MYT Regulations, 2024
- Contingencies of 3% to take care of quantity variations and 5 % for Price Variations
- Interest during Construction considering the normative debt: equity ratio of 70:30, phasing of expenditure considering the project schedule and interest rates as approved by the Commission in its latest MYT/MTR Order.

After adding all the above components to the Base Cost, the total Project Cost excluding land and RI charges shall be worked out.

- 4.4. The total Project Cost excluding Land Cost and RI Charges as estimated as per approach elaborated in 4.3 above shall be considered to assess as to whether the Project Cost excluding Land Cost and RI Charges is equal to or more than threshold limit of Rs 200 Crore specified in the Regulations.
- 4.5. Even if the total Project Cost excluding Land Cost and RI Charges is equal is equal to or more than threshold limit of Rs 200 Crore specified in the Regulations, STU in following cases may approach MERC for prior approval to implement the project under RTM.
  - Project is of critical nature (e.g., Transmission System being developed for Defence, Railways, Airport, Port etc. or any other Project as decided by the Empowered Committee).
  - Project may lead to ownership or interface issues, i.e., the ownership of new Intra-State Transmission System cannot be delineated from the assets of existing transmission assets.
- 4.6. By following these criteria, the STU can ensure that projects identified for TBCB align with MERC MYT Regulations, optimize competitive processes, and address any exceptions with proper justification and regulatory approval.

4.7. The Step wise Check List for selection of Projects to be executed under TBCB is pictorially depicted below and is summarised in Table after Flow Chart:



Figure 1: Step wise checklist for selection of projects to be implemented under TBCB

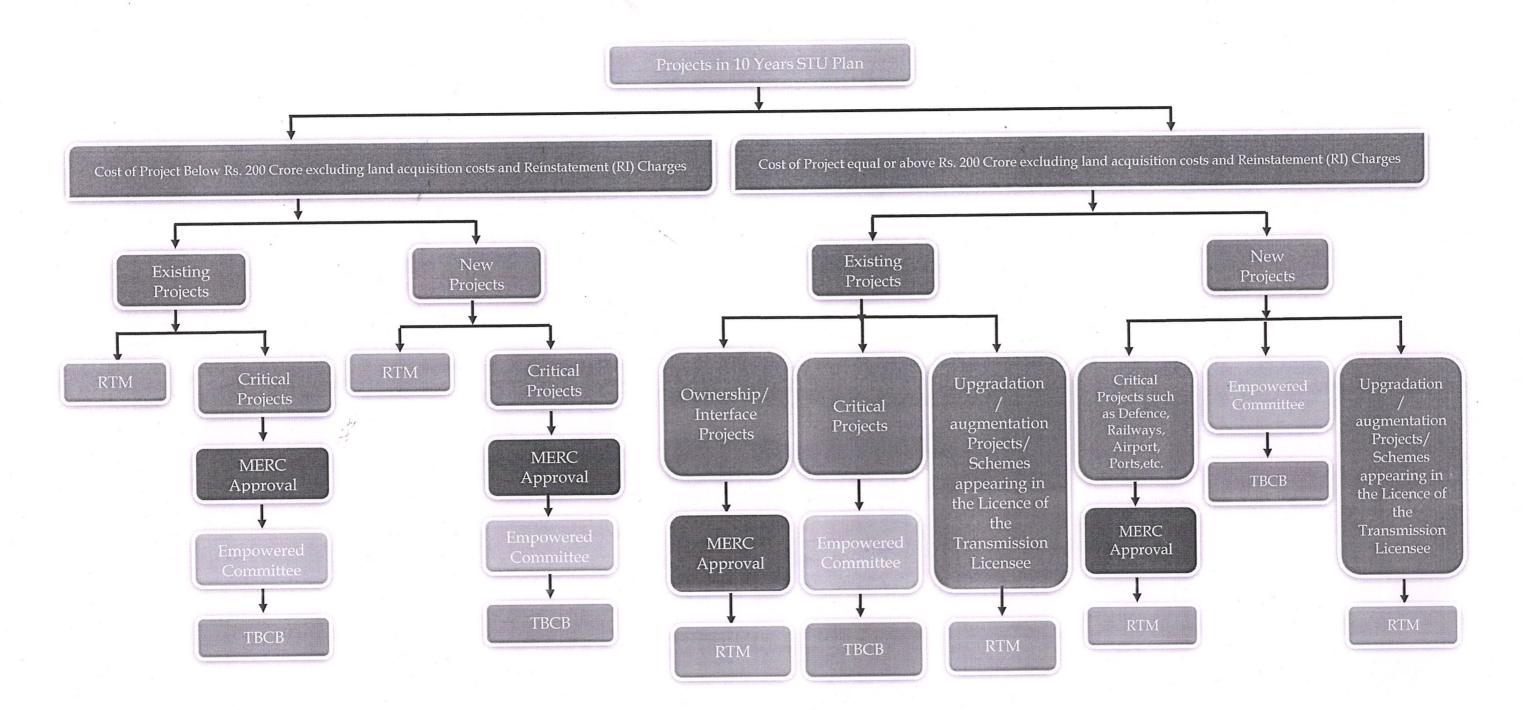




Table 1: Summary of Criteria for Selection of Project to be implemented under TBCB

Sr. No.	Particulars	Details
1.	Type of Project	<ul> <li>All new Intra-State Transmission System         Projects in STU 10 year Rolling Plan.</li> <li>Projects where MERC's earlier approval is         not valid or cancelled by the MERC, as the         case may be.</li> </ul>
2.	Threshold Limit	Estimated Project Cost Excluding Land Cost and RI charges equal to or more than Rs 200 Crore
3	Definition of Single Project	All Intra-State Independent transmission systems, along with any upstream or downstream system to be designed as a single project.
4.	TBCB Exclusions	<ul> <li>Upgradation or augmentation of existing assets held by the Transmission Licensee.</li> <li>Projects listed in the Transmission Licensee's licence.</li> <li>Project of critical nature (e.g., Transmission System being developed for Defence, Railways, Airport, Port, etc. or any other Project as decided by the Empowered Committee) subject to MERC approval.</li> <li>Project leading to ownership or interface issues, i.e., the ownership of new Intra-State Transmission System cannot be delineated from the assets of existing transmission assets subject to MERCs approval.</li> </ul>