



**MAHARASHTRA ELECTRICITY REGULATORY COMMISSION**

**EXPLANATORY MEMORANDUM**

**ON**

**Draft Maharashtra Electricity Regulatory Commission (Multi Year Tariff) (First Amendment)  
Regulations, 2022**

**August, 2022**

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## LIST OF ABBREVIATIONS

AEML-T	Adani Electricity Mumbai Limited – Transmission Business
AERC	Assam Electricity Regulatory Commission
BERC	Bihar Electricity Regulatory Commission
CBG	Competitive Bidding Guidelines
CEA	Central Electricity Authority
CERC	Central Electricity Regulatory Commission
Ckt-km	Circuit Kilometres
COD	Commercial Operation Date
CTU	Central Transmission Utility
DISCOM	Distribution Companies
DPR	Detailed Project Report
EA 2003	Electricity Act, 2003
GoM	Government of Maharashtra
HERC	Haryana Electricity Regulatory Commission
HT	High Tension
HVDC	High Voltage Direct Current
InSTS	Intra-State Transmission System
kWh	kilo Watt hour
LT	Low Tension
MERC	Maharashtra Electricity Regulatory Commission
MoP	Ministry of Power
MPERC	Madhya Pradesh Electricity Regulatory Commission
MSETCL	Maharashtra State Electricity Transmission Company Limited
MSLDC	Maharashtra State Load Despatch Centre
MYT	Multi Year Tariff
PGCIL	Power Grid Corporation of India Limited
PSERC	Punjab State Electricity Regulatory Commission
RERC	Rajasthan Electricity Regulatory Commission
RFP	Request for Proposal
RFQ	Request for Qualification
RVPNL	Rajasthan Rajya Vidyut Prasaran Nigam Limited
SBD	Standard Bidding Documents

SERC	State Electricity Regulatory Commission
SLDC	State Load Despatch Centre
STU	State Transmission Utility
TBCB	Tariff Based Competitive Bidding
TPC-T	The Tata Power Company Limited - Transmission Business
TSA	Transmission Service Agreement
UERC	Uttarakhand Electricity Regulatory Commission
UPERC	Uttar Pradesh Electricity Regulatory Commission

# 1 Background & Regulatory Framework

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## 1.1 The Electricity Act, 2003

Promoting competition is one of the key principles enshrined in the preamble of the Electricity Act, 2003 (Act), which aims to develop the electricity industry and optimise and rationalize the electricity tariff. The preamble of the Electricity Act, 2003 is 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, rationalization of electricity tariff, ensuring transparent policies regarding subsidies, promotion of efficient and environmentally benign policies, constitution of Central Electricity Authority, Regulatory Commissions and establishment of Appellate Tribunal and for matters connected therewith or incidental thereto.”*

Section 38 (2) and Section 39 (2) of the Act have entrusted the planning and coordination of the inter-State and intra-State Transmission Systems to the Central Transmission Utility (“CTU”) and the State Transmission Utility (“STU”), respectively. The overarching mandate of the CTU and STU is to ensure the development of an efficient, coordinated and economical system of inter-State and intra-State transmission systems, respectively. The said mandate may be achieved by adopting a fair and transparent system of planning, which takes into consideration interests of all the stakeholders.

Electricity Regulatory Commissions, being the custodian of the statute, have been bestowed with the responsibility to facilitate and promote competition, efficiency and economy in activities of the electricity industry.

The Act has created a conducive environment for investments in all segments of the industry, both for public sector and private sector, by removing entry barriers in different segments. Section 63 of the Act provides for participation through Competitive bidding mechanism giving an alternate mechanism and opening to the developers for developing the Transmission Infrastructure possibly in an economic and efficient manner.

Further, the Act also states that the State Electricity Regulatory Commission, while discharging its functions as mentioned in the Act, shall be guided by the National Electricity Policy, National Electricity Plan and Tariff Policy.

## 1.2 Provisions in support of Competitive Bidding

The State Electricity Regulatory Commission has been vested with the responsibility to determine the tariff for generation, supply, transmission and wheeling of electricity, wholesale, bulk or retail, as the case may be, within the State under Section 86 of the Act. Further, Section 63 of the Act provides for adoption of the tariff determined through transparent process of bidding. The relevant Section of the Act is reproduced below:

*“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.”*

The Ministry of Power, Government of India, in compliance with Section 3 of the Act, notified the National Electricity Policy on February 12, 2005 and Tariff Policy on January 06, 2006 and revised Tariff Policy on January 28, 2016.

Clause 5.3.10 and Clause 5.8.9 of the National Electricity Policy as regards competition in transmission sector and participation of private players stipulates as follows:

*“5.3.10 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 by 2012.*

...

*“5.8.9 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 equity with the public sector lending, ushering efficiency gains through good management practices that secure higher return on investment. Mechanisms for continuous dialogue with industry for streamlining procedures for encouraging private participation in power sector need to be put in place.”(emphasis added)*

Further, Tariff Policy, 2006 as well as Tariff Policy, 2016, mandates competition in the development of inter-State as well as intra-State transmission projects by following competitive bidding route. Relevant clauses of Tariff Policy, 2016 are as under:

*“5.1 Introducing competition in different segments of the electricity industry is one of the key features of the Electricity Act, 2003. Competition will lead to significant benefits to consumers*



**through optimal capital costs and also efficiency of operations.** It will also facilitate the price to be determined competitively in a transparent manner. The Central Government has already issued detailed guidelines for tariff based bidding process for procurement of electricity by distribution licensees.

...

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 6th 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.” (emphasis added)***

Clause 5.3 of the Tariff Policy, 2016 as regards development of intra-State Transmission System stipulates that the same shall be executed through competitive bidding route provided for projects costing above a Threshold Limit, which shall be decided by the State Commission.

### **1.3 Competitive Bidding Guidelines**

Ministry of Power, Govt. of India (GOI) notified the “Tariff Based Competitive Bidding (TBCB) Guidelines for Transmission Service” on April 13, 2006 under the provisions of Section 63 of the Act, for procurement of transmission services for transmission of electricity except under special circumstances. Subsequently, Standard Bidding Documents, i.e., Request for Qualification (RfQ), Request for Proposal (RfP), and Transmission Service Agreement (TSA) were notified by MoP, Govt. of India in the year 2008, followed by subsequent amendments in the year 2008, 2010, 2011, 2020 and 2021 in these documents based on the Stakeholders’ comments and suggestions to address the issues to further expedite the adoption of TBCB in transmission projects.

MERC vide its letter No. MERC/ADM/20122013/00303 dated May 14, 2012 in its statutory advice on ‘Transmission Infrastructure Development Plan for Mumbai Metropolitan Region (MMR) and addressing its implementation issues advised the Government of Maharashtra (GoM) that for a time bound, efficient and cost effective development of the proposed transmission network for MMR, it is

desirable that such schemes should be developed through competitive bidding process under TBCB route.

Govt. of Maharashtra vide its GR dated January 4, 2019 decided the development of intra-state transmission projects through TBCB route based on GOI's TBCB Guidelines and constituted the Empowered Committee (EC) for deciding the intra-state transmission projects to be developed through Tariff Based Competitive Bidding route.

Further, Ministry of Power vide its notification dated March 15, 2021 has recommended to all the State Governments /UTs to adopt Tariff Based Competitive Bidding (TBCB) for development of intra-State Transmission System.

MoP issued revised Guidelines for Competitive Bidding in Transmission in August, 2021.

The Commission in its Order dated March 21, 2021 in Case No. 190 of 2020 with respect to fixation of Threshold Limit has ruled as follows:

*“37.35 The Commission will be separately deciding on the Threshold Limit to be considered for undertaking projects through the TBCB route, after seeking inputs from the stakeholders. The Commission will also have to decide on the conditions/exceptions to the Threshold Limit, keeping the requirements of the State in mind, as well as factors such as delineability of the Project, scope for fixing clear responsibility for project execution, applicability to new Projects vs. system strengthening or augmentation Projects, etc., based on objective criteria, so that the scope for subjectivity in decision making is minimised. Timely completion of projects is also one of the important criteria which needs to be considered. In the meantime, in the absence of any defined Threshold Limit decided by the Commission, the Tariff Policy provisions in this regard cannot be given effect.”*

Considering the above aspects, the Commission has undertaken the present Study for deciding the regulatory framework of fixing Threshold Limit for development of InSTS schemes under TBCB, suitable for the State of Maharashtra.

The Commission has, formulated the Draft Maharashtra Electricity Regulatory Commission (Multi Year Tariff) (First Amendment) Regulations, 2022 (hereinafter referred as “**Draft Multi Year Tariff (First Amendment) Regulations, 2022**” or “Draft Regulations”). While formulating the Draft Regulations, the Commission has been guided by Capital Investment Schemes submitted by the

Transmission Licensees and approved by the Commission over the past few years. The Commission has also considered the existing TBCB for Transmission Service, Guidelines for Encouraging Competition in Development of Transmission Projects, Threshold Limit specified by other SERCs and International experiences. Further, it is clarified once again that the option of TBCB enabled through the Section 63 of the Electricity Act 2003 is in addition to the provision under Section 62 of the Electricity Act, 2003. The Commission, through these Draft Regulations is recognising the need for private sector participation in transmission sector of the State and to optimise the capital investment in transmission in line with the policy directions and regulatory guidelines provided in the National Electricity Policy (NEP) and the Tariff Policy.

**The rationale for the various provisions proposed in the Draft Maharashtra Electricity Regulatory Commission (Multi Year Tariff) (First Amendment) Regulations, 2022 have been elaborated in this Explanatory Memorandum (EM).**

The Commission while formulating the Draft Regulations has endeavoured to balance the interest of consumers and Transmission Licensee. Based on its analysis of various aspects, the Commission has tried to bring out the best possible regulatory framework to determine the Threshold Limit above which (subject to the certain exceptions) the transmission projects shall be executed through TBCB process based on the Standard Bidding Guidelines notified by MoP, GoI from time to time.

The Explanatory Memorandum is organised in the following five (5) Chapters:

**Chapter 1:** Background & Regulatory Framework

**Chapter 2:** Competitive Bidding in Transmission

**Chapter 3:** Threshold Limit Specified by other SERC's

**Chapter 4:** International Experiences

**Chapter 5:** Determination of Threshold Limit

## 2 Competitive Bidding in Transmission

### 2.1 Special Cases for Regulated Tariff Mechanism (RTM) – As per CBG

Section 62 and Section 63 of the Electricity Act 2003 are the enabling provisions for development of the Intra State Transmission Infrastructure. The provisions of both these sections need to be used in combination on case to case basis considering the specific nature and importance of the Transmission projects. There may be cases, where transmission projects, under special circumstances or deviation from the threshold limit defined by the Commission may be required in to be developed. In such cases, the Commission may, on a case to case basis decide the execution of the project. Further, the Tariff Policy, 2016 also emphasises that all the future transmission projects shall ordinarily be developed through competitive bidding process, however, the Central Government may give exemption to specific projects of strategic importance and works required to be done to cater to an urgent situation on a case-to-case basis.

### 2.2 Inter State Projects undertaken under TBCB

An analysis based on secondary data from various public sources including Central Electricity Authority (CEA) shows that out of a total number of 151 inter-State transmission projects awarded since 2011, 62 projects were awarded through TBCB route (6 were subsequently scrapped), while 89 projects were awarded under cost-plus/regulated tariff mechanism (RTM) route.

### 2.3 Tariff Aspects of TBCB vs. RTM

While it may not be an one on one comparison to conclude, based on the general observation of the various inter-State projects executed through TBCB process, it is observed that the levelised tariff of TBCB projects is generally lower than the levelised tariff computed based on CERC Tariff Regulations considering Capital Cost estimated by the CTU. This has possibly resulted in reduction in tariff. However, in some cases, levelised tariff works out to be higher than the Cost plus tariff. Some of the prominent projects are listed below:

**Table 1: Prominent Projects (TBCB vs. RTM)**

Scheme Name/Project	Winning Levelised Tariff (Rs. Crore)	Cost Plus Levelised Tariff (Rs. Crore)	Reduction/ (Increase) w.r.t. Cost Plus Tariff (%)
Transmission System (TS) Gadawara STPS (2 x 800 MW) of NTPC (Part-B)	257.00	527.00	51%
TS Gadawara STPS (2 x 800 MW) of NTPC (Part-A)	290.00	593.00	51%
Khargone TPP 1320MW	159.00	310.00	49%

<b>Scheme Name/Project</b>	<b>Winning Levelised Tariff (Rs. Crore)</b>	<b>Cost Plus Levelised Tariff (Rs. Crore)</b>	<b>Reduction/ (Increase) w.r.t. Cost Plus Tariff (%)</b>
Construction of Ajmer (PG)-Phagi 765 kV D/C line	61.00	118.00	48%
Jam Khambaliya pooling station and inter-connection of Jam Khambaliya pooling station	33.67	66.51	49%
Transmission System associated with LTA applications from Rajasthan SEZ Part-B (Fatehgarh-II Transco Limited)	71.56	158.39	55%
WRSS-21 (Part-B)	178.87	281.85	37%
Transmission System associated with RE Generations at Bhuj-II, Dwarka & Lakadia (Lakadia Banaskantha Transco Limited)	83.46	141.27	41%
Transmission System for connectivity to RE Projects at Bhuj-II (2000 MW) in Gujarat (Bhuj-II Transmission Limited)	123.77	207.69	40%
400 kV Udupi (UPCL)-Kasargode D/C line (Udupi Kasargode Transmission Limited)	84.74	114.44	26%
(WRSS-21) Part A	95.13	174.61	46%
Transmission system associated with LTA application from Rajasthan SEZ (Part-D) (Bikaner-Khetri Transmission Limited)	100.05	229.54	56%
NEW WR-NR 765 kV Inter-Regional corridor	92.73	140.96	34%
Transmission System for Ultra Mega Solar Park, district Jaisalmer Rajasthan (Fatehgarh- Bhadla Transmission Limited)	38.02	83.87	55%
Transmission System associated with Additional 400 kV feed to Goa and additional system for power evacuation from generation projects pooled at Raigarh (Tamnar) Pool	164.775	224.57	27%
transmission of electricity for Eastern Region Strengthening Scheme-XXI (ERSS-XXI)	138.58	252.00	45%
Strengthening in Northern Region (NRSS-XXXVI) along with LILO of Sikar-Neemrana 400 kV DC at Babai (RRVPL) (NRSS XXXVI Transmission Ltd.)	48.60	60.49	20%
NEW WR-NR 765 kV Inter-Regional corridor	92.73	140.96	34%
Immediate evacuation for North Karanpura (3x660 MW) generation project and creation of 400/220 kV sub-station at Dhanbad	55.99	75.17	26%

Scheme Name/Project	Winning Levelised Tariff (Rs. Crore)	Cost Plus Levelised Tariff (Rs. Crore)	Reduction/ (Increase) w.r.t. Cost Plus Tariff (%)
Transmission System strengthening for transfer of power from new HEPs in Bhutan, Alipurduar Transmission Ltd.	129.42	184.91	30%
Strengthening of Transmission System beyond Vemagiri	359.26	762.57	53%
Northern Region System Strengthening Scheme NRSS-XXIX	438.00	418.00	(5%)
NER System Strengthening Scheme-II (Part-B) and V	432.00	407.00	(6%)
ER System Strengthening Scheme VII	589.00	561.30	(5%)
ER System Strengthening Scheme VI	1,174.02	896.70	(31%)
NER strengthening scheme (NERSS-VI)	2,027.40	1604.50	(26%)

**Based on the above, it can be inferred that awarding a project under TBCB route does not always guarantee a reduction in costs. The tariff discovered under competitive bidding depends upon several factors. Further, it is also important to note that there are many factors including design aspects, right of way, specifications, technology etc., which decide the tariff and hence the reasons for higher or lower levelised tariff discovered through competitive bidding as against Cost Plus Tariff that needs to be examined in detail on case-to-case basis. Further, the levelised tariff discovered through bidding is subjected to change in law provisions of Transmission Service Agreement (TSA) entered with beneficiaries. Perhaps innovative financial engineering is employed to reduce the cost of the capital to drive down the tariffs in an essentially capital intensive transmission projects.**

The MoP, vide its letter dated March 15, 2021, has strongly recommended TBCB 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.

Further, 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 RTM and 43 TBCB projects) shows that “TBCB projects typically offer ~30% lower tariff than same project awarded on RTM basis”.

Another inherent benefit of TBCB mode of development is that it has encouraged private sector participation, which has resulted in releasing the government finances for more widespread deployment in priority sectors. It has also resulted in risk sharing with private players, adoption of innovative technology with private participation, etc. Moreover, it has been observed that TBCB projects, which are governed by Transmission Service Agreement (TSA) normally do not face time and cost overrun and also no time and cost overrun are allowed in TBCB Projects except on account of Change in Law and Force Majeure, which are also applicable for RTM Projects.

Further, for executing the project under TBCB consent of the Transmission System Users is necessary in terms of signing of TSA. Further, as per the TBCB Guidelines, the Long Term Transmission Customers get to know the progress of the implementation of the Project. Further, if the project is delayed by the TSP, then the LTTCs can terminate the TSA as per provisions of TSA.

### 3 Threshold Limit Specified by other SERCs and Developments related to TBCB in Maharashtra

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#### 3.1 Threshold Limit Specified by other SERCs

In accordance with the Tariff Policy, 2016, the SERCs are required to determine the Threshold Limit for the projects above which, the project shall be executed through competitive bidding route. However, till date only few SERCs have determined the Threshold Limit for projects to be executed through TBCB, while others are still in the process of determining the same.

Further, the Commission has observed that out of the SERCs, which have determined the Threshold Limit for projects to be executed through TBCB, 4 SERCs (Rajasthan, Haryana, Uttarakhand and Assam) have determined Threshold Limit of Rs. 100 Crore, while Punjab has determined Threshold Limit of Rs. 50 Crore and above, and Madhya Pradesh has determined Threshold Limit of above Rs. 250 Crore whereas, Uttar Pradesh has directed UPPTCL to implement all new transmission projects above 200 kV through TBCB.

The approach adopted by the above SERCs while determining the Threshold Limit is as follows:

- a) **Rajasthan Electricity Regulatory Commission (RERC)** vide its letter dated 28<sup>th</sup> August, 2018 accepted the Threshold Limit proposed by Rajasthan Rajya Vidyut Prasaran Nigam Limited (RVPNL), wherein it stated as follows:

*“Commission, considering the proposals furnished by RVPN, has decided the threshold limit as Rs. 100 Crore or more, irrespective of voltage level for development of Intra-State transmission projects....”*

- b) **Punjab State Electricity Regulatory Commission (PSERC)** vide Notification dated 5<sup>th</sup> November, 2018 determined the Threshold Limit as under: -

*“No. PSERC/Secy/132.-In accordance with para 5.3 of National Tariff Policy, the Punjab State Electricity Regulatory Commission hereby decides that intra-state transmission projects costing more than Rs. 50 Crore shall be developed by State Govt./STU through tariff based competitive bidding.”*

- c) **Haryana Electricity Regulatory Commission (HERC)** after following due public consultation process vide Notification dated 1<sup>st</sup> June 2021 determined Threshold Limit as under:-



*“No. 935/HERC/Tariff. — In exercise of the powers conferred under Section 61, 66 and 86 read with Section 181 of the Electricity Act 2003 (36 of 2003) & Clause 5.3 of the National Tariff Policy and all other powers enabling it in this behalf, the Haryana Electricity Regulatory Commission decides that intrastate transmission projects costing Rupees one hundred crores and more (Rs. 100 Crores plus) shall be necessarily developed through global Tariff Based Competitive Bidding (TBCB) only. HVPNL (STU) shall prepare the necessary implementation guidelines.”*

- d) **Assam Electricity Regulatory Commission (AERC)** after following due public consultation process vide Notification dated 12<sup>th</sup> January 2022 determined Threshold Limit as under:-

*“No. AERC. 687/2018/79- 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 Assam Electricity Regulatory Commission (AERC) hereby determines the threshold limit of Rs 100 Cr, irrespective of the voltage level for all new development and augmentation schemes of 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 issued by the State Transmission Utility (STU).*

*State Transmission Utility shall frame the said guidelines within three months from the issue of this notification and notify the same after approval of the Commission.”*

- e) **Uttarakhand Electricity Regulatory Commission (UERC)** after following due public consultation process, has proposed the Threshold Limit of Rs. 100 Crore in Draft Uttarakhand Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) (First Amendment) Regulations, 2022. The final Regulations is pending for Gazette Notification.

Other Conditions mentioned in draft Regulations for Threshold Limit for InSTS to be developed through TBCB are as follows:-

- a) Applicable for all new Intra-State Transmission System (Projects) **for which approval is yet to be accorded by the Commission;**
- b) Entire Intra-State independent transmission system including any upstream/downstream project shall be designed as single project;
- c) In case the State Government/STU intends to develop any Intra-State Transmission System above the Threshold Limit through cost plus approach due to some specific reasons such as project is of critical nature or the Project may lead to ownership or interface issues, the State Government/STU shall obtain prior approval of the Commission for the same.

- f) **Madhya Pradesh Electricity Regulatory Commission (MPERC)** vide Order dated January 15, 2021 in Petition No. 42 of 2020 has determined the Threshold Limit and stated as follows:

-

*“(7) In view of all aforesaid and considering the aforesaid submissions of MPPTCL, the Commission hereby decides that in the State of Madhya Pradesh, the intra-state transmission projects shall be developed by State Government through competitive bidding process for projects costing above a threshold limit of Rs. 250 Crore (Rupees Two Hundred and Fifty Crores) in accordance with Clause 5.3 of the Tariff Policy dated 28/01/2016. However, the Commission has not considered yearly escalation in the threshold limit. **The threshold limit shall be reviewed at the time of commencement of next MYT control period (from FY 2024-25) on a reasoned proposal received from the Government of Madhya Pradesh / MPPTCL. Under special circumstances, deviation from the aforesaid threshold limit may be considered by the Commission on a case to case basis on a reference made by the Government of Madhya Pradesh / MPPTCL**”*

- g) **Uttar Pradesh Electricity Regulatory Commission (UPERC)** vide order dated February 10, 2021 on Review Petition on UPPTCL’s Business Plan Order has directed UPPTCL to implement all new transmission projects above 220 kV through TBCB, as reproduced below:-

“ ...

*(iv) The Commission has examined the issue in light of difficulties being faced by the Petitioner and has also considered the procedure being followed by other States. Thus, the Commission directs that all new transmission projects above 220 kV shall be implemented through TBCB in view of the difficulties and issues associated with it.”*

- h) **Bihar Electricity Regulatory Commission (BERC)** after following due public consultation process vide Notification dated 23<sup>rd</sup> December 2019 determined Threshold Limit of Rs. 100 Crore above which all new projects and augmentation of intra-State projects shall be developed through TBCB in accordance with the Guidelines issued by the State Transmission Utility. BERC ruled that the State Transmission Utility shall frame the said guidelines within three months from the issue of this notification and issue the same after approval of the BERC. However, BERC vide order dated March 04, 2021 has decided to keep the order of determined Threshold Limit in abeyance till the readiness of STU for implementation of Intra-State Transmission projects in TBCB mode.

### **3.2 TBCB Related Developments in the State of Maharashtra**

The Government of Maharashtra vide Resolution dated January 4, 2019 established its own Empowered Committee (“EC”) to consider award of intra-State transmission projects for development under TBCB route, in accordance with the TBCB Guidelines and Development Guidelines dated 13.04.2006. The functions of the Empowered Committee are as follows:

- a) **To promote new transmission projects in the State through this Scheme.**
- b) To select the transmission project as per the recommendations of the State Transmission Utility
- c) Helping to evaluate received Bids; also form the Bid Evaluation Committee.

Furthermore, Empowered Committee in its 5<sup>th</sup> Meeting held on December 24, 2020 has recommended as follows:

- All the projects in the STU plan costing Rs.500 Crore or more will be referred to consideration for execution under TBCB
- If STU proposes that a project costing more than Rs 500 Crore is not to be taken under TBCB for peculiar reasons, the same will be referred to Empowered Committee with reasons
- If STU with recommendation of Transmission Planning Committee proposes any project below Rs 500 Crore for specific reasons, the same will be referred to Empowered Committee with reasons
- Threshold Limit shall be set every year in the month of December
- Threshold Limit shall be applicable only to new projects and not to the existing projects.

The Commission asked the STU to submit the rationale for considering Rs.500 Crore or more by Empowered Committee for projects to be executed through TBCB. However, STU has not submitted any rationale towards the same.

As regards TBCB in Maharashtra till now, only one Project (400 kV Kharghar Vikhroli Scheme ) has been awarded under TBCB route in Maharashtra (earlier envisaged under Cost-plus regime). **Along with the Kharghar Vikhroli Scheme, the Empowered Committee has approved two other Schemes, i.e., 400 kV Sikhrapur – Lonikand DC line and 220 kV Talegaon (PGCIL) Substation to 220 kV Khed City, to be undertaken under the TBCB route. However, there is no progress on the other two Schemes.**

### **3.3 Intra-State Transmission Projects awarded under TBCB Route in various States:**

Further, the Commission also analysed the intra-State transmission projects awarded through TBCB route in various States. It is observed that Uttar Pradesh, Rajasthan and Madhya Pradesh have awarded

7, 5 and 2 projects, respectively, through TBCB route whereas Maharashtra has awarded 1 project through TBCB. The projects awarded through TBCB in Intra-State Transmission are given below:-

**Table 2: Intra-State Transmission Projects through TBCB**

State	Scheme Name/Project	Tariff Adoption FY	Winning Levelised Tariff (Rs. Crore)
<b>Maharashtra (01- Nos)</b>	400 kV Vikhroli Transmission project	FY 2020-21	219.98
<b>Madhya Pradesh (02-Nos)</b>	Development of Intra-State Transmission work in M.P. through Tariff Based Competitive Bidding: Package – II	FY 2022-23	132.64
	Establish Transmission System for Intra-State Transmission Work associated with construction of 400 kV Substation near Guna (Distt.- Guna) & Intra-State Transmission Work associated with construction of 220 kV S/s near Bhind, on build, own, operate and maintain basis.	FY 2020-21	68.68
<b>Rajasthan (05-Nos)</b>	132 kV Grid Sub-Stations along with associated Transmission lines and associated scheme/works were covered under Raj/PPP-10	FY 2017-18	286.59
	132 kV Grid Sub-Stations along with associated Transmission lines and associated scheme/works were covered under Raj/PPP-9	FY 2017-18	319.67
	220 kV and 132 kV Grid Sub Stations along with associated Transmission lines and associated Scheme / works were covered under Raj/PPP-8	FY 2017-18	398.80
	400 kV D/C Bikaner - Sikar (Twin Moose) Transmission Line Project through Public Private Partnership mode availing VGF	FY 2015-16	29.43
	220kV S/c Sikar (400 kV)-Nawalgarh-Jhunjhunu line with 220/132kV GSS at Nawalgarh & associated works	FY 2013-14	45.45*
<b>Uttar Pradesh (07-Nos)</b>	Establish Transmission System for Construction of 765/ 400/ 220 kV GIS substation, Rampur and 400/ 220/ 132 kV GIS substation, Sambhal with associated transmission lines through TBCB	FY 2020-21	102.91
	Establish Transmission System for Construction of 765/400/220 kV GIS Substation, Meerut with associated lines and 400/220/132 kV GIS Substation, Simbhaoli with associated Transmission lines through TBCB	FY 2020-21	115.90
	Transmission system associated with 1980 MW TPA of 3x360 Ghatampur Thermal Power Stations on built, own, operate and	FY 2018-19	196.04

State	Scheme Name/Project	Tariff Adoption FY	Winning Levelised Tariff (Rs. Crore)
	maintain basis		
	Establish Transmission System for Evacuation of Power from 2 x 660 MW Jawaharpur Thermal Power Project and construction of 400 kV Substation at Firozabad through TBCB	FY 2018-19	53.80
	Transmission system associated with evacuation of power from 2x660 MW Obra-C TPS and Construction of 400 kV GIS substation Badaun with associated transmission lines.	FY 2019-20	84.35
	Establishment of the intra-State Transmission System of 765KV S/C Mainpuri-Bara line with 765KV/400KV AIS at Mainpuri and associated Schemes/Works" Package-1	FY 2013-14	870.00
	Establishment of the intra state Transmission System titled "765KV S/C Mainpuri - Hapur & Mainpuri - Greater Noida lines with 765KV/400KV AIS at Hapur & Greater Noida and associated Schemes/Works" Package – 2	FY 2013-14	875.00

*\*In the order Tariff adopted has not been clearly stated. Therefore, derived.*

## 4 International Experiences

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Internationally, the tariff based competitive bidding has been implemented for Transmission Projects in the United Kingdom, certain States of United States of America, Brazil, Australia, Argentina, and Peru. It is currently under various stages of implementation in other countries. Three international experiences, viz., United Kingdom, Brazil and Peru are chosen as case studies.

In this section, the relevant aspects from the international experience of these countries have been discussed.

### 4.1 United Kingdom

In UK, the objective was to push the costs of developing and operating certain onshore network solutions to the efficiency frontier by putting in place a legislative framework that is expected to allow a body(ies) appointed by Secretary of State to run competitive processes for identifying the licensee or contract holder(s) that can build and operate such solutions<sup>1</sup>.

Government recognised that it is unlikely to be cost-effective for Ofgem (**Office of Gas and Electricity Markets, United Kingdom**), business, or the consumer to run a competitive tender for all onshore network assets. The societal costs of running a tender for a small project, for instance, would likely be higher than any savings achieved by running it. As such, only those assets, which meet a certain set of technical criteria will be eligible for competitive tender<sup>2</sup>.

Ofgem and Government for long time were considering the type of network assets suitable for competitive tender, and how to define such assets at the transmission level. In January 2018, Ofgem confirmed three criteria for onshore transmission competition, as given below:

a) **New Projects:-**

*“A completely new transmission asset or a complete replacement of an existing transmission asset”*

b) **Separable Projects:-**

“

1) *The boundaries of ownership between these assets and other (existing) assets can be clearly delineated.*

2) *Transmission assets do not need to be electrically contiguous or electrically separable from other assets to be considered separable and*

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<sup>1</sup> Ofgem, Extending competitive tendering in the GB electricity network- Impact Assessment

<sup>2</sup> Ofgem, Extending competitive tendering in the GB electricity network- Impact Assessment

3) *The System Operator may on a case-by-case basis propose electrical separability at project interfaces, if the SO considers there is a cost-benefit justification for this.*”

c) **High Value Projects:-**

“

- a) *A threshold set at or above £100,000,000 of expected capital expenditure at the point of our initial assessment of the appropriate delivery model.*
- b) *The threshold will be a fixed nominal value and not indexed to a reference year.*
- c) *Expected capital expenditure will be assessed in the price base of the year of assessment.*
- d) *The expected capital expenditure will include:*
  - 1) *purchasing the component parts of the relevant assets;*
  - 2) *the construction of the relevant assets;*
  - 3) *the land at which the relevant assets are situated;*
  - 4) *compliance with the conditions attached to consents;*
  - 5) *the third-party works upon which the operation of the relevant assets depends;*
  - 6) *project management;*
  - 7) *itemised risk and contingency allowances;*
  - 8) *the procurement of itemised goods, services and works; and*
  - 9) *any other cost elements which can be reasonably justified as integral or relevant to the construction or function of the relevant assets.*”

The meaning of the criteria for onshore transmission competition has been elaborated below<sup>3</sup>:-

- a) The asset must be **‘new’**. This is a readily-comprehensible criterion, which has the benefit of making it easy for industry to identify which assets may be tendered.
- b) The asset should be **‘separable’** from the rest of the network. This means that projects should be easily identifiable as discrete projects and that ownership and operational boundaries and responsibilities are clear. Separable projects are more easily scoped and defined, giving greater clarity on the opportunity presented by the tender.
- c) The asset should be **‘high value’**. The cost savings from competitive tendering are at least partly proportional to the value of the asset being tendered; the greater the value of the asset, the greater the cost savings. There is a certain level of cost associated with running a tender that cannot be escaped (although may be reduced over time and with process familiarity), and additional costs may be incurred depending on the value and complexity of the asset that is being tendered. In order to realise benefits from competition, the value of the asset needs to be

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<sup>3</sup> Ofgem, Extending competitive tendering in the GB electricity network- Impact Assessment

significant enough that the cost savings outweigh the costs.

Further, Ofgem in November 2016, when assessing a project for its suitability for competition mentioned that they would consider whether a project should be subject to principles of ‘bundling’, ‘splitting’, and ‘re-packaging’ in line with the competition criteria. Ofgem in “Update on competition in onshore electricity transmission” document stated that these principles are relevant when considering the suitability of a project for delivery through the SPV models. Ofgem have stated following principles for packaging.

- a) **Bundling – combining smaller projects:** Ofgem will combine one or more projects with a common driver into a single project where this makes technical or commercial sense and is in the interests of consumers. This would only apply to projects, which already meet the high value criterion in the first place.
- b) **Splitting – separating larger projects:** Ofgem will consider if some projects should be split into separate projects, treated separately, to achieve better outcomes for consumers. Ofgem will consider this if a project is particularly high value, which could limit the pool of potential bidders, if there is a clear technology split requiring different skills and procurement approaches, or if a multi-phase construction is planned over a long period in discrete and separate locations. Any resulting projects will need to meet the criteria for competition.
- c) **Re-packaging – re-specifying scope of projects:** Ofgem will consider whether a project could be re-packaged into a new project where certain elements of the project do not meet the criteria, for example if:
  - the vast majority of a project proposed is brand new or a complete replacement, but a small proportion involved updating/renovating existing assets;
  - a project as proposed would not be considered separable, but could be re-packaged through minor re-scoping to make ownership boundaries easier to define; or
  - the timing of elements of a project vary such that it may be sensible to separate earlier and later components.

### **Key Inferences from UK Experience**

- Competitive Bidding to be adopted for new Projects only.
- Boundaries of the projects to be implemented through bidding should be clearly delineated.
- Project Cost should be above the Threshold limit.
- More the value of the asset, more is the cost savings.

## **4.2 Brazil**

The liberalization reforms undertaken in the mid-1990s were the first step to shape Brazil’s current power sector. Concessions for public utilities were introduced by Law in 1995. The Law sets out the



main rules for the concession and permission for tendering public services and specifies that concessions must be awarded through a competitive process<sup>4</sup>. Therefore, in Brazil all transmission lines projects are allocated through a single stage reverse auction.

ANEEL (Brazilian Electricity Regulatory Agency) releases a tender notice and technical specifications for constructing, operating and maintaining transmission lines. The eligible bids are evaluated through a single stage reverse auction, whereby ANEEL sets a benchmark maximum annual revenue, which functions as a price cap, and bidders subsequently propose discounts<sup>5</sup>. The bidder with the highest discount is selected as winner of the tender. Thereafter, ANEEL publishes the auction details including the size, location, winning party, price, and construction costs.

ANEEL has held public auctions for 186 lots in the period 2015 to 2021 of which 152 lots were auctioned and 34 lots did not trade. It was observed that competitive tendering reduced costs and for the period, the average tariff reduction was 42.79% as shown in the table below:-

**Table 3: Brazil Tender Details<sup>6</sup>**

Year	Offered Lots	Lots Not Traded	Auctioned	Avg. tariff reduction (%)
2015	72	30	42	7.34%
2016	35	4	31	36.47%
2017	11	0	11	40.46%
2018	36	0	36	50.67%
2019	12	0	12	60.30%
2020	10	0	10	55.24%
2021	10	0	10	49.06%
<b>Total</b>	<b>186</b>	<b>34</b>	<b>152</b>	<b>42.79%</b>

### Key Inferences from Brazil Experience

- Transmission Projects are awarded through the single-stage reverse auction process which has been already provided in Standard Bidding Documents (SB) for transmission projects.
- Year 2017 onward, lot not traded is nil.
- Tariff reduction range is wide from 7 % to 60%.

<sup>4</sup> World Bank, "International Experience with Private Sector Participation in Power Grids: Case Study

<sup>5</sup> Houston Kemp, Regulatory treatment of large, discrete electricity transmission investments

<sup>6</sup> Source: ANEEL

### 4.3 Peru

In Peru the Transmission Sector was fully privatized by early 2000s as part of a broader wave of reform to attract private capital to the power sector and to improve the efficiency of the sector<sup>7</sup>. Accordingly, Peru implemented different organisational and regulatory models for transmission and sub-transmission assets. Each model comprises a default mechanism and an alternative mechanism to select the party that implements the investment and to determine the allowed cost<sup>8</sup>.

In Transmission model, default mechanism to implement the transmission plan is based on competitive tenders and the alternative mechanism is based on regulation<sup>9</sup> whereas in case of Sub-Transmission, default mechanism to govern the implementation of sub-transmission investments is based on regulation and alternative mechanism is based on tenders. The winner of the tender is awarded a Concession for the role of sub-transmission operator for the new asset and allowed costs are equal to its bid in the tender<sup>10</sup>

Peru tendered 15 projects through competitive bidding during the period 1998 to 2013. It was observed that competitive tendering reduced costs and for the period on Average tariff discovered was 34% lower than estimated annual costs (which also set the price cap) which has been shown in the table given below:-

**Table 4: Cost estimates and winning bids of public-private transmission projects in Peru, 1998-2013<sup>11</sup>**

Year	Project	Winning bid (US\$ Millions)	Cost estimate (price cap) (US\$ Millions)	Tariff Reduction (%)
1998	Mantaro-Socabaya	27.6	42.6	35%
1999	Southern electric transmission system reinforcement	11.5	14.3	20%
2008	Eléctrica Carhuamayo-Paragsha-Conococha-Huallanca-Cajamarca-Cerro Corona-Carhuaquero	10	42.6	77%
2008	Eléctrica Mantaro-Caravelí-Montalvo and Machu Picchu Cotaruse	5.4	5.6	4%
2008	Chilca-La Planicie-Zapallal	8.1	14.5	44%

<sup>8</sup> World Bank Group, Linking Up: Public-Private Partnerships in Power Transmission in Africa Transmission in Africa, 2017

<sup>9&10</sup> DFC Economics, Conceptual models and frameworks for improving the regulation and management of the electricity systems in Peru

<sup>11</sup> Source: World Bank, Private Sector Participation in Transmission Systems: Making It Work

Year	Project	Winning bid (US\$ Millions)	Cost estimate (price cap) (US\$ Millions)	Tariff Reduction (%)
2009	Zapallal-Trujillo	25.8	32	19%
2010	Chilca-Marcona-Montalvo	48.2	61.6	22%
2010	Tintaya-Socabaya and associated substations	6.7	12.3	46%
2010	Talara-Piura	2.3	2.5	8%
2010	L.T. Machupicchu-Abancay-Cotaruse	9.8	14.2	31%
2011	Trujillo -Chiclayo	15.6	15.8	1%
2012	Carhuaquero-Cajamarca Norte-Cáclic -Moyobamba	16.2	22.2	27%
2013	Machupicchu -Quencoro -Onocora-Tintaya and associated substations	16.7	28.5	41%
2013	Mantaro-Marcona-Socabaya-Montalvo and associated substations	41.4	63.5	35%
	<b>Average Tariff Reduction</b>			<b>34%</b>

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### Key Inferences from Peru Experience

- Both the approaches for implementing transmission projects i.e., through bidding route or through Regulations co-exist for both transmission and sub-transmission projects.
- Wide tariff variation ranges from 1% to 46%

## 5 Determination of Threshold Limit

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### 5.1 Approach

An Intra-State Transmission Licensee needs to carry out various works in order to maintain and augment transmission systems. As per recently commissioned and ongoing works being carried out by the Transmission Licensees, the cost of schemes varies from few lakhs of rupees for minor works to above Rs. 1,000 Crore. Further, the InSTS network such as number of EHV substations, lengths of the lines, voltage level, transformation capacity, required level of reliability etc drastically vary for each State. The Tariff Policy duly considering that there are various works, which are minor in nature and for which TBCB mode of development may not be feasible, has rightly included a Threshold Limit that needs to be specified by the SERC. However, Clause 5.3 of the Tariff Policy does not suggest the methodology or basis to be considered while specifying the Threshold Limit. This could be so to cater

to the diversity among the States including the availability of network and the requirement of future network which would be very different for different states. Thus, it has put the onus of determination of this limit on the respective SERCs.

Further, it is observed that very few SERCs of Bihar, Rajasthan, Punjab, Haryana, Assam, Uttar Pradesh, Uttarakhand and Madhya Pradesh have specified this Threshold Limit, however, not much is available in public domain as to the approach followed while determining the Threshold Limit.

In order to determine a reasonable Threshold Limit, it is imperative to consider the cost of schemes which the State Transmission Licensees have executed in the past and also those that are being currently executed. Adopting this approach will take into account the State specific issues.

## **5.2 Past and Ongoing Schemes**

The Commission obtained the information of various transmission schemes executed and under execution by the 3 Transmission Licensees, viz., MSETCL, AEML-T, and TPC-T. Based on the information received on past and current on-going schemes, it is observed that the schemes pertain to EC

- a) System Strengthening of Grid,
- b) Improvement of Power Quality and Reliability,
- c) Meeting the Energy Demand,
- d) Augmentation/ Upgradation of existing substation and lines, etc.
- e) For evacuation of power.

Further, it has been observed that MSETCL has commissioned projects of around Rs. 1,839 Crore and projects of Rs. 6,382 Crore are under execution for the period from FY 2015-16 to FY 2021-22. In the same period, TPC-T has commissioned projects of around Rs. 695 Crore and AEML-T has commissioned projects of around Rs. 513 Crore, respectively. TPC-T and AEML-T plan to commission projects of approximately Rs. 1,767 Crore and Rs. 1,163 Crore, respectively, in future years, which are under execution presently.

Based on the information available, the schemes have been bifurcated on the basis of approved cost in two ways for analysis purposes:

- a) Schemes Approved and Commissioned (completed schemes) and ;
- b) Schemes Approved and are under execution (ongoing schemes).

The Summary of the same has been shown in the table below:-

**Table 5: Completed and Ongoing Schemes**

Transco	MSETCL		TPC-T		AEML-T		Total	
	Cost (Rs Crore)	Nos. of Projects	Percentage Share (%) of Projects	Nos. of Projects	Percentage Share (%) of Projects	Nos. of Projects	Percentage Share (%) of Projects	Nos. of Projects
<=50	40	43%	18	53%	5	56%	63	47%
51-100	23	25%	10	29%	1	11%	34	25%
101-200	22	24%	3	9%	1	11%	26	19%
201-300	2	2%	2	6%	0	0%	4	3%
301-400	3	3%	0	0%	1	11%	4	3%
401-500	1	1%	1	3%	0	0%	2	1%
501-600	0	0%	0	0%	0	0%	0	0%
601-700	0	0%	0	0%	0	0%	0	0%
701-800	0	0%	0	0%	0	0%	0	0%
801-900	1	1%	0	0%	0	0%	1	1%
901-1000	0	0%	0	0%	0	0%	0	0%
>1000	0	0%	0	0%	1	11%	1	1%
<b>Total</b>	<b>92</b>	<b>100%</b>	<b>34</b>	<b>100%</b>	<b>9</b>	<b>100%</b>	<b>135</b>	<b>100%</b>

Based on an analysis of a total of 135 projects approved by the Commission for the three Transmission Licensees, it has been observed from above table that projects below or equal to Rs. 50 Crore constitutes major share of the total projects, i.e., 47%, whereas, projects in the range of Rs. 51 Crore - Rs. 100 Crore, Rs. 101 Crore - Rs. 200 Crore and Rs. 201 Crore - Rs. 300 Crore constituted 25%, 19% and 3%, respectively, and remaining projects above Rs. 300 Crore constituted 6%.

### 5.3 Standard Bidding Guidelines – Minimum Capital Expenditure Requirement

It is observed that the Standard Bidding Guidelines and the Standard Bidding Documents do not specify any Threshold Limit for Transmission Project to be considered under TBCB mode. The only reference to the capital expenditure is with regards to qualification criteria wherein in order to qualify, a Bidder must have executed projects amounting to a minimum of Rs. 500 Crore in the last five years and in order for a project to qualify to meet the above requirement, the minimum individual project experience should be Rs. 100 Crore.

However, as the National Committee on Transmission has been constituted, the Committee based on the requirement and in association with CEA formulates and recommends to the Ministry of Power, Schemes to be either executed under TBCB mode or through Regulated Tariff Mechanism (RTM). The Committee does take care of the aspect that the project should not be too small as it will not attract competitive tariff thus, curtailing competition. Further, higher the cost of the project higher will be the saving in terms of reduction in tariff if the project gets implemented through TBCB.

Therefore, taking a cue from the above and the actual investment approval data for various schemes executed and under execution, the Threshold Limit should not be too small as the same may not attract competition.

Further, based on completed and ongoing projects (135 Projects), analysis of Scenarios for determining Threshold limit is as follows:

**Table 6: Analysis of Scenarios for fixing Threshold limit**

Sr. No.	Threshold Limit	No. of Projects	% of Projects
1	< Rs. 100 Crore	97	71.85%
2	>= Rs. 100 Crore	38	28.15%
3	>= Rs. 200 Crore	12	8.89%
4	>= Rs. 300 Crore	8	5.93%
5	>= Rs. 400 Crore	4	2.96%
6	>= Rs. 500 Crore	2	1.48%

Based on the actual investment approval data towards cost of projects and in order to encourage competition amongst various stakeholders, **it is proposed that the Threshold Limit be kept as Rs. 200 Crore for new transmission projects to be developed through TBCB process.**

As per the STU 5-year Transmission Plan for FY 2021-22 to FY 2025-26, out of 412 schemes, there are 9 Intra-State Transmission Schemes whose Capital Cost is above Rs. 200 Crore.

#### **5.4 Other Factors affecting implementation of Projects under TBCB**

In addition to the optimum project size in terms of project cost that would be amenable to TBCB to attract competitive rates, and factors typical to the State that may have to be considered before determination of Threshold Limit, various other aspects such as projects of strategic importance, consideration of upstream/downstream projects, project configuration, etc., also have a bearing on the Threshold Limit, and need to be deliberated.

##### **a) Projects of Strategic Importance :**

The Commission is of the view that in case the STU intends to develop 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 strategic importance (e.g., Transmission System being developed for Defence, Railways, Airport, etc.) or the 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, the STU shall obtain prior approval of the Commission for the same.

b) **Associated Transmission Network:**

The Commission is of the view that the entire Intra-State independent transmission system including any upstream/downstream project shall be designed as single project for inviting bids for development of project through TBCB. This has been proposed so that STU, in coordination with the stakeholders, the Transmission Licensee(s), adheres to the Central Electricity Regulatory Commission's advisory dated 14<sup>th</sup> October 2016 to Ministry of Power, para 12(a), which advises that *"splitting the network into components and award of the project through TBCB complicates the execution of project. Therefore, it is advisable to identify the entire network for development through TBCB, instead of comparatively smaller elements, commissioning of which depends upon commissioning of all upstream/ downstream elements."*

c) **Applicability:**

Once specified, the Threshold Limit shall be applicable to only new projects including complete replacement of existing transmission system and not the existing Projects for which the investment approval has already been accorded by the Commission. The existing proposals under consideration of the Commission for in principle approval will not be governed by this proposed amendment. Also, in case the Commission is not satisfied with the progress of existing Project, the Commission may direct STU to explore an option of developing the project through TBCB.

## **5.5 Role of STU for Implementation of Projects under TBCB Route**

Regulation 18.5 of MERC (Approval of Capital Investment Schemes) Regulations, 2022 stipulates as follows:

*“18.5 The STU may either permit the Transmission Business/Licensee with the lowest capital cost to take up the concerned Capex Scheme under Section 62 of the Act or recommend the Capex Scheme to be taken up through Tariff Based Competitive Bidding (TBCB) under Section 63 of the Act.*

Accordingly, after notification of Maharashtra Electricity Regulatory Commission (Multi Year Tariff) (First Amendment) Regulations, 2022 STU will identify the projects to be executed under TBCB route in accordance with the provisions Regulations and recommend the same to the Empowered Committee for its approval. As per the functions of Empowered Committee, EC will select the transmission projects to be executed under TBCB route as per the recommendations of the STU and also form the Bid Evaluation Committee.



## **6 Draft Maharashtra Electricity Regulatory Commission (Multi Year Tariff) (First Amendment) Regulations, 2022**

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In view of the above, the Commission has decided to include an enabling provision in this regard in the Maharashtra Electricity Regulatory Commission (Multi Year Tariff) (First Amendment) Regulations, 2022 as follows:

### **1. Amendment to Regulation 56 of the Principal Regulations:-**

Regulation 56.3 is added to the Principal Regulations:

*“56.3 All the new intra-State transmission systems costing above a Threshold Limit and meeting other conditions as laid out in Annexure-IV, shall be developed through Tariff Based Competitive Bidding in accordance with the guidelines issued by the Central Government under Section 63 of the Act.”*

### **2. Annexure IV to Principal Regulations:-**

Annexure IV is added to Principal Regulations as follows:

#### **Annexure IV : Threshold Limit for Intra-State Transmission System to be developed through Tariff Based Competitive Bidding**

- 1. The Commission hereby determines the Threshold Limit of Rupees Two Hundred (200) Crore.*
- 2. All new Intra-State Transmission Systems ) costing Rupees Two Hundred (200) Crore or more 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.*
- 3. This Threshold Limit shall be applicable for all new Intra-State Transmission Systems (Projects) for which approval is yet to accorded by the Commission (excluding the projects for which application for in-principle approval is already submitted to the Commission and the same is under consideration by the Commission) or Commission’s approval is not valid or approval cancelled by the Commission as the case may be.*
- 4. 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.*

5. *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 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 Commission 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 can decide to implement such projects through Tariff Based Competitive Bidding with valid reasons to do so and with prior approval of the Commission.*

### **6.1 Inviting Comments and Suggestions**

In the backdrop of above discussions, comments and suggestions are sought from all the stakeholders for determination of Threshold Limit and applicability of Threshold Limit on nature of projects that would be developed through TBCB.