#### JHARKHAND STATE ELECTRICITY REGULATORY COMMISSION

1<sup>st</sup> Floor, Jharkhand State Housing Board Old Building Harmu Housing, Ranchi, Jharkhand

Email - <u>secretary@jserc.org</u>, <u>info@jserc.org</u>
Website - www.jserc.org

\*\*\*\*\*

### **PUBLIC NOTICE**

Draft JSERC (Modalities of Tariff Determination), Regulations 2023

The Jharkhand State Electricity Regulatory Commission (JSERC) has issued the draft (JSERC (Modalities of Tariff Determination), Regulations 2023 regarding determination of Threshold limit for development/execution of Intra-State Transmission projects through Tariff Based Competitive Bidding (TBCB). The Commission hereby invites comments/suggestions from the stakeholders on the above mentioned draft Regulations.

The Copies of the above draft Regulations can be obtained on written request from the office of JSERC on payment of Rs.100 (One hundred) payable by Cash/Demand Draft in favour of Jharkhand State Electricity Regulatory Commission payable at Ranchi. The draft Regulations can also be downloaded from the website of JSERC <a href="https://www.jserc.org/tbcb2023.pdf">www.jserc.org/tbcb2023.pdf</a>

Suggestions/comments may be sent to the office of JSERC at the address given below on or before **15.02.2023**:

The Secretary
Jharkhand State Electricity Regulatory Commission
1st Floor, Jharkhand State Housing Board (Old Head Quarter)
Harmu Housing Colony, Ranchi – 834002

Email id – <u>info@jserc.org</u>

The Suggestions/comments can be submitted in English or Hindi. The sender should clearly specify his/her full name, postal address, email id and telephone number. It should also be indicated, if suggestions/comments are being filed on behalf of any organization, consumer or consumer group.

By Order

(R.P.Nayak) Secretary



# Consultation Paper On Development of Intra-State Transmission System Through Tariff Based Competitive Bidding (TBCB) In the State of Jharkhand

30th December, 2022

JHARKHAND STATE ELECTRICITY REGULATORY COMMISSION

1st Floor, Jharkhand State Housing Board Old Building

Harmu Housing, Ranchi, Jharkhand

### **CONTENTS**

- 1. Background
- 2. Jharkhand state transmission system
- 3. Some regulatory provisions relating to electricity tariff and competitive bidding
- 4. Need for tariff-based competitive bidding (TBCB) in Jharkhand
- 5. Criteria considered for determination of threshold limit for execution of intrastatetransmission projects under TBCB route
- 6. Practices in other states for the execution of intra-state transmission projects under the TBCB route.
- 7. Conclusion.

### 1. BACKGROUND

The erstwhile Jharkhand State Electricity Board ("Board" or "JSEB") was a statutory body constituted under Section 5 of the Electricity (Supply) Act, 1948 and was engaged in electricity Generation, Transmission, Distribution, and related activities in the State of Jharkhand. The erstwhile Jharkhand State Electricity Board (JSEB) was constituted on March 10, 2001 under the Electricity (Supply) Act, 1948 as a result of the bifurcation of the erstwhile State of Bihar. Before that, the Jharkhand State Electricity Board (JSEB) was the predominant entity entrusted with the task of generating, transmitting, and supplying power in the State.

Jharkhand Urja Vikas Nigam Ltd. (herein after to be referred to as "JUVNL" or "the Holding company") has been incorporated under Indian Companies Act, 1956 pursuant to decision of Government of Jharkhand to reorganize erstwhile Jharkhand State Electricity Board (herein after referred to as "JSEB"). The said reorganization of the JSEB has been done by Government of Jharkhand pursuant to "Part XIII – Reorganization of Board" read with section 131 of The Electricity Act 2003. The Holding company or JUVNL has been incorporated on 16th September 2013 and registered with the Registrar of Companies, Jharkhand, Ranchi and has obtained Certificate of Commencement of Business on 12th November 2013.

The Energy Department, Government of Jharkhand, vide its Letter No. 1/Board-01- Urja-26/13 -1745 dated 28th June 2013 unbundled the erstwhile JSEB into following companies:

- "Jharkhand Bijli Vitran Nigam Ltd", means the Distribution Company to which the Distribution Undertakings of the Board are transferred in accordance with this Scheme.
- "Jharkhand Urja Utpadan Nigam Ltd" means the Generating Company to which the Generating Undertakings of the Board are transferred in accordance with this Scheme;
- "Jharkhand Urja Sancharan Nigam Ltd" means the Transmission Company to which the Transmission Undertakings of the Board are transferred in accordance with this Scheme;
- "Jharkhand Urja Vikas Nigam Ltd" means the Company that owns all shares of newly incorporated reorganized three companies i.e. Jharkhand Urja Utpadan Nigam Ltd, Jharkhand Urja Sancharan Nigam Ltd, and Jharkhand Bijli Vitran Nigam Ltd;

Jharkhand Urja Sancharan Nigam Ltd. (hereinafter to be referred to as "JUSNL") was incorporated on 23rd October 2013 with the Registrar of Companies, Jharkhand, Ranchi, and has obtained a Certificate of Commencement of Business on 28th November 2013. The JUSNL is a Company constituted under the provisions of the Government of Jharkhand,

General Resolution as notified by transfer scheme vide notification no. 8, dated 6th January 2014.

### 2. JHARKHAND STATE TRANSMISSION SYSTEM

As per Electricity Act, the development of an efficient, coordinated, economical, and robust electricity system is essential for the smooth flow of electricity from generating stations to load centers. The transmission system is the backbone of the power system, which establishes the link between the Generation source on one side and the Distribution network, connected to the ultimate consumers on the other side. A reliable transmission system plays a vital role in achieving the ultimate objective of reliable, uninterrupted (24x7) quality power for all consumers.

There has been a consistent expansion in the transmission network and an increase in transformation capacity (in substations) in the state of Jharkhand. This increase is in consonance with an increase in the generation and demand for electricity in the state. JUSNL, the designation STU, owns the state's transmission network, including power transmission voltage levels of 132 kV, 220 kV & 400 kV. The transmission lines, substations, and transformation capacity at different voltage levels are as follows:

Description	132 kV	220 kV	400 kV	Total
Transmission	3660.66	2482.51	278	6421.17
lines (Ckt Kms)				
Transformer	5260	4100	630	9990
Capacity(MVA)				

\*Source JUSNL website

The 132 kV and 220 kV is the backbone of the Jharkhand transmission system and out of 6421.174 ckt kms of EHV transmission lines, about 57% of transmission lines belong to the 132 kV level and 38% belong to 220 kV level.

Jharkhand has a total transformation capacity of 9990 MVA out of which 5260 MVA belongs to 132 kV, 4100 MVA belongs to 220 kV, and the rest belongs to 400 kV voltage level.

## 3. SOME REGULATORY PROVISIONS RELATING TO ELECTRICITY TARIFF AND COMPETITIVE BIDDING

a) The Electricity Act, 2003 is the basic framework for the Electric supply industry in India, withthe 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 ..."

b) Further, the State Commission has been vested with the responsibility to determine the Tariff for Generation, Supply, and Transmission under Section 86 of the Electricity Act, as follows:

### "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..."

With regard to the Determination of Tariff by a bidding process, Section 63 of the Act provides regulatory provisions for the 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."
- c) The Central Government notified the revised National Electricity Policy vide resolution no. 23/40/2004-R&R (Vol-II) dated 12/02/2005 in accordance with Section 3 of the Electricity Act, 2003. The Clause No. 5.3.10 and 5.8.9 of the National Electricity Policy, 2005 encourages private investment and their partnership in Transmission sector to meet the need of rapidly growing sector are 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

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."
- d) The Central Government notified the revised Tariff Policy vide ref no. 23/2/2005-R&R (Vol-IX) dated 28/01/2016 in accordance with Section 3 of the Electricity Act, 2003. The Clause No. 5.3 of the 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.
  - "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 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."
- e) The Ministry of Power, Government of India in its Guidelines dated 15/03/2021 recommended the adoption of TBCB for Intra State Transmission projects in the larger interest of consumers. This will reduce the burden on Government finances and scarce Government fund can be spared for other priority sectors. Also, it will encourage use of advanced technology for improving cost and efficiency. Relevant Clause of MoP, GoI guidelines are as follows:
  - "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."

- f) The Ministry of Power, Government of India in its Guidelines dated 10/08/2021 by which it has encouraged competition in development of Intra-State Transmission System Projectsby introducing Tariff Based Competitive Bidding (TBCB) including e-reverse auction for Transmission Services. The projects shall be awarded on Build, Own, Operate and Transfer (BOOT) mode, as follows.
  - "17. The selection of developer for identified projects would be through tariff based competitive bidding through e-reverse bidding for transmission services according to the guidelines issued by the Ministry of Power under section 63 of the Electricity Act, 2003. The projects shall be awarded on Build, Own, Operate and Transfer mode.
  - 21. As far as intra State projects are concerned the State Governments may adopt these guidelines and may constitute similar committees for facilitation of transmission projects within the State. The States also have the option to use Viability Gap Funding (VGF) based Model Transmission Agreement (MTA) document of erstwhile Planning Commission for development of transmission system in their States under Public Private Partnership (PPP) mode."

In view of above, it is observed that there are adequate regulatory provisions that enable the State Commission to initiate process of introducing Tariff based Competitive Bidding for Intra-State Transmission Projects with a threshold limit that remains to be decided.

### 4. <u>NEED FOR TARIFF-BASED COMPETITIVE BIDDING (TBCB) IN</u> <u>JHARKHAND</u>

Electricity demand in the State of Jharkhand is increasing due to industrial growth and urbanization. As per CEA Installed Capacity Report, the current installed capacity of 2488.02 MW includes about 293 MW of generation from renewable sources. Also, as per CEA PSP Report the present energy requirement is 12182.99 MU (from sept 2021-Aug 2022), and peak demand is about 2253.42 MW (in the month of July 2022) which is likely to increase in upcoming years.

The rising trend of electricity demand and development of power evacuation systems for the generation addition including RE generation within the state and integration of power systems at the regional level requires a robust Transmission system for smooth flow of electricity from generating stations to load centers to ensure reliable power supply to the ultimate consumers. Huge potential for industrialization exists in the state of Jharkhand for which the State Govt. is committed to provide reliable and quality power for operation of industries.

With the rising demand for electricity in the state, it is imperative to make the transmission system more efficient, cost-effective and technology-driven. For the development of efficient & cost-effective Transmission system, there is a need to adopt best practices and encourage competition. The competition in transmission business will bring technology innovation, reduction in Tariff and timely completion of projects. The investment from private players in the transmission business will also help Government to divert their fund for other priority sector. As the intra-state transmission system has the majority share in the transmission sector in the country, adoption of Tariff Based Competitive Bidding (TBCB) in development of intra-state transmission system can effectively reduce burden on State Government finances as well as reduce tariff of intra State transmission system leading to consumer benefit.

"The Hon'ble Supreme Court on Civil Appeal No. 1933 of 2022 (TPCLT vs MERC & Ors.) dated on November 23, 2022 has strongly recommended TBCB route with a 'Threshold limit' for development of intra-State Transmission Project".

It has been observed by Govt. of India that the tariff discovered through TBCB is lower as compared to cost-plus projects/ projects executed through Regulated Tariff Mechanism (RTM) where tariff is fixed upfront.

### 5. <u>CRITERIA CONSIDERED FOR DETERMINATION OF THRESHOLD LIMIT</u> <u>FOR EXECUTION OF INTRA-STATE TRANSMISSION PROJECTS UNDER</u> <u>TBCB ROUTE</u>

At present the Transmission projects are being executed by JUSNL on cost-plus basis as per provisions of JSERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2020. Presently, there is a need to open up investment in the transmission sector to private players to ease the financial burden on the utility, optimize risk and execute the projects in a cost effective manner ensuring timely completion. The data from other States suggests that TBCB route has been able to achieve fairly the above objectives. However, owing to the transaction costs involved, this mode of development of the project appears to be more appropriate for medium and large projects and therefore, a Threshold Limit is required to be determined.

The Tariff Policy duly considers the fact that there are various works that are of minor nature for which TBCB route may not be desirable and hence a Threshold Limit of project to be specified by the State Commission has been rightly included. However, the

Tariff Policy does not suggest the methodology or criteria that need to be considered while specifying the Threshold Limit. The onus of determination of this limit has been left with the State Commission to decide. This could be based on the requirement & various issues of the state. It is observed that very few State Commissions like Assam, Bihar, Punjab, Haryana and Rajasthan have specified this Threshold Limit for project cost. However, not much has been discussed about the approach followed while determining the Threshold Limit.

In order to determine a reasonable threshold limit, the cost of major schemes/projects already executed/under execution by the State Transmission Licensee and the estimated cost of upcoming projects have been considered which will take into account State-specific issues. Minor projects like augmentation of transmission works or LILO works etc. has not been considered for the determination of Threshold Limit. However, new substations with LILO arrangements can be considered for the TBCB route.

Further, a Summary of major completed, ongoing and upcoming length-wise transmission lines in the state of Jharkhand are depicted below:

S. No	Transmission line (Voltage-level)	Ckt (in Km)	Line Length (in Km)
1	220 kV D/C 3 Ph. Simdega - Chaibasa Trans. Line (Upcoming/Planned)	330.00	165.00
2	220 KV D/C Chatra - Latehar transmission line (ongoing)	208.00	104.00
3	132 kV D/C 3 Ph. Chatra - Ramgarh Transmission line ((Upcoming/Planned)	200.00	100.00
4	132 kV D/C Jasidih - Madhupur transmission line (ongoing)	100.00	50.00

The summary of major completed, ongoing and upcoming transmission project in the state of Jharkhand are as follows:

FY 2015-16 to 2021-22			
S. No.	Name of the Project/ Scheme	Estimated/ Actual Cost (Rs. Cr.)	Voltage Level (kV)
Comple	ted/Ongoing projects		
1	400 kV transmission line (D/C) Latehar (JSEB) to 400 KV PTPS G/S/S	96.70	400 kV
2	220 kV Dumka - Rupnarayanpur transmission line (D/C)	55.28	220 kV
3	220 kV D/C Chatra – Latehar transmission line	77.69	220 kV
4	220/132/33 kV Grid Sub-Station Chaibasa (PG) 2x150 MVA+2x50 MVA,	101.44	220/132/33 kV
5	220/132/33 kV Grid Sub-Station at Chatra	101.44	220/132/33 kV
6	220/132/33 kV Grid Sub-Station Govindpur (PG) 2x150 MVA+2x50 MVA,	101.44	220/132/33 kV
7	220/132/33 kV Grid Sub-Station Bokaro 2x150 MVA+2x50 MVA,	101.44	220/132/33 kV
8	2x150MVA,220/132 kV Grid Sub- Station Dumka (PG)	91.07	220/132 kV

<sup>\*</sup>Source JUSNL

From the above Table it is observed that the average cost of the projects (Major project cost of cost more than 50 Cr. Completed/ongoing from FY 2015-16 to FY 2021-22) is around Rs 96.82 Cr.

Major	Major Transmission projects in Jharkhand (Planned/ Upcoming above Rs 100 Cr.)			
	(Planned/Upcoming projects ) for FY 2022-23 to 2026-27			
S. No.	Name of the	Project/ Scheme	Estimated/ Actual Cost (Rs. Cr.)	Voltage Level (kV)
1	400/220 kV GSS 400 (D/C) kV T.L. 400 (D/C) kV	Chandil Patratu - Chandil	916.82	400/200 kV
2	T.L. 220 (D/C) kV T.L. 400/220 kV GSS	Chandil - Chaibasa  Chandil - Chandil  Chandil	1152.00	400/220/132/33 kV
2	400 (D/C) kV T.L. 400 (D/C) kV T.L.	Patratu - Chandil Chandil - Chaibasa	1132.00	100/220/132/33 KV
3	220 (D/C) kV T.L. 220/132/33 kV GSS	Chandil - Chandil Hazaribagh	170.59	220/132/33 kV
4	2 x 220 kV T.L. 220/132/33 kV GSS	Tenughat - Hazaribagh  Baliyapur	124.35	220/132/33 kV
5	2 x 220 kV T.L. 400/220 kV GSS 220/132/33 kV GSS 2 x 220 kV T.L. 2 x 132 kV T.L.	Dumka - Govindpur  Mandar  Bero  Bero - Mandar  Kamdara - Bero	201.46	400/220/132/33 kV
6	400/220 kV GSS 400 (D/C) kV T.L. 220 (D/C) kV T.L.	Dumka  Jasidih – Dumka  Dumka – Godda	546.22	400/220 kV
7	220/132/33 kV GSS 200 kV (D/C) T.L.	Sarwal  Ranchi - Chandil	148	220/132/33 kV
8	220/132/33 kV GSS 220 kV T.L.	Palajori Dumka- Gobindpur	126.75	220/132/33 kV
	220 K V 1.L.	Dunika- Goomupui	Ц	1

\*Source JUSNL

JSERC has carried out an exercise to estimate the probable cost of lines with normal ACSR conductor and Sub-Station based on certain reasonable assumption for both 220 kV & 132 kV System and details are depicted below:

Condition 1	Cost (in Cr.)
220/132/33 kV AIS S/s	101.45
150 km 220 kV D/C line	112.07
100 km 132 kV D/C line	62.09
M. Factor	1.21
Total in Cr	333.47

<b>Condition 2</b>	Cost (in Cr.)
220/132/33 kV AIS S/s	101.45
100 km 220 kV D/C line	74.71
70 km 132 kV D/C line	43.46
M. Factor	1.21
Total in Cr	265.74

<b>Condition 3</b>	Cost (in Cr.)
220/132/33 kV AIS S/s	101.45
70 km 220 kV D/C line	43.46
50 km 132 kV D/C line	31.04
M. Factor	1.21
Total in Cr	212.90

<b>Condition 4</b>	Cost (in Cr.)
220/132 kV AIS S/s	91.07
150 km 220 kV D/C line	112.07
100 km 132 kV D/C line	62.09
M. Factor	1.21
Total in Cr	320.92

Condition 5	Cost (in Cr.)
220/132 kV AIS S/s	91.07
100 km 220 kV D/C line	74.71
70 km 132 kV D/C line	43.46
M. Factor	1.21
Total in Cr	253.18

Condition 6	Cost (in Cr.)
220/132 kV AIS S/s	91.07
70 km 220 kV D/C line	43.46
50 km 132 kV D/C line	31.04
M. Factor	1.21
Total in Cr	200.34

Condition 7	Cost (in Cr.)
132/33 kV AIS S/s	50.78
100 km 132 kV D/C line	62.08
M. Factor	1.21
Total in Cr	136.57

Condition 8	Cost (in Cr.)
132/33 kV AIS S/s	50.78
70 km 132 kV D/C line	43.46
M. Factor	1.21
Total in Cr	114.03

Condition 9	Cost (in Cr.)
132/33 kV AIS S/s	50.78
50 km 132 kV D/C line	31.04
M. Factor	1.21
Total in Cr	99.01

<sup>\*</sup>M. Factor (Multiplying Factor includes IEDC, Contingency, etc.)

From the above table, it is observed that:

- if we consider a project consisting of 132/33 kV AIS Sub-Station with a transmission line length of 50 km, 70 km and 100 km 0f 132 kV D/C line the tentative cost comes out to be about Rs 99.00 Cr, 114.00 Cr & 136.5 Cr (including IEDC, Contingencies and other factors).
- if we consider a project consisting of 220/132 kV AIS Sub-Station with a transmission line length of (50 km of 132 kV D/C line and 70 km of 220 kV D/C line), (70 km of 132 kV D/C line and 100 km of 220 kV D/C line), and (100 km of 132 kV D/C line and 150 km of 220 kV D/C line) line the tentative cost comes out to be about Rs 200.33 Cr, 253.18 Cr. & 320.00 Cr (including IEDC, Contingencies and other factors).
- if we consider a project consisting of 220/132/33 kV AIS Sub-Station with transmission line length of (50 km of 132 kV D/C line and 70 km of 220 kV D/C line), (70 km of 132 kV D/C line and 100 km of 220 kV D/C line), and (100 km of 132 kV D/C line and 150 km of 220 kV D/C line) line the tentative cost comes out to be about Rs 227.92 Cr., Rs 265.73 Cr & 333.47 Cr (including IEDC, Contingencies and other factors).

Form the above table it may be concluded that major ongoing and planned project cost lies between the range of Rs. 100 Cr. to Rs 333.47 Cr. Therefore, **the "threshold limit" of Rs 175 Cr.** seems to be reasonable and the tariff for the project to be discovered through competitive bidding route could be a win-win situation for both the developer as well as the consumers of the State of Jharkhand.

### 6. PRACTICES IN OTHER STATES FOR EXECUTION OF INTRA STATE TRANSMISSION PROJECT UNDER TBCB ROUTE

States such as Assam, Bihar, Haryana, Punjab, Rajasthan have introduced TBCB mechanism for execution of their Intra State Transmission System.

State Commission	Date of Order/ Notification	Threshold limit	Remarks
Assam	Notification	225 Cr. and	Notified implementation of TBCB for
Electricity	dated	above for	Intra STS for projects costing 225Cr.
Regulatory	14/01/2019	transmission	And above for transmission line and
Commission		line and 160	160 Cr. for Sub- stations vide
(AERC)		Cr. for Sub-	Notification dated 14/01/2019
		stations	

Bihar	Notification	100 Cr. and	Bihar Government Gazette Notification
Electricity	dated	above	dated 24.12.2019 on threshold limit for
Regulatory	24.12.2019		TBCB
Commission			
(BERC)			
Haryana	Order dated	100 Cr. and	Issued TBCB Order dated26/04/2021
Electricity	26/04/2021	above	for Intra STS for projectscosting above
Regulatory			100 Cr. and above
Commission			
(HERC)			
Punjab State	Notification	50 Cr. and	Notified implementation of TBCB for
Electricity	dated	above	Intra STS for projects costing 50 Cr.
Regulatory	05/11/2018		and above vide Notification
Commission			dated 05/11/2018
(PSERC)			
Rajasthan	Notification	100 Cr. and	TBCB for Intra STS projects costing
Electricity	dated	above	100 Cr. and above vide Notification
Regulatory	28/08/2018		dated 28/08/2018
Commission			
(RERC)			

### 7. CONCLUSION

The delay in execution of transmission projects leading to cost & time overrun has become a matter of concern. It has been observed that execution of some of the transmission projects including critical projects are delayed due to various reasons like RoW issue, financial problems of executors, change in law and/or force majeure on grounds such as requirement of statutory clearances like forest clearance and various litigations etc. leading to cost & time overrun and ultimate tariff burden to consumers. Various State Electricity Regulatory Commissions have also followed Tariff Based Competitive Bidding route for implementation of Intra-State Transmission System in line with the Tariff Policy 2016 and Guidelines issued by Ministry of Power, GoI from time to time. The experience gained by execution of ISTS projects through TBCB and feedback from various states suggests that TBCB route has been able to achieve fairly its objective.