

GUIDELINES FOR ENCOURAGING COMPETITION IN DEVELOPMENT OF TRANSMISSION PROJECTS

1. The Electricity Act, 2003 envisages competition in transmission and has provisions for grant of transmission licenses by the Central Electricity Regulatory Commission (CERC) as well as State Electricity Regulatory Commissions (SERCs).

2. The National Electricity Policy notified on 12th February, 2005 inter-alia states that –

“5.3.1 The Transmission System requires adequate and timely investments and also efficient and coordinated action to develop a robust and integrated power system for the country.

5.3.2 Keeping in view the massive increase planned in generation and also for development of power market, there is need for adequately augmenting transmission capacity.....

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.

5.8.1 Considering the magnitude of the expansion of the sector required, a sizeable part of the investments will also need to be brought in from the private sector. The Act creates a conducive environment for investments in all segments of the industry, both for public sector and private sector, by removing barrier to entry in different segments. Section 63 of the Act provides for participation of suppliers on competitive basis in different segments which will further encourage private sector investment.”

3. In order to facilitate the smooth and rapid development of transmission capacity in the country as envisaged in the National Electricity Policy, some transmission projects will be identified for tariff based competitive bidding, in which Private Investors and Transmission Utilities, both Central and State, can participate.

4. These guidelines will be reviewed from time to time with the ultimate aim of developing all transmission projects in an efficient and economical manner.

PERSPECTIVE, SHORT TERM AND NETWORK PLANS

5. Central Transmission Utility (CTU) has to discharge all functions of planning and coordination relating to inter state transmission system according to section 38(2) (b) of the Electricity Act 2003. According to section 38(2) (c) of the Act, the CTU has to ensure the development of an efficient, coordinated and economical system of inter state transmission lines for smooth flow of electricity from generating stations to load centers.

6. According to Section 73(a) of the Act, the Central Electricity Authority (CEA) has to “advise the Central Government on the matters relating to the national electricity policy, formulate short-term and perspective plans for development of the electricity system and co-ordinate the activities of the planning agencies for the optimal utilization of resources to subserve the interests of the national economy and to provide reliable and affordable electricity for all consumers.”

7. According to Section 3 subsection 4 of the Electricity Act, the CEA has to prepare the National Electricity Plan in accordance with the National Electricity Policy.

8. Para 3.2 of the National Electricity Policy provides “the CEA shall prepare short term and perspective plan. The National Electricity Plan would be for a short- term framework of five years while giving a 15 year perspective”. Para 3.4 of the National Electricity Policy also provides “the National Electricity Plan for the ongoing 10th Plan period and the 11th Plan and Perspective Plan for the 10th, 11th and 12th Plan periods would be prepared and notified after reviewing and revising the existing Power Plan prepared by CEA.”

9. According to the National Electricity Policy “the Central Transmission Utility (CTU) and State Transmission Utility (STU) have the key responsibility of network planning and development based on the National Electricity Plan in coordination with all concerned agencies as provided in the Act.” Section 38(2) of the Electricity Act, inter alia, provides the following:

“The functions of the Central Transmission Utility shall be –

- a. To undertake transmission of electricity through inter-State transmission system;
- b. To discharge all functions of planning and co-ordination relating to inter-state transmission system with –
 1. State Transmission Utilities;
 2. Central Government;
 3. State Governments;
 4. Generating companies;
 5. Regional Power Committees;
 6. Authority;
 7. Licensees;
 8. Any other person notified by the Central Government in this behalf”

The Network Plan will be prepared as per the above provisions of the Electricity Act and the National Electricity Policy.

10. In view of the above the following plans will be prepared:

- **Perspective Plan** for three five year plan periods will be prepared by CEA.
- **Short Term Plan** corresponding with one five year plan period will be prepared by CEA.

Both these plans form part of the National Electricity Plan.

- **Network Plan** will be prepared by the CTU based upon the National Electricity Plan.

The Network Plan, Short Term Plan and the Perspective Plan will be hosted on the websites of the respective organizations, entrusted with the task of formulation of these plans.

11. The Network plan will be reviewed and updated as and when required but not later than once a year. The Network Plan would include the projects for new lines and substations, strengthening and up gradation of the existing lines and interregional transmission lines. The Network Plan will clearly identify the scope of the project, broad parameters such as design specifications including Voltage level, Line and conductor configuration etc., length of transmission line and probable location of substation or converter station of HVDC transmission lines.

12. If any developer proposes to construct a transmission line, not being a dedicated transmission line (as defined in the Electricity Act 2003) and not included in the Network Plan, the same will be constructed after being included in the Network Plan by the CTU on the basis of necessary data such as required load flow study and other relevant studies. If such studies have not been done then these will be undertaken by the CTU, the cost for which will be borne by the developer.

EMPOWERED COMMITTEE

13. An Empowered Committee will be constituted by the Ministry of Power. The Committee will be chaired by a Member of the CERC, to be nominated by the Chairman, CERC. It shall have both Member (Power System) and Member (E&C) from the CEA as members. Besides the above, the Committee shall have representatives from the Ministry of Power, the Planning Commission, the CTU* and two experts from the power sector to be nominated by the Ministry of Power.

14. The functions of the Empowered Committee will be the following:

- (a) To identify projects to be developed under the Scheme.
- (b) To facilitate evaluation of bids.

- (c) To facilitate development of projects under this Scheme.

15. The secretarial assistance for the Empowered Committee will be provided by the Central Electricity Authority.

IDENTIFICATION OF PROJECTS

16. Identification of projects under this Scheme will be done in such a way that it results in a balanced mix of both difficult and less difficult projects. The nature of the terrain and issues relating to right of way, land area to be acquired and issues involved in environment and forest clearances would be material factors in relation to difficult or less difficult projects.

PROJECT FORMULATION

17. Once the Perspective plan, covering three five year plans, the Short Term Plan and the Network Plan have been prepared; some of these projects will be identified as projects to be covered under this scheme for competitive bidding. In order to attract private investment in the transmission sector, it is very important to be able to make available all the information to the stakeholders, regarding new projects and their technical and other specifications. These identified projects would then need to be formulated with adequate details to enable competitive bidding to take place. Project Profile (PP) for these projects shall be prepared. The Project Profile (PP) must contain relevant data regarding the line i.e voltage level, line configuration ie S/C or D/C, approximate route length, conductor type and conductor configuration etc and location and specifications of the substations or converter stations. In addition, information regarding the type of terrain likely to be encountered and its likely implication in terms of Right of Way (ROW), statutory clearances and land area to be acquired for the substation or converter station, in case of HVDC line, will be made available. This task of preparation of Project Profile (PP) can be given to any government agency or to a consultant. The cost incurred on project formulation will be recovered from the agency that finally undertakes the implementation of the project.

18. Central Transmission Utilities (CTU)/ Special Purpose Vehicle (SPV) will fund the formulation of projects and preparation of Project Profile (PP). CTU/SPV, as the case may be, will recover this amount from the agency that implements the project as indicated in para 17 supra.

SELECTION OF DEVELOPER

19. The selection of developer for identified projects would be through tariff based bidding for transmission services according to the guidelines issued by the Ministry Of Power under section 63 of the Electricity Act, 2003. CTU/STUs and Joint Venture Companies will also be eligible to bid, so that there is sufficient competition among the bidders.

LICENSE FOR TRANSMISSION

20. Along with the recommendation of **selection by the Bid Evaluation Committee**, the selected developer shall approach the Appropriate Commission, within a period of 30 days, for grant of transmission license. If it fails to apply for license within thirty days then it will be liable for cancellation of its selection. Cancellation of selection as provided above will be done by the Empowered Committee only after giving the selected private company an opportunity to be heard.

PAYMENT OF TRANSMISSION CHARGES

21. A Transmission Service Agreement (TSA) will be signed among the SPV and the concerned utilities for payment of the transmission charges finalized on the basis of competitive bidding. TSA will come in force after a license is granted to the developer, if not a deemed licensee.

22. TSA shall, inter alia, include an arrangement for payment security, which will consist of revolving letter of credit of required amount and escrow arrangement.

23. Regional Load Dispatch Centre (RLDC) will assist the developer in case there is any default in payment by any utility/licensee. For this transmission services could be regulated if transmission charges become overdue from any utility/consumer.

STATE TRANSMISSION PROJECTS

24. 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.

MONITORING OF THE PROJECTS

25. To ensure the timely completion of the transmission projects by the successful bidder, the Central Electricity Authority shall monitor the progress of the execution of the project as per the conditions of the license issued by the Central Electricity Regulatory Commission.

Tariff based Competitive-bidding Guidelines for Transmission Service

1. Preamble

Promotion of competition in the electricity industry in India is one of the key objectives of the Electricity Act, 2003 (the Act). Development of a transmission system is essential both for encouraging competition and for creating electricity markets. These guidelines are aimed at facilitating competition in this sector through wider participation in providing transmission services and tariff determination through a process of tariff based bidding.

Section 61 & 62 of the Act provide for tariff regulation and determination of tariff of generation, transmission, wheeling and retail sale of electricity by the Appropriate Commission. Section 63 of the Act states that –

“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.”

Tariff based Competitive Bidding Guidelines for Transmission Service and Guidelines for encouraging competition in Development of Transmission Projects have been framed under the above provisions of section 63 of the Act. The specific objectives of these guidelines are as follows:

- Promote competitive procurement of transmission services.
- Encourage private investment in transmission lines.
- Facilitate transparency and fairness in procurement processes;
- Facilitate reduction of information asymmetries for various bidders;
- Protect consumer interests by facilitating competitive conditions in procurement of transmission services of electricity;
- Enhance standardization and reduce ambiguity and hence time for materialization of projects;
- Ensure compliance with standards, norms and codes for transmission lines while allowing flexibility in operation to the transmission service providers.

2. Scope of the Guidelines

2.1. These guidelines are being issued under the provisions of Section 63 of the Electricity Act, 2003 for procurement of transmission services for transmission of electricity.

2.2. The guidelines shall apply for procurement of transmission services for transmission of electricity through tariff based competitive bidding, through the

mechanisms described in this notification and to select transmission service provider for a new transmission line and to build, own, maintain and operate the specified transmission system elements.

2.3. “Transmission line” has been defined in para 2(72) of the Electricity Act 2003 as all high pressure cables and overhead lines(not being an essential part of the distribution system of a licensee) transmitting electricity from a generating station to another generating station or a substation, together with any step up and step down transformers, switch gear and other works necessary to and used for the control of such cables or overhead lines, and such buildings or part thereof as may be required to accommodate such transformers, switch gear and other works.

2.4. Procurement of transmission services would include all activities related to survey, detailed project report formulation, arranging finance, project management, obtaining transmission license, obtaining right of way, necessary clearances, site identification, land compensation, design, engineering, equipment, material, construction, erection, testing and 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 by 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 availability for recovery of full transmission charges fixed by the appropriate commission. For availability of transmission line below the target, subject to para 2.5 below, transmission tariff payable to the TSP will be in accordance with the appropriate regulation of the appropriate commission.

2.5. If the availability of the transmission line is below the norms prescribed by the CERC for six consecutive months the procurer of transmission service or the billing and accounting agency or the operator of the transmission system may seek revocation of transmission license as per the procedure laid down under the Electricity Act 2003 and in accordance with rule 5 of Electricity rules 2005.

3. Bid Process Coordinator (BPC)

3.1. A Bid Process Coordinator, herein after referred to as BPC, would be responsible for coordinating the bid process for procurement of required transmission services for each inter-state Transmission Project to be implemented under tariff-based competitive bidding in accordance with these guidelines.

3.2. For procurement of transmission services, required for any inter-state Transmission Project, the Central Government shall notify any Central Government Organization/ Central Public Sector Undertaking or its wholly owned subsidiary (Special Purpose Vehicle) to be the BPC. It will be open for Ministry of Power to review the nomination of BPC at any time. For immediate implementation of these guidelines the Empowered Committee constituted as per the provisions of the “Guidelines for encouraging competition in

development of Transmission Projects” will be the BPC till any other organization is nominated as BPC by the Ministry of Power.

3.3. For procurement of transmission services required for intra-state transmission, the appropriate State Government may notify any Organization/ State Public Sector Undertaking especially engaged for this purpose by the appropriate state government or BPC notified by the Central Government to be the BPC for the state.

3.4. All the expenditure incurred by the BPC in the process of selection of the investor in accordance with the provisions of these guidelines shall be recovered from the developer who is finally identified and assigned the task of developing that project. The amount to be recovered shall be indicated in the RFP document so that bidders can take that amount into consideration in the tariff to be quoted by them.

4. Preparation for inviting bids

4.1. The BPC shall prepare the bid documentation in accordance with these guidelines and obtain approval of the Appropriate Commission. Alternatively, the BPC can use the standard bidding documents notified by Ministry of Power. Standard Bid Documents in accordance with these guidelines will be notified by Ministry of Power within three months of the notification of these guidelines. Approval of the Appropriate Commission would be necessary if any material deviation is proposed to be made from the Standard Bid Documents.

4.2. Intimation shall be sent by the BPC to the Appropriate Commission about initiation of the bidding process.

4.3. For location specific substations, switching stations or HVDC terminal or inverter stations the BPC or its authorized representative should initiate the process of acquisition of land. The BPC or its authorized representative will also initiate the process of seeking forest clearance, if required.

5. Transmission Service Provider (TSP)

5.1. The successful bidder shall be designated as the Transmission Service Provider (TSP), hereinafter referred to as the TSP, after executing the TSA and acquiring the SPV. The TSP shall seek transmission license from the appropriate Regulatory Commission, if it is not a deemed licensee. The TSA shall be effective from the date of grant of license from the appropriate Regulatory Commission.

5.2. The TSP would take-up execution of the Transmission Project so as to complete commission and operationalise the transmission line as per the specified schedule in the TSA.

6. Recovery of Transmission Charges

6.1. Total charges for transmission of electricity by use of the transmission services provided by the TSP(s) selected through the bidding process as per these guidelines, payable to the TSP, shall be determined as specified in paras 7.1, 7.2, 7.3, 7.4 and 7.5 of these guidelines.

6.2. Recovery of transmission charges from the users of the transmission services such as State supply utilities, distribution companies, generation companies, traders, bulk consumers, etc., shall be done as provided in these guidelines.

7. Transmission Charge Structure

7.1. For procurement of transmission services under these guidelines, transmission charges shall be paid and settled for each payment period (not exceeding one month). A transmission charge for providing transmission service and operation and maintenance required for the various transmission elements shall form the basis for bidding and evaluation. Tariff structure will have two components – one scaleable and the other non-scaleable. The scaleable component shall not be more than 15% of the non-scaleable component.

7.2. The BPC shall specify scheduled month of commercial operationalisation for the transmission line required for the transmission service and invite bids for the transmission charge.

7.3. At the bid evaluation stage, ratio of minimum and maximum transmission charge (including both the non-scaleable component and the scaleable component incorporating escalation as per index being used for the purpose of evaluation) over the term of the license shall not be less than 0.7 to avoid excessive front loading or back loading during the period of contract.

7.4. The bidders shall quote annual tariff payable after commissioning till expiry of license period and the monthly tariff payable shall be annual tariff divided by 12.

7.5. Tariff shall be designated in Indian Rupees only. Foreign exchange risks, if any, shall be borne by the provider of transmission service.

7.6. The bidder who has quoted the lowest levelised tariff as per evaluation procedure, shall be considered for the award. The Evaluation Committee shall have the right to reject all price bids if the rates quoted are not aligned to the prevailing prices.

8. Payment Security Mechanism

8.1. Adequate payment security shall be made available to the TSP by the user of transmission services being provided by the TSP. The payment security may constitute:

- (i) Letter of Credit (LC)
- (ii) Letter of Credit (LC) backed by credible escrow mechanism.

9. Bidding Process

9.1. For the procurement of transmission services under these guidelines, BPC may at its option either adopt a two-stage process featuring separate Request for Qualification (RFQ) and Request for Proposal (RFP) or adopt a single stage two envelope tender process combining the RFP and RFQ processes. The bid documents shall be prepared in accordance with para 4.1 of these guidelines.

9.2. RFQ or combined RFQ and RFP notice should be published in at least two national newspapers, website of the BPC and the appropriate Government and preferably in trade magazines also, so as to accord it wide publicity. The bidding shall necessarily be by way of International Competitive Bidding (ICB). For the purpose of issue of RFQ minimum conditions to be met by the bidder shall be specified in the RFQ notice.

9.3. BPC shall provide only written interpretation of the tender document to any bidder / participant and the same shall be made available to all other bidders. All parties shall rely solely on written communication and acceptances from the bidders.

9.4. Standard documentation to be provided in the RFQ shall include,

9.4.1. Definition of requirements, including:

- Brief description of the Project;
- Commissioning milestones to be achieved by the bidders;
- Qualification requirements to be met by bidders including, minimum net-worth, internal resource generation, etc with necessary proof of the same, as outlined in the bid documents;

9.4.2. The conditions as specified by the Appropriate Commission to be complied with by a person for being eligible to obtain a transmission licence shall be necessary conditions for RFQ and will be incorporated in the RFQ by BPC.

9.5. RFP shall be issued to all bidders who have qualified at the RFQ stage. BPC may call a pre bid conference with all the developers who have sought documents for RFP stage. In case the bidders seek any deviations and BPC finds those deviations are reasonable, the BPC may agree to such deviations. The clarification/revised-bidding document shall be given to all who had

sought the RFP document informing about the deviations and clarifications. Wherever revised bidding documents are issued, the BPC shall provide bidders at least two months after issue of such documents for submission of bids.

9.6. Standard documentation to be provided by the BPC in the RFP shall include,

9.6.1. Specified target dates/months for commissioning and commercial operations and start of providing the transmission services.

9.6.2. Proposed Transmission Service Agreement(TSA)

The TSP will enter into a Transmission Service Agreement (TSA) with the concerned utilities. These may include the utilities falling in the region where the load is located, any intervening region and the interregional transmission lines between the regions.

The bid document for the concerned project shall provide a draft of proposed TSA.

9.6.3. Required Period of validity of offer of bidder;

9.6.4. TSA proposed to be entered with the selected bidder. The TSA proposed in the RFP stage may be amended based on the inputs received from bidders during the pre bid conference and it will be made available to all RFP bidders. No further amendments shall be carried out in the TSA;

9.6.5. Bid evaluation methodology to be adopted by the BPC. The bids shall be evaluated based on annual transmission charges for all components covered under the package as quoted by the bidder.

9.6.6. The RFP shall also specify the Discount Factor (DF) that would be used for evaluation of bids.

9.6.7. The RFP will also specify the bid bond as well as the Contract Performance Guarantee that the bidders will have to furnish.

9.6.8. The proposed indemnification agreement between the TSP and the utilities will also be provided along with the RFP. This indemnification will be applicable to both the TSP and the utilities from the zero date as specified in the RFP.

9.6.9. The RFP shall also specify the liquidated damages that would apply in event of delay in start of providing the transmission services.

9.6.10. Other technical, operational and safety criteria to be met by bidder/TSP, including the provisions of the technical standard specified by CEA, IEGC/State Grid Code, relevant orders of the Appropriate Commission, etc., as applicable.

9.7. Bid submission and evaluation

To ensure competitiveness, the minimum number of qualified bidders will be two.

9.8. Bid evaluation committee: The Empowered Committee shall constitute a committee for evaluation of the bids with at least one representative from CEA and not less than two representatives from the concerned Regional Power Committees with at least one representative from every concerned RPC and one independent member. The independent member shall have expertise in financial matter/bid evaluation.

9.9. The bids shall be opened in public and representatives of bidders shall be allowed to remain present.

9.10. The technical bids shall be examined to ensure that the bids submitted meet minimum eligibility criteria set out in the bid documents on all technical evaluation parameters. Only the bids that meet all elements of the minimum technical criteria set out in the bid documents shall be considered for further evaluation on the transmission charges bids.

9.11. The transmission charge bid shall be rejected if it contains any deviation from the bid documents for submission of the same.

9.12. The bidder who has quoted lowest levelised transmission charge as per evaluation procedure shall be considered for the award.

10. Arbitration

10.1. In case of any dispute regarding TSA or tariff, the same will be subject to jurisdiction of the appropriate Regulatory Commission under the provisions of the Electricity Act 2003.

11. Time Table for Bid Process

11.1. A suggested time-table for the bid process is indicated below. The BPC may give extended time-frame indicated herein and such alterations shall not be construed to be deviation from these guidelines.

Event	Elapsed Time from Zero date
Publication of RFQ	Zero date
Submission of Responses of RFQ	45 days
Short listing based on responses and issuance of RFP	75 days
Bid clarification, conferences, Final clarification and revision of RFP	90 days
Technical and price bid submission	180 days
Short listing of bidder and issue of LOI	210 days
Signing of Agreements	240 days

11.2. A suggested time-table for the Single stage two envelope bid process is indicated below. The procurer may give extended time-frame indicated herein based on the prevailing circumstances and such alterations shall not be construed to be deviation from these guidelines.

Event	Elapsed Time from Zero date
Publication of RFP	Zero date
Bid clarification, conferences etc. & revision of RFP	60 days
Technical and price bid submission	120 days
Short-listing of bidder and issue of LOI	150 days
Signing of Agreements	180 days

12. Contract award and conclusion

12.1 After selection and issue of LOI from the BPC, the selected bidder shall acquire the SPV created for the Project to become TSP and sign the TSA, if not already signed by the SPV, in accordance with the terms and conditions as finalized in the bid document. The TSA will be effective only upon grant of transmission license from the Appropriate Commission.

12.2. The TSP shall make an application for grant of transmission license to the Appropriate Commission within one month of issuance of LOI or signing of TSA, whichever is later.

12.3. The BPC shall make the final result of evaluation of all bids public.

12.4. The final TSA along with the **certification by the Bid Evaluation Committee** shall be forwarded to the Appropriate Commission for adoption of tariffs in terms of Section 63 of the Act.