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## RESOLUTION

No. 23/11/2004-R&R (Vol.II)

### **Guidelines for Determination of Tariff by Bidding Process for Procurement of Power by Distribution Licensees**

#### **1. Preamble**

Promotion of competition in the electricity industry in India is one of the key objectives of the Electricity Act, 2003 (the Act). Power purchase costs constitute the largest cost element for distribution licensees. Competitive procurement of electricity by the distribution licensees is expected to reduce the overall cost of procurement of power and facilitate development of power markets. Internationally, competition in wholesale electricity markets has led to reduction in prices of electricity and in significant benefits for consumers.

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.”

These guidelines have been framed under the above provisions of section 63 of the Act. The specific objectives of these guidelines are as follows:

1. Promote competitive procurement of electricity by distribution licensees;
2. Facilitate transparency and fairness in procurement processes;
3. Facilitate reduction of information asymmetries for various bidders;
4. Protect consumer interests by facilitating competitive conditions in procurement of electricity;

5. Enhance standardization and reduce ambiguity and hence time for materialization of projects;
6. Provide flexibility to suppliers on internal operations while ensuring certainty on availability of power and tariffs for buyers.

## **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 electricity by distribution licensees (Procurer) for:

- (a) long-term procurement of electricity for a period of 7 years and above;
- (b) Medium term procurement for a period of upto 7 years but exceeding 1 year.

2.2. The guidelines shall apply for procurement of base-load, peak-load and seasonal power requirements through competitive bidding, through the following mechanisms:

- (i) Where the location, technology, or fuel is not specified by the procurer (**Case 1**);
- (ii) For hydro-power projects, load center projects or other location specific projects with specific fuel allocation such as captive mines available, which the procurer intends to set up under tariff based bidding process (**Case 2**).

2.3. Unless explicitly specified in these guidelines, the provisions of these guidelines shall be binding on the procurer. The process to be adopted in event of any deviation proposed from these guidelines is specified later in these guidelines under para 5.16.

2.4. Procurement by more than one distribution licensee through a combined bid process shall be permitted. For such combined procurement, each procurer shall provide the necessary information required as per these guidelines. To ensure standardization in evaluation of bids, the payment security and other commercial terms offered to the bidders by the various procurers shall not vary. The price offered by the bidders shall also be the same for the distribution licensees inviting the bid.

2.5. All obligations on part of the procurers for the bid process shall be considered to be met only when each and every procurer meets such obligations set out in the Request for Proposal (RFP). This shall, however, not preclude the bidder from waiving such stipulation if the bidder finds it reasonable to do so, and the same shall not be construed to be violation of these guidelines.

## **3. Preparation for inviting bids**

3.1. To expedite the bid process, the following conditions shall be met by the procurer:

- (i) The bid documentation shall be prepared in accordance with these guidelines and the approval of the appropriate Regulatory Commission shall be obtained unless the bid documents are as per the standard bid documents issued by the Central Government. In such cases, an intimation shall be sent by the procurer to the appropriate Regulatory Commission about initiation of the bidding process.
- (ii) Approval of the Appropriate Commission shall be sought in event of the deviations from the bidding conditions contained in these guidelines, following the process described in para 5.16 of these guidelines.
- (iii) Approval of the Appropriate Commission shall be sought prior to initiating the bidding process in respect of the following aspects:
  - (a) For the quantum of capacity / energy to be procured, in case the same is exceeding the projected additional demand forecast for next three years (Both for **Case 1** and **Case 2**).
  - (b) For the transfer price of fuel, in case of fuel specific procurement enquiry, if such price has not been determined by government, government approved mechanism or a fuel regulator (under Case 2).

3.2. For long-term procurement from hydro electric projects or for projects for which pre-identified sites are to be utilized (Case 2), the following activities should be completed by the procurer, or authorized representative of the procurer, before commencing the bid process:

- Site identification and land acquisition required for the project
- Environmental clearance
- Fuel linkage, if required (may also be asked from bidder)
- Water linkage
- Requisite Hydrological, geological, meteorological and seismological data necessary for preparation of Detailed Project Report (DPR), where applicable.

The bidder shall be free to verify geological data through his own sources, as the geological risk would lie with the project developer.

The project site shall be transferred to the successful bidder at a declared price.

3.3. It is recommended that the procurer should obtain the transmission clearances necessary for receiving power at the delivery points prior to inviting bids. However this shall not be a binding condition for the bid process. Unless otherwise specified in the bid documents, it shall be the responsibility of the

selected bidder to obtain transmission linkage for evacuation and inter-State transmission of power (where applicable).

#### **4. Tariff Structure**

- 4.1. For procurement of electricity under these guidelines, tariff shall be paid and settled for each payment period (not exceeding one month). A multi-part tariff structure featuring separate capacity and energy components of tariff shall ordinarily form the basis for bidding. However, for medium term procurement the procurer may, at his option, permit bids on a single part basis, and the same shall be clearly specified in the Request for Qualification (RFQ) / Request for Proposal (RFP).
- 4.2. In case of long term procurement with specific fuel allocation (Case 2), the procurer shall invite bids on the basis of capacity charge and net quoted heat rate. The net heat rate shall be ex-bus taking into account internal power consumption of the power station. The energy charges shall be payable as per the following formula :

$$\text{Energy Charges} = \text{Net quoted heat rate} \times \text{Scheduled Generation} \times \frac{\text{Monthly Weighted Average Price of Fuel}}{\text{Monthly Average Gross Calorific Value of Fuel.}}$$

If the price of the fuel has not been determined by the Government of India, government approved mechanism or the Fuel Regulator, the same shall have to be approved by the appropriate Regulatory Commission.

In case of coal / lignite fuel, the cost of secondary fuel oil shall be factored in the capacity charges.

- 4.3. Tariffs shall be designated in Indian Rupees only. Foreign exchange risks, if any, shall be borne by the supplier. Transmission charges in all cases shall be borne by the procurer.

#### **Capacity charges**

- 4.4. Capacity charge shall be paid based on actual availability in kwh, as per charges quoted in Rs/kwh and shall be limited to the normative availability (or normative capacity index for hydro electric stations). The normative availability shall be aligned to the level specified in the tariff regulations of the Central Electricity Regulatory Commission (CERC) prevailing at the time of the bid process, and shall be computed on annual basis. The capacity component of tariffs may feature separate non-escalable (fixed) and escalable (indexed) components. The indices to be adopted for escalation of the escalable component shall only be

Wholesale Price Index (WPI) or Consumer Price Index (CPI) and the Base year shall be specified in the bid document.

- 4.5. Capacity charges for supply beyond the normative availability shall be a pre-specified percentage of the non-escalable component of the capacity charges, and shall be based on the availability of the plant beyond the normative availability. The percentage applicable shall be specified in the RFP, and shall be limited to a 40% of the non-escalable component of the capacity charges. For procurement of Case-2 type (in reference to para 2.2.), the procurer shall have first right of refusal on energy generated beyond normative availability. In case actual availability is less than the normative availability, capacity charges shall not be payable for the shortfall compared to the normative availability. In such case a penalty at the rate of 20% of the capacity charge shall be applicable to the extent of the shortfall in availability.
- 4.6. The seller (successful bidder) shall declare availability on a daily basis in accordance with the scheduling procedure as stipulated in the Indian Electricity Grid Code (IEGC) from time to time. Further the seller and procurer shall comply with all relevant provisions of the IEGC. If the procurer does not avail generation up to declared availability, the same can be sold in market by the seller, and sale realization in excess of variable charges shall be equally shared with the procurer.
- 4.7. Any change in tax on generation or sale of electricity as a result of any change in Law with respect to that applicable on the date of bid submission shall be adjusted separately.
- 4.8. Ratio of minimum and maximum capacity charge for any year shall not be less than 0.7 to avoid excessive front loading or back loading during the period of contract.
- 4.9. In case peakload or seasonal requirements are distinct from baseload requirements, the bidders shall indicate distinct prices for such peakload or seasonal supply which shall be evaluated separately. Differential rates quoted for the same source of power for base and peak/seasonal load shall not constitute violation of guideline or unfair practice.
- 4.10. Adequate payment security shall be made available to the bidders. The payment security may constitute:
  - (i) Letter of Credit (LC)
  - (ii) Letter of Credit (LC) backed by credible escrow mechanism.

In the case the seller does not realize full payment from the procurer by the due date as per payment cycle, the seller may after 7 days, take recourse to payment security mechanism by encashing the LC to the extent of short fall or take recourse to escrow mechanism. The procurer shall restore the payment security mechanism prior to the next date of payment. Failure to realize payment even through payment security mechanism shall constitute an event of payment default. In the event of payment default the seller, after giving 7 days notice, can sell up to

25% of the contracted power to other parties without losing claim on the capacity charges due from the procurer. If the payment security mechanism is not fully restored within 30 days of the event of the payment default, the seller can sell full contracted power to other parties without losing claim on the capacity charges due from the procurer. The surplus over energy charges recovered from sale to such other parties shall be adjusted against the capacity charge liability of the procurer. In case the surplus over energy charges is higher than the capacity charge liability of the procurer, such excess over the capacity charge liability shall be retained by the seller.

### **Energy Charges**

- 4.11. Where applicable, the energy charges payable during the operation of the contract shall be related on the base energy charges specified in the bid with suitable provision for escalation. In case the bidder provides firm energy charge rates for each of the years of the contract term, the same shall be permitted in the tariffs. In other cases, the energy charges shall be payable in accordance with fuel escalation index used for evaluation of the bid. In case of bids based on net heat rate, the price of fuel shall be taken as stipulated under para 4.2. However, the fuel escalation will be subject to any administered price mechanism of Government or independent regulatory price fixation in case of fuel produced within the country. The applicable indices for various fuels shall be identified in the RFP documents.
- 4.12. No adjustment shall be provided for heat rate degradation of the generating stations. Even in case of bids based on net heat rate, the bidder shall factor in site conditions, loading conditions, frequency variations etc and no adjustment shall be allowed on the quoted net heat rate for the duration of the contract.
- 4.13. In case a bidder offers hydro power, under **Case 1** or the procurer invites bids of hydro power under **Case 2**, the hydrological risk shall be borne by the Procurer, provided the hydrological data of such a project is based on authentic sources and is known to the parties in advance. Any hydrological advantages resulting in energy availability beyond the design energy shall be passed on to the Procurer without any charge. The geological risk for the hydro project shall be borne by the developer.
- 4.14. Energy charges shall be payable by the procurer to the seller for the scheduled energy. Deviations beyond agreed energy schedules shall be settled under the ABT/UI mechanism.

### **Combined capacity and energy charges**

- 4.15. In cases where the procurement process permits bidders to submit combined capacity and energy charges, the charges proposed shall be firm for each of the years of the term of the Power Purchase Agreement (PPA), and no

escalation of tariffs shall be permitted over and above the rates proposed by the seller in the price bid.

- 4.16. The bidder shall specify the normative availability from the project on an annual basis. The model PPA made available to the bidders at the RFQ/RFP stage shall feature appropriate provisions for penalties in event of the normative availability not being met by the seller. The RFQ/RFP shall also specify minimum offtake conditions for procurement from such stations.
- 4.17. The per kwh rates payable to the seller for offtake by the procurer over and above the normative levels shall be the same as the rates applicable till normative availability. In case the procurer does not schedule the energy made available by the seller as per the contract, the seller shall be free to sell to other parties. The seller shall not be required to make any payments to the procurer for such sales to third parties.

## **5. Bidding Process**

### **Two-stage process**

- 5.1. For long-term procurement under these guidelines, a two-stage process featuring separate Request for Qualification (RFQ) and Request for Proposal (RFP) stages shall be adopted for the bid process under these guidelines. The procurer may, at his option, adopt a single stage tender process for medium term procurement, combining the RFP and RFQ processes. Procurer or authorized representative shall prepare bid documents including the RFQ and RFP in line with these guidelines and standard bid documents.
- 5.2. The procurer shall publish a RFQ notice in at least two national newspapers, company website and preferably in trade magazines also 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 by the procurer in the RFQ notice.
- 5.3. Procurer 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 the written communication and acceptances from the bidders.
- 5.4. Standard documentation to be provided by the procurer in the RFQ shall include,
  - (i) Definition of Procurer's requirements, including:
    - Quantum of electricity proposed to be bought in MW. To provide flexibility to the bidders, this may be specified as a range, within which bids would be accepted. Further, the procurer may also provide the bidders the flexibility to bid for a part of the tendered quantity, subject to a given minimum quantity.

- The procurer may separately specify distinct baseload requirements and peakload requirements through the same bid process. Seasonal power requirements, if any, shall also be specified;
  - Term of contract proposed; (as far as possible, it is advisable to go for contract coinciding with life of the project in case of long term procurement). The bidder shall be required to quote tariff structure for expected life of the project depending upon fuel proposed by him. The expected life project is estimated to be 15 years for gas/liquid fuel based projects, 25 years for coal based projects and 35 years for hydro projects.
  - Normative availability requirement to be met by seller (separately for peak and off-peak hours, if necessary);
  - Definition of peak and off-peak hours;
  - Expected date of commencement of supply;
  - Point(s) where electricity is to be delivered;
  - Wherever applicable, the procurer may require construction milestones to be specified by the bidders;
  - Financial requirements to be met by bidders including, minimum net-worth, revenues, etc with necessary proof of the same, as outlined in the bid documents;
- (ii) Model PPA proposed to be entered into with the seller of electricity. The PPA shall include necessary details on:
- Risk allocation between parties;
  - Technical requirements on minimum load conditions;
  - Assured offtake levels;
  - Force majeure clauses as per industry standards;
  - Lead times for scheduling of power;
  - Default conditions and cure thereof, and penalties;
  - Payment security proposed to be offered by the procurer.
- (iii) Period of validity of offer of bidder;
- (iv) Requirement of transfer of assets by the selected bidder (if any) to the procurer at the end of the term of the PPA.
- (v) Other technical, operational and safety criteria to be met by bidder, including the provisions of the IEGC/State Grid Code, relevant orders of the Appropriate Commission (e.g – the ABT Order of the CERC), emission norms, etc., as applicable.

- (vi) The procurer may, at his option, require demonstration of financial commitments from lenders at the time of submission of the bids. This would accelerate the process of financial closure and delivery of electricity;
- (vii) The procurer and the supplier may exercise exit option subject to the condition that the new player satisfies all RFP conditions.

5.5. RFP shall be issued to all bidders who have qualified at the RFQ stage. In case the bidders seek any deviations and procurer finds that deviations are reasonable, the procurer shall obtain approval of the Appropriate Commission before agreeing to deviation. The clarification/revised-bidding document shall be distributed to all who had sought the RFQ document informing about the deviations and clarifications. Wherever revised bidding documents are issued, the procurer shall provide bidders at least two months after issue of such documents for submission of bids.

5.6. Standard documentation to be provided by the procurer in the RFP shall include,

- (i) Structure of tariff to be detailed by bidders;
- (ii) **PPA proposed to be entered with the selected bidder.**

The model PPA proposed in the RFQ stage may be amended based on the inputs received from the interested parties, and shall be provided to all parties responding to the RFP. No further amendments shall be carried out beyond the RFP stage;

- (iii) **Payment security to be made available by the procurer.**

The payment security indicated in the RFQ stage could be modified based on feedback received in the RFQ stage. However no further amendment to payment security would be permissible beyond the RFP stage.

- (iv) **Bid evaluation methodology to be adopted by the procurer including the discount rates for evaluating the bids.**

The bids shall be evaluated for the composite levelled tariffs combining the capacity and energy components of the tariff quoted by the bidder. In case of assorted enquiry for procurement of base load, peak load and seasonal power, the bid evaluation for each type of requirement shall be carried out separately. The capacity component of tariffs may feature separate non-escalable (fixed) and escalable (indexed) components. The index to be adopted for escalation of the escalable component shall be specified in the RFP. For the purpose of bid evaluation, median escalation rate of the relevant fuel index in the international market for the last 30 years for coal and 15 years for gas / LNG (as per CERC's notification in (vi) below) shall be used for escalating the energy charge quoted by the bidder. However this shall not apply for cases where the bidder quotes firm energy charges for each of the years of proposed supply, and in such case the energy charges proposed by the bidder shall be adopted for bid evaluation. The rate for discounting the combination of fixed and variable charges for computing the levelled tariff shall be the prevailing rate for 10 year GoI securities;

- (v) The RFP shall provide the maximum period within which the selected bidder must commence supplies after the PPA is entered into by the procurer with the selected bidder, subject to the obligations of the procurer being met. This shall ordinarily not be less than four years from the date of signing of the PPA with the selected bidder in case supply is called for long term procurement. The RFP shall also specify the liquidated damages that would apply in event of delay in supplies.
- (vi) Following shall be notified and updated by the CERC every six months for the purpose of bid evaluation:
  - 1. Applicable discount rate
  - 2. Escalation rate for coal
  - 3. Escalation rate for gas /LNG
  - 4. Inflation rate to be applied to indexed capacity charge component.

#### **Bid submission and evaluation**

- 5.7. To ensure competitiveness, the minimum number of qualified bidders should be at least two other than any affiliate company or companies of the procurer. If the number of qualified bidders responding to the RFQ/RFP is less than two, and procurer still wants to continue with the bidding process, the same may be done with the consent of the Appropriate Commission.
- 5.8. Formation of consortium by bidders shall be permitted. In such cases the consortium shall identify a lead member and all correspondence for the bid process shall be done through the lead member. The procurer may specify technical and financial criteria, and lock in requirements for the lead member of the consortium, if required.
- 5.9. The procurer shall constitute a committee for evaluation of the bids with at least one member external to the procurer's organisation and affiliates. The external member shall have expertise in financial matters / bid evaluation. The procurer shall reveal past associations with the external member - directly or through its affiliates - that could create potential conflict of interest.
- 5.10. Eligible bidders shall be required to submit separate technical and price bids. Bidders shall also be required to furnish necessary bid-guarantee along with the bids. Adequate and reasonable bid-guarantee shall be called for to eliminate non-serious bids. The bids shall be opened in public and representatives of bidders desiring to participate shall be allowed to remain present.
- 5.11. The technical bids shall be scored to ensure that the bids submitted meet minimum eligibility criteria set out in the RFP documents on all technical evaluation parameters. Only the bids that meet all elements of the minimum technical criteria set out in the RFP shall be considered for further evaluation on the price bids.

- 5.12. The price bid shall be rejected if it contains any deviation from the tender conditions for submission of price bids.
- 5.13. Wherever applicable, the price bid shall also specify the terminal value payable by the Procurer for the transfer of assets by the selected bidder in accordance with the terms of the RFP.
- 5.14. The bidder may quote the price of electricity at the generating station bus-bar (net of auxiliaries), or at the interface point with the State transmission network. For purposes of standardization in bid evaluation, the tariffs shall be compared at the interface point of the generator/supplier with the State transmission network. In case the bidder quotes his rate at the generating station bus-bar, normative transmission charges for the regional/inter-regional network, if applicable, based on the prevailing CERC orders shall be added to the price bid submitted. The charges for the State transmission network shall be payable by the procurer, and shall not be a part of the evaluation criteria.
- 5.15. The bidder who has quoted lowest levelled 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 market prices.

#### **Deviation from process defined in the guidelines**

- 5.16. In case there is any deviation from these guidelines, the same shall be subject to approval by the Appropriate Commission. The Appropriate Commission shall approve or require modification to the bid documents within a reasonable time not exceeding 90 days.

#### **Arbitration**

- 5.17. The procurer will establish an Amicable Dispute Resolution (ADR) mechanism in accordance with the provisions of the Indian Arbitration and Conciliation Act, 1996. The ADR shall be mandatory and time-bound to minimize disputes regarding the bid process and the documentation thereof.

If the ADR fails to resolve the dispute, the same will be subject to jurisdiction of the appropriate Regulatory Commission under the provisions of the Electricity Act 2003.

#### **Time Table for Bid Process**

- 5.18. A suggested time-table for the 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 RFQ	Zero date
Submission of Responses of RFQ	60 days
Shortlisting based on responses and issuance of RFP	90 days
Bid clarification, conferences etc	150 days
Final clarification and revision of RFP	180 days
Technical and price bid submission	360 days
Shortlisting of bidder and issue of LOI	390 days
Signing of Agreements	425 days

5.19 A suggested time-table for the Single stage 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	90 days
Technical and price bid submission	180 days
Short-listing of bidder and issue of LOI	210 days
Signing of Agreements	240 days

## **6. Contract award and conclusion**

- 6.11. The PPA shall be signed with the selected bidder consequent to the selection process in accordance with the terms and conditions as finalized in the bid document before the RFP stage.
- 6.12. Consequent to the signing of the PPA between the parties, the evaluation committee shall provide appropriate certification on adherence to these guidelines and to the bid process established by the procurer.

- 6.13. The procurer shall make evaluation of bid public by indicating terms of winning bid and anonymous comparison of all other bids. The procurer shall also make public all contracts signed with the successful bidders.
- 6.14. The final PPA along with the certification by the evaluation committee shall be forwarded to the Appropriate Commission for adoption of tariffs in terms of Section 63 of the Act.

Sd/-

(Ajay Shankar)

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