Transmission System Development through Tariff based Competitive Bidding

P. Batra
Chief (Engg.), CERC
• 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.”
Policy Guidelines

• Para 5.1 of Tariff Policy, issued by GoI on 06.01.2006, says:

“Even for the Public Sector projects, tariff of all new generation and transmission projects should be decided on the basis of competitive bidding after a period of five years or when the Regulatory Commission is satisfied that the situation is ripe to introduce such competition.”
• Para 7.1 (6) of Tariff Policy prescribed

“Even for the Public Sector projects, tariff of all new generation and transmission projects should be decided on the basis of competitive bidding after a period of five years or when the Regulatory Commission is satisfied that the situation is ripe to introduce such competition. “
Para 7.1 (7) of Tariff Policy prescribed:
“(7) After the implementation of the proposed framework for the inter-State transmission, a similar approach should be implemented by SERCs in next two years for the intra-State transmission, duly considering factors like voltage, distance, direction and quantum of flow.”

• These guidelines were issued under section 63 of the Act with the following objectives:
  – 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.

• The guidelines issued by GoI in Apr,2006 were revised
EMPOWERED COMMITTEE

• An Empowered Committee will be constituted by the Ministry of Power. The Committee will be chaired by a Member of the CERC, having members from CEA, MoP, CTU and two experts nominated by MoP.

• The functions of the Empowered Committee:
  (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.
SELECTION OF DEVELOPER

• 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.
PAYMENT OF TRANSMISSION CHARGES

- 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.

- 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.
Payment Security Mechanism

• 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.

• 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

- 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.
Bid Process Coordinator

• For procurement of transmission services, required for inter-state transmission, the Central Government notifies any Central Government Organization/ Central Public Sector Undertaking to be the BPC, which is responsible for coordinating the bid process for procurement of required transmission services.
GoI Guidelines – Oct,08

Bid Documents

• 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 have been notified by Ministry of Power.
Transmission Service Provider (TSP)

- The successful bidder shall be designated as the Transmission Service Provider (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.
- The TSP would take-up execution of the Transmission Project so as to complete commissioning and operationalise the transmission line as per the specified schedule in the TSA.
Tariff Structure

- 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.
Tariff Structure

• 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.

• No bid will be accepted by the BPC if it finds after evaluation that none of the quoted transmission charges are reasonable.
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.
Contract award and conclusion

• 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.

• 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.

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

• 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.
Clarification by GoI dated 09.12.2010

3. The above provisions are sufficiently clear with regard to the applicability of tariff based competitive bidding for the projects in the generation and transmission sectors and clarifications in this regard have also been issued in the past. However, in view of the decision taken in the meeting of the Group of Minister on Power Sector held on 29.10.2010, it is clarified that the following are exempted from the tariff based competitive bidding route.

(A) Generation (excluding hydro) projects of PSUs/CPSU:
   i) The expansion of already commissioned projects.
   ii) Projects for which the PPA(s) have been signed on or before 5.1.2011.

(B) Transmission Projects of STUs/CTU:
   i) The upgradation/strengthening of the existing “transmission lines” and associated sub-stations.
   ii) Projects for which BPTA(s)/TSA(s) have been signed on or before 5.1.2011.

4. These clarifications are to be read alongwith the relevant provisions in the Electricity Act, 2003 and the Tariff Policy.

5. This issues with the approval of Hon’ble Minister of Power.

Yours faithfully,

(Pranay Kumar)
Director
Tel: 2371 5250
The following provisions will replace sub para (6) and (7) of para 7.1:

7.1(6) Investment by transmission developer including CTU/STUs would be invited through competitive bids. The Central Government has already issued tariff based competitive bidding guidelines for transmission service vide Gazette Notification dated 13th April, 2006.

The tariff of the projects to be developed by CTU/STU after the period of five years or when the Regulatory Commission is satisfied that the situation is right to introduce such competition (as referred to in clause 5.1) would also be determined on the basis of competitive bidding.

However, in the following cases the exemptions from competitive bidding route may be adopted:

(i) First two experimental works for 1200 KV HVDC line.
(ii) Works required to be done to cater to an urgent situation or which are required in a compressed time schedule by CTU/STUs as decided by the Central Government on a case to case basis.
(iii) The intra-state transmission projects by STUs will be exempted from competitive bidding route for further 2 years beyond 6.1.2011.

7.1(7) After coming into effect of the CERC Regulation on framework for the inter-State transmission, a similar approach should be implemented by SERCs in next two years for the intra-State transmission, duly considering factors like voltage, distance, direction and quantum of flow.

2. These provisions shall come into force with effect from 6.1.11.
The Process

Nomination of Bid Process Coordinator (BPC)* by GoI

Formation of SPV by BPC

Selection of L1 bidder through Tariff Based Competitive Bidding

SPV acquired by selected L1 Bidder

PFC Consulting Ltd., & REC Tr. Projects Company Ltd have been notified by GoI as the BPC for identified Projects

A 100% owned subsidiary of the BPC is incorporated by the BPC

Each Bidder has to quote Tariff (revenue) upfront for 35 years (life of the project).

Bidder quoting the lowest levelised tariff will be declared the winner.

Transmission Project is to be established by the SPV under BOOM basis
5. Accordingly, the Commission in discharge of its functions under section 79(2) of the Electricity Act, has decided to advise the Central Government to modify the standard bidding documents regarding the development of transmission lines through competitive bidding to incorporate the following:

a) The bidders should be asked to quote bid for a period of 35 years starting from the date of commissioning.

b) The evaluation of bids should take into account the bids so submitted for a period up to 35 years.

c) In case the Commission extends the license beyond the initial period of 25 years, the selected bidder would be entitled to recover the tariff according to the bids submitted by him.

d) The selected bidder should be obligated for extension of his license two years before the expiry of initial 25 years.
3. In view of the above, the Commission in exercise of its statutory power under section 79 (2) of the Act, hereby advises the Central Government that

The transmission projects/systems recommended by the Empowered Committee on Transmission in its meeting held on 03rd November, 2010 may also be considered for exemption from the requirement of competitive bidding subject to the provisions that the “works required to be done to cater to the urgent situation or which are required in compressed time schedule” be qualified to mean such works as are required urgently to relieve congestion or such other similar circumstances for which prior approval of the Appropriate Commission should be obtained.
EXTRACT FROM THE MINUTES OF THE
24TH MEETING OF EMPOWERED COMMITTEE ON TRANSMISSION
HELD ON 03RD NOVEMBER, 2010.

3.5 The proposal of CEA to exclude certain items from the domain of competitive bidding was discussed in detail. Director(Trans) MoP observed that suggestions if any must be communicated immediately as the government was in the process of taking decision any time. The CTU suggested one change which was accepted. It was decided to recommend to the MoP that the following works may be excluded from the realm of tariff based competitive bidding:

- Providing additional equipment at existing substations.
- Re-conductoring/upgrading of old lines.
- Extension of existing substations.
- Experimental works such as 1200 kV line.
- Works required to be done to cater to an urgent situation or which are required in a compressed time schedule.
- HVDC stations and bi-pole lines may not be immediately taken up for competitive bidding due to their technical complexity.
<table>
<thead>
<tr>
<th>SL. NO.</th>
<th>PROJECT &amp; ITS DESCRIPTION</th>
<th>BPC</th>
<th>AWARDED TO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>EAST-NORTH INTERCONNECTOR PROJECT</td>
<td>PFC</td>
<td>STERLITE - LoI dated 07.01.2010</td>
</tr>
<tr>
<td>5</td>
<td>SYSTEM STRENGTHENING COMMON FOR WR &amp; NR</td>
<td>PFC</td>
<td>STERLITE - LoI dated 19.01.2011</td>
</tr>
<tr>
<td>6</td>
<td>SYSTEM STRENGTHENING FOR WR</td>
<td>PFC</td>
<td>STERLITE - LoI dated 31.01.2011</td>
</tr>
<tr>
<td>7</td>
<td>TRANSMISSION SYSTEM ASSOCIATED WITH IPPS OF VEMAGIRI AREA, PACKAGE-A</td>
<td>REC</td>
<td>POWERGRID</td>
</tr>
<tr>
<td>8</td>
<td>TRANSMISSION SYSTEM ASSOCIATED WITH IPPS OF NAGAPATTINAM/ CUDDALORE AREA -PACKAGE A</td>
<td>PFC</td>
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## Transmission System identified for Competitive Bidding

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<tr>
<td>1</td>
<td>TRANSMISSION SYSTEM ASSOCIATED WITH DGEN TPS (1200 MW) OF TORRENT POWER LTD.</td>
<td>PFC</td>
<td>RFQ submitted by parties on 31st January 2012</td>
</tr>
<tr>
<td>2</td>
<td>Evacuation system for Vizag - Vemagiri Project Hinduja Package-C</td>
<td>REC</td>
<td>RFQ is presently withdrawn</td>
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</tbody>
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### Projects In the process of Award

### Future Projects identified in Empowered Committee Meeting (25th, 26th & 27th)

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<td>PFC</td>
<td>RFQ yet to be published</td>
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<td>2</td>
<td>TRANSMISSION SYSTEM ASSOCIATED WITH IPPS OF VEMAGIRI AREA, PACKAGE-B</td>
<td>REC</td>
<td>RFQ yet to be published</td>
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<td>3</td>
<td>TRANSMISSION SYSTEM ASSOCIATED WITH IPPS OF VEMAGIRI AREA, PACKAGE-C WARDHA-JABALPUR POOLING STATION 1XD/C LINE</td>
<td>REC</td>
<td>RFQ yet to be published</td>
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Issues related to implementation

EAST-NORTH INTERCONNECTOR PROJECT


• Petition filed by the Company before CERC to allow additional cost:
  – On account of additional distance of the Transmission Project: Rs. 24.765 Crore /annum as there has been an increase in the total project line by 21% (from 380 km to 460 km. of line length) from the original scope of work due to the change in the geographical co-ordinates viz. “start” and “end” points.
  – On account of forest involvement: Rs. 3 Crore

• Case under Process in the Commission
## Issues related to implementation


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<th>Relief</th>
<th>Provisions</th>
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| Non-Issuance of approval under section 164                                 | 1) Extension of COD  
2) Rs. 220 Cr. for Cost over-run due to increase in input cost of Aluminum & steel  
3) Rs. 450 Cr. as loss of opportunity as Revenue Earning Years stands reduced due to loss of 62 weeks time | 1) Force Majeure - Article 11.5 of TSA  
| No notification of sponsoring authority and non issuance of Certificate by sponsoring authority for availing concessional customs duty under Section 157 of the Customs Act. | Relief for Rs. 25 Cr.                                                                                                   | Change in Law - Article 12.3 of TSA |
| Enhancement of excise duty from 8% to 10%.                                 |                                                                                                                          |                                                                           |
| There is imminent risk of lapse of approval under Section 68 of the Act, as according to approval under section 68 dated 08.12.2008, petitioner had to commence construction within three years i.e. by 07.12.2011. | Extension of approval under section 68 by MoP |                                                                           |
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<td>3) Rs. 250 Crores as loss of opportunity as Revenue Earning Years stands reduced due to loss of 62 weeks time</td>
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Section 68

• **Overhead lines.**
  1. An overhead line shall, with prior approval of the Appropriate Government, be installed or kept installed above ground in accordance with the provisions of sub-section (2).

• 2. The provisions contained in sub-section (1) shall not apply-
   - in relation to an electric line which has a nominal voltage not exceeding 11 kilovolts and is used or intended to be used for supplying to a single consumer;
   - in relation to so much of an electric line as is or will be within premises in the occupation or control of the person responsible for its installation; or
   - in such other cases as may be prescribed.
Section 164

• **Exercise of powers of Telegraph Authority in certain cases.**

164. The Appropriate Government may, by order in writing, for the placing of electric lines or electrical plant for the transmission of electricity or for the purpose of telephonic or telegraphic communications necessary for the proper coordination of works, confer upon any public officer, licensee or any other person engaged in the business of supplying electricity under this Act, subject to such conditions and restrictions, if any, as the Appropriate Government may think fit to impose and to the provisions of the Indian Telegraph Act, 1885, any of the powers which the telegraph authority possesses under that Act with respect to the placing of telegraph lines and posts for the purposes of a telegraph established or maintained, by the Government or to be so established or maintained.
Challenges and Suggestions

• While implementing transmission lines, getting Right of Way (RoW) is most critical to complete project in time.

• For facilitation of RoW issues involving Govt. agencies like NHAI, Railways, State Govt. agencies etc., an agency designated by Central Govt. Could help for coordination and facilitation in RoW issues.
Challenges and Suggestions

• The bidders must be properly informed about the clearances etc. and Govt. agencies should set definite time period for clearances to enable proper planning of construction activities.
Challenges and Suggestions

• The bidding documents could have suitable provisions for escalation of transmission charges on account of such reasons.

• The contracts should have proper clauses to accommodate such factors in transmission charges.

• The private players should also keep in mind the uncertainties causing cost increase while bidding.

• BPCs may keep watch on bidders who bid aggressively but are not able to construct the projects.
REVIEW OF BIDDING GUIDELINES

Current situation

- Guideline framed - 17th April’2006 by MoP
- PFC & REC – Appointed as BPC
- RFP, RFQ & TSA
- Six Projects has been selected

Expected Situation

- New bidding Framework to align with revised transmission pricing
- Minimum impediments for smooth implementation - ensures competition

Issues identified in implementation

Revised Transmission Pricing implemented by CERC

Need felt to Review Competitive Bidding Guideline- Committee constituted to work out the details of modification
SALIENT FEATURES OF CHANGES

- Transition from Postage Stamp to PoC mechanism
- Major Role envisaged to CTU on behalf DICs
- Changes in RFP/RFQ to address practical difficulties
- Review of existing bidding guidelines
TRANSITION FROM POSTAGE STAMP TO PoC

- Number of Transmission Pools were exist in Postage Stamp regime. PoC enables common National Pool for each long term transmission customer (DICs).
- CERC approved standard TSA under PoC regime to be executed between CTU & long term transmission Customers.
- CERC has made CTU as Nodal Agency for collection & disbursement of transmission charges.
- Simultaneous existence of TSA in PoC (CTU & DICs) and competitive bidding (between TSP & DICs) is creating conflict.

- Changes has been identified to align with PoC dispensation
- Conflict in terms of TSA and payment terms have been addressed.
MAJOR ROLE ENVISAGED FOR CTU

- For all future ISTS under the TBCB route to follow the billing, collection and disbursement as proposed in PoC regime.
- CTU has a role of Nodal Agency for billing, collection and disbursement in PoC regime.
- In line with the functions envisaged for the CTU under Section 38 of the Electricity Act 2003, major role is envisaged for CTU in competitive bidding too.

Statutory Role of CTU under Section 38 is evolving in many facades with the development of transmission network
The practical difficulties are identified based on experience of Bid Process Coordinators and cases filed with Commission.

Change of Regulatory framework and terms required to bring more clarity in the existing RFP/RFQ documents

Proposed RFP/RFQ documents will provide more clarity and ease difficulties in implementation
The existing bidding guideline formulated in April’2006 by considering the regulatory framework existing at that time.

The revised regulatory framework called for review of existing bidding guideline for providing enabling framework for projects selected under competitive bidding.

Bidding guidelines is required to review for providing enabling framework to align with revised regulatory framework.
Stimulate competition in Transmission business

Bidding guideline aligning with existing regulatory framework provide effective platform for competition in transmission projects

Facilitate in bringing Competition in Transmission Projects
Thank you!!!