

Mega Power Projects – India

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Context: Power Sector Reforms

- 1991 – Private investments in power permitted.
- Projects through negotiation between utility and developer.
- Tariff guidelines given by Government of India.
- Two part tariff – Capacity charge = Interest on loan + Depreciation by notified rate + O&M – 2 1/2 percent of capital + interest on working capital + return 16% post tax on the equity.
- Foreign currency investments in equity guaranteed 16% in dollar terms on the foreign currency.
- The variable cost = fuel cost.
Result: Over 100 offers for >26000 MW received.

Achievements 1991-97

- Main problem was “payment guarantees”.
- 8 projects were given guarantees by State and Central Governments.
- Of these only three have materialized.
- Other projects insisted on counter guarantee.
- Problems of multilevel negotiations for tariff resulted in delays.
- Negotiated prices showed wide variations and led to charges of corruption.
- Central Government reduced drastically funds for public investment in power.
- Power shortage increased.

Negotiated Prices: Widely Varying – I

Coal Based Projects

Project	Capacity (MW)	Cost/MW Rs/Million	Levelised tariff At 68.5% PLF (Rs/kwh)
Visakhapatnam**	1040	44.5	2.09
Mangalore**	1000	39.5	2.29
Bhadravati	1072	47.5	2.18
Korba East	1070	43.8	2.01

- 20% variation in capital cost.
- Merit order on cost gets altered on tariff based rating.

** Allegations of Corruption arose in these projects.

Negotiated Prices: Widely Varying – II

Gas Based Projects

Project	Capacity (MW)	Cost/MW Rs/Million	Levelised tariff At 68.5% PLF (Rs/kwh)
Basin Bridge	200	37.8	2.52
Godavari	208	36.0	1.98
Jegurupadu	216	38.3	2.22
Hazira	515	32.4	2.18
Paguthan	654.7	35.1	2.17
Dabhol** (Enron)	2015	44.9	2.86

- 38% variation in capital costs. Merit order on capital costs gets altered on tariff based rating.

** Allegations of corruption arose in this project.

A Standing Independent Group Setup

- In 1996-97 Prime Minister of India on his visit abroad was informed that Governments of Japan, Korea and Germany and some others, to help India, could setup large power projects with competitive tariff.
- Condition: the time taken for processing, bidding and negotiation should be short.
- Prime Minister felt a group of independent eminent men could negotiate contracts and finalizes tariff for mega projects. Their decision would be above board.
- GOI setup SIG consisting of eminent persons to negotiate and finalize tariff for mega projects (over 1000 MW).

Members of the Negotiating Committee

- Justice P. N. Bhagwati, former Chief Justice of India.
- Mr. M. K. Sambamurty, former Chairman of Central Electricity Authority.
- Mr. T. R. Satishchandra, former Secretary (Power) Govt of India.
- Mr. T. L. Sankar, former Adviser (Energy) to the Planning Commission and former Chairman Andhra Pradesh Electricity Board.
- Mr. Deepak Parikh, Chairman, Infrastructure Development Finance Corporation
- Dr. Pachauri, Director, Tata Energy Research Institute, Secretary (Power) Government of India, Secretary of the Committee.

Initial Work of SIG

SIG on examination, found –

- No proposal was a “government to government” project proposal.
- All proposals were from major international utilities, power plant manufacture with the “blessing” of their governments.
- Proposals had diverse conditionalities and tariff implications.
- SIG had several daylong meetings with prospective developers and government agencies of mega projects.
- Their views varied widely on each issue.
- Expectations of all players were harmonized. A set of common expectations identified.

Principles of Negotiation Evolved by SIG

- Non-competitive negotiation can be only for contracts by Government of India with other Governments.
- All other commercial proposals should go through a bidding-cum- negotiation process.
- The project should be demand-driven and not supply-driven.
- Project selection and specification of size, fuel etc., should be decided as part of the national power development plan.
- Several pre-negotiation requirements should be first fulfilled.

Pre-Negotiation Requirements

- The model Power Purchase Agreement and Fuel Supply & Transport Agreement should be finalized.
- A list of promising locations for mega projects should be identified. Important government clearances such as environmental clearance, fuel linkage approvals should be in place.
- Project profiles should be prepared, allowing flexibility to the developer to modify to obtain greater efficiency and lower cost.
- Tariff bands for different locations; different sizes and different fuels should be worked out by a competent agency prior to the calling of bids.

Bidding Process

- The selection of successful bidder for a project should be on two stages process

Stage 1:

- Request for Qualifications. Expression of interest to be obtained from agencies that fulfill certain basic qualifications notified.
- Short listing of bidders for RFP stage to be completed quickly.
- Number short-listed should ensure competition.

Stage 2:

- Request for Proposals (RFP) should be issued with draft PPA & FSTA as enclosures.
- Pre-bid conference of potential bidders.
- The relevant dates, due diligence procedures, the bidding criteria and evaluation procedures should be disclosed to all bidders.

Legal and Institutional Hurdles

1. The prospective bidders were reluctant to participate in a multi-state negotiate for PPA.
2. Legal – Under Electricity supply Act (1948) projects have to be approved along with capital cost by the Central Electricity Authority.
3. Under the new Electricity Regulatory Commission's Act (1998), Central Electricity Regulatory Commission (CERC) will have to approve the tariff for all interstate power projects.
4. If SIG negotiates and decides, Government officials will have to sign on documents taking responsibility for others decision.

SIG's Solutions

1. To enable a single party negotiation by bidder's power trading company was encouraged to setup.
2. Legal – The Electricity Supply Act was amended to exempt CEA scrutiny to projects up to RS. 50,000 millions.
3. Electricity Regulatory Commission's Act should be amended to allow CERC only the process of complete and not the result of decisions on competitive bidding.
4. An Empowered Committee of the Concerned Secretaries to Government and concerned agencies was established to negotiate the details of the contract under SIG guidance.

Procedural Improvements

- No standard PPA for preparation of multiparty PPA model available.
- No standard methodology for evaluating offers involving different fuels available. Example: a port-based 1000 MW project with indigenous coal or imported coal or LNG as fuel as alternatives.

SIG's Solutions:

- Got a draft PPA prepared with the assistance three different foreign consultants and harmonized the clauses.
- Methodology for evaluation obtained supplies from different locations and with different fuels finalized.
- Procedures for evaluating f.e. variations and fuel cost variation over the life of the project, settled.

SIG's Achievements

In Project Terms:

- The two best projects were referred to SIG and Empowered Committee.
- One project HIMRA was referred to CERC by SIG. Matter is pending.
- No mega project has come up.
- Others proposals Floundered on payment guarantee issue.

In Policy & Procedures:

- Mega power policy issue by Government in November 98.
- The model PPA for multi location and alternate fuels finalized.
- Model FSTA finalized. Power Trading Company set up its operation necessary legal and institutional hurdles.
- Empowered Committee of officials for mega projects set up.

Lessons from SIG:

- The power projects involve many conditions, many parameters and specifications and variables.
- All variables cannot be discussed simultaneously.
- A two-stage selection, through RFQ & RFP is necessary.
- Most of variables have to be fixed first before negotiations by settling draft PPA and FSTA.
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- RFQ should be managed to maximize competition and eliminate undesirable and incapable parties.
- RFP should disclose all facts truthfully and should include draft PPA and FSTA.
- Full cooperation should be given for due diligence.
- Preparatory work for commencing negotiation will be long and tortuous. These could be speeded up. But Short-circuiting of procedures should be avoided.
- Evaluation criteria and procedures should be disclosed in RFP.
- Negotiation by a group of empowered officials under the guidance of a group of eminent persons can carry credibility.

- The ability to pay by the buyer is as important as the ability to invest and implement by the developer.
- SIG worked for over two years.
- No project materialized. But it has given principles; procedures and templates for negotiating large contracts.
These would involve:
 - The least amount of discretion
 - Non-discriminatory discretion
 - Transparency all through
- It is possible to negotiate other large projects in a short time following the guidelines of SIG.
- But these are only guideposts. Total elimination of corruption would depend on the character of the person involved and the diligence with which projects are negotiated.