

**PRIVATE SECTOR PARTICIPATION IN
BOOT POWER PROJECTS**

By: Eng. Fawzia Abou-Neima

EEA Vice Chairman For Affiliated Companies Affairs

Power Projects Financing

Power projects are financed in two ways:

- i) Through "**Balance Sheet**" financing; and
- ii) Through "**Project Financing**",

In Balance Sheet Financing, lenders provide loans to a corporate entity to finance a project and in return the corporation has a general obligation to repay the loans, regardless of the performance of the specific project financed by the loans.

Accordingly the lenders assume the overall credit risk of the large corporate entity which has many assets. Hence, the loans is "On-balance sheet" for the corporate borrower.

In contrast, under project financing, lenders provide loans to project company, whose only asset is the project being financed, often on a BOO or BOOT basis. Under this method, the government is not responsible for repaying commercial loans at all, which are entirely the responsibility of the private sector borrower. The private sector will provide a portion of the financing itself normally (20-30%) in equity and are therefore the owners of the project. Lenders provide the remainder of the required financing (70-80%) in loans.

BOO, BOOT projects are generally new investments without existing sources of revenues. Therefore, Lenders must rely on a set of contracts to provide the project's cash flow for repayment.

Financing of BOOT Power Projects

	Sidi Krir MUSS		Suez Gulf / Port Said East MUSS		Total MUSS	
Equity	100	23%	118	32%	336	29%
Loans	<u>320</u>	77%	<u>252</u>	68%	<u>824</u>	71%
Total	420		370		1160	

Power Plants BOOT Projects

The First Egyptian Experience

- The most successful BOOT projects in the developing countries.
- EEA will purchase electricity for the lowest electricity price (2.54U\$C/kWh).
- The Financial Closure of the Project was on July 20, 1999.
- The construction started.

Preparation for the BOOT Projects:

- EEA selected a consultant through international bidding to assist in developing the different activities required for the project: selection of short list of experienced developers, preparation of Request For Proposal (RFP), Bid evaluation and contract negotiations.
- A new legislation (Law No. 100 of June 1996) modifying Law no. 12 establishing EEA has been issued to allow Private Sector Developers to invest in Electric Power Generation Projects in Egypt.

- Developers, Contractors, and Investors in the BOOT Project will be enjoying the benefits of Law no. 8, 1997; “The Investment Guarantees and Incentives Law”, Tax Exemption, Currency Conversion, Repatriation of Profits, Protection against Nationalization or Expropriation...etc.
- The Guarantees offered by the Central Bank Guarantee all EEA Payment obligations.
- The fuel supply agreement is provided by Ministry of Petroleum as commitment for the supply and delivery of the fuel required to the project (Natural Gas as main fuel, and Fuel Oil as backup fuel) on calorific basis.

THE PROCESS

The Process Included Three Phases :

The First Phase, Pre-qualification And Short List Selection.

The Second Phase, Preparation Of The Request Of Proposal, Evaluation And Selection Of The Best Bidder.

The Third Phase, Negotiations And Execution Of Project Agreements.

Implementation Plan for the First BOOT Project

Phase I: Selection of short list of experienced developers:

- In June, 1996 a questionnaire was published in international and local newspapers to require information from interested developers. **Fifty-Four** responses were received and screened and **Thirty-Four** developers were selected to submit their pre-qualifications.
- The request for pre-qualifications has been prepared and sent to them to submit their pre-qualification .The developers consolidated into consortiums, and on October 31,1996, **Nineteen** responded to the pre-qualification request. After evaluation **Eleven** consortiums were selected as the short list.

Phase II: Issuance of Request of Proposals (RFP)

Tender documents was prepared including the following main sections:

1. Information for preparation of the proposals.
2. Instructions to bidders.
3. Technical Requirements.
4. The draft of the four Agreements (Power Purchase Agreement (PPA), Usufruct Agreement (UA), Fuel Supply Agreement (FSA), and Form of Guarantee).
5. The Evaluation Criteria.
6. Documents to be submitted by bidders.

On May 20, 1997 the short list consortiums received the (RFP) documents.

Submission of Proposals.

Nine Consortiums submitted their Proposals on October 15, 1997. The average price for the first year of operation including the capacity purchase price and the energy purchase price varied between US\$ 2.6 –3.6 C/kWh based on a natural gas price of 1.2 \$/MMBTU. These prices are considered the lowest submitted for an independent power project anywhere in the world for a steam plant of 2x325 MW capacity.

Phase III: Bid Evaluation and Top Ranked Bidders:

The Evaluation of the proposals started on October 16, 1997. Evaluation was conducted in complete confidentiality by joint EEA/consultant specialized technical, economical, financial and legal teams. The evaluation was finalized during the first week of February 1998.

Phase IV: Contract Negotiations:

Negotiations of the final projects agreements have started with the Top Ranked Bidder on March 8, 1997. The contracts were signed on July 22, 1998.

The Time Schedule Of The Selection Process Of The First BOOT Project

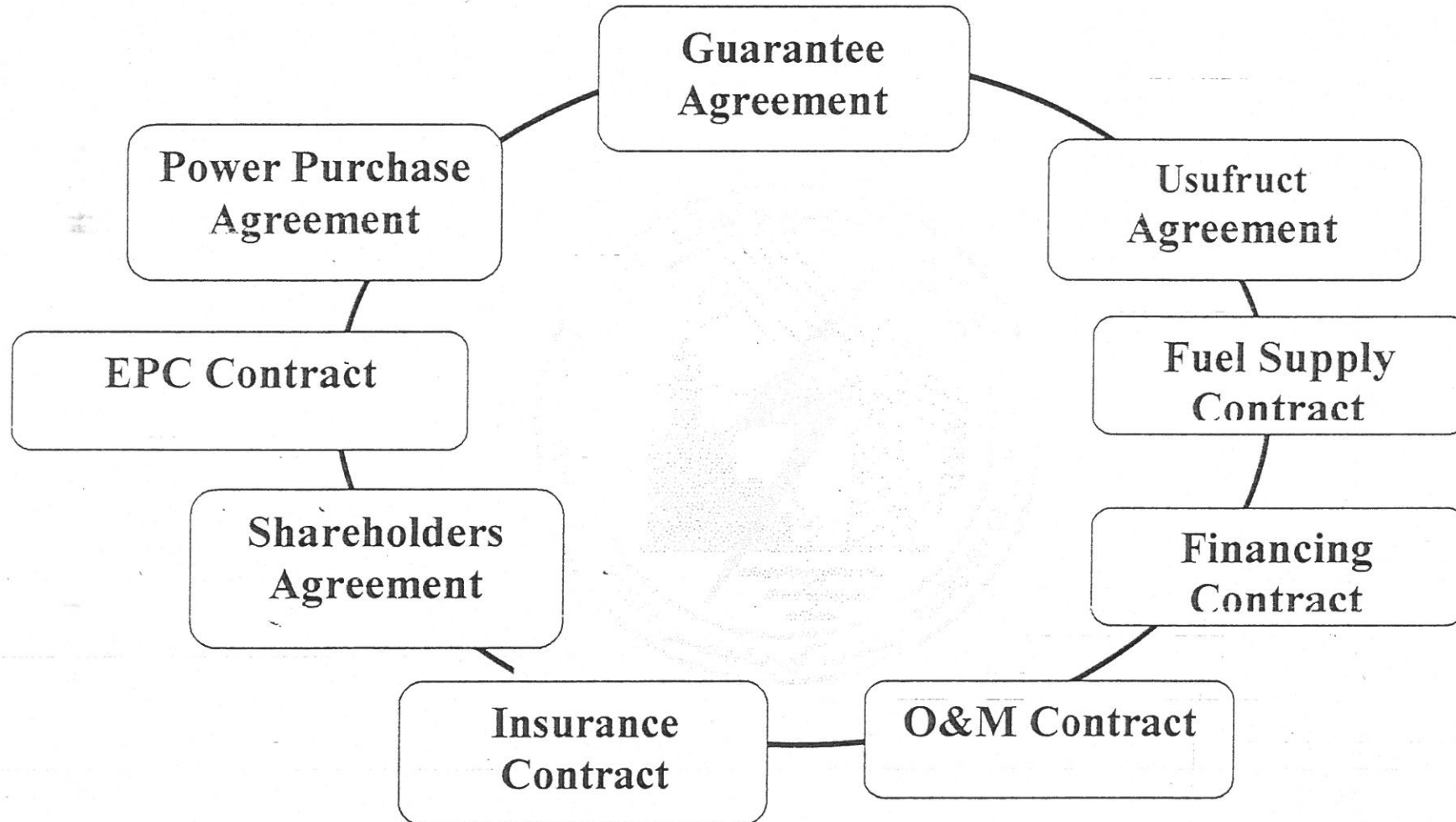
Months	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Action																								
<i>First Phase</i>																								
• First public announcement	█																							
• Prequalification and short list		█	█	█	█	█	█																	
<i>Second Phase</i>																								
• Preparation of RFP		█	█	█	█	█	█	█	█	█	█	█												
• Preparation of proposal by bidders											█	█	█	█	█	█	█	█	█	█	█	█	█	
• Evaluation of bids and selection of the best bid.																	█	█	█	█	█	█	█	
<i>Third Phase</i>																								
• Negotiations and Execution of Agreement																						█	█	█

Second and Third BOOT Power Projects in Suez Gulf and Port-Said East (2 X 325 MW Steam Units Each)

- On November 30, 1998. Seven consortiums submitted their proposals for both projects and one additional consortium submitted a proposal for Port-Said East only.
- The prices ranged between 2.37 to 2.87 U\$C/kWh for Suez Gulf and between 2.37 to 2.98 U\$C/kWh for Port-Said East.
- In January 1999 the evaluation of proposals was finalized and the results were announced. Electricité de France (EdF) was the selected Bidder for both projects.
- Negotiations commenced with EdF consortium on Feb. 22, 1999. The Agreements have been signed on October 3, 1999.

**Suez Gulf & Port Said East
BOOT Projects
Time Schedule**

- | | |
|-----------------------------------------|-----------------------------------------------------------------------|
| - Invitation For Pre-qualifications | April 12, 1998 |
| - Submission of Pre-qualifications | June 30, 1998 |
| - Selection of Short List | August 17, 1998 |
| - Issuance of RFP | September 20, 1998 (Suez Gulf)
September 30, 1998 (Port Said East) |
| - Submission Date. | November 30, 1998 |
| - Notice of Proposal Evaluation Results | February 1, 1999 |
| - Commencement of Negotiations | February 22, 1999 |
| - Execution of Agreements. | October 3, 1999 |



The principal BOOT Project Agreements

The Power Purchase Agreement (PPA)

The Power Purchase Agreement Was Prepared With The Following Factors In Mind

- The Agreement is designed on pay for performance (quality, availability, quantity) concept.
- The concept is to render the project bankable and feasible for limited recourse financing with attractive terms and conditions.
- Appropriate allocation and mitigation of risks.

Power Purchase Agreement, key provisions:

- Sale and Purchase of Energy and capacity
- Agreements of the Parties
- Terms and Termination
- Transfer of Ownership
- Testing and Capacity Ratings
- Control and Operation of the Complex and Dispatch
- Metering & Telecommunications
- Compensation, Payment and Billing
- Insurance
- Force Majeure, Change in Law
- Resolution of Disputes
- Arbitration
- Schedules

Risks

- Development Phase
 - Construction Phase
 - Operating Period

Resolution of Disputes

The Procedure for Dispute Resolution:

- Resolution By Parties
 - Mediation By Expert
 - Settlement By Arbitration.

Arbitration

- The arbitration is in accordance with the Rules of the Cairo Regional Center for Commercial Arbitration (the Center).
- Enforcement of arbitral award will be subject to the procedures set forth in law 27 of 1994.
- The arbitration would take place in Cairo at the Center.
- Egyptian Law shall apply to the dispute and the language will be in English.
- If either party requests, the arbitration may be conducted in Paris/Geneva and settled in accordance with the rules of arbitration of the International Chamber of Commerce.

Conclusion

The Main Reasons Behind the Success of the Egyptian BOOT Project:

- Government support
- The credit worthiness of the Egyptian Economy.
- The Central Bank guarantee to all EEA's financial obligations under the PPA.
- The investment guarantees and incentives offered by Law 8,1997.
- The assistance of an experienced international consultant.
- The professionalism and transparency of EEA in handling the project.
- The appropriate allocation of risks.



Thank You For Listening