PN ABY-056
98441

Memorandum

To G/ENV/EET, Samuel Schweitzer

From/Location EPDF, Virginia Orben

Date February 13, 1995

Re Independent Power Seminar in Guatemala - January 17 - 20, 1995

Through the Energy Project Development Fund, USAID sponsored an introductory seminar on the principles of soliciting and contracting for power from independent power projects for the Instituto de Nacional Electrificacion (INDE). The seminar was presented by Price Waterhouse LLP with the assistance of Commonwealth Power Corporation during the period January 17 to 20, 1995 at the Ramada Conquistador Hotel in Guatemala City, Guatemala.

There were 35 participants at the seminar which included utility representatives from Guatemala, Nicaragua, Costa Rica, and Panama. A listing of participants at the seminar is included as Appendix A.

The seminar was conducted over a 4 day period under the guidance of Edward Monahan of Price Waterhouse. Messers. Peter Lalor and Bill Daley lead the presentation and discussions on legal and project development issues. Mr. Gary Edwards handled the presentation and discussions related to issues and policies involved in solicitations for new power supplies. Mr. John Sachs lead the presentation and discussions regarding international limited recourse financing structures. A copy of the seminar presentation schedule is included as Appendix B. In addition, a copy of the slides and presentation materials is included as Appendix C.

The response from the participants was excellent. There were questions directed at the session leaders throughout the seminar. The highlight of the seminar was on the third day when the seminar participants were divided into small teams for two case studies. The case studies were for the development of a hydro project and a thermal project by independent developers. One team represented the developers and a second team represented the utility. The teams developed their negotiating strategies and conducted their negotiations before the remainder of the participants.

Feedback from the participants indicates that the seminar has provided valuable information and knowledge for their future use. The participants from Panama indicated that their country's energy sector would benefit greatly from a similar seminar.

Appendix A

SEMINARIO
ELABORACION Y NEGOCIACION DE CONTRATOS DE COMPRA-VENTA DE ENERGIA ELECTRICA CON PARTICIPACION PRIVADA
GUATEMALA, DEL 17 AL 20 DE ENERO DE 1995

No.	NOMBRE-CARGO	EMPRESA-PAIS	DIRECCION	TELEFONO	FAX
1	Edward L. Monahan Jr.	Price Waterhouse LLP International Consulting Services	1801 K Street, N.W. Washington, DC 20006	703 522 4849	202 467 4405
2	Mario Funes	Consultor, Guatemala	9a. Calle "B" 22-48 Z. 11	737215	
3	Carlos A. Monroy G.	EEGSA, Guatemala	6a. AVe. 8-14 Z. 1	536191 518777	20373
4	Marcia Ester Morales	EEGSA, Guatemala	6a. Ave. 8-14 Z. 1	518777	501975
5	Jorge Alvarado	EEGSA, Guatemala	6a. Ave. 8-14 Z. 1	518777	301086
6	Mauro Fernando Oroxóm	EEGSA, Guatemala	6a. Ave. 8-14 Z. 1	518777	
7	Sergio Quiroa	EEGSA, Guatemala	6a. Ave. 8-14 Z. 1	518777	20373
8	Oskar Aquiles Castillo Di Donato	EEGSA, Guatemala	6a. Ave. 8-14 Z. 1	300659	519977
9	Carlos Fernando Rodas	EEGSA, Guatemala	6a. Ave. 8-14 Z. 1	578777-86	21336
10	Mario A. Gutiérrez	EEGSA, Guatemala	6a. Ave. 8-14 Z. 1	518773-86	501975
11	Gustavo A. Rodas Silas	EEGSA, Guatemala	6a. Ave. 8-14 Z. 1	518777-86	519977
12	Raúl Iván Cortes	ENEL, Nicaragua	Apdo. No. 55 Managua	674103	672683
13	Gustavo Acosta López	ENEL-Nicaragua	Managua, Plata de la Resistencia	505-311-3154	505 311 5292
14	José Saborío	ICE, Costa Rica	ICE, Sabana Piso 13	506 2207105 2207981	231-4078 (506)
15	Irene Campos	ICE, Costa Rica	ICE, Sabana Norte Piso 6. Apdo. 10032-1000	506 2207237 2207412	(506) 231-4737

SEMINARIO

ELABORACION Y NEGOCIACION DE CONTRATOS DE COMPRA-VENTA DE ENERGIA ELECTRICA CON PARTICIPACION PRIVADA

GUATEMALA, DEL 17 AL 20 DE ENERO DE 1995

No.	NOMBRE-CARGO	EMPRESA-PAIS	DIRECCION	TELEFONO	FAX
16	Paul A. Scharf	International Consulting & Marketing, USA	Ave. Reforma 8-95 Z. 10 No. 803 Guatemala	311029	311029
17	Dennis E. Moreno	IRHE, Panamá	Edif. Hatillo Ave. Justo Arosemena y Calle 36 Este Direc. Ing. y Desarrollo	507 270589-507 273137	507 27 0360
18	Pablo Castrejón	IRHE, Panamá	Edif. Poli/ Direcc. Ej. de Finanzas, Gerencia Nacional de Operaciones Financieras	279425 277186	62-4247
19	Mario Rolando Jocón Hernández	Ministerio Energía y Minas Guatemala	Diagonal 17, 29-78 Z. 11	770901-3	
20	Erick Gonzalez	Ministerio de Energía y Minas	Diagonal 17, 29-78 Z.11	770902	
21	Joel W. Febel	USA	Ave. Reforma 8-95 Z. 10 No. 803	311029	336954
22	Silvia Alvarado de Córdoba	USAID/G-Cap	1a. Calle 7-66 Zona 9	320202	311151
23	Irving Orlando López	INDE, Guatemala	7a Ave. 2-29 Z. 9	345711	345058
24	Gustavo B. Orozco Godinez	INDE, Guatemala Jefe U. Planif. Sis. Elect.	7a Ave. 2-29 Z. 9	345711 ext 2245	502 2 345785
25	José Reyes López	INDE, Guatemala	7a. Ave. 2-29 Z. 9	345711	345785
26	Juan Luis Guzmám	INDE, Guatemala	7a. Ave. 2-29 Z. 9	345711 ext 2240	502 2 345785
27	Julio Carlos Prado	INDE, Guatemala	7a. Ave. 2-29 Z. 9	345711 ext 2240	502 2 345785

SEMINARIO

ELABORACION Y NEGOCIACION DE CONTRATOS DE COMPRA-VENTA DE ENERGIA ELECTRICA CON PARTICIPACION PRIVADA

GUATEMALA, DEL 17 AL 20 DE ENERO DE 1995

No.	NOMBRE-CARGO	EMPRESA-PAIS	DIRECCION	TELEFONO	FAX
28	Manuel Efrain Medina Aquino	INDE, Guatemala Centro Nac.. Operaciones	Km. 15 Carretera al Pacífico San José Villa Nueva, Guatemala	0311411 0311602 0310222	0311411
29	Ricardo Catalan Cuellar	INDE, Guatemala	7a. Ave 2-29 Z. 9	345711	502 2 345785
30	Marco Antonio Bocaletti	INDE, Guatemala	7a. Ave. 2-29 Z. 9	345711	345785
31	Elmer R. Ruiz	INDE, Guatemala	7a. Ave 2-29 Z. 9	345711	502 2 345785
32	Rafael Larios Alvarez	INDE, Guatemala Depto. Planeam. Operativo	Km. 15 Carretera al Pacífico San José Villa, Guatemala	0310222 03114111 0311602	0311411
33	Benigno de J. Pellecer Zelada	INDE, Guatemala	7a. Ave. 2-29 Z. 9	345711	345785
34	Thelma Aldana Hernández	INDE, Guatemala	6a. Ave. 0-60 Z. 4	718805	
35	Lionel Pineda Ruano	INDE, Guatemala	7a Ave. 2-29 Zona 9	502 2 345711	502 2 345785

Appendix B

SEMINARIO SOBRE ELABORACION Y NEGOCIACION DE CONTRATOS DE COMPRA-VENTA DE ENERGIA ELECTRICA CON PARTICIPACION PRIVADA

Guatemala, 17-20 de enero de 1995

Martes 17 de enero

08:00 - 08:30 Inscripción
08:30 - 08:40 Observaciones Preliminares y Temas a tratar en el Seminario
08:40 - 09:40 Presentación: Perspectiva General de las Opciones Independientes de Energía Eléctrica para Guatemala
- política y marco institucional
- fuentes financieras y estructurales
- factores claves para alcanzar el éxito

09:40 - 10:30 Discusión sobre la Situación Regional en cuanto al Tema
10:30 - 11:00 Receso
11:00 - 11:30 Ceremonia de Inauguración
11:30 - 12:30 Presentación: El Rol de los Participantes: Promotores, Patrocinadores, Contratistas y Oficiales Públicos
12:30 - 02:00 Receso
02:00 - 03:00 Presentación: La Dinámica en el Proceso de Solicitud y Negociación; Las Metas de los Participantes; Presentación del Caso de Estudio
03:00 - 03:15 Receso
03:15 - 03:45 Preguntas y Discusión.
03:45 - 04:45 Presentación: Las Perspectivas y Metas de las Empresas Eléctricas en el Proceso de Solicitud y Negociación
04:45 - 05:15 Preguntas y Discusión.

Miércoles 18 de enero de 1995

09:00 - 09:30 Discusión y Resumen de las Presentaciones de los Días anteriores
09:30 - 10:30 Presentación: Logro de las Metas de las Empresas Eléctricas -- Selección y Evaluación de Propuestas
- Factores de Precio y no Precio
- Riesgo de las Inversiones
- Selección de Propuestas
- Técnicas y Métodos

10:30 - 10:45 Receso
10:45 - 11:15 Preguntas y Discusión.
11:15 - 12:15 Presentación: Selección y Evaluación de Propuestas (Continuación)
12:15 - 12:45 Preguntas y Discusión.
12:45 - 02:00 Receso
02:00 - 03:00 Presentación: Negociación de Contratos Financiables: Políticas y Principios
03:00 - 03:15 Receso
03:15 - 03:45 Preguntas y Discusión.
03:45 - 04:45 Presentación: Negociación de Contratos Financiables (Continuación)
04:45 - 05:15 Preguntas y Discusión.

Jueves 19 de enero de 1995

09:00 - 09:30 Discusión y Resumen de las Presentaciones de Días Anteriores
09:30 - 10:30 Discusión del Caso Estudio
10:30 - 10:45 Receso
10:45 - 11:15 Preguntas y Discusión.
11:15 - 12:15 Caso de Estudio (Continuación)
12:15 - 12:45 Preguntas y Discusión.
12:45 - 02:00 Receso
02:00 - 03:00 Presentación: El Papel del Gobierno en la Contratación de Energía Eléctrica
03:00 - 03:15 Receso
03:15 - 03:45 Preguntas y Discusión.
03:45 - 04:45 Presentación: El Papel del Apoyo Crediticio; Instituciones y Requerimientos; Implicaciones de diversos factores en las estructuras y cálculo de tarifas
04:45 - 05:15 Preguntas y Discusión.

Viernes 20 de enero de 1995

09:00 - 09:30 Discusión y Resumen de las Presentaciones de Días Anteriores
09:30 - 10:30 Presentación: Financiamiento Internacional para proyectos de Generación Eléctrica
10:30 - 10:45 Receso
10:45 - 11:15 Preguntas y Discusión
11:15 - 12:15 Presentación: Lecciones Aprendidas de los Exitos y Fracasos en Otros Países
12:15 - 12:45 Preguntas y Discusión
12:45 - 02:00 Receso
02:00 - 03:00 Presentación: Lecciones Aprendidas de los Exitos y Fracasos en otros Países (Continuación)
03:00 - 03:15 Receso
03:15 - 03:45 Preguntas y Discusión
03:45 - 04:30 Resumen y Conclusiones
04:40 - 05:00 Clausura

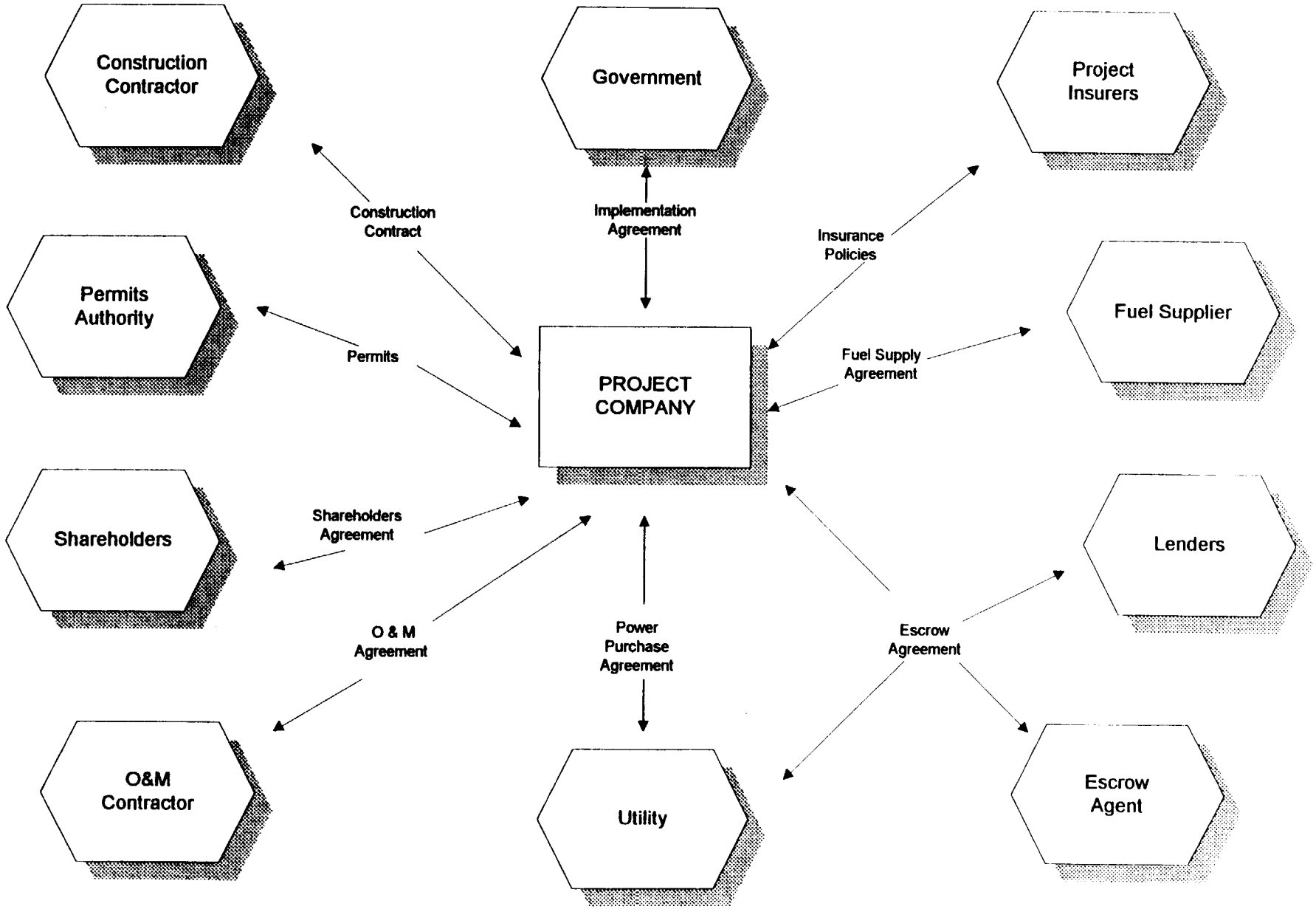
Appendix C

GUATEMALA SEMINAR

JANUARY 17 - 20, 1995

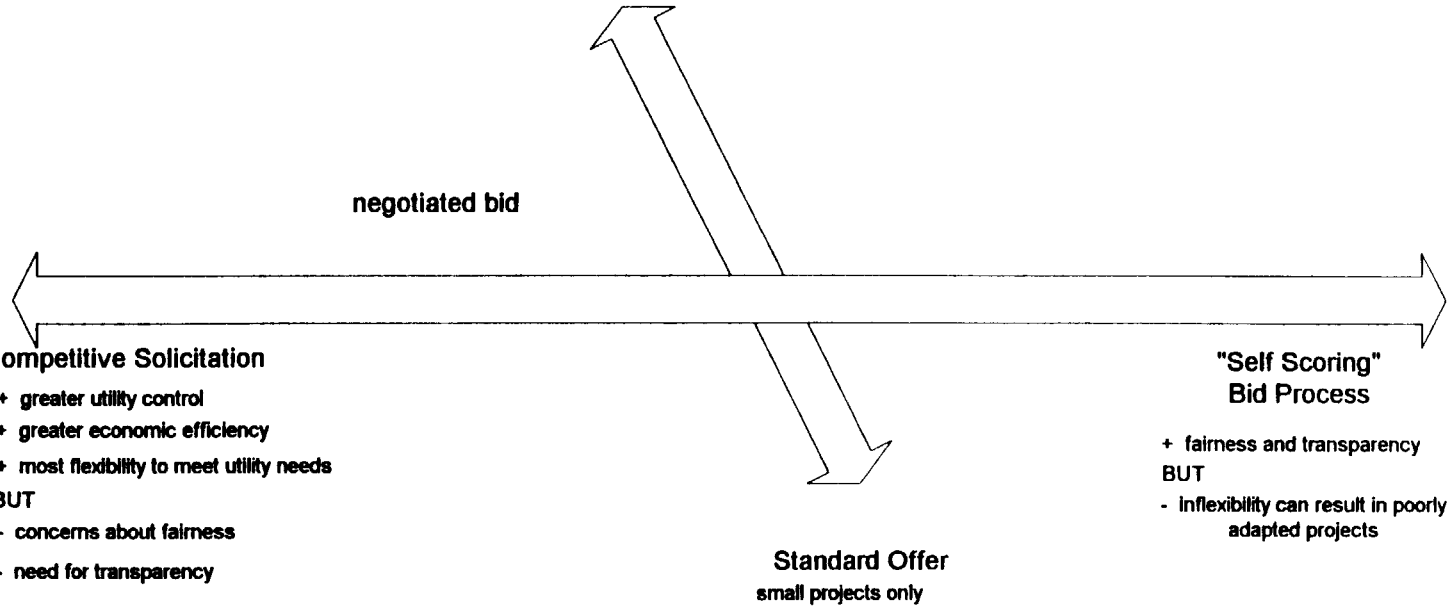
a

GUATEMALA SEMINAR ON INDEPENDENT POWER
JANUARY 17 - 20, 1995
SECURITY PACKAGE



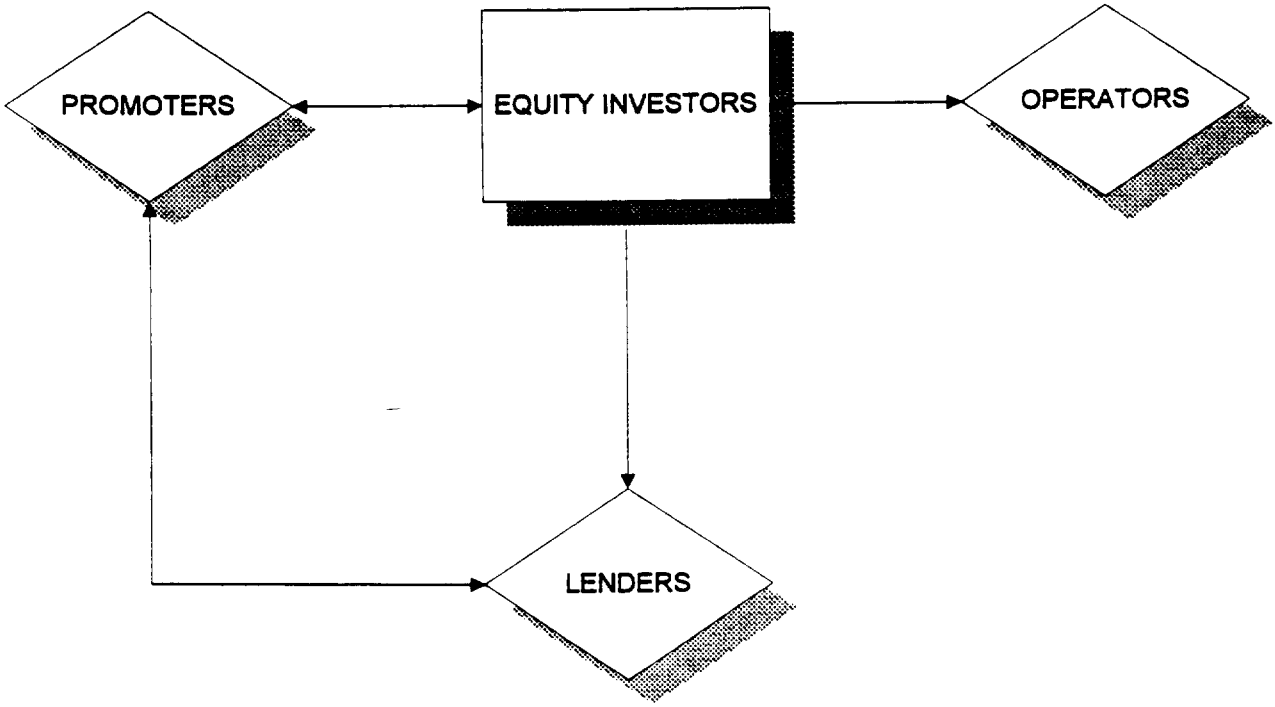
GUATEMALA SEMINAR
ON
INDEPENDENT POWER

JANUARY 17 - 20, 1995



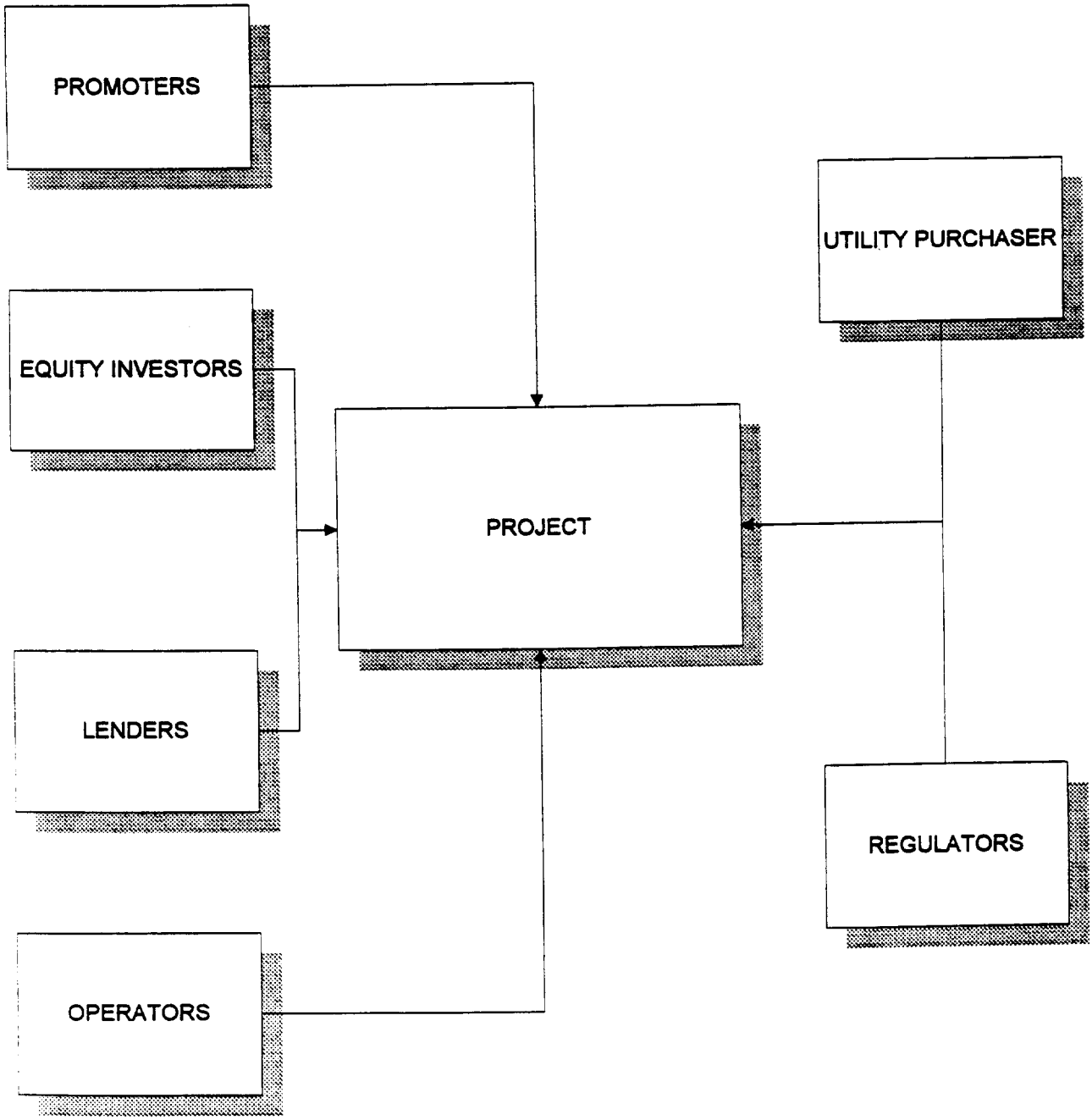
GUATEMALA SEMINAR
ON
INDEPENDENT POWER

JANUARY 17 - 20, 1995



GUATEMALA SEMINAR
ON
INDEPENDENT POWER

JANUARY 17 - 20, 1995



GUATEMALA SEMINAR ON INDEPENDENT POWER

Project Risk Matrix

RISK	HOST COUNTRY GOVERNEMENT	COMMERCIAL BANKS	DEVELOPMENT INSTITUTIONS	POWER PURCHASERS	EQUIPMENT SUPPLIERS	CONTRACTOR	PROJECT SPONSOR	GOVERNEMENT INSURER	COMMERCIAL INSURER
PRE-CONSTRUCTION									
POWER SALES CONTRACT									
FUEL SUPPLY CONTRACT									
DEVELOPMENT COSTS									
IMPLEMENTATION AGREEMENT									
PERMITTING									
DUE DILIGENCE									
CONSTRUCTION / START UP									
COMPLETION DELAYS									
COST OVERRUNS									
PERFORMANCE TESTING									
FORCE MAJEURE									
OPERATION									
O&M COST OVERRUNS									
PERFORMANCE									
FUEL AVAILABILITY									
FUEL COST									
FORCE MAJEURE									
POLITICAL / LEGAL / REGULATORY									
TAXES									
ENVIRONMENTAL									
EXPROPRIATION									
INSURRECTION									
CONVERTIBILITY									
ECONOMIC / MARKET									
NEED									
INFLATION									
INTEREST RATES									
FOREIGN EXCHANGE AVAILABILITY									

H - MAJOR RISK M - MODERATE RISK L - LOW RISK

REQUEST FOR PROPOSAL PROCESS

RFP PROCESS

UTILITY MAKE-UP

POLITICAL CONCERNS

BUY VERSUS BUILD

SOLICITATION DOCUMENT

PROCESS SCHEDULE

UTILITY MAKE-UP

TERRITORY SERVED

UTILITY SIZE

CUSTOMER MIX

UTILITY'S GENERATION MIX

NON-UTILITY GENERATION MIX

UTILITY MAKE-UP

FORECAST OF LOAD

- *Existing Reserve Margins*
- *Desired Reserve Margins*
- *Type of Generation Desired*

TRANSMISSION PLANNING

- *Ability To Interconnect*
- *Cost To Interconnect*
- *Location Priorities*

POLITICAL CONCERNS

PROCUREMENT POLICY

PROPOSED CHANGES TO POLICY

COMMITTMENT FROM LEADERS

ACCEPTANCE BY REGULATORS

COMPETITION

THE GOAL OF COMPETITION IS TO IMPROVE ECONOMIC EFFICIENCY IN THE SUPPLY OF ELECTRICITY

THE RFP DOCUMENT

PROVIDES FOR THE SELECTION OF CAPACITY BY BALANCING LOW COST WITH NON-PRICE FACTORS

PROVIDES THE BEST MEANS OF FOSTERING ECONOMIC EFFICIENCY IN FREE AND FAIR MARKETS

THE RFP DOCUMENT

INSTRUCTIONS TO BIDDERS

Intent of Solicitation
Capacity Requirements
Bid Preparation
Contacts
Notice of Pre-Bid Meeting
Bid Submittal Requirements
Evaluation and Selection
Information Required
Model Agreement
Required Copies of Bid
Confidentiality
Bid Modifications
Amendments

THE RFP DOCUMENT

PROPOSAL FORM

General Requirements
Project Schedules Provided
Authorized Representative
Facility Description
Pricing Provisions
- *Energy*
- *Capacity*

Terms and Conditions
No Collusive Arrangements With Others
Prior Project Experience
Term and Schedule Commitments
Fuel Utilization

THE RFP DOCUMENT

NOTICE OF RECEIPT
OF
REQUEST FOR PROPOSAL

INTENT TO BID
FOR POWER PURCHASES

THE RFP DOCUMENT

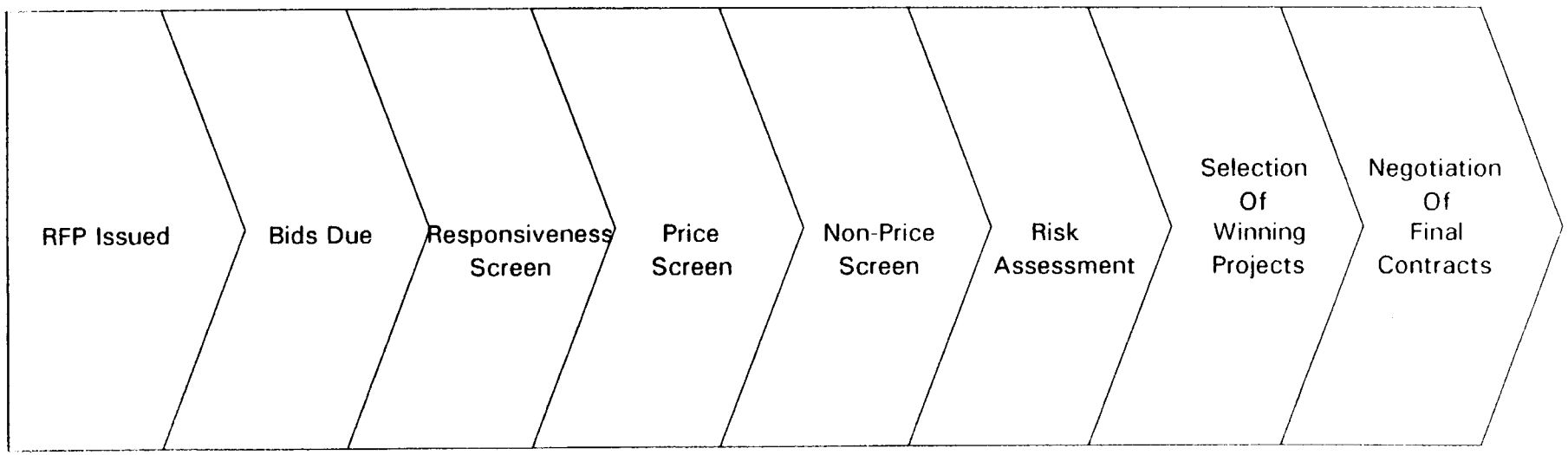
MODEL AGREEMENT

THE RFP DOCUMENT

TRANSMISSION SYSTEM MAPS

CAPACITY SOLICITATION PROCESS

Key Activities



Total Process Time Is 11 - 12 Months

CAPACITY SOLICITATION PROCESS

Issuance of RFP

Advertisement

Pre-Bid Meeting

CAPACITY SOLICITATION PROCESS

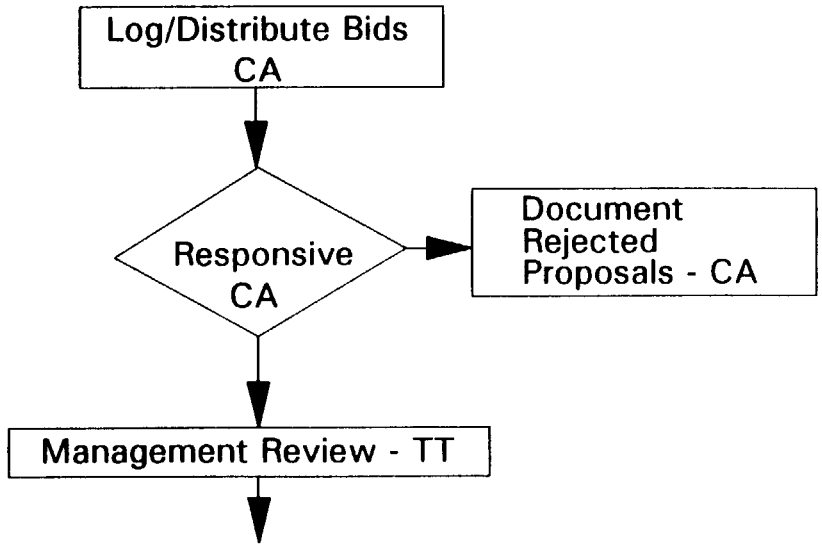
Bids Due

By Specified Date
By Specified Time
To Specified Location
No Short List
No Second Chance
Bid Fee Enclosed

OBJECTIVE

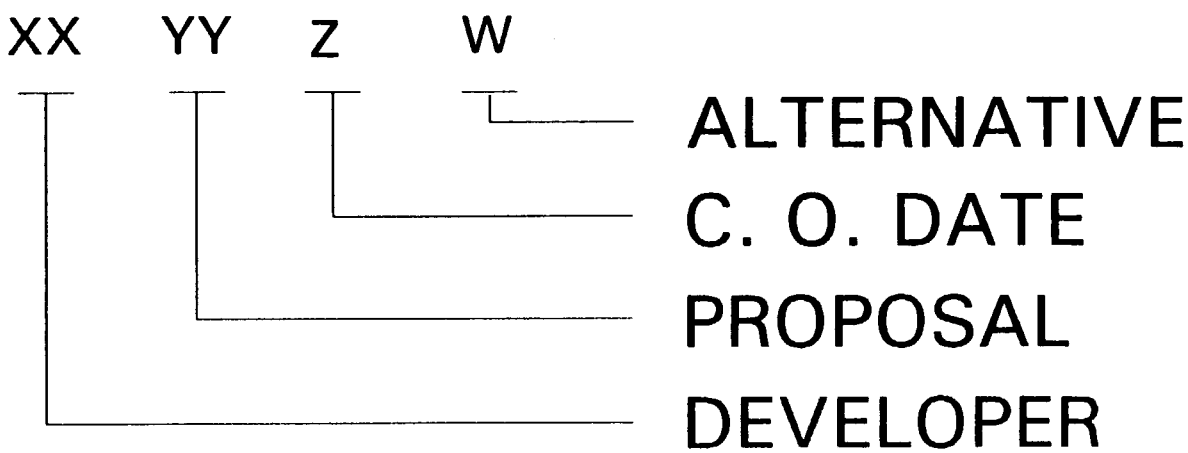
TO IDENTIFY AND SELECT THE GENERATION EXPANSION PLAN THAT BEST MEETS THE FUTURE NEEDS OF VIRGINIA POWER'S CUSTOMERS AT THE LOWEST EVALUATED TOTAL SYSTEM COST BY SELECTING THE BEST COMBINATION OF ALL AVAILABLE SOURCES OF GENERATING CAPACITY.

STEP 1



TO STEP 2

BIDDER IDENTIFICATION

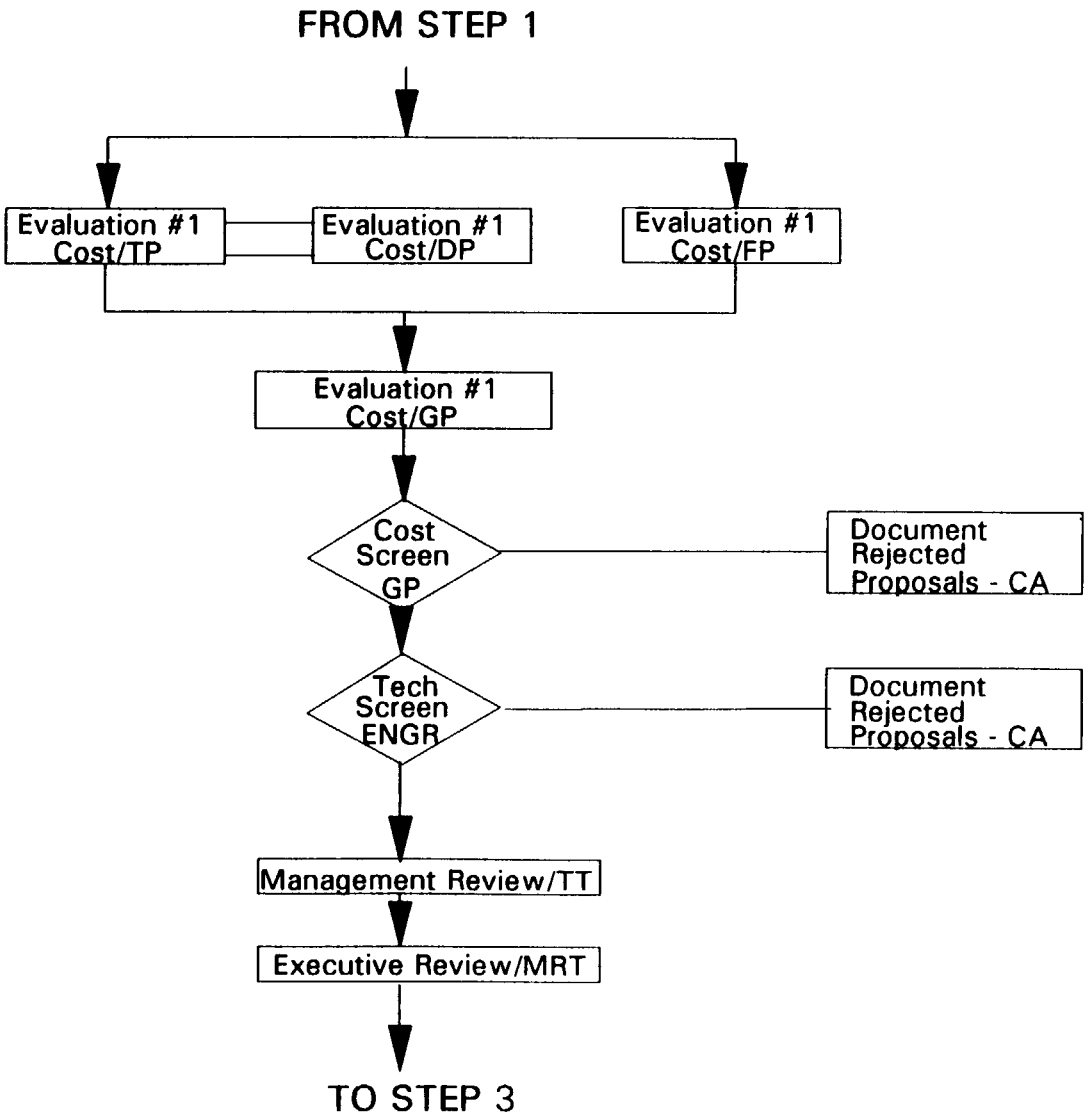


CAPACITY SOLICITATION PROCESS

Responsiveness Screen

- *Bid Received By Due Date*
- *Bid Accompanied By Bid Fee*
- *Bid Submitted In Required Form*
- *Bid Identified Specific Site*
- *Bid Complies With Corporate Policy*
- *Bid Is A Firm Offer*
- *Bidder Accepts Required Provisions*
- *Sufficient Information To Evaluate*

STEP 2

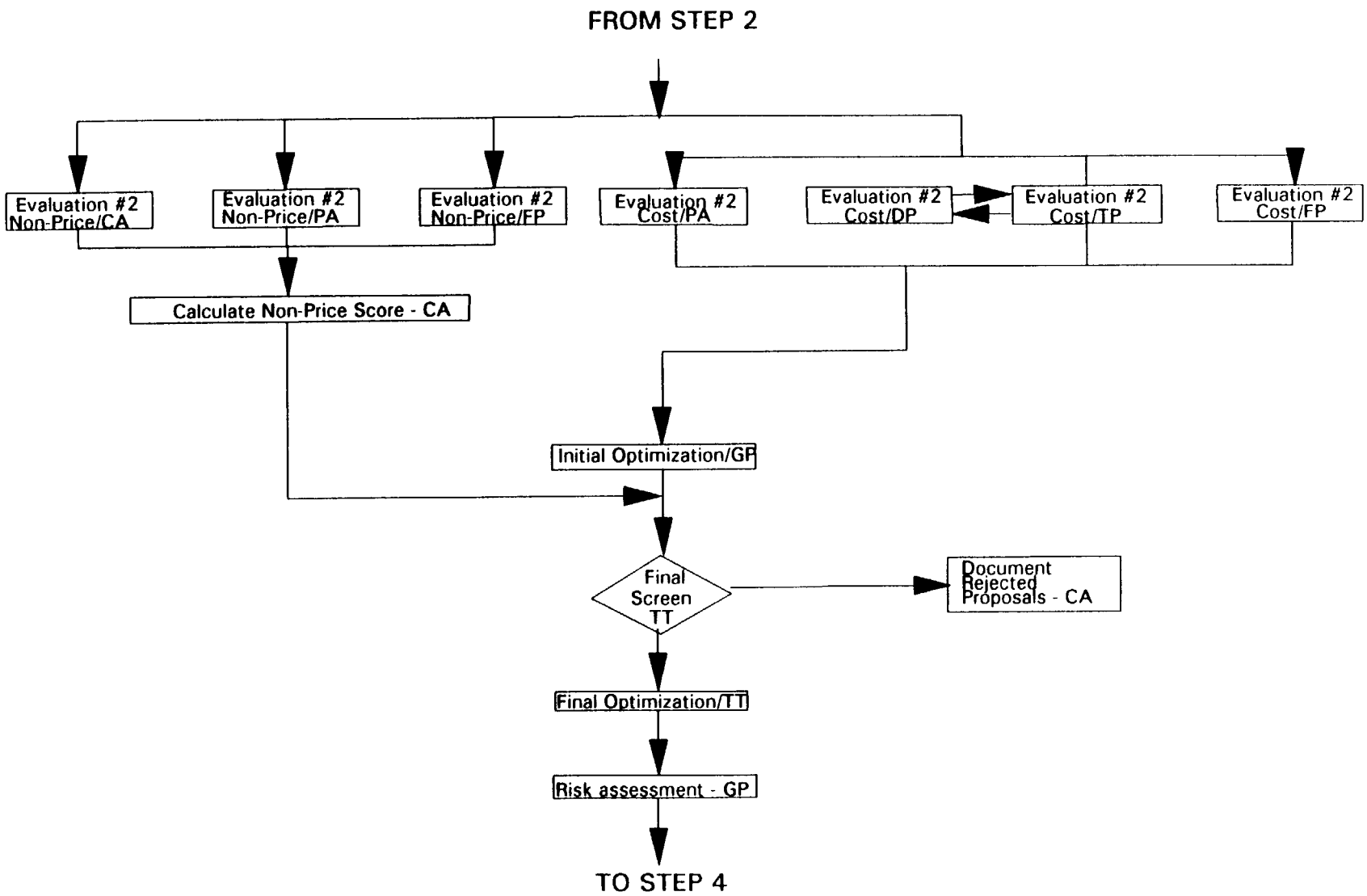

FROM STEP 1
Evaluation #1 Cost/TP
Evaluation #1 Cost/DP
Evaluation #1 Cost/FP
Evaluation #1 Cost/GP
Cost Screen GP
Document Rejected Proposals - CA
Tech Screen ENGR
Document Rejected Proposals - CA
Management Review/TT
Executive Review/MRT
TO STEP 3

CAPACITY SOLICITATION PROCESS

Price Screen

- Proposed Capacity Payment Stream
- Proposed Energy Payment Stream
- Dispatch Of The Facility
- Cost To Interconnect

STEP 3


FROM STEP 2
Evaluation #2 Non-Price/CA
Evaluation #2 Non-Price/PA
Evaluation #2 Non-Price/FP
Evaluation #2 Cost/PA
Evaluation #2 Cost/DP
Evaluation #2 Cost/TP
Evaluation #2 Cost/FP
Calculate Non-Price Score - CA
Initial Optimization/GP
Final Screen TT
Document Rejected Proposals - CA
Final Optimization/TT
Risk assessment - GP
TO STEP 4

NON-PRICE FACTORS

Project Viability

Financial Capability
Level of Development
Experience
Security

Fuel & Fuel Diversity

Origin
Market Stability
Multi-Fueled Plants
System Fuel Diversity

Other Factors

Societal/Economical Benefits
Use of Local Resources
Steam Commitment To Host
Operating Flexibility
Location

CRITERIA FOR NON-PRICE EVALUATION

CRITERIA	WEIGHTING
■ PROJECT VIABILITY	10%
LEVEL OF DEVELOPMENT	15%
SECURITY	10%
FINANCIAL STATUS	25%
EXPERIENCE	25%
TECHNICAL ASPECTS	25%
■ FUEL AND FUEL DIVERSITY	10%
PRICE STABILITY	60%
SYSTEM FUEL MIX	15%
MULTI-FUEL CAPABILITY	10%
VIRGINIA/NORTH CAROLINA FUELS	15%
■ OTHER FACTORS	10%
DISPATCHABILITY	40%
OWNERSHIP	15%
LOCATION	15%
CAPACITY PAYMENT STRUCTURE	15%
QUALIFYING FACILITY STATUS	15%

CALCULATION OF NON-PRICE SCORE FOR EACH PROJECT

PROJECT VIABILITY
(for illustration only)

	SCORE		WEIGHT		PRODUCT
LEVEL OF DEV'T	9.0	X	0.15	=	1.35
SECURITY	7.0	X	0.10	=	0.70
FINANCIAL STATUS	5.0	X	0.25	=	1.25
EXPERIENCE	6.0	X	0.25	=	1.50
TECHNICAL ASPECTS	3.5	X	0.25	=	0.86
	PROJECT VIABILITY SCORE			=	5.66

CALCULATION OF NON-PRICE SCORE FOR EACH PLAN

(for illustration only)

PROJECT	SCORE		MW		PRODUCT
1	6.52	X	200	=	1,304
2	3.49	X	200	=	698
3	9.20	X	600	=	5,520
4	1.11	X	200	=	222
5	5.73	X	400	=	2,292
			1,600		10,036

NON-PRICE SCORE FOR THIS PLAN =

$$\frac{10{,}036}{1{,}600} = 6.27$$

CONVERSION OF PLAN COSTS TO COST SCORES

(for illustration only)

	PLAN	TOTAL SYSTEM COST ($MILLION)	COST SCORE
LOW COST	A	12,912	10.00
	B	13,068	9.40
	C	13,481	7.80
	⋮	⋮	⋮
CUTOFF	N	15,500	0.00

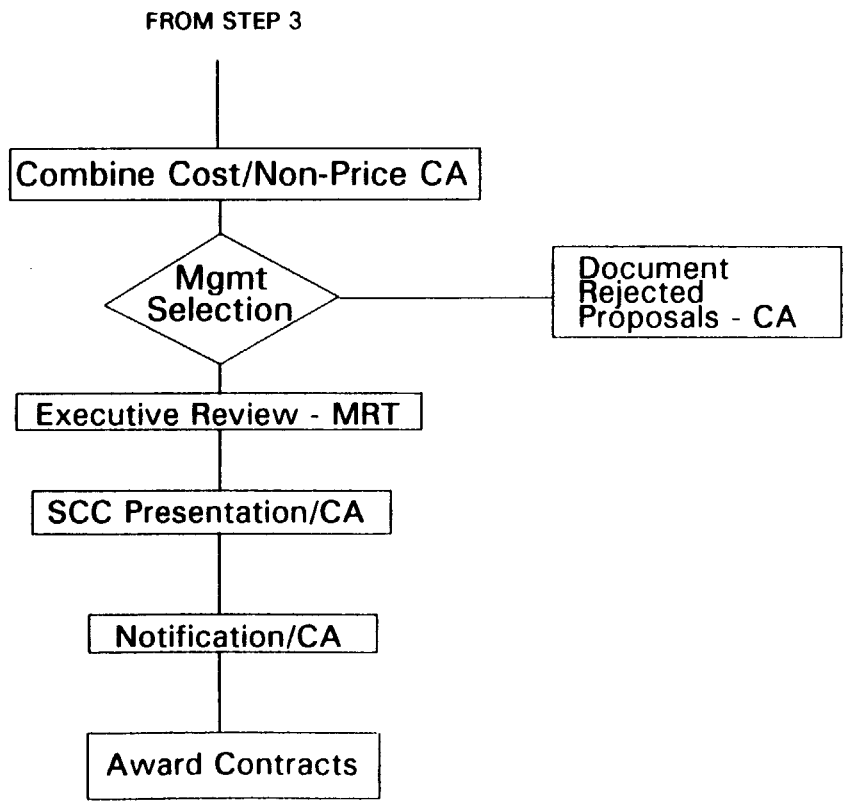
$$\text{SCORE} = \left[1 - \frac{(\text{PLAN COST} - \text{LOW COST})}{(\text{HIGH COST} - \text{LOW COST})}\right] \times 10$$

CAPACITY SOLICITATION PROCESS

Risk Assessment

Higher Than Expected Load Growth
Lower Than Expected Load Growth
Deterioration Of Existing Units
Demand Side Programs Reflected
Unstable Fuel Prices Of Some Plants

STEP 4


FROM STEP 3
Combine Cost/Non-Price CA
Mgmt Selection
Document Rejected Proposals - CA
Executive Review - MRT
SCC Presentation/CA
Notification/CA
Award Contracts

COMBINING COST SCORES AND NON-PRICE SCORES

(for illustration only)

PLAN	COST SCORE	x 0.7	NON-PRICE SCORE	x 0.3	COMBINED SCORE
A	10.00	7.00	0.00	0.00	7.00
B	9.40	6.58	9.40	2.82	9.40
C	7.80	5.46	10.00	3.00	8.46
.	.	.	.	.	.
.	.	.	.	.	.
.	.	.	.	.	.
.	.	.	.	.	.
N	0.00	0.00	7.20	2.16	2.16

CAPACITY SOLICITATION PROCESS

Selection Of Winning Plan

Review Top 3 - 6 Plans
Projects Common To All Plans
Determine Least Sensitive Plan
Make Selection
Notify Project Winners

CAPACITY SOLICITATION PROCESS

Negotiation Of Contracts

Negotiations Should Be Limited
5 - 10 Days To Complete Each Contract
Execute Final Contract

KEYS TO AGREEMENT NEGOTIATIONS

Agreement must be complete

All exceptions should be noted by Developer

Be prepared for negotiating sessions

No piecemeal negotiations

Maintain document control

Ambiguity will be expensive

Negotiation is desirable for projects of any significant size. It allows the parties to optimize the needs of the utility and the abilities of the project.

As with any negotiation, know what you want and what you can live with, and just as important, know your supplier's business as well as he does.

The negotiators must fully understand all of the associated risks and how they are to be shared.

Keeping track of risk allocation with a matrix is helpful to keep all parties to the negotiation "singing from the same sheet."

The Purchaser needs an enforceable contract.

- Lowest price that will yield a fair return to the supplier recognizing the risks he is assuming

- Clear performance standards and appropriate penalties for non-performance. Performance standards include:

    1. Milestone schedules
    2. Capability audits
    3. Unit availability
    4. Posting of security
    5. Maintenance of licenses, etc.

- Penalties that fairly compensate the utility for the damages resulting from non-compliance

- Security in the eventuality of penalties or to protect against over-payment in the early years of the contract

- As much dispatchability and control over unit operations as is feasible

- Clear metering, intermediate and relaying requirements

The Developer needs an enforceable contract.

- clearly defined and technically feasible obligations to perform; reasonable penalties for failure to perform
- fair price
- purchaser obligation to pay if developer meets his obligations
- assurance that return on and of investment capital can be converted and repatriated
- excuses to performance for force majeure events
- fair allocation of risk
- fair process of evaluation and negotiation

Operating Issues

Prefer contracts that allow economic dispatch.

Define need for automatic generation control and be sure that IPPs provide it to the extent needed.

Seek control of maintenance scheduling

Provide for emergency operations

Maximum output during high loads or loss of generation

VAR support during voltage problems

Be sure there are good communication links between central dispatch and the IPP operators.

Be sure that operators of IPPs are trained in all aspects the IPPs operational obligations.

Standard Offers are form contracts, including price schedules, which prospective developers need only sign and return to the utility to create a binding long-term contract. They are administratively the easiest, but

1) they should be limited to smaller projects
   a) which have little impact on system economics or reliability, and
   b) which cannot afford project-specific negotiations with the purchasing utility

2) pricing, as noted above, must be carefully structured to avoid perverse incentives

3) dispatch capability is not economic for smaller projects, so capacity reliability is less certain

Standard offers were used extensively in the early evolution of many U.S. jurisdictions for large and small projects. However,

4) accurate estimation of "avoided costs" has been a recurring problem
   a) overestimation in some jurisdictions has resulted in higher costs to users
   b) underestimation in other jurisdictions has resulted in suppressing the market, and higher costs to users

Standard Offers using administratively determined "avoided cost" continue to be widely used for small projects satisfying criteria 1(a) and (b) above. Contracts for larger projects result from project-specific negotiations described below.

Competitive Negotiation, in which the utility does not issue any formal bid request, but selects one or more project proposals for detailed contract negotiations (this might include BOT proposals for specific pre-engineered projects) has certain advantages:

1) there is much less administrative burden on the purchasing utility

2) the purchasing utility has a great deal of discretion in selecting prospective projects for negotiation

3) it is particularly well adapted to systems which
   a) have few suitable sites
   b) are considering purchase of significant increments relative to the size of the existing system
   c) for other reasons the purchasing utility needs significant control over the implementation of the independent project

This form is particularly well suited to intermediate phases of independent power development programs for the above reasons, and also because the developers of the project(s) selected for negotiation have greater comfort that the purchasing utility is serious.

However, this form of solicitation also has drawbacks:

4) it does not encourage an active market due to concerns over the fairness of the evaluation and selection process

5) it requires a good working relationship between the utility and the regulatory commission, because there is no objective market discipline on which the regulators can rely for confirmation of competitive price levels.

Competitive negotiation has been successful in numerous U.S. jurisdictions but is not now as widely used as competitive bidding, by reason of the foregoing drawbacks.

Competitive Bidding can take a variety of forms

1) the utility can identify the type, size and other characteristics of desired generating resource additions, or

2) it can identify a number of MW of incremental capacity needed, then optimize the set of responses meeting the utility's threshold criteria

System (2) is theoretically and practically preferable to system (1), as the pre-selection of generation alternatives limits the flexibility of developers to propose other alternatives which are more cost-effective than the assumptions used by the utility in the optimization. Whether the utility uses system (1) or system (2), it can identify the most promising projects (using the criteria described in the following section) either by:

3) use of a more or less mechanical "self-scoring" system, or

4) use of a more subjective scoring system, with accordingly greater discretion in the utility.

System (3) imposes great constraints on the purchasing utility's flexibility in selecting beneficial projects; on the other hand, the more subjective systems share the drawbacks of competitive solicitation systems.

Define your objectives in purchasing from IPPs. Typical objectives include:

1) Least net present value cost over the term of the contract

2) Project viability, both short and long-term

3) Fuel, geographic and size diversity

4) Operational control - AGC, economic dispatch, turn-down ratio, maintenance scheduling, etc.

5) Options to advance or retard project development schedule. Buyout options.

Define the criteria for measuring each IPP's ability to meet your goals. Such criteria may be highly quantitative or qualitative. Examples include:

1) Lowest net present value of <u>total</u> revenue requirements

2) Project viability criteria, such as sponsors experience building and operating plants, sponsors financial capability, site acquisition status, project licensibility, technical feasibility and fuel supply

3) Project impact on local economy and potential for creating jobs

4) Loss of load probability, a large project with a high forced outage rate can jeopardize system reliability and lead to the need for high installed resources

5) Environmental impact, including air and water emissions and waste disposal requirements, and

6) Amount of dump power.

Put together a **competent interdisciplinary team** to evaluate each project. Members of this team should have experience in economics, finance, plant engineering and operatives, power system engineering, licensing and environmental assessment, and power system planning.

The basic tools for project evaluation include:

1) Resource planning optimization models

2) Production cost simulation models, and

3) Risk assessment or decision analysis models.

SEMINARIO EN GUATEMALA
SOBRE LA OBTENCION DE PLANTAS ELECTRICAS PRIVADAS

por

John L. Sachs
Socio
Latham & Watkins

17-20 de enero de 1995

Ciudad de Guatemala, Guatemala

TABLA DE CONTENIDO

I. Paquete de seguridad

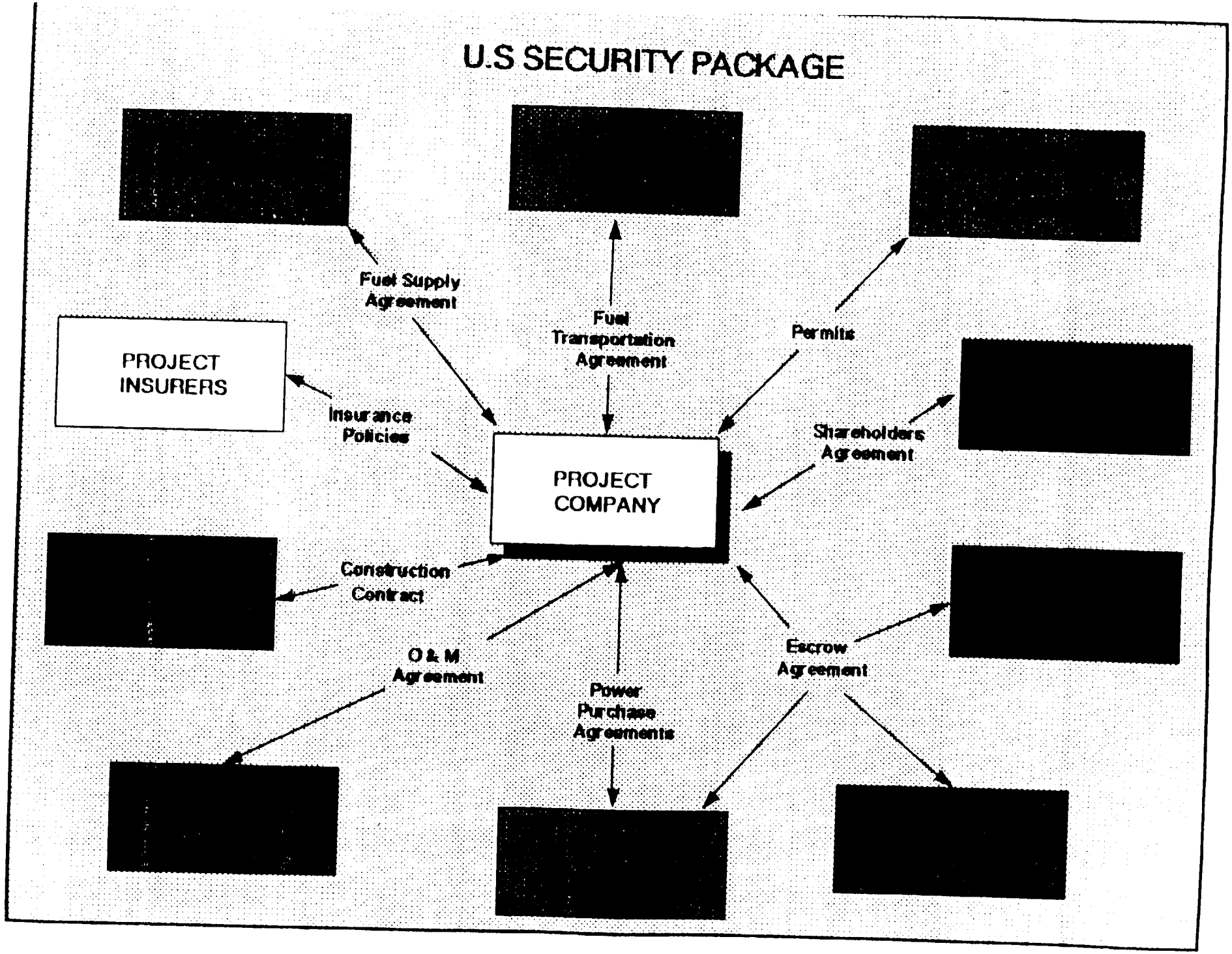
II. Riesgo político

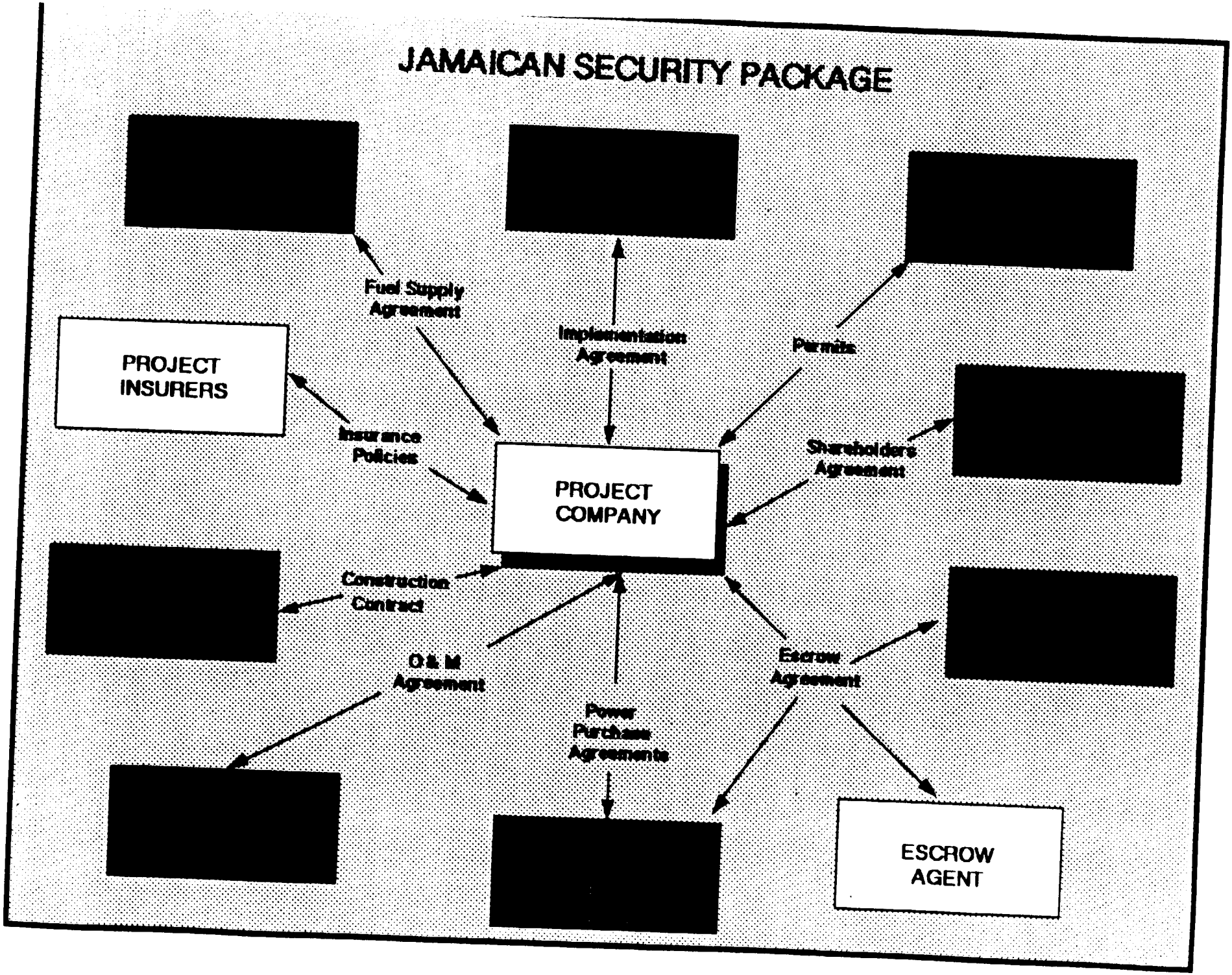
III. Acuerdo de implementación

- A. Incentivos económicos
- B. Riesgo político
- C. Resolución de disputas
- D. Garantías

IV. Estudios de casos

U.S SECURITY PACKAGE




JAMAICAN SECURITY PACKAGE
Fuel Supply Agreement
Implementation Agreement
Permits
PROJECT INSURERS
Insurance Policies
PROJECT COMPANY
Shareholders Agreement
Construction Contract
O & M Agreement
Escrow Agreement
Power Purchase Agreements
ESCROW AGENT

EJEMPLOS DE RIESGOS POLITICOS

- Incapacidad de obtener permisos y aprobaciones del Gobierno.
- Fluctuaciones en las tasas de divisas, indisponibilidad de divisas, incapacidad de transferir divisas al exterior.
- Fuerza mayor política.
- Expropiación u otro incumplimiento gubernamental.

ACUERDO DE IMPLEMENTACION

- Derecho exclusivo para construir la planta eléctrica
- Desgravación de impuestos y derechos de aduana
- Ayuda con permisos
- Compromisos de divisas
- Protección contra fuerzas mayores
- Definición de incumplimientos y recursos
- Procedimientos para la resolución de disputas
- Garantías gubernamentales

RIESGOS ASOCIADOS CON LOS PERMISOS

PROBLEMA: El promotor debe de obtener todos los permisos requeridos, pero las agencias gubernamentales pueden retener la emisión de permisos. El promotor sufre las siguientes consecuencias:

a. No completa la construcción de la planta a tiempo o no la opera según se requiere bajo el PPA.

b. Déficit en los ingresos.

c. Daños liquidados bajo el PPA y el FSA.

d. Terminación del IA, PPA y FSA.

RIESGOS ASOCIADOS CON LOS PERMISOS (Cont.)

Asignación:

Después de recibir una solicitud del promotor, el Gobierno:

a. **Podría renunciar al requisito de obtener un permiso pero posiblemente no obre en su propio beneficio.**

b. **Podría pagar al promotor por cualquier aumento de costo si se puede resolver el problema con dinero, pero es posible que el Gobierno no quiera pagar más.**

c. **Podría garantizar la emisión del permiso:**

   (1) **Identificar los permisos requeridos con anticipación y considerar los problemas.**

   (2) **Requerir una solicitud completa y exacta del promotor.**

   (3) **Retener el poder para revocar el permiso.**

RIESGOS ASOCIADOS CON LOS PERMISOS (Cont.)

PROBLEMAS RELACIONADOS:

a. El Gobierno se niega a renovar un permiso emitido por un tiempo limitado.

b. El Gobierno impone términos y condiciones adversas en el permiso después de emitirlo.

c. El promotor viola los términos y condiciones del permiso.

d. Se requieren permisos adicionales más tarde.

RIESGOS ASOCIADOS CON LAS DIVISAS

PROBLEMA: El promotor debe pagar a los prestamistas, inversionistas, contratistas y proveedores extranjeros en moneda extranjera, pero los pagos por la electricidad se hacen en moneda local.

a. El tipo de cambio fluctúa después de que el monto de pago en moneda local sea acordado o pagado.

b. Reservas insuficientes de divisas para convertirlas en moneda local.

c. No se permite transferir las divisas fuera del país.

RIESGOS ASOCIADOS CON LAS DIVISAS (Cont.)

Asignación:

a. **Fluctuación en los tipos de cambio.**

   (1) **Pagarle al promotor en divisas.**

   (2) **Venderle al promotor seguro contra riesgos de cambio.**

   (3) **Indizar el monto de moneda local.**

b. **Reservas insuficientes de divisas.**

   (1) **Atar el negocio de la planta eléctrica a algún negocio de exportación que genere divisas.**

   (2) **Acceso prioritario a divisas.**

RIESGOS ASOCIADOS CON LAS DIVISAS (Cont.)

Asignación:

(3) Garantía gubernamental de disponibilidad.

(4) Garantía o seguro contra riesgo político.

c. Restricciones sobre transferibilidad

(1) Garantía gubernamental del derecho de transferir.

(2) Garantía o seguro contra riesgo político.

FUERZA MAYOR

PROBLEMA: ¿Cómo puede un promotor cumplir con sus obligaciones de servicio de deuda cuando ocurre un suceso no asegurado?

Asignación:

a. El promotor aumenta al máximo la cobertura de su seguro, aunque su costo aumentará la tarifa.

b. El promotor toma riesgo si deja de obtener seguro disponible o si la empresa de seguro público por el promotor.

c. Si el suceso no es asegurable:

   (1) La empresa de servicio público continue los pagos al promotor, pero es posible que estos pagos no paguen por reparaciones y que la empresa de servicio público no le cobre a los clientes.

   (2) El Gobierno presta el dinero al promotor.

d. El promotor termina el IA, PPA y FSA, pero por lo menos el Gobierno debe repagar los préstamos.

RIESGO DE EXPROPIACION

PROBLEMA: **El Gobierno expropia los bienes o acciones del promotor o recurre a la expropiación paulatina haciendo que el promotor se vuelva incapaz de desempeñar sus funciones.**

RIESGOS DE EXPROPIACION (Cont.)

Asignación:

a. El promotor compra seguro contra expropiación completa, pero hay límites en la cobertura.

b. El Gobierno presta dinero al promotor, pero esto es improbable si el Gobierno ha participado en la expropiación.

c. El promotor termina el IA, PPA y FSA y trata de cobrar por daños.

   (1) Caro y lento recobrar por daños a través de un pleito o una arbitración.

   (2) El Gobierno debe renunciar la inmunidad soberana y consentir a la ejecución de juicios contra sí.

   (3) Acordar con anticipación el monto del daño.

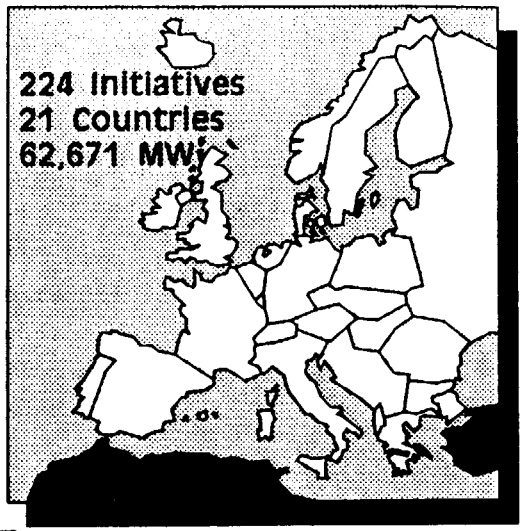
RESOLUCION DE DISPUTAS

- Tipos de resolución de disputas
- Procedimientos de arbitraje
- Renuncia a la inmunidad soberana
- Nacionalidad de los árbitros
- Foro
- Ley gobernante
- Diligencia de emplazamiento

GARANTIAS GUBERNAMENTALES

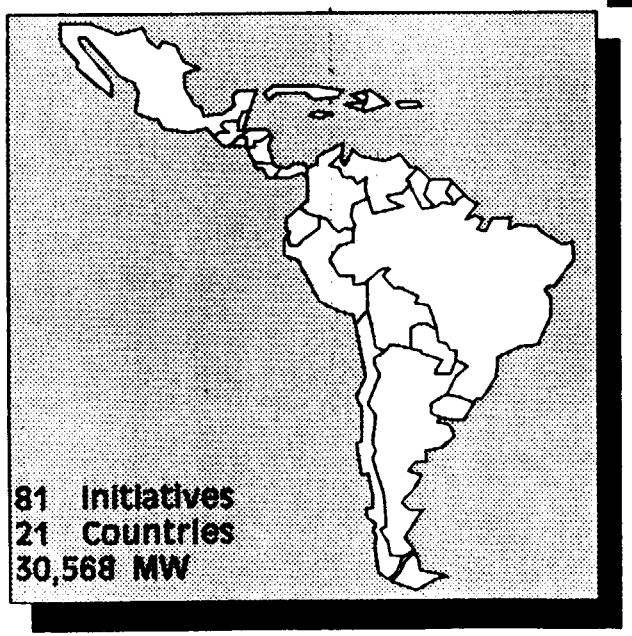
- Tipos de garantías
- Alcance de garantías
  - Agencias
  - Pago contra cumplimiento
  - Limitaciones
- Otras consideraciones
  - Prenda negativa
  - Construcción estricta

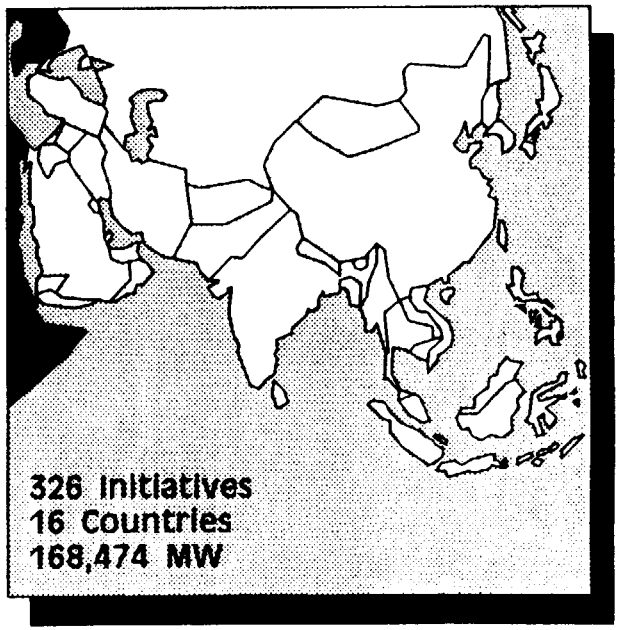
Independent Power Market Abroad



TOTAL

654 Initiatives
68 Countries
272,620 MW





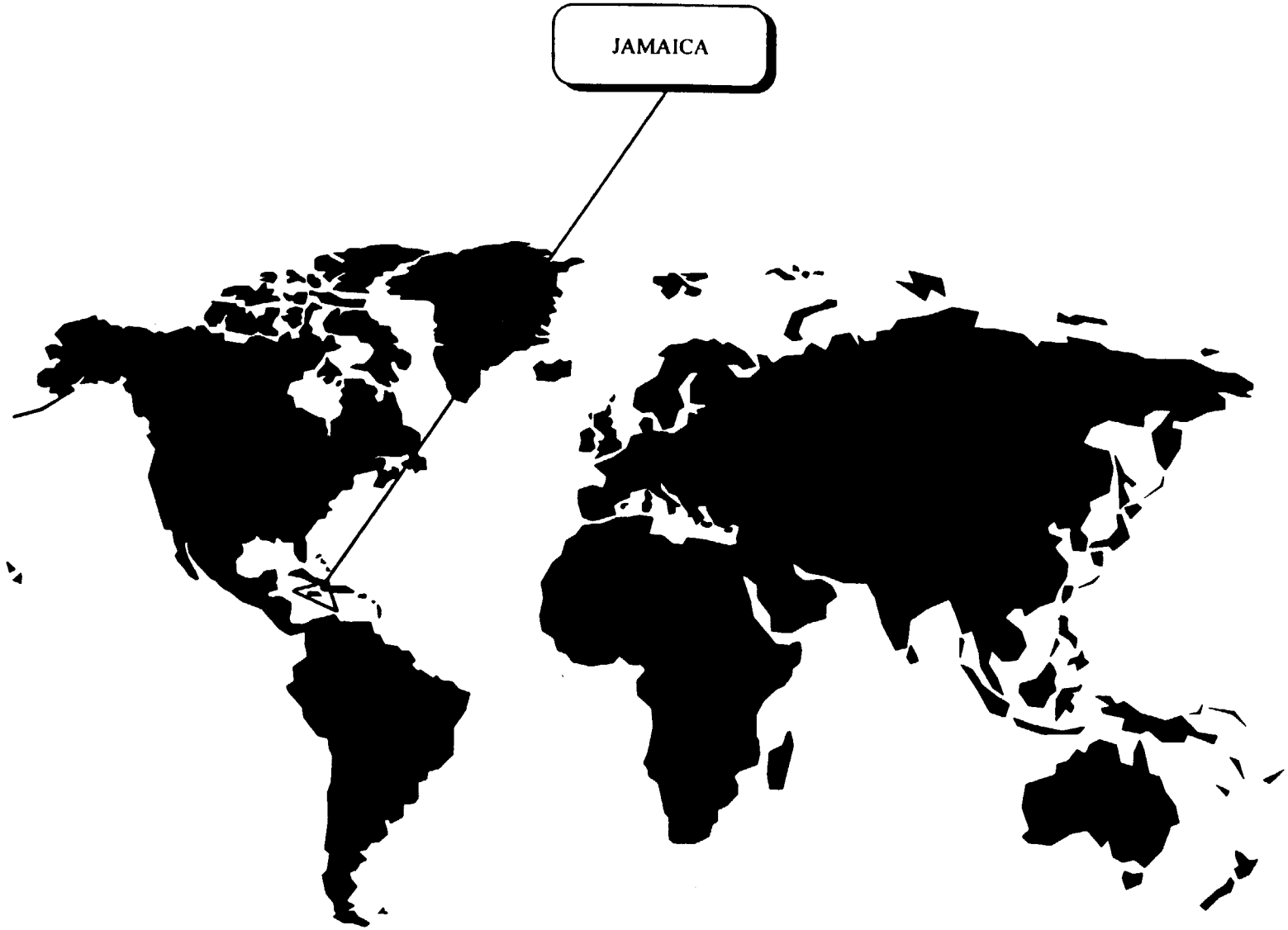
Source: RCG/Hagler, Bailly, Inc., February 1993. Reflects announcements over last 36 months.

PROYECTOS DE PLANTAS ELECTRICAS PRIVADAS SIN EXITO

- Proyecto Bauxita (Jamaica)
- Carbon II (México)
- Mission (India)
- Cogentrix (Filipinas)
- Krakow-Leg (Polonia)
- IEC Paiton (Indonesia)

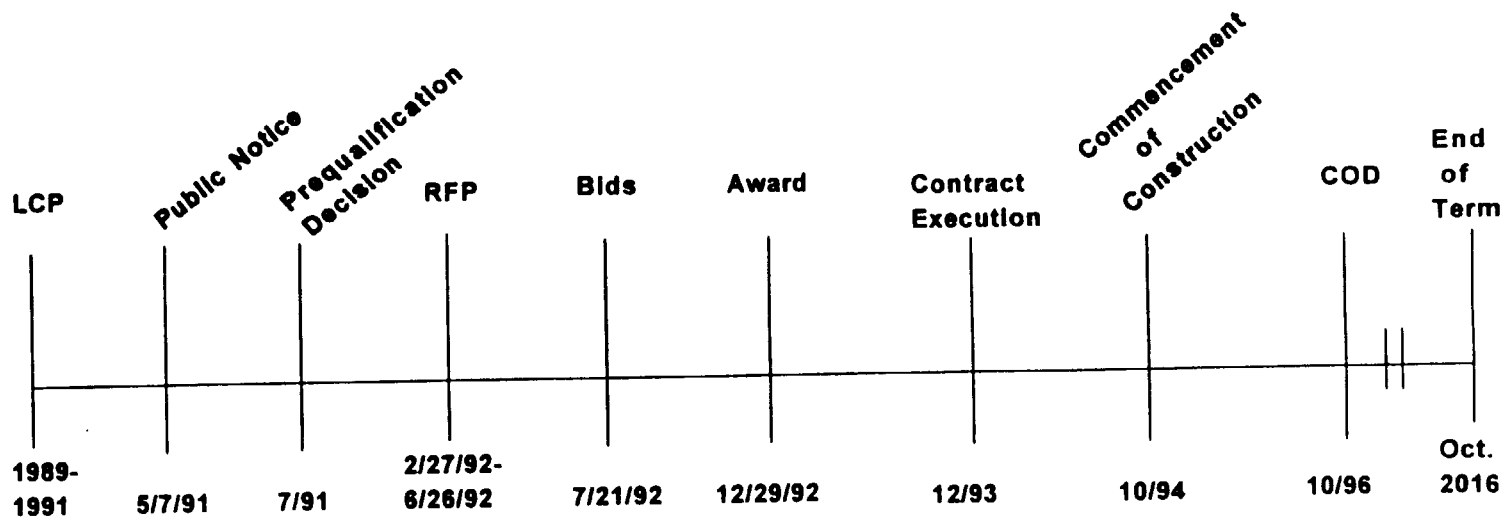
PROYECTOS DE PLANTAS ELECTRICA PRIVADAS CON EXITO

- Proyecto de Diesel de Rockfort (Jamaica)
- Proyecto Eléctrico Mamonal (Colombia)
- Proyecto Pagbilao (Filipinas)
- Proyecto Eléctrico Hub (Pakistán)


JAMAICA

JAMAICA ROCKFORT PROJECT

PROCEDURE AND TIMELINE

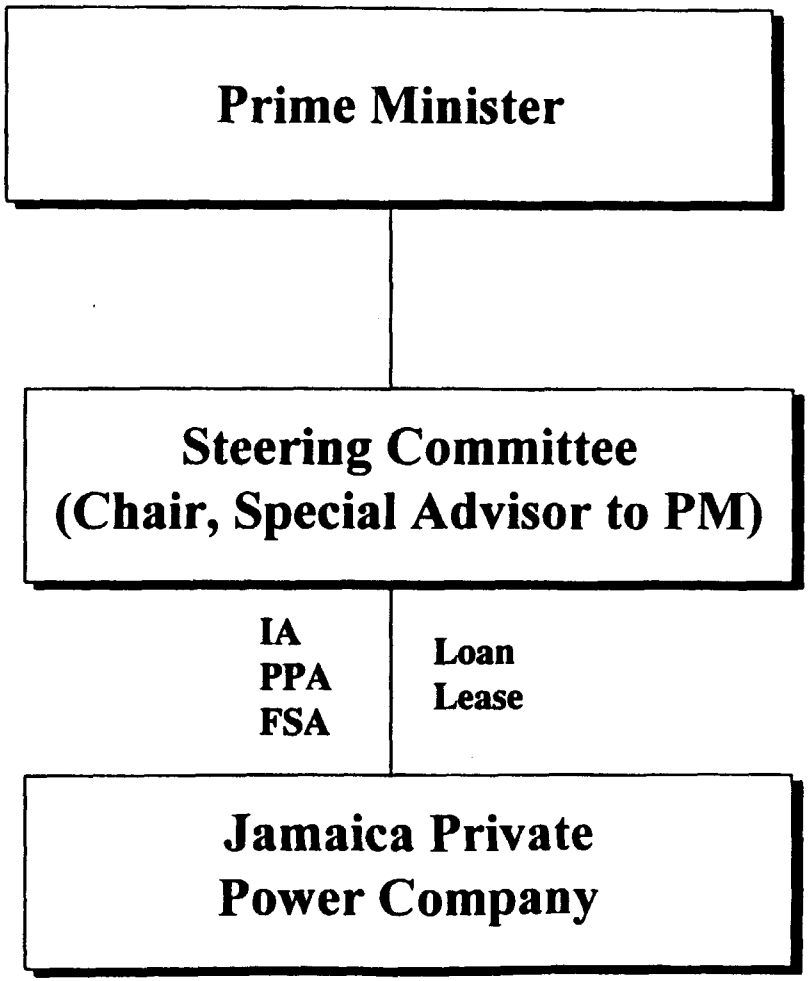


PROYECTO DE DIESEL DE ROCKFORT

Razones del éxito

- Apoyo gubernamental unánime
- El Gobierno se organizó antes de las discusiones con los patrocinadores.
- Usó una solicitud de propuestas para definir las ofertas y limitar las negociaciones.
- Seleccionó patrocinadores experimentados.
- Apoyo considerable del Banco Mundial y del BID.
- Financiamiento relativamente pequeño.

JAMAICA ROCKFORT PROJECT ORGANIZATION



PROJECTO DIESEL ROCKFORT
INCENTIVOS DEL GOBIERNO DE JAMAICA

- Exención de impuestos
- Ayuda con los permisos
- Carta de crédito
- Protección contra fluctuaciones en el tipo de cambio y indisponibilidad de divisas
- Pagos durante una fuerza mayor política
- Garantía de cumplimiento del Gobierno de Jamaica

ROCKFORT DIESEL PROJECT
FINANCING PLAN

	Base Funding	Additional Standby Funds	Total Available Funding
Pre-Takeout			
2-year Bond Proceeds	$ 41,000,000	$ 0	$ 41,000,000
5-year 936 Proceeds	$ 81,000,000	$ 4,764,995	$ 81,000,000
Total 936 Issuance	$122,000,000	$ 4,764,995	$122,000,000
Additional Cash Equity	$ 0	$ 2,200,000	$ 2,200,000
Post-Takeout			
WB/IDB Private Sector Energy Fund Term Loan	$ 81,000,000	$ 0	$ 81,000,000
Term Loan	$ 14,000,000	$ 5,800,000	$ 19,800,000
CDC Equity	$ 41,000,000	$ 2,200,000	$ 43,200,000
Total Funding	$136,000,000	$ 8,000,000	$144,000,000

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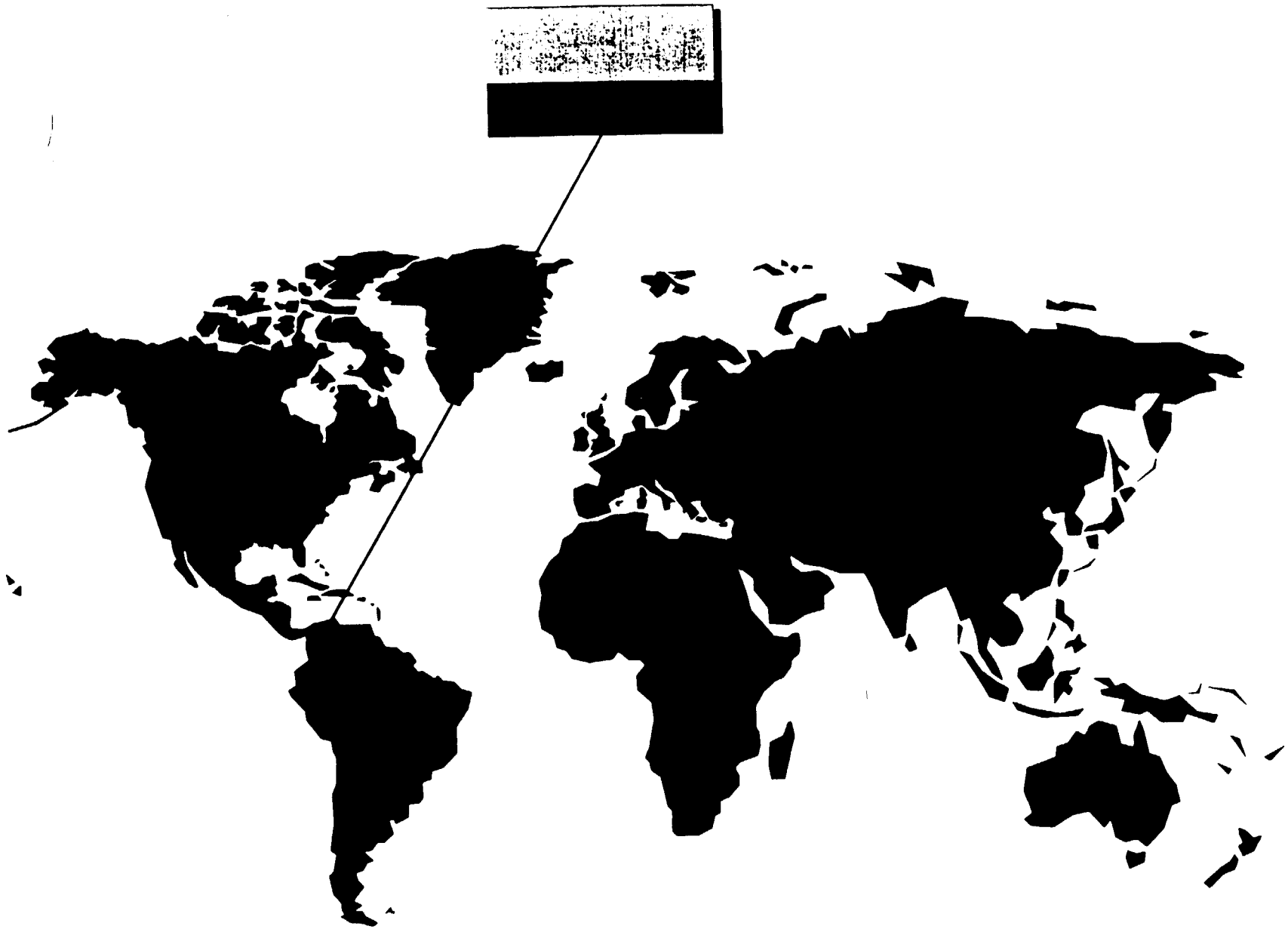
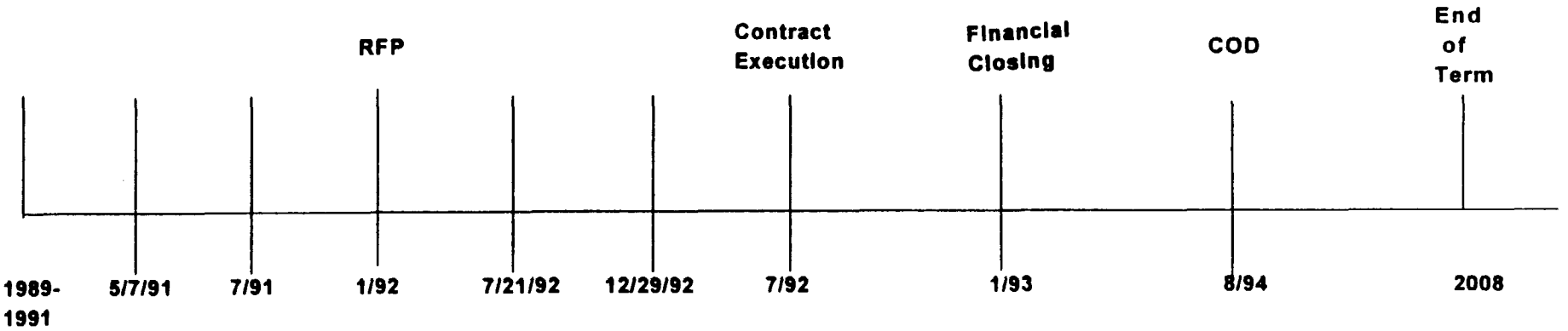


MAMONAL PROJECT
PROCEDURE AND TIMELINE



PROYECTO ELECTRICO MAMONAL

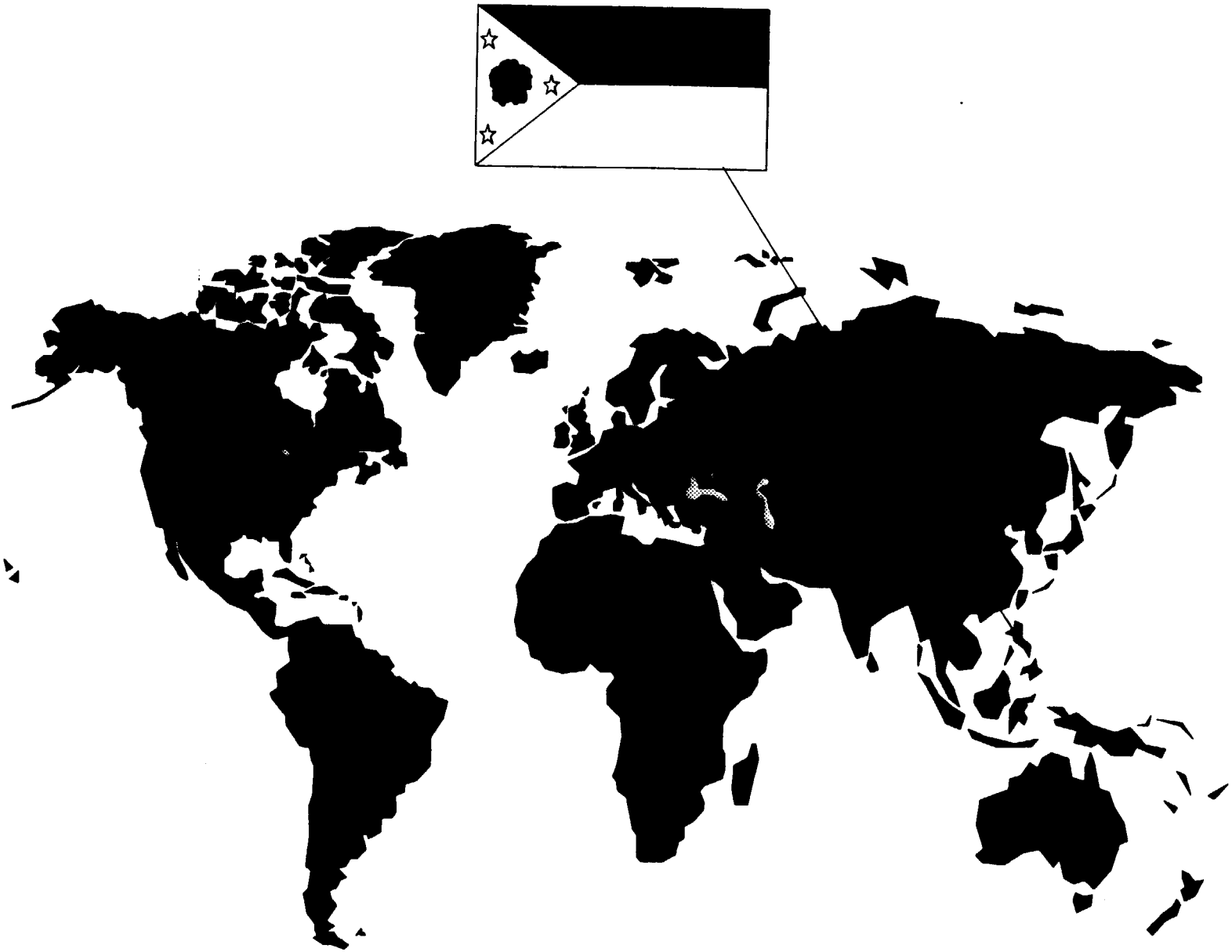
Razones del éxito

- Electricidad comprada por 23 clientes industriales solventes en vez de la empresa de servicio público nacional.
- El contratista de construcción corrió el riesgo de la construcción.
- Pagos hechos a los patrocinadores en moneda dura.
- Plan de financiamiento simple.

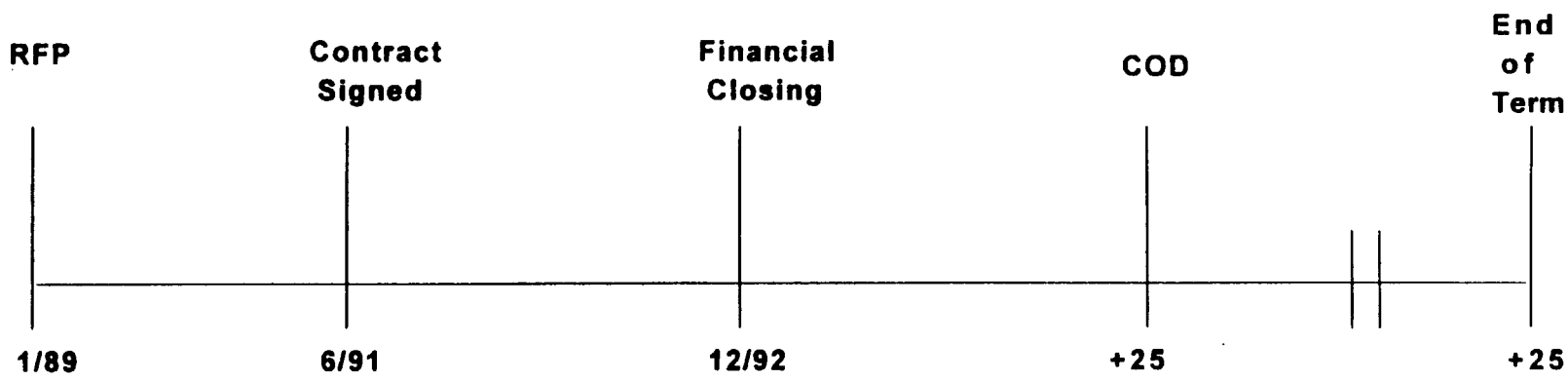
MAMONAL POWER PROJECT

Financing Plan

		US$ Million
Equity		14
Debt		
Commercial Bank Loan	21	
OPIC Financing	35	
		56
Total		70



PAGBILAO PROJECT
PROCEDURE AND TIMELINE



PROYECTO PAGBILAO

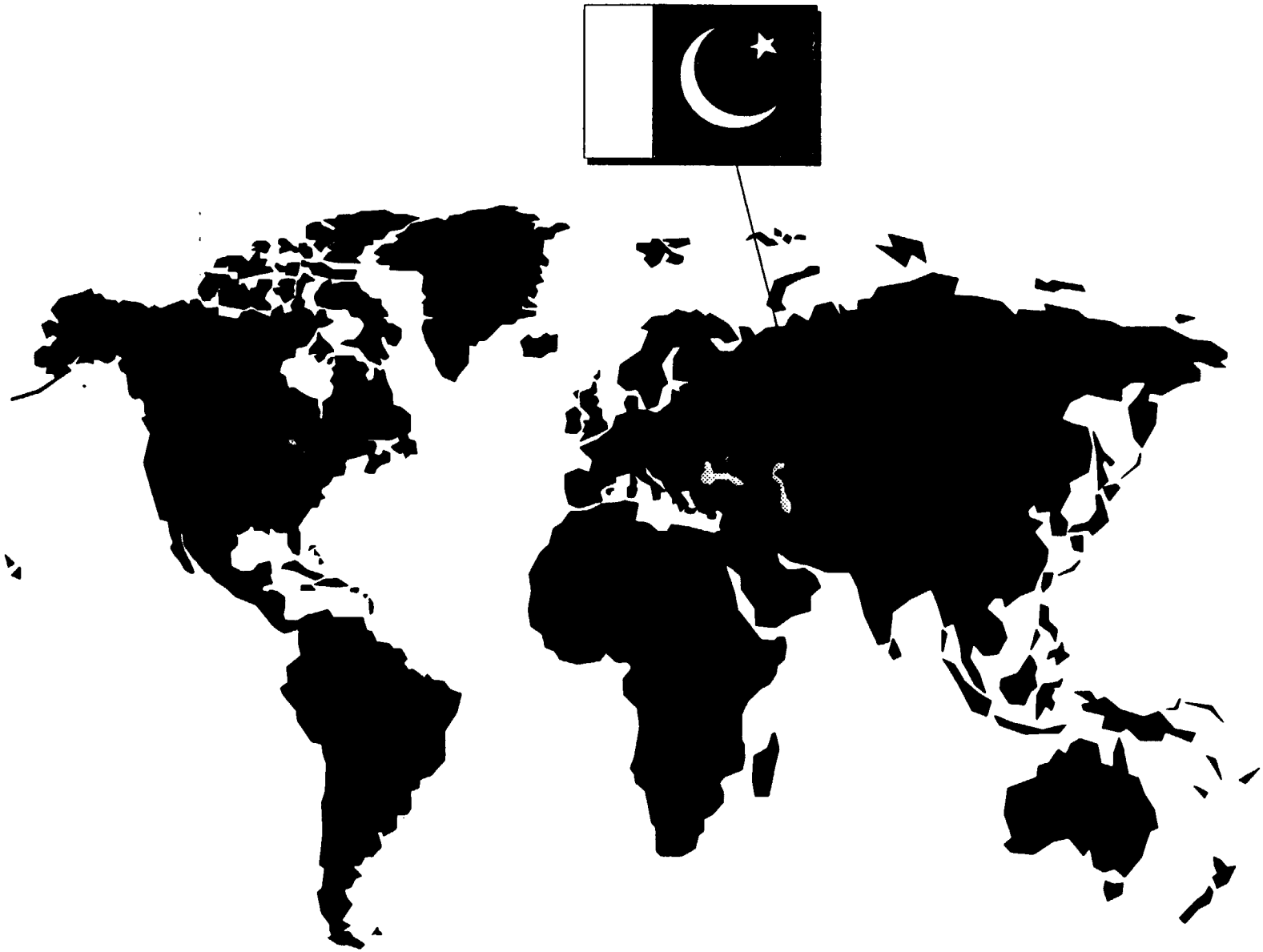
Razones del éxito

- NPC le proporcionó la tierra y el combustible al promotor durante la duración del proyecto.
- NPC hizo todos los pagos por electricidad en dólares de los EE.UU. a una cuenta exterior.
- NPC compró el promotor después de una fuerza mayor política.
- El Gobierno garantizó todos los pagos y las obligaciones de suministro de combustible de NPC.
- Participación de la CIF.

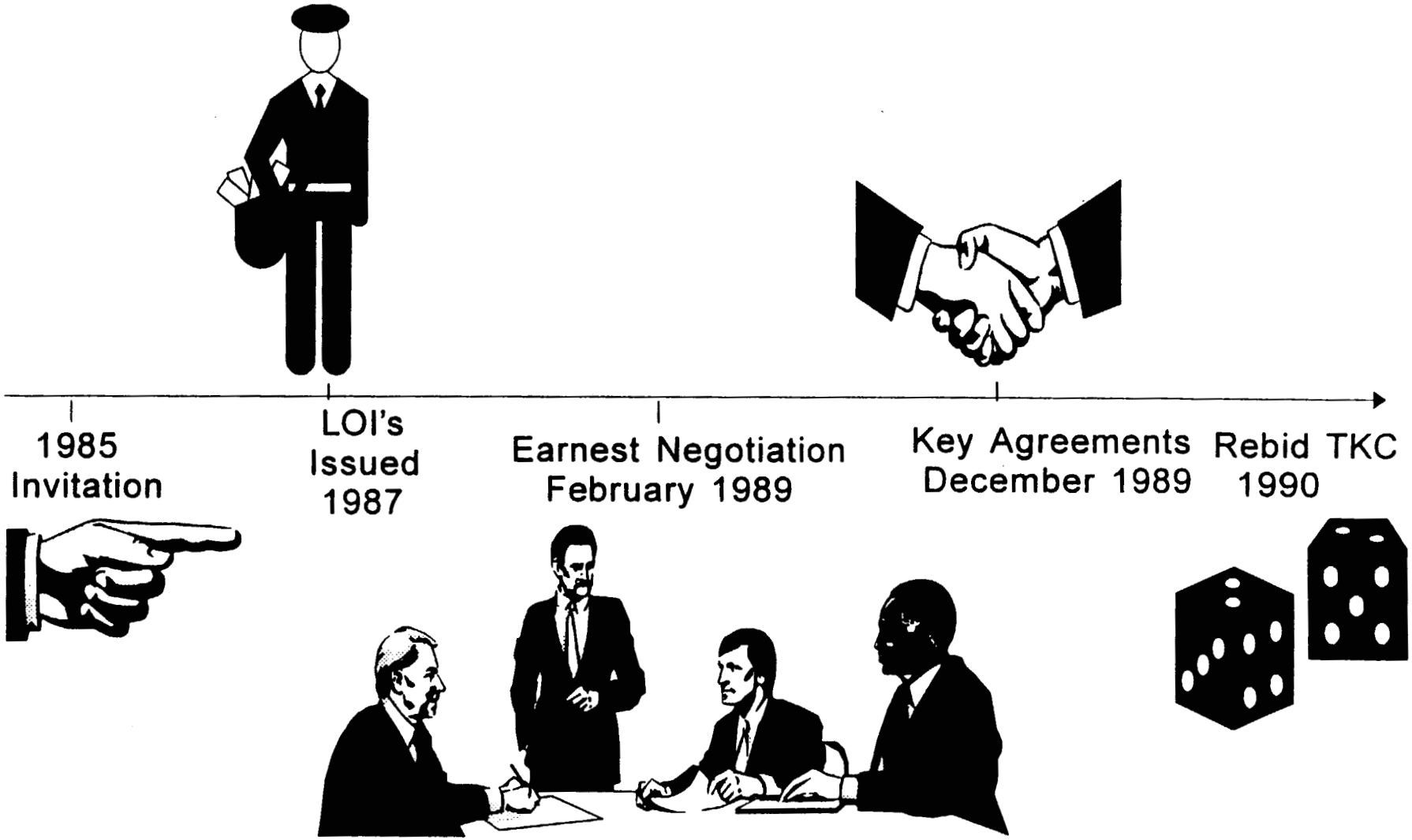
PAGBILAO PROJECT

FINANCING PLAN

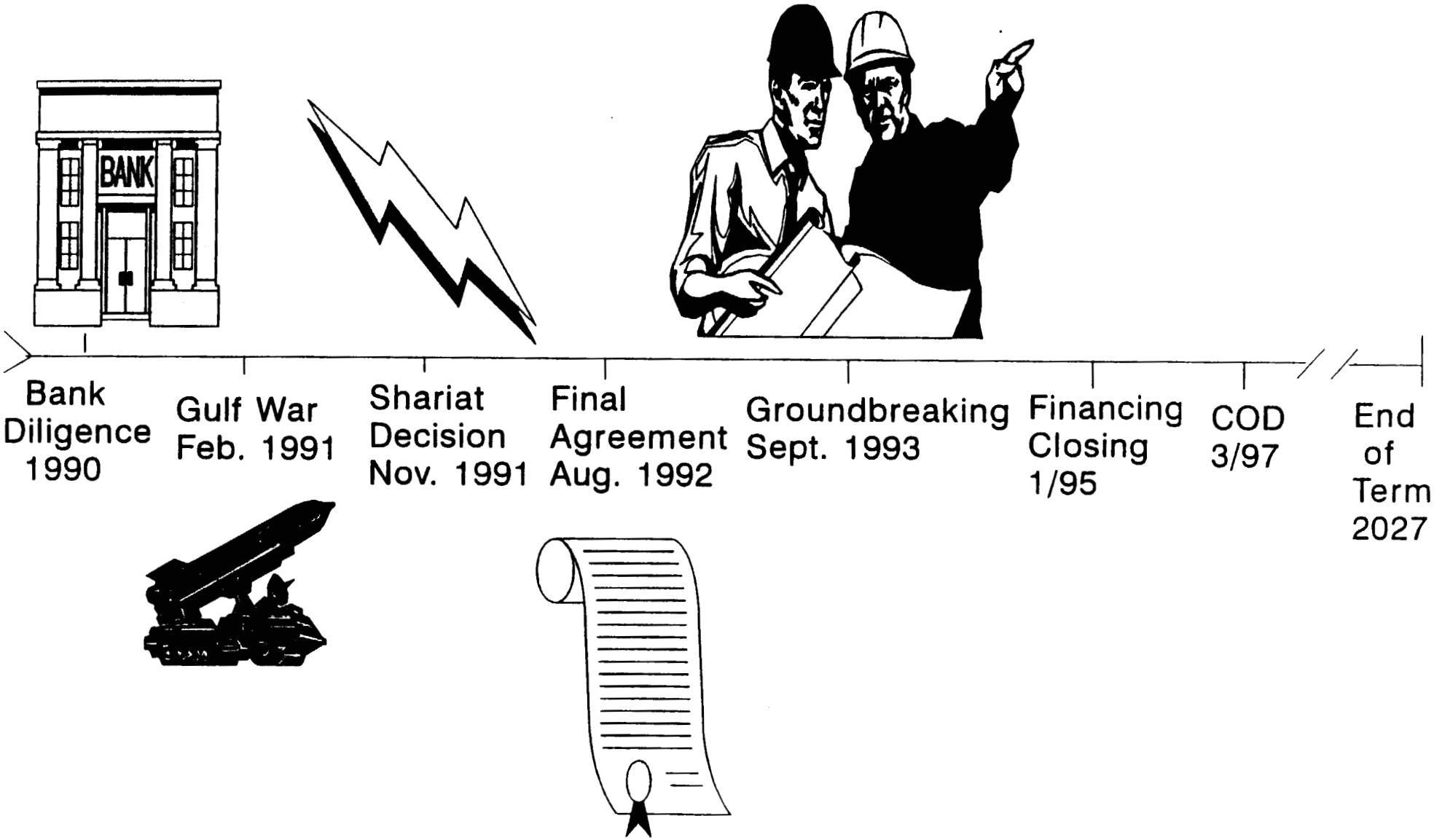
Debt	US$ Million
Export Agency Credit	535.0
IFC	60.0
ADB	40.0
CDC	35.0
Other Loans	18.0
Total Debt	688.0
Equity	
Hopewell Energy International Limited	200.0
IFC	10.0
ADB	10.0
CDC	10.0
Total Equity	230.0
Total	918.0



HUB TIMELINE



HUB TIMELINE



PROYECTO ELECTRICO HUB

Razones de éxito

- Gran porcentaje de la capacidad del país.
- Incentivos gubernamentales considerables.
- Técnicas innovadoras de financiamiento del Banco Mundial.

PROYECTO ELECTRICO HUB

Incentivos del Gobierno de Pakistán

- Ayuda con los permisos.
- Extensiones de los derechos de aduana e impuestos.
- Protección contra la fuerza mayor política.
- Seguro contra riesgos de cambio.
- Conversión libre y transferencia de divisas.
- Carta de crédito.
- Ley gobernante neutral y arbitraje neutral.
- Garantía de cumplimiento del Gobierno de Pakistán.

PROPOSED FINANCING PLAN
(US $ MILLIONS)

EQUITY	$ 380
DEBT	$1501
TOTAL	$1882

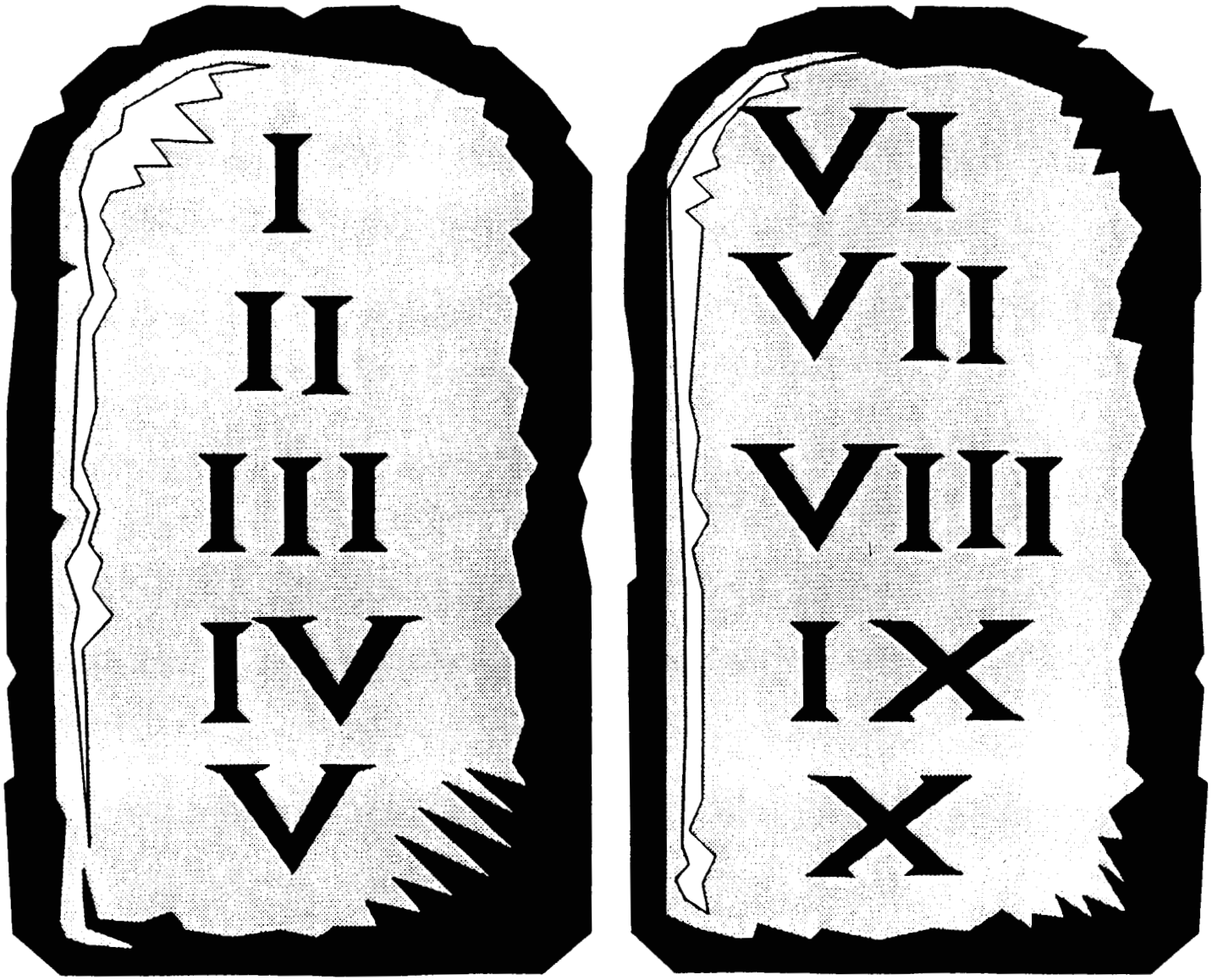
PROPOSED FINANCING PLAN
EQUITY

	(US $Millions)
FOREIGN	
HUBCO & Other Committed	$136
Other	$144
LOCAL	
HUBCO Convertible Bonds	$100
TOTAL EQUITY	$380

PROPOSED FINANCING PLAN
EQUITY

	(US $Millions)
FOREIGN	
CDC	$42
PSEDF	$415
ECO	$360
ECA's	$318
Other	$178
LOCAL	
Banks	$188
TOTAL DEBT	$1,501

TEN COMMANDMENTS



LOS DIEZ MANDAMIENTOS

1. No subestimarás.
2. Organizarás.
3. Escogerás un equipo bueno.
4. No enfatizarás la importancia del LOI.
5. Prepararás con anticipación.
6. Serás consistente.
7. No codiciarás el dinero de tu vecino.
8. Dividirás los riesgos.
9. No demorarás.
10. Confiarás en tu promotor.

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JOHN L. SACHS

Mr. Sachs is a partner in the Washington, D.C. office of the international law firm of Latham & Watkins. For over ten years, he has specialized in the privatization of electric generation around the world. He represents foreign governments and their national utilities as well as private investors with respect to privatization issues and private power projects in the United States, South and Central America, Asia, Eastern Europe and the New Independent States. In addition, he has advised on the restructuring of the electric generating industry in the United States and abroad and on the creation or modification of legal and regulatory frameworks.

Among the governments and utilities Mr. Sachs has advised are the governments and utilities of Jamaica, Poland, Russia, the Ukraine, Pakistan, India, Thailand and the Philippines. More specifically, Mr. Sachs represented the Government of Jamaica and the Jamaica Public Service Company Limited in the structuring of a private power program and the negotiation of the project and financing agreements for three private power projects. In Poland, Mr. Sachs is assisting the Polish Power Grid Company in negotiations with private developers and in the development of a private power program. Mr. Sachs has also been the lead negotiator for the Government of Pakistan and the Pakistan Water and Power Development Authority with respect to the development and financing of the largest build-own-operate energy project in the world, the 1200 MW Hub Power Project.

Mr. Sachs also represents a variety of corporate developers in connection with the development of all types of energy projects. Overseas, he has acted for private investors in the Argentina, Brazil, Bolivia, Venezuela, Mexico, the Philippines, Indonesia, India, Pakistan and Canada. In the United States, he has assisted clients in winning contracts for over 3000 MW of new generating capacity, and he has represented these clients in the structuring of their projects, the negotiation of the project agreements, the procurement of governmental approvals and the negotiation of loan documentation. He has also counseled demand side management companies in both competitive and non-competitive situations.

Previously, Mr. Sachs served as a judicial law clerk to the Honorable Charles R. Richey, a federal district court judge in Washington, D.C. He graduated from Harvard Law School and was a magna cum laude graduate of Yale College.