FINAL REPORT

PN-ACS-065
118900

TECHNICAL ASSISTANCE OPTIONS REPORT FOR DRAFTING IMPLEMENTING RULES AND REGULATIONS IN THE PHILIPPINES

CENTER FOR ENVIRONMENT

Office of Energy, Environment, and Technology

MARCH 10, 1999

Bechtel National, Inc.

23865-211-034-0001

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TABLE OF CONTENTS

ACRONYMS ii

I. INTRODUCTION 1

II. COMMENTS ON THE STATEMENT OF WORK 3

III. TECHNICAL ASSISTANCE OPTIONS 3

1. Prior to Finalization of Legislation 4
   1.1 Option 1 – Part-Time Team Leader and ERB Liaison 4
   1.2 Option 2 - Policy Papers 5
   1.3 Option 3 – Draft IRRs 7
2. IRR Activities in First 12 Months upon Passage of Omnibus Energy Act 7

IV. HOUSE BILL No. 4579 11

1. Major Policy Issues 11
   1.1 STRANDED COSTS 11
   1.2 ANTI-TRUST/COMPETITION/CROSS-OWNERSHIP 12
   1.3 MARKET OPERATION 13
   1.4 DIRECT RETAIL ACCESS/FRANCHISE AREAS/RETAIL COMPETITION 13
   1.5 REGULATORY INDEPENDENCE AND AUTHORITY 14
   1.6 INCENTIVES 15
   1.7 THE PROVISION OF PUBLIC GOODS 15
2. Section by Section Analysis 21
   2.1 SECTION 6. POWERS AND FUNCTIONS OF DOE 21
   2.2 SECTION 7. GENERATION 23
   2.3 SECTION 8. TRANSMISSION 23
   2.4 SECTION 9. DISTRIBUTION AND SUPPLY 24
   2.5 SECTION 10. PERFORMANCE STANDARDS 24
   2.6 SECTION 11. ELECTRICITY SPOT MARKET AND DISPATCH OPERATIONS 24
   2.7 SECTION 12. REGULATION OF THE ELECTRIC POWER INDUSTRY 24
   2.8 SECTION 13. MARKET DOMINATION AND ANTI-COMPETITIVE BEHAVIOR 25
   2.9 SECTION 14. FINES AND PENALTIES 26
   2.10 SECTION 17. NPC RESTRUCTURING AND PRIVATIZATION 26
   2.11 SECTION 19 - 26. CEMSCO 27
   2.12 SECTION 28. REPORTORIAL REQUIREMENTS 29
   2.13 SECTION 37. MODEL SUPPLY CONTRACT 30
   2.14 SECTION 41. REPEALING CLAUSE 30
   2.15 LEGAL RIGHTS 30

V. INITIAL COMMENTS ON THE PHILIPPINES GRID CODE 31

1. Introduction and Background 31
2. Comments 31
   2.1 Technical Aspects 31
   2.2 Data and Information Aspects 32

VI. INITIAL COMMENTS ON THE PHILIPPINES MARKET RULES 33

1. Introduction and Background 33
2. Comments 33
   2.1 Omissions from the Draft Market Rules 33
   2.2 Additional Inputs to the Draft Market Rules 34

VII. TRANSITIONING 35

Attachment A 38

ACRONYMS

CCN	Cooperating Country National
CEMSCO	Countrywide Electrification and Missionary Service Company
DOE	Philippine's Department of Energy
ECAs	Energy Conversion Agreements
ERB	Energy Regulatory Board
GOP	Government of Philippines
IRRs	Implementing Rules and Regulations
NPC	National Power Corporation
NTC	National Transmission Company
PEM	Philippine Electricity Market
PEP	Philippine Electricity Pool
SOW	Statement of Work
TA	Technical Assistance
USAID	US Agency for International Development

I. INTRODUCTION

A team of experts sponsored by the United States Agency for International Development (USAID) visited the Philippines between 1/27/99 and 2/5/99 to work alongside representatives of the Philippine's Department of Energy (DOE), its related agencies and corporations and the Energy Regulatory Board (ERB). The team's mandate was to review the proposed Omnibus Bill and draft codes and to develop technical assistance (TA) options to be used by USAID in assisting the Government of the Philippines (GOP) in drafting Implementing Rules and Regulations (IRRs).

The mission began with a review of all outstanding versions of the proposed bill with the team concentrating on House Bill No. 4579 at the request of DOE[1]. The team reviewed the Bill in light of DOE's six policy declarations:

1. Ensure and accelerate the total electrification of the country.
2. Ensure the quality, reliability, security and affordability of the supply of electric power.
3. Promote competition and accountability of industry participants to achieve greater operational and economic efficiency.
4. Enhance the inflow of private capital and broaden the ownership base of the power generation, transmission and distribution sectors and minimize the financial risk exposures of the Government.
5. Rationalize and make electricity prices competitive and transparent; and,
6. Assure socially and environmentally compatible energy resources and infrastructure.

The policy statements set forth in the Bill paint a vision of a greatly transformed electricity sector in the Philippines. It is one in which major efficiencies in the production, transmission and distribution of energy will be achieved through competition in generation, proper incentives to regulated segments and correct tariffs. Because prices will reflect the real costs of electricity to the Philippines, private investment will flow into the electricity sector, and there will be more renewable energy feeding not only rural areas needing electricity for economic uplift but industries hungry for efficient and reliable power. Furthermore, even though more abundant electricity feeds the economic growth of the country, electricity will not be wasted because of the deliberate attempt to incorporate energy efficiency in all areas.

This picture of success will not come about in a happenstance manner. It will be directly facilitated by the Omnibus Bill and engineered and implemented through consistent IRRs. The Omnibus Bill attempts to address these multiple issues, and, while it does a good job, there are gaps and inconsistencies which can only be addressed by understanding that these policy statements do not stand alone by themselves but are highly interrelated. Some of these issues can be addressed by

[1] This is the version favored by DOE to pass the House. It differs from the Senate bill in several key ways that will impact drafting IRRs and this will be discussed in a subsequent section of the report.

minor adjustments in the Bill's language, while others will require additions to the Bill and strong direct policy guidance. Thus, only some of the IRRs can be written at this time with comparatively minor input. Others will require the GOP to take make minor policy decisions, and yet, others will require the GOP to make major policy decisions.

In reviewing the Bill (and the analogous Senate (Osmena) Bills), we start from the perspective that any electricity sector restructuring law should address clearly three important and interrelated topics:

1. The structure of the industry (e.g., competitive generation model? single buyer? open access? fully regulated?);
2. The roles of each participant (including policy makers, regulators, competitive and regulated entities, and customers); and
3. Transition and implementation issues (e.g., timing of the transition to the newly restructured sector; responsibility, timing and scope of implementing rules and regulations; special provisions to ease impacts on certain classes of ratepayers or other materially impacted participants).

Likewise, in keeping with Philippine legislative and legal practices, the proposed legislation should mandate broad policy decisions but should delegate the definition of details to the designated implementing entities - except when such brevity would conflict with the Bill's policy objectives. The details of the IRRs should not appear in the legislation itself. It will be important to consider issues of sequencing as the IRRs relate to the Bill. For instance, it may be important that IRRs be drafted and adopted before provisions of the Bill on *Stranded Costs* and *Cross Ownership* take effect legally. Similarly, regulations on the creation of the market should be clear before implementing provisions take effect.

By these criteria, the Bill is commendable. The draft law, in general, articulates the new industry structure, the responsibility of the players (especially the DOE), and provides some guidance for implementation and transition. However, there are features of the Bill, such as clarification of the roles of the policy maker and regulator, and transition and phase-in provisions that mandate further revision of the existing draft.

Detailed comments on House Bill No. 4579 are provided against this backdrop and are presented later in this report. The following section focuses on the options for technical assistance given the team's analysis; the proposed laws; the current institutional capacity of the various actors; and the need for sector reform. While the Philippines has come a long way, there is still much which must be done prior to the passage of the law and prior to the restructuring of the industry. In addition to the technical assistance options given in this paper, a level of effort budget measured in person-days is presented by area and/or activity for the first six months.

II. COMMENTS ON THE STATEMENT OF WORK

The statement of work (SOW) envisioned the design team would work closely with IRR subcommittees. While this was the logical course, it quickly became clear that this would not work. Many of the subcommittee had not met and others were not in a position to discuss policies crucial to the drafting of the IRRs. This has a profound impact on the design of activities and the subsequent cost of any USAID intervention. In essence, any intervention to assist the GOP in drafting IRRs will require additional preliminary effort in helping the GOP arrive at certain policy decisions.

The SOW called upon the contractor to develop budgets for various intervention options. Given the expanded scope of any assistance activities and USAID-Manila's desire to use a wide variety of contractual vehicles to service the IRR related activities, it was decided that the contractor should submit only level of effort budgets for any options as the actual cost of each option would vary by contractual vehicle. Similarly, it is envisioned that technical assistance will be provided by a variety of regulatory, economic, legal, utility and policy specialists. The exact distribution of effort will depend upon the contractual vehicle used and the substantive areas addressed.

III. TECHNICAL ASSISTANCE OPTIONS

The team, in reviewing the proposed legislation, grouped the supporting rules and regulations into those that (1) could be drafted with no or minimal input, (2) required minor policy input, the policy is either known or can be decided on the basis of existing policies, and (3) areas where important policy decisions had not yet been made or articulated. The result of this grouping is presented in tabular form at the end of this section (see Table 1). This table presents the team's assessment of proposed House Bill No. 4579, major gaps in the DOE outline of IRRs and the GOP's ability to write IRRs. The team has attempted to assign responsibility for the drafting of IRRs between the GOP (G) solely and the team and GOP (J) jointly. Moreover, a time path for assistance was established, breaking down interventions into three periods:

1. work to be completed prior to the passage of the law such as draft IRRs and policy papers;
2. work to be completed in the first twelve months after the passage of the law such as finalization of IRRs and transition assistance; and,
3. work to be completed after the IRRs are in place or technical assistance for implementation in the next eighteen months.

The options for USAID to consider are: (1) how many activities to undertake in a time frame (the time frames being until the passage of the law and twelve months after passage; and (2) in how many time periods to provide assistance. Since USAID has many different mechanisms to provide technical assistance, this report presents the budget on the basis of person days without specific reference to costs.

A two pronged approach is recommended which will provide assistance in drafting IRRs in areas where minimal policy input or clarification is needed, while concurrently developing a series of white papers in key policy areas that need resolution. Once a policy decision has been reached in each policy area, then drafting of that relevant section of the IRRs could begin. The following steps are proposed and are based on the assumption that a Bill would not be finalized until at least July 1999.

1. Prior to Finalization of Legislation

Prior to finalization of legislation, a number of options exist for USAID sponsored technical assistance activities. It is anticipated that all three options presented below will take approximately six months.

1.1 Option 1 – Part-Time Team Leader and ERB Liaison[2]

This technical assistance process is complex, given the number of issues, many of which are intertwined, and the number of potential actors involved. To facilitate the flow of information and assistance, to ensure that DOE and ERB work jointly where required and to sensitize the technical assistance team to important issues, the following management structure is proposed as illustrated in the attached diagram (Attachment A). It is proposed that a resident advisor, in-country technical assistance focal point be assigned who will also act as the technical assistance task leader in coordinating the technical assistance services with DOE.

It was apparent from the team's initial visit that this process overwhelms the DOE. Many of the IRR drafting subcommittees had not met prior to our arrival and others were unable to answer routine policy questions that must be addressed prior to the drafting process. It is the expert opinion of the team and USAID - Manila that an on-the-ground facilitator is required. The facilitator will have several roles but on a part-time basis and will be a person already resident in Manila and fully immersed in the electricity sector.

First, the in country task leader develops a transition flow chart to establish priorities and steps as the country transitions to the vision outlined in House Bill No. 4579. This chart will be developed in consultation with the DOE, the National Power Corporation (NPC) and other important participants. The transition flow chart will plot the course of implementing the Bill and the privatization and restructuring plans. It will serve as a guide for the technical assistance, a guide to DOE in marshaling its resources in fulfillment of the restructuring and as a tool to map additional bilateral and multilateral assistance to assist the GOP in implementing the program.

[2] As per DOE's concern, this position will be filled by two persons – one to provide overall task direction and liaison with the DOE and the other to act as ERB liaison.

Secondly, the task leader will serve as the focal point for questions, comments and/or concerns on the technical assistance. He will serve as the liaison between the GOP and the technical assistance team. Cooperating Country Nationals (CCN's) will provide logistics and administration. The following presents the role of the team leader in the first six months:

IRR Committee Support

- Dialog regarding White Papers
  - Facilitated by Team Leader and may include:
    - Exchange of e-mail with certain USAID Experts
    - In-person visit for a week of meetings by certain USAID Experts
    - Consultations with USAID local experts
- Review NPC privatization plans for implications on IRR's and industry structure. DOE has requested: Specifically for the NPC privatization, the technical assistance team may provide the DOE with a discussion paper that would include recommendation on the appropriate timetable, bidding and evaluation processes and statement of procedures. For reasons of sensitivity, however, we exclude details on pricing and valuation of the NPC generating companies.
- Assist Committees in Drafting IRR's
  - Facilitated by Team Leader and may consist of:
    - Preparation of outline
    - Writing certain specified sections
    - Review and comment on Committee's work
    - Inputs from expatriates and locals

Budget
It is estimated that the combined functions of the team leader and the ERB liaison will require 80 person days over the first six-month period.

1.2 Option 2 - Policy Papers

The technical assistance team will prepare research papers in the US on selected areas where major policy decisions are needed. These papers will take place in the first six months and possibly cover:

Topic	Priority
Anti-trust/competition/cross ownership	1
Market Operations	1
Stranded Costs	2
Public Goods	2
Regulatory Issues	3
Retail Competition	3

These papers will compare and contrast how each of these issues has been dealt with in other countries and detail the pros and cons of each approach within the Philippine context. The papers will also show how this topic is intertwined throughout the structure of the industry, the drafting of IRRs, and implementation. These papers will then be made available to the DOE for dissemination to all concerned parties and the consultants will hold a workshop in the Philippines to answer questions and solicit stakeholder concurrence.

The development and finalization of each paper follows the same basic six-step plan.

Step 1: The paper is developed in the US and forwarded to the Philippines to be shared with the GOP.

Step 2: The draft paper is then sent to Philippines energy experts for their review (under supervision of the team leader).

Step 3: The comments are incorporated into the draft and the paper finalized.

Step 4: The team leader coordinates a review of the paper by the GOP.

Step 5: The consultant travels to Manila to hold a workshop with GOP officials.

Step 6: The process culminates in either or both a policy stance by the DOE/ERB on the issue and/or the incorporation of concrete action in the law.

It is anticipated that anti-trust/cross ownership and market operations will require more resources than the other policy areas because, in the case of antitrust, no master legislation exists and, in the case of market operations, it is a new and pivotal topic. Thus, more person days must be dedicated to these papers. The table below presents the budget allocation for each of the policy areas. These estimates exclude the team leader's time.

Budget

Policy Area	Expatriate Person Days	CCN Person Days	Admin/Logistic Person Days	Number of Trips
Antitrust	50	16	8	1
Market Operations	60	21	21	3
Stranded Costs	22	8	8	1
Public Goods	22	8	8	1
Retail Competition	22	8	8	1
Regulatory Issues	22	8	8	1
Total	**198**	**69**	**61**	**8**

1.3 Option 3 – Draft IRRs

It is anticipated that many of the IRRs can be drafted in the six months prior to finalization of the law. This will, of course, depend upon a number of factors including the number of areas undertaken exclusively by the GOP, the resources that DOE and ERB are willing to commit to working with the technical assistance team in drafting IRRs and the finalization of policy issues.

Budget
For each major IRR section it is anticipated that an average total of 18 person days will be required to prepare comprehensive IRRs and present those of other countries within the Philippine context, and a one 1-week trip by each consultant. This does not include local administrative resources.

2. IRR Activities in First 12 Months upon Passage of Omnibus Energy Act

Technical assistance activities to be completed in the first twelve months after the passage of the Omnibus Energy Act and as part of the development of the final IRRs would include the following:

- Assist DOE in the re-drafting of IRR's based on the legislative requirements
  - This may include:
    - Exchange of e-mail with certain USAID Experts
    - In-person visit for week of meetings by certain USAID Experts
    - Drafting of particular sections of IRR's for which policy decision were required and which were not drafted in the first six month period.
- Assist DOE in the design of the consultative process with stakeholders outside of Government Agencies
- Conduct, as lead entity but with DOE participation, the consultative process regarding non-ERB jurisdictional IRR's and provide discussion papers to DOE regarding the results and implications of the consultations.
- ERB to conduct separate public hearings and/or collaboratives under the pre-hearing rules, regarding tariffs, to be monitored by USAID Team for implications on DOE IRR's.
- Assist DOE in formulating final policy positions and final IRR's

Budget
For each major IRR section it is anticipated that an average total of 12 person days will be required to finalize the IRRs. In addition, this finalization would require one 1-week trip by each consultant. This does not include local administrative resources.

The team leader is an important part of this process and it is estimated that 88 person days will be required.

Table 1

	Implementing Rules and Regulations	Minimal Input Proforma	Minor Policy Input	Major Policy Decision	Written By
	GENERAL PROVISIONS				
Rule 120	Basic Guidelines				G
120.1	Generation Subsector	X			G
120.2	Transmission Subsector	X			G
120.3	Distribution Subsector	X			G
120.4	Supplier Subsector	X			G
120.5	Electricity Spot Market and Dispatch Operation			X	J
120.6	Market Domination and Anti-Competitive Behavior			X	J
120.7	NPC Privatization			X	J
120.8	Environmental Guidelines			X	J
	GENERATION SUB-SECTOR				
Rule 200	Issuance of Operating Permits (licensing)	X			J
200.1	General Procedures for Application	X			J
200.2	Qualifications	X			J
200.3	Obligation	X			J
200.4	Terms and Conditions for Operating Permit	X			G
Rule 210	Reporting Requirements	X			G
Rule 220	Requirement and Guidelines for the Issuance of Stock	X			G
Rule 230	Incentives, Fines and Penalties	**Partial/In progress**			
	TRANSMISSION SUB-SECTOR				
Rule 300	National Grid Code	**In progress**			
300.1	Technical Performance and Service Standards	**In progress**			
300.2	Incentives, Fines and Penalties	X			G
Rule 310	National Transmission Company			X	J
310.1	Transmission Provider				
310.1.1	Obligation				
310.1.2	Scope of Application				
310.1.3	Compliance with Grid Code				
310.1.4	Reportorial Requirements				
310.2	System Operator			X	J
310.2.1	Obligation				
310.2.2	Scope of Application				
310.2.3	Statement of Charges (Wheeling Tariffs)				
310.2.4	Reportorial Requirements				
310.2.5	Compliance with Grid Code				
310.3	Market Operator			X	J
310.3.1	Obligation				
310.3.2	Scope of Application				
310.3.3	Compliance with Grid Code and Market Pool Rules				

	Implementing Rules and Regulations	Minimal Input Proforma	Minor Policy Input	Major Policy Decision	Written By
310.3.4	Reportorial Requirements				
Rule 320	Price Regulation		X		J
320.1	Wheeling Tariffs and Charges		X		J
320.2	Ancillary Tariffs and Charges		X		J
Rule 330	Franchising and Licensing	X			G
330.1	General Procedures for Application	X			G
330.2	Qualifications	X			G
330.3	Terms and Conditions	X			G
330.4	Reportorial Requirements	X			G
	DISTRIBUTION AND SUPPLIER SUB-SECTOR				
Rule 400	Distribution Code	**In progress**			G
400.1	Technical Performance and Service Standards	**In progress**			G
400.2	Incentives, Fines and Penalties	X			G
Rule 410	Franchising and Licensing				
410.1	Franchising of Distribution Utilities				
410.1.1	General Procedures for Application	X			G
410.1.2	Qualifications	X			G
410.1.3	Terms and Conditions	X			G
410.1.4	Reportorial Requirements	X			G
410.2	Franchising of Suppliers				
410.2.1	General Procedures for Application	X			G
410.2.2	Qualifications	X			G
410.2.3	Terms and Conditions	X			G
410.2.4	Reportorial Requirements	X			G
Rule 420	Price Regulation		X		J
420.1	Wheeling Tariffs and Charges		X		J
420.2	Retail Tariffs and Charges		X		J
Rule 430	Obligation of End Users		X		J
Rule 440	Review of Integrated Resource Plan			X	G
	ELECTRICITY SPOT MARKET AND DISPATCH			X	J
Rule 500	Electricity Spot Market				
510.1	Organization of the Spot				
510.2	Administration of the Market				
510.3	By Law of the Spot Market				
510.4	General Procedures/Guidelines for Establishing a Market Clearing Price				

Implementing Rules and Regulations	Minimal Input Proforma	Minor Policy Input	Major Policy Decision	Written By
MARKET DOMINATION AND ANTI-COMPETITIVE BEHAVIOR			X	J
610 Market Domination				
610.1 General Rules and Guidelines				
610.2 Applicability				
610.3 Cross Ownership Provisions				
610.4 Disposition of Assets in Divestiture				
620 Anticompetitive Behavior			X	
620.1 General Rules and Guidelines				
620.2 Applicability				
PUBLIC GOODS				
800 Missionary Electrification		X		J
810 Indigenous Energy Resources		X		G
820 Energy Efficiency			X	J
830 Cross Subsidy Removal Mitigation		X		J
840 Employee Benefits	X			G
900 RECOVERY OF STRANDED ASSETS			X	J
PLANNING				
1000 Distribution Development Plans		X		G
1010 Transmission Development Plans		X		G
1020 Power Development Plan		X		G
1030 CEMSCO Development Plan		X		G
1040 Desirable Technology and Fuel Mix		X		J
1050 Resource Plan Integration		X		J
INCENTIVES, FINES AND PENALTIES				
1100 Tax and Duty Incentives			X	J
1110 Universal Levy			X	J
1120 Tariffs			X	J
1130 Fuel Mix			X	J
1140 Dispatch			X	J
1150 DSM Cost Recovery			X	J
1160 Trading			X	J
1170 Fines and Penalties		X		G
1200 RETAIL COMPETITION			X	J

IV. HOUSE BILL No. 4579

1. Major Policy Issues

1.1 STRANDED COSTS

Calculation, mitigation, assignment of responsibility for, and collection of, stranded costs are core components of any restructuring plan. Failure to deal with the issue clearly and fairly can impair either successful privatization, hurt ratepayers, burden Government balance sheets or credit ratings, or all of the foregoing. The Bill, while generally providing for the recovery of stranded costs from ratepayers (Section 12(l)(4)), does not address these critical issues in detail. Moreover, the Bill limits stranded cost recovery only to the National Power Corporation (NPC) and not the stranded costs that investor-owned utilities may incur through restructuring. The drafters of the bill should amend these provisions to

- define more clearly stranded costs;
- require mitigation of such costs to the maximum extent feasible (perhaps by creating incentive programs for affected entities);
- define which parties are responsible for remaining stranded costs (customer classes, utilities, shareholders, the GOP, or some combination thereof);
- include in its treatment all stranded costs, whether government or private sector; and
- create a bridging mechanism for the collection of such costs to protect both ratepayers and utilities from "stranded cost shock." The relationship between the recovery of stranded costs under Section 12(l)(4) and the model supply contracts described in Section 37 is unclear.

The term "stranded costs" typically is defined in other country restructuring programs as comprehending those costs that:

- were previously (and prudently) incurred by the utility in the discharge of its business and public service obligations under the regulatory system in existence prior to restructuring;
- are not extinguished or paid off (i.e., which are stranded) as a result of the restructuring; and
- cannot otherwise be mitigated.

In general, stranded costs arising out of electric sector restructuring are comprised of up to three types or components, all of which may be present in the Philippine situation. These components include actual physical assets that are economically obsolete, whose book value exceeds fair market value (e.g., nuclear plant investments in most countries); general debt obligations of the enterprise subject to restructuring that may not be secured by a particular asset but which in total exceed the fair market value of the enterprise or its assets; and ongoing contractual obligations of the enterprise that extend into the future at rates or costs higher than current replacement or fair market costs (e.g., long term generation supply contracts with IPPs at above market rates).

Our understanding is that both NPC and investor owned utilities would incur stranded costs as so defined, in each of these categories. The problem is of staggering magnitude. For example, estimates provided to us by NPC indicate that its corporate debt alone will exceed anticipated

privatization revenues by several billion dollars (U.S.). Likewise, the value of NPC's obligations under ECAs exceeds fair market value estimates by several billion dollars (U.S.). And there are some physical assets that likely will sell below book value. The cumulative impact on NPC and its customers will be enormous. Impacts on investor owned utilities will be similar (though in smaller amounts).

Other countries have paired pursuit of restructuring with a carefully thought out program to mitigate stranded costs through a variety of incentives. For example, with regard to ongoing liabilities under ECAs or power purchase agreements, other countries have put together teams of skilled and experienced bankers, economists, attorneys and engineers to engage in creative, "win-win" contract restructuring negotiations with sellers, whereby the sellers gain benefits (e.g., reduce capital costs, contract extensions), and contract prices are lowered, so ratepayers gain. Incentives are created so the utility and its advisors retain as their fee a percentage of the documented savings. There obviously are numerous variations on this approach. Such mitigation strategies are especially appropriate and urgently needed in the Philippine context.

Hence, defining and valuing stranded costs, creating mechanisms to mitigate them, determining who bears the stranded costs, and over what period of time, is a major element of the Philippine restructuring program.

1.2 ANTI-TRUST/COMPETITION/CROSS-OWNERSHIP

As with stranded costs, proper treatment of market domination, anti-trust and cross-ownership issues is fundamental to a successful restructuring. We recommend that the Bill more specifically prescribe cross-ownership limitations, and instead of creating outright prohibitions in all instances, permit certain minority cross-ownership, provided that there is no control or market domination. The key issue is market domination, not ownership per se. For instance, if the National Transmission Corporation (NTC) owns and controls the physical transmission facilities, as well as operation and dispatch, then the NTC probably should not be owned by any other participant in the power markets (producers, suppliers, distributors). However, there may be advantages to permitting limited joint ownership among companies in the same sector or even different sectors, provided there is no market interference. For example, the dominant shareholder of one generating company could be permitted to own a minority, non-controlling interest (e.g., 25%), or even a minority interest, in another generating company or a distribution company, if there are no control and no opportunity for market blockage. There may be economies of scale that promote efficiency and benefit consumers from such ownership, without impairing the functioning of markets.

The specific factors of the Philippine archipelago, such as small island systems, should be taken into account in setting these policies. In addition to ownership structures, the actual text and operation of IRRs and market rules can have an unintended anti-competitive impact, and the IRRs should clearly reflect concerns against market abuse.

1.3 MARKET OPERATION

Consistent with promotion of competitive markets is the need to identify clearly and define with specificity the role of the market operator. Transmission line ownership and system operations can be segregated from market making operations (i.e., dispatch), and market-making functions can be properly protected and monitored. Such desegregation is consistent and supports the eventual structure and ownership of NTC. The current draft does not clearly set forth the critical role and powers of the independent market operator.

In fact the current draft has a very weak definition of the role of a competitive and transparent wholesale electricity market in the restructured electricity sector. The wholesale electricity market appears to be established after full retail access, rather than before retail access, as has been the accepted practice in other jurisdictions. A weak or nonexistent wholesale electricity market, such as the Bill currently indicates, results in a greater reliance on the ERB and regulation to act as a surrogate for competition.

Lack of a functioning wholesale electricity market also results in the Grid Code and the Distribution Code being inappropriately burdened with commercial standards and issues that would more correctly be included in the Market Trading Rules. The initial review of those documents shows that there is evidence of confusion as to what constitutes technical standards and what is in fact a commercial standard. A clearer statement in the Bill of the role of the wholesale electricity market would alleviate this confusion.

Lastly, the timing of the establishment of a wholesale electricity market will be critical to the success of the NPC privatization. Private investors will demand evidence that the wholesale electricity market is functioning and is independent of Government intervention as a condition of privatization. It is possible, as has been demonstrated in other jurisdictions, to establish a wholesale electricity market in conjunction with the restructuring of NPC and prior to the privatization of the generating assets. The Bill needs to lay out such a schedule for the establishment of an independent market operator and wholesale electricity market.

1.4 DIRECT RETAIL ACCESS/FRANCHISE AREAS/RETAIL COMPETITION

The Bill contemplates direct retail access on a schedule and other terms and conditions determined by DOE. The risk arising from retail competition is that, unless properly structured and phased-in, generators and/or suppliers will "cherry pick" the most desirable customers, leaving smaller, less economically powerful consumers as the remaining customers of the distribution companies. The distribution companies thus will have to spread their fixed costs over a smaller customer base. The spiral of dwindling customers and rising costs may create undesirable social impacts on customers and financial stress on distribution companies, and will likely make the distribution companies less desirable privatization candidates, to the extent they are privatization candidates. Furthermore, weakened distribution companies, whether private or cooperative, will retard privatization of the generating companies, since their prime customers may not be credit worthy. The drafters of the Bill should consider an explicit phase-in policy and directions to the DOE on what impacts to consider when issuing IRRs for retail access.

The transition from price-regulated franchise retail service to open retail service without price regulation, where it is now being done in the U.S., has been an extremely complex and lengthy undertaking with some disruption to customers, suppliers and distributors. The provision in the Bill for open retail competition poses potential risks for anti-competitive behavior and for market disruption.

On page 13, line 24 the Bill provides that "The supply of electricity to end-users shall be undertaken either by the distribution utilities within their franchise areas, or by suppliers, generating companies and other entities duly authorized by the ERB." On page 25, line 6 the Bill provides that "Upon breaking up of NPC's generating assets into different corporations, distribution utilities shall provide open and nondiscriminatory access to its distribution system to end-users whose peak demand is greater than the threshold level to be prescribed by DOE..."

It will be some time before NPC is broken up, DOE specifies the threshold level for mandatory retail wheeling (presumably accompanied by a set of rules and a schedule for implementation), and the resulting generating utilities have an approved open access tariff in place. During that time (and forever afterward), without prohibitions in the rules there is nothing to prevent suppliers from getting licensed by ERB and making voluntary private business arrangements with the distributing utilities to provide retail service to any end user. Likewise, at any time from the effective date of the Act, without prohibitions in the rules there is nothing to prevent a supplier from getting licensed by ERB and making voluntary private business arrangements with NTC to take electricity directly off the transmission grid to provide electricity to any end-user bypassing the distribution system. By the time retail wheeling is mandated, new suppliers might be serving large commercial and industrial customers or even whole residential communities. This would be a prescription for mischief because it would give NTC and the distributing companies enormous market power. Allowing the market to develop in this fashion without mandated open access would open the door for collusion and anti-competitive practice.

The team appreciates that allowing suppliers to operate immediately is intended to accommodate existing NPC direct customers and that DOE intends to prohibit in the IRR new suppliers prior to open access wheeling tariffs being in place. This is an unnecessary risky approach when it would be easier and safer to add the prohibition to the Bill and grandfather the existing NPC direct customers.

1.5 REGULATORY INDEPENDENCE AND AUTHORITY

The Bill does not clearly define ERB as an independent regulator, nor does it grant ERB authority to promulgate IRRs for those matters specifically assigned to it under the Bill. For example, Section 12 (c) gives ERB significant price setting authority but does not empower it to issue IRRs; Section 39 places all authority to issue IRRs with DOE. In general, private investors respond more enthusiastically to regulatory systems where the policy making functions are placed in one authority but licensing and authorization powers and price setting authority (economic regulation) are vested in an autonomous regulator whose decision-making is free of political influence. The current draft Bill should more expressly confirm the autonomy and scope of the ERB.

1.6 INCENTIVES

The role of incentives in the operation of the restructured electricity industry is key to achieving the goals of electricity sector restructuring. The Bill provides several incentive mechanisms. Although these mechanisms exist, there is lack of clarity and specificity regarding their use that might result in lost opportunities.

The Bill clearly provides for both the use of fines and penalties and the provision of tax relief. The Bill provides special fees to create incentives for missionary electrification, development of indigenous resources, and mitigating price increases to small residential end-users. The Bill directs ERB to build incentives for efficiency (presumably including DSM recovery) into its rate regulation. The Bill contains opportunities for establishing incentives through fuel mix designation and dispatch although it stops short of urging DOE and ERB to use these mechanisms for provision of incentives.

Overall, we see adequate provision of incentive mechanisms for most areas in the Bill. The Bill would be stronger if the Bill specified more clearly how the incentive mechanisms are to be targeted toward important policy objectives. For example, ERB might not only be allowed to use incentive rate making to promote efficiency; it might also be directed to use incentive rate making to reward achievement in reducing technical line losses. Additional provision of this type would help focus attention on the most pressing and difficult policy objectives.

1.7 THE PROVISION OF PUBLIC GOODS

The new Bill and the restructuring of the electricity sector offer significant opportunities to enhance the provision of public goods and to level the playing field amongst all stakeholders. On the other hand, if not properly accounted for, significant opportunities to include public goods provision at no or low costs will be missed. For example, if not properly structured, retail competition could threaten the continuation (or development) of certain public goods that traditionally are provided by distribution utilities to their customers. In the U.S., restructuring generally provides special treatment for four public goods -- energy efficiency, renewable energy, low-income assistance, and research & development. These are services the distribution companies have been providing that benefit society, often at extra cost and without direct benefit to the utility companies, primarily because their regulators have encouraged or ordered them to do it. Experience in several countries has shown that companies operating in a competitive retail environment tend to avoid providing these services in the absence of proper incentives.

Other examples include:

(1) the opportunity to draft a Grid Code that is renewables friendly or neutral in that it recognizes the unique and often seasonal character of renewables systems and sets conditions that accommodate these types of resources; or

(2) direct mandated levels of renewables use by the Countrywide Electrification and Missionary Service Company (CEMSCO) or other electrification agencies.

The Bill provides less support for these public goods than it might and in someway lacks the strength to meet its stated policy objectives. The history of public goods in the Philippine's electricity sector demonstrates time and again that policy pronouncements often fail to materialize or become embodied in concrete investments in renewable energy or environmentally sustainable energy production. Given this inability to transform public goods policy into concrete realities, strengthening the law might be considered.

a) Energy Efficiency

The use, but lack of definition, of the term "efficiency" in the Bill invites extensive confusion and litigation. The word "efficiency" is used nine times in the Bill for a variety of purposes.

If the Bill is passed in its current form, proponents of energy efficiency are likely to urge DOE to facilitate reforms in its implementation rules and regulations to promote end-use efficiency and the ERB to include incentives to promote end-use efficiency in its tariffs. Proponents of the lowest possible customer rates (as opposed to the lowest possible customer bills) are likely to respond by arguing to ERB that the law allows it only to account for supply-side efficiency. Whichever way the ERB decides, the matter is likely to end up ultimately being decided by the courts. Such litigation before the ERB and in the courts can be avoided by defining efficiency in the Bill.

There are two ways to mitigate the ambiguity in the use of the term "efficiency" in the Bill. One is to specify the target of efficiency each time the word is used. For example, the use on page 1 might be clarified to read "achieve greater operational and economic efficiency of the electricity sector in delivering energy services to the public." Similar treatment would then be appropriate for the use on pages 7, 11 and 26. The other uses on pages 15, 16 and 19 need no such clarification.

The other way to mitigate the ambiguity is to define "efficiency" in SEC.4 *Definition of Terms*. The definition might read something like *Efficiency, unless specified otherwise, refers to the efficiency with which electricity is generated, transmitted, distributed and used* or *Efficiency, unless specified otherwise, refers to the efficiency with which the electricity sector delivers energy services to the public*. Either of these definitions would allow DOE and the ERB the broadest latitude to act in the public interest in implementing the Act.

Provision in the Bill for programs to deliver cost-effective end-use *energy efficiency* in an open competitive retail market is almost nonexistent. These are programs that benefit society by reducing the need for new power plants and avoiding pollution by less fuel burning -- and that certain market barriers cause customers to avoid conducting on their own. Under conventional regulation, Demand Side Management (DSM) programs can be used to improve the efficiency with which customers use electricity. Under conventional regulation, Integrated Resource Planning (IRP) allows regulators to ensure that all cost-effective efficiency improvements are included in utility companies' DSM programs. Under retail competition, regulated planning is gone and, using the U.S. as an example, states these are eliminating any requirement or rate incentives for utility DSM. Instead, states are collecting special levies to fund DSM and not necessarily limiting use of these funds to distribution companies.

Section 5 (g) of the Philippines Department of Energy Act of 1992 provides that the Department shall have the "power and function" to "Formulate and implement programs, including a system of providing incentives and penalties, for the judicious and efficient use of energy in all energy-consuming sectors of the economy." Although this enabling provision would remain in the law, we are concerned that silence on the subject in the Bill would undermine efforts within DOE to implement these programs and avoid the opportunity to extend this mandate to ERB.

The (undefined) term demand-side management (DSM) appears three times in the Bill.

In section 6(g)(1), though DOE is required to evaluate the annual development plans of the distribution utilities for, among other things, demand-side management, it is not clear what the use, purpose, or impact of this evaluation is intended to be. The Bill should be more specific in this respect.

The ERB is authorized to provide for cost recovery for DSM programs, so presumably there are to be some, at least during a transition period to open retail competition. The distribution utilities are going to have an interesting and changing mix of customers. Early in the transition, they will largely remain the same, but accelerating challenges to their former franchises will occur, beginning with their largest customers.

In general, DSM mandated by regulators is a viable mechanism for improving the energy efficiency of customers who remain captive. Companies competing for customers free to choose their suppliers are unlikely to offer DSM services, especially those that are primarily in the public rather than the private interest.

Achievement of the overall goals for the Philippine electricity sector of overall economic efficiency, reduced capital investment, and reduced environmental stress could be enhanced by addressing energy efficiency more directly in the Bill in two ways. First, DSM and IRP could be explicitly mandated during the transition period to retail competition. Second, the use of the special fees established on page 20, line 17 could be expanded to include countrywide DSM like projects not limited to being conducted by distribution companies.

b) Renewable Energy

Provision in the Bill for development of renewable energy is ambiguous. Power generation using renewable energy benefits society by avoiding pollution from fuel burning, but is generally more expensive than generation from conventional power plants[3]. Under conventional regulation, regulators can mandate the use of renewable energy to whatever extent is best for the Philippines. In a deregulated competitive wholesale market, this opportunity is less direct.

Section 5 (h) of the Department of Energy Act of 1992 provides that the Department shall have the "power and function" to "Formulate and implement a program for accelerated development of non conventional energy systems and the promotion and commercialization of its applications." (Non conventional energy systems include systems that use renewable energy.) On page 20, line 21 the Bill requires ERB to levy a special fee for "(1) Missionary

[3] Even in circumstances where renewable energy might be cost competitive with fossil fuels, other traditional utility rules and practices, such as the Grid Code, bias access and use of renewable energy unfavorably and unnecessarily.

electrification: Provided, that the share of the special fees for missionary electrification shall be channeled through CEMSCO" and "(2) Development of indigenous energy resources for the industry."

Furthermore, page 28, line 17 the Bill defines the purposes of CEMSCO as follows: "The CEMSCO shall be responsible for providing power generation in areas that are not connected to the grid and where no private sector entity is able and willing to provide service at reasonable cost without a subsidy. It shall pursue and promote the use of indigenous and renewable sources of energy." And page 34, line 3 the Bill specifies that funds generated from the privatization of NPC shall be used, among other things, for "missionary functions of CEMSCO" and "development of indigenous, new and renewable energy resources."

Thus, funding is provided in the Bill for renewable energy development, we are concerned that the focus on indigenous energy resources and on rural CEMSCO applications will cause development of renewable energy to be pursued only in areas beyond the grid. There are extensive opportunities for the use of renewable energy in grid-connected and off-grid applications within the primary electricity system of the country.

Achievement of the goal stated in Section 2 of the Bill to "assure socially and environmentally compatible energy sources and infrastructure" could be enhanced by clarifying the Bill in two ways. First, the term "indigenous energy resources" could be defined to include renewable energy. Second, the responsibility for developing "indigenous resources for the industry" mentioned on page 20, line 24 of the Bill and for the "development of indigenous, new and renewable energy resources" mentioned on page 34, line 5 of the Bill could be specified. Clearer provision for the use of funds and clear assignment of responsibility for implementation would increase the likelihood of achieving the desired outcome.

There appear to be two potential barriers to selling renewable energy into the grid. Renewable energy is strongly supported in off grid and remote applications but there seem to be flaws in the anticipated transition of these systems to commercial viability. For instance:

i. Section 6(i)(1) - page 8, line 12, requires DOE to formulate rules and guidelines for stock sales. The section could inadvertently constrain small companies, privately held companies and cooperatives from developing renewable based energy if such rules of DOE require public stock as a condition of market entry without regard for the size or basis of the generating resource.

   An explicit policy statement could be included favoring an order of selection for all bidding and other power supply options within logical constraints such as economic (cost-effectiveness) or environmental (emissions etc.)[4]. The Bill could for example, include language, which establishes a resource priority scheme favoring indigenous energy conservation and renewable resources over thermal plants. Such a clear policy preference need not be exclusive in either priority or sequence.

[4] See, for example, "Renewable IPPs for Southeast Asia", IIEC, Bangkok, 1999. The team will furnish a copy of this report separately.

ii. CEMSCO provides for off-grid electrification using renewable resources. However, the weak provisions of Section 26, page 31, hamper the prospect for commercial viability of these systems. Section 26 obligates CEMSCO to formulate privatization plans for its facilities where feasible.

Two flaws appear. CEMSCO is the sole determiner of "feasible", and any purchaser of such facility must provide electric service at or below CEMSCO's cost as portrayed in it budget. This seems likely to result in CEMSCO's franchise being effectively permanent. This is not optimal because it could continue the perception that renewable energy facilities are not commercially viable.

The problem could be fixed by providing that at any time a prospective commercial operator could apply for a CEMSCO system and thereby cause CEMSCO to place that system up for bid. The price of electrical service requirements should be softened to allow prospective purchasers to offer to price electricity slightly above CEMSCO's actual price of electricity for that facility.

c) Low-Income Assistance

Provision in the Bill for long term assistance to low-income customers is limited to remote rural areas. We are concerned that some low-income customers within the grid system will not be able to purchase electricity at competitive retail prices.

On page 21, line 1 the Bill requires ERB to levy a special fee "to mitigate the impact of the removal of all forms of cross subsidies to small residential end-users for a period not exceeding three (3) years from the effectivity of this Act."

All countries recognize the need to provide lifeline rates or other electricity bill reduction mechanisms for needy individuals. Most countries choose to provide subsidies for electricity for these individuals directly within the electricity sector rather than through general welfare. We are indifferent to which avenue is provided as long as the subsidy is transparent. We are only concerned that, if neither is provided, the pressure for electricity theft will interfere with the development of an open competitive retail electricity market.

d) The Environment

The process of reforming the power sector offers a unique and powerful opportunity to promote environmental protection. Policies in the bill that assure that this objective will be met are either missing, inadequate, or need implementation options. Existing language in the Bill regarding this topic is limited to the following:

In Section 7 on *Generation*, on page 10, lines 13-14 states that "a generation company shall secure from ERB the appropriate certificate of compliance to the standards pursuant to this Act, as well as health, safety and environmental clearances from the proper government agencies under existing laws."

In Section 10 on *Attainment of Performance Standards*, there is silence regarding environmental standards.

In Section 11 on *Dispatch Operations*, there is silence as to whether power generated from non-compliant generation facilities can still be dispatched.

In Section 34, *Environmental Protection,* it states that "All industry sector participants in the generation, transmission, sub-transmission and distribution sectors shall comply with all environmental rules, regulations and standards."

Conclusions from reform processes elsewhere, as noted in a USAID report for the Office of Energy, Environment and Technology entitled *"The Environmental Implications of Power Sector Reform in Developing Countries,"* include the following:

- Commercialization reforms have positive environmental implications with little downside risk.
- Privatizing the power sector's assets is more likely to lead to improvements in environmental performance if requirements have been specified in advance.
- Establishing an independent regulator can locate in one agency responsibility for: eliminating tariff subsidies, licensing new facilities, overseeing competitive markets, promoting least-cost approaches to system expansion, and balancing national policy objectives such as environmental protection against the financial health of the sector.
- The environmental implications of allowing privately developed new generating capacity and of introducing wholesale competition depends on the types of generation chosen by developers.
- Retail competition appears to be a net negative effect on environmental performance.
- The liberalization of fuel supply sectors generally allows more environmentally friendly fuels to be used for generation.

Proposed measures, which have been used effectively in other countries to promote environmental protection, include the following:

- Establish an independent regulatory body prior to reforms whose authority includes oversight over power sector decisions that affect environmental performance.
- Include environmental criteria when weighing bids for selling power sector assets and allocate part of the sale proceeds to funding renewables and energy efficiency.
- Develop rules for wholesale markets that require explicit consideration of the environmental characteristics of all competing generators.
- Create incentives for retail electricity suppliers to promote end use efficiency improvement.
- Ensure that renewable generation has equivalent access to transmission services when such services become unbundled.

- Create incentives for the distribution and retail components of unbundled power sectors to fully consider distributed resource options for providing electricity services.
- Adopt electricity tariff structures that provide appropriate price signals for energy efficiency.

Incentives outside the power sector can also improve its environmental performance. These include:

- Allow environmental stakeholders to participate in the reform process.
- Strengthen environmental policies and institutions prior to major reforms, especially privatization.
- Evaluate the environmental implications of reforms being contemplated (including greenhouse gas emissions) through a programmatic environmental assessment.
- Complement power sector reforms by implementing reforms in other sectors that eliminate barriers to using clean fuels and technologies.

Complementary tools of multilateral and bilateral development organizations (such as USAID and the Asian Development Bank (ADB)) can provide technical and financial assistance. These organizations have a variety of tools at their disposal that can be used to:

- Make environmental performance improvement an explicit component of technical and financial assistance to the power sector.
- Help developing country governments design indigenous solutions to power sector problems that promote environmental sustainability.
- Help in-country environmental stakeholders become more involved in power sector reform processes.
- Provide leadership to the independent power industry to adopt high international standards of environmental performance.
- Improve policy makers' understanding of how power sector reforms affect environmental performance, including greenhouse gas emissions.

2. Section by Section Analysis

2.1 SECTION 6. POWERS AND FUNCTIONS OF DOE

a. This section defines the role of the DOE in implementing and managing the newly restructured sector. The roles reserved for the DOE are both comprehensively defined and specific. DOE will act as policy maker and, in some cases, regulator. For instance, provisions of subparagraph (f) and (g)(2), pertaining to incentives for investment and construction of capacity, arguably refer to or imply pricing or tariffs designed to achieve these goals. Yet, the Bill in most instances delegates price setting authority to the regulator, the ERB (e.g., Sections 12 (c), (f), (g), (h)). Typically, in most national electricity laws, the policy making and economic regulatory functions are placed in two separate bodies. The potential for overlap and contradiction between DOE and ERB should be eliminated. In the example given, the Bill should clearly confirm precisely in which body all price decisions lie.

Otherwise, consumers and investors may be faced with one set of prices from the ERB and another set of tariffs from the DOE intended to "encourage" certain types of investments. The entire Bill should be thoroughly scrutinized from this standpoint (and amended as necessary).

b. What does subparagraph (d) ("formulate policies relative to mutual arrangements among industry participants"...) mean? It is vague. Does it mean modification or amendment (i.e., price reductions) of existing power purchase agreements between Independent Power Producers (IPPs) and NPC? If so, such impairment of existing contracts could chill the investment climate and make privatization more difficult. If not, the intent of subparagraph (d) needs to be more clearly stated.

c. "Indigenous energy resources" (e.g., Section 6(f). Section 12(k)(2)) should be defined.

d. Why are entities with marginal peak load exempted from privatization? (Section 6(i)(1)(ii)).

e. The general scope of the Bill is to move toward a competitive, market-based model. But subparagraph (i)(2) (instructing DOE to promulgate IRRs prescribing "the desirable technology and fuel mix") smacks of centralized planning and reserves for the Government (in the form of DOE) what are customarily market driven decisions. Government intervention in the market is justified if it is to correct for a market failure such as environmental externalities. Our point is that one should be clear what one hopes to achieve by interfering with the market mechanism.

f. Subparagraph (i)(4), dealing with the contents of the National Grid Code and Distribution Code, mixes both technological and engineering concepts with factors that more traditionally appear in IRRs dealing with tariffs or licenses and authorizations (e.g., financial reserves, credit facilities and insurance cover typically are specific license conditions; collection efficiency is a component of rate-making). Grid committees have great expertise in technical operating issues; market operators have expertise in financial and commercial matters and regulators have superior expertise in licensing matters. Financial reserves/credit facilities should be removed from (i)(4) and added to Section 11. System losses, collection efficiency and insurance cover are part of the tariff and licensing functions and should be moved to Section9(c).

g. Subparagraph (k) and subparagraph (i)(6) appear duplicative.

h. Several provisions of the Bill refer to fines and penalties that may be imposed for certain defaults or breaches (e.g., Section 6 (l), Section 12 (n)). Do the provisions of Section 14, *Fines and Penalties,* apply in all such instances? If so, an appropriate cross-reference should be included. The levels of such fines and penalties should be explicitly stated; otherwise they could be either limitless (which chills private investment) or trivial (which fails to protect consumers). There also should be a clearly stated appeals mechanism for parties against which the fines or penalties are imposed (again, failure to state with clarity legal rights will inhibit investment). The Bill should make it clear that certain IRRs will address the issue of fines and penalties. For instance, IRRs governing Pool operations typically deal with the types of events that are defaults under Pool rules and the resulting fines.

2.2 SECTION 7. GENERATION

a. What are the "standards" referred to in Section 7 (b); shouldn't ERB be given authority to adopt IRRs regarding the process and standards for issuing such "certificates of compliance"?

2.3 SECTION 8. TRANSMISSION

a. Section 8(c) contemplates that the NTC will be responsible for three separate functions: market operations, system operations and actual transmission grid operations. Each of these functions could be handled by a separate entity. Typically, in most competitive systems, the market operator is separate from the entity that handles system and grid operations, so as to assure a fully competitive market. Especially since NTC is to be privatized in the future, transparent separation of market functions from other functions is crucial. In Victoria, Australia, for example, these three functions have been fully separated (and privatized) to assure competitive markets. The drafters of the Omnibus Bill may wish to consider this alternative.

b. Subsection 9(e) requires a privatization plan for NTC within 6 months of its creation. While it may be feasible to draft a plan within this time frame, experience from other countries teaches that implementation of the plan in such a short period is unlikely. Indeed, many of the deadlines in the Bill are very optimistic and aggressive. Converting to a privately owned, desegregated, competitive and market oriented electric power system is challenging. While a brisk schedule is appropriate to motivate players, the drafters of the Bill should understand that DOE, ERB and other participants likely will need more time to fully and effectively implement the contemplated changes.

c. Subsection (g) delegates to ERB the authority to specify which entities cannot hold interests in NTC, so as to assure fully competitive markets. But Section 13, *Market Domination and Anti-Competitive Behavior,* as well as Section 6 (e), reserve to DOE antitrust and market preservation powers. The reference in (g) should be to DOE. It will be more effective if one body gains the competency and expertise to deal with the crucial area of antitrust, monopoly, ownership and market share for the electric sector, instead of two.

d. What are the "allied or related businesses" to which Subsection (j) refers? Also, note that revenues from such ancillary business flow to the benefit of ratepayers but ratepayers do not share in the costs associated with such businesses. In effect, the Bill provides for a one-way cross-subsidization. Successful investments in "allied or related businesses" inure to the benefit of ratepayers; unsuccessful ones don't, and presumably are born by shareholders of the privatized NTC. Provided that appropriate mechanisms are in place to segregate the two businesses, and avoid cross-subsidization, then profits from the ancillary enterprises should flow to shareholders. The current version almost guarantees that the NTC will not invest in other undertakings; it has no incentive to do so.

e. In several instances, the Bill prohibits cross-subsidization (e.g., Section 8(j); Section 9(a)). Probably the Bill should define this term, in the context of the Philippine supply situation and in relation to societal and consumer needs. While the Bill specifies that cross-subsidies will

be phased out over a defined period of time (3 years), in order to protect small residential ratepayers (Section 12(l)(3)), it is likely that other customer classes also need such protection (e.g., small commercial customers) or that the phase in period needs to be longer, depending on the extent of existing cross-subsidies.

2.4 SECTION 9. DISTRIBUTION AND SUPPLY

a. Loss of end-user customers to other suppliers could seriously weaken the financial viability of some distributors, especially co-ops. The provisions of Section 9(d) should specify that the levels prescribed by the DOE must take into consideration the overall financial viability of the distribution entity and should prescribe a phased-in approach to universal customer choice in terms of supply.

b. Subsection (h) appears to contradict the prohibition against cross-subsidies (Section 9(a)) and underscores the need to define better what is meant by that term.

2.5 SECTION 10. PERFORMANCE STANDARDS

This Section should make clear that the pursuit of economies of scale should not be in violation of the provisions of Section 13. Market Domination and Anti-Competitive Behavior. There may be a need to include suppliers in this section.

2.6 SECTION 11. ELECTRICITY SPOT MARKET AND DISPATCH OPERATIONS

a. What is the difference, if any, between the market operations, for which NTC has only provisional authority as per Section 11 (e) and the market operations delegated to NTC, apparently without time limitation in Section 8(c)? If they are the same, then Section 8(c) should make a cross-reference to 11(e). If they are different, a further explanation is required in the Bill.

2.7 SECTION 12. REGULATION OF THE ELECTRIC POWER INDUSTRY

a. Independent regulation and the independence of the regulator are key components of a market oriented, privately owned, competitive and efficient power sector. This Section, at the outset, should so term the ERB as the "independent regulatory body responsible for". See Philippine Senate Bill #1408, Section 1. In addition, either Section 12 or Section 15, *Reorganization of ERB* should provide that ERB members shall be appointed for a specified term, that the initial terms shall be staggered, and that once appointed, members can only be removed for just cause, which should be clearly defined from the start. See Senate Bill #1408. The law should also make clear who is the appointing authority.

b. Section 12 should clearly grant ERB the power to adopt IRRs necessary for it to carry out its various delegated functions. For example, Section 12 (b) provides that ERB can grant, revoke or modify licenses, but does not expressly grant ERB the right to adopt IRRs to implement these provisions. In contrast, Section 39, *Implementing Rules and Regulations* places all authority to promulgate IRRs in the DOE.

c. ERB has broad authority to set prices; will the price caps referred to in Subsection (c) limit such authority or inhibit investor interest? When will the price caps be phased out, or will the price cap be phased out?

d. Subsection (i) vests the ERB with the responsibility to prevent or correct anti-competitive behavior, but in most respects the full spectrum of antitrust measures resides with DOE; see Section 13. Since antitrust issues are extraordinarily important to the success of the market oriented sector restructuring, establishing and maintaining regulatory competence in the field is crucial. The Philippines does not have a strongly developed, separate antitrust program or antimonopoly office, in contrast with other countries. To build competence, experience and predictability in the administration of antitrust and market concentration issues, policy making and enforcement should be confined to the same agency. Moreover, in the area of antitrust and competition, remedies to correct anti-competitive behavior frequently have a strong policy component and do not merely rely on imposition of fines, penalties or other enforcement devices. Thus, retention of policy making and enforcement authority in one agency makes sense.

e. The Bill (Subsection (l)(4)) should provide more guidance on the recovery of stranded costs, such as mitigation requirements, the period of time over which they are collected, and their impacts on various customer classes.

f. Subsection (m) should be modified such that ERB also reviews and approves times and penalties for any breach of the rules which the independent Market Operator administer.

2.8 SECTION 13. MARKET DOMINATION AND ANTI-COMPETITIVE BEHAVIOR

a. See the sections above, which discuss cross-ownership issues and regulatory competency. There are additional provisions of Section 13 that the drafters of the Bill may wish to consider.

b. The two paragraphs of subsection (a) may contradict each other. The first bans any form or cross-ownership, in the same or another sector; the second refers to a generating company or its beneficial owners not having any interest in an entity engaged in transmission or distribution, but does not preclude a generating company from ownership in another *generating* company, thus suggesting that the ban of paragraph one is not as comprehensive as it appears. (The same problems arise with the treatment of distribution companies in paragraph two). Once the policy decisions regarding cross ownership are made, the Bill should be clarified to eliminate this drafting ambiguity.

c. Since "market domination" (e.g., Section 13 (b)) is a prevalent concept in the Bill, it should be defined legislatively, or at least the Bill should give better guidelines as to the meaning of the term. Also, subsection (b) on its face precludes "market domination" in transmission, yet, by definition, the new NTC will be market dominant (though regulated).

d. Section 13 also espouses the principal of vertical separation while another part of the Bill stipulates that this prohibition will not apply to areas, which are not connected to the "Backbone" grid. The Bill may create uncertainty in the mind of the potential investor in supplying vertically integrated services in off-grid areas, mainly because the Bill does not assure them that they will be protected if and when their service area becomes connected to the grid. Some such consideration should be given in the law or dealt within the IRRs.

2.9 SECTION 14. FINES AND PENALTIES

a. This Section should make it clear that the amounts and sanctions specified apply to all violations of the act (if, in fact, they do) and should also specify administrative and judicial appeal rights. The Section also appears punitive on its face. For example, the fines apply to "any violation or non-compliance" of the Act or the IRRs, apparently no matter how unintended or minimal (e.g., should a fine be imposed because a mandatory report is a few days late?). The Bill should note that certain IRRs themselves would deal with infractions and penalties. The reference to a criminal action is unclear. Presumably what is intended is that any administrative sanction levied by the ERB will not prejudice any criminal action that may arise under the Philippine penal code. If so, the Bill should so specify. The present language sounds as though there are unspecified criminal actions that can arise under this Act-a vague threat that is unnecessary and chilling to anyone acting in the sector, whether investor owned or public. Investors expect absolute clarity in these matters.

2.10 SECTION 17. NPC RESTRUCTURING AND PRIVATIZATION

This report will not comment on privatization provisions in detail; these issues literally could be the subject of a multi-volume study. There are, however, a few provisions of Section 17 that should be noted.

a. Subsection (a) seeks to optimize the privatization value of NPC restructured units. This is an ambiguous statement. Optimization generally involves maximizing or minimizing some objective function (in this case the privatization value of NPC) subject to constraints. The most important constraints are those imposed by the stated policy objectives in this Bill. Other constraints may result in sub-optimal values. For example, the provision to ensure Filipino participation in ownership (subsection (b)) will impact the values obtained and so there is a strong connection between the percent of ownership, which is to be ensured (presumably by the IRRs), and the privatization value of NPC. The manner in which stranded assets are financed will also impact privatization values. Other sections of this Bill have strongly and, perchance, unrecognized impact on asset values, as pointed out below.

b. Subsection (d) requires grouping of assets for the privatization sale. One of the intended benefits is to spread responsibility for NPC liabilities. Similar tactics have been pursed in privatization in other countries, but frequently have not worked. When undesirable assets are paired with desirable assets, the market traditionally has reacted by deeply discounting bids and thereby overly discounting the price of the

desired asset, or by ignoring the bid altogether. Capital markets are mobile and global. Energy investors customarily will place their capital elsewhere rather than buy a liability (i.e., an undesirable company) as part of the price of acquiring the asset (the desirable company). Hungary is a case in point, where in the initial privatization rounds in the electric sector, bidders refused to bid on certain generating assets that were paired with uneconomic coal mines. In the second round, the generating assets sold, once the coal mines were unbundled.

c. Golden Shares are fairly common (subsection (h)), but the rights and powers, transferability and other aspects of the Golden Share must be specified legislatively.

2.11 SECTION 19 - 26. CEMSCO

The Bill defines the purposes of CEMSCO as follows: "The CEMSCO shall be responsible for providing power generation in areas that are not connected to the grid and where no private sector entity is able and willing to provide service at reasonable cost without subsidy. It shall pursue and promote the use of indigenous and renewable sources of energy." The words in the Bill that specify the use of "special fees," the use of NPC's privatization proceeds, and the purposes of CEMSCO, may limit CEMSCO from achieving its mission as effectively as it otherwise might.

The use of funds to achieve missionary electrification and the development of indigenous energy resources are addressed in three places in the Bill. On page 34, line 3 the Bill specifies that funds generated from the privatization of NPC shall be used, among other things, for "missionary functions of CEMSCO" and "development of indigenous, new and renewable energy resources."

Since both missionary electrification and the development of indigenous energy resources are generally more costly than the market is now willing to support, their successful achievement will require minimizing additional costs by adopting the most economic approach possible. Experience around the world has shown that one vital step in minimizing the cost of rural electrification and development of renewable resources is to first take advantage of all cost-effective opportunities for energy efficiency. By first reducing the power needs of the community, we lower the total capital requirements of the electrification project. If the Bill is passed in its current form, some people are likely to argue against ERB allocation of funds for such energy efficiency projects.

It would increase ERB's flexibility and possibly avoid unnecessary litigation to acknowledge in the Bill that spending fund proceeds on energy efficiency projects would be acceptable if it were shown that this reduces the overall cost of the development of the missionary electrification and indigenous energy resource programs.

Other unintended problems may arise because of the way the CEMSCO will operate. Provision should be made for the time when areas under CEMSCO control will be economically viable to be supplied by the grid and where the willingness to pay for such power will exceed CEMSCO's subsidized price. In other words a transition policy should be

mandated to provide CEMSCO an incentive to bring areas under its control into economic pricing as rapidly as possible.

Finally, it is not clear how CEMSCO will achieve the stated policy goal to "Ensure and accelerate the total electrification of the country." It is not mandated to be different from its predecessor organization other than a new source of funding and with the exception that it "shall periodically assess the requirements and prospects for bringing its facilities to commercial viability on an area-by-area and system-by-system basis at the earliest possible date and, where feasible, develop and implement a plan for the privatization of the same." Rural electrification has suffered from problems such as significant technical and non-technical losses, inappropriate procurement, poor accounting and billing practices and poor management and operations.

It is unclear how CEMSCO will bring its facilities to commercial viability when those responsible for rural electrification have not been able to do it in the past. It is not clear that throwing more money through the special levy will ensure increased rural electrification. In the absence of clear, legislatively mandated changes, the bureaucratic inertia is such that new, novel ways of supplying rural electricity are unlikely to happen. One such consideration could be that CEMSCO contract with private sector companies or non-government organizations to manage its assets. Another possibility could be that CEMSCO licenses and subsidizes private sector companies or non-government organizations to provide rural electrification. The point being that new approaches are required, not only additional funds.

CEMSCO has a large task achieving rural electrification for millions of households many of whom are extremely remote from any cost efficient grid connected electric service. The task facing CEMSCO is clearly impossible to achieve over the near term and will take many years of dedicated effort. This makes it more important that CEMSCO effectively prioritize what it should do first, and leverage the investment, drive, and sustainability that comes from well designed, community based, and economically sustainable projects.

Thailand has very effectively and efficiently provided electric service to 97% of its population. Of course, Thailand did not have to wrestle with remote islands but it did have to deal with costly and uneconomic grid extensions. Thailand was successful because they established a priority order for their rural electrification projects using a calculated <u>economic development potential</u> index. The index calculated the highest potential for economic development, and considered population density, population growth, and existing or planned investment in other infrastructure. The goal of the priority scheme was to begin where line extensions would have the best chance of being economically viable as evidenced by the community's ability to recover its investment in less than 10 years. In order to insure the direct financial interest of the community, the community had to come up with the majority of the cost.

There are many parallels for this kind of scheme to choose effectively where to begin such a long and difficult task as is facing CEMSCO. Similar criteria could be established and similar calculations done to support focusing on the highest potential for economic viability, the biggest renewable resource, lowest cost, etc.

The Omnibus Bill already anticipates a role for private sector involvement. It sets out a system for moving projects out of CEMSCO's charge to the private sector. However, it is clear that in other countries, private sector benefits are gained from earlier involvement rather than later. For this reason we suggest that CEMSCO's role be defined as the project builder and operator of last resort.

In our model, CEMSCO would set the priorities for development using the index suggested above. Then renewable resource project feasibility studies would be made on the highest priority villages. Then those projects would be offered to bid to private investors interested in building, owning, and operating the proposed system. The communities themselves could enter into consortia to bid on these projects if they so desired.

The US National Renewable Energy Laboratory, under funding from USAID, is tasked to transfer to the GOP an analytic model for assessing the economic viability of remote energy systems, line extensions, appropriate technology mixes, and other issues. This effort could provide CEMSCO with the tools and training to be able to effectively complete the prioritization task.

The use of CEMSCO's funds should be clearly focused on ensuring long-term economic productivity and sustainability of the systems promoted. The usual means to accomplish this actually may work against economic sustainability. Operating subsidies and sometimes even capital subsidies result in subsidy dependency rather than viability. Some promoters of off-grid systems have found that the construction or operation of the system is benefited more by assisting the community with the purchase of machines and tools which both use the energy from the renewable system and are economically productive (e.g., small enterprise manufacturing equipment). Provisions should be made in the rules for CEMSCO to be flexible and innovative in the incentives, investments and subsidies it makes so long as they are effective at promoting cost-effective and economically sustainable missionary electrification.

Further definition of CEMSCO operations could occur within the applicable IRRs.

2.12 SECTION 28. REPORTORIAL REQUIREMENTS

The Bill should clarify and expand in this section the rights of DOE and ERB to obtain the financial, ownership, technical and other information from generators, distributors, transmitters and suppliers as may be reasonably necessary to carry out the policy making, regulatory and enforcement functions of the act. Section 28 needs to be more explicit and comprehensive in this respect.

For example, under existing law the GOP has the right to collect financial information on the distribution utilities. It does this for ratemaking purposes. If the ERB or any other GOP organization is to have the responsibility for determining anticompetitive behavior, then it will need to have financial data from the generators. The right to collect this data may not exist in current law or the proposed Bill. Section 28, page 21, states "in connection with the implementation of this Act, the DOE may require any person or entity in the industry to submit appropriate information concerning the operation and development plans of such

person or entity. Are the terms "operation and development plans" sufficient to encompass financial data?

2.13 SECTION 37. MODEL SUPPLY CONTRACT

The operation of the model supply contract is unclear. Is it a method to mitigate and recover stranded costs arising from existing Energy Conversion Agreements (ECA) between independent producers and NPC? If so, how are these costs mitigated before being passed on to NPC customers? How do the contracts work in connection with the universal levy, to recover stranded costs, of Section 12? How is the "schedule of tariffs" set, and by whom? It is also unclear as to what effect the ten-year contracts will have on the wholesale market, and what entity remains responsible as seller (to the distributors) after the privatization of NPC. Also, the standard for tariff disallowance ("same or lower quality of service") is vague and subjective, yet carries potential significant financial impact. It should be made more specific. This Section also is unclear as to what portion of NPC's existing supply capacity or the distributor's existing load is to be covered. Thus, if the model contracts are a stranded cost collection device, they either repeat or conflict with the universal levy of Section 12. To the extent they tie up significant portions of the market, they will undermine the creation of robust, free functioning markets. If they are not generator specific but instead are slices of the system, they may inhibit privatization of generating companies, since it is unclear how the generating companies will assume these NPC contracts. If the contracts are assignable, then, on privatization, a generating company may get stuck with a weak distribution company customer, or a distribution company may get paired with a weak or unreliable generator. The whole process needs to be thought through further.

2.14 SECTION 41. REPEALING CLAUSE

This provision broadly appeals certain laws or decrees that are "inconsistent" with the proposed act. It would be more accurate legislatively to identify specifically which sections of which decrees or laws are repealed, so as to minimize ambiguity arising under the "inconsistent" standard. An analysis should be conducted on which specific laws etc. will by effected by this clause. In particular because many sections and intents of the Bill are vague and unclear, the impact of this repeal clause could result in unintended abandonment of other important environmental, renewable energy, and energy efficiency initiatives.

A possible solution is to repair other parts of the legislation to restore clarity and direction to important policy choices, which impact the use of renewable energy, energy efficiency, environmental, and other provisions.

2.15 LEGAL RIGHTS

The Bill does not state expressly or incorporate by reference to a general administrative law or code the appeal rights of parties affected by administrative rulings under the proposed law. Investors and other affected parties will require a clear statement of appeal rights consistent with the general laws of the republic of the Philippines; the Bill should add such a universal provision.

V. INITIAL COMMENTS ON THE PHILIPPINES GRID CODE

1. Introduction and Background

The draft Philippine Grid Code is an extensive and detailed document that draws heavily on international experience. The document is intended to define the technical aspects of the working relationship between the transmission company, "Transco", and those parties that are connected to the transmission system. The following comments are intended to be a general commentary of issues raised by the document rather than a detailed review and analysis of the draft Grid Code.

The Omnibus Bill envisions that a wholly owned corporation will be created to "take over NPC's transmission and sub-transmission functions, assets and liabilities" [Section 8(c)]. Within six months of the creation of the National Transmission Company (NTC) a plan to privatize the corporation will be prepared by DOE for approval by the President. NTC will be responsible for both the system operation of the transmission system and the market operations of the wholesale electricity market. No sooner than eighteen months after the creation of the electricity market, an independent entity can take over the responsibility of market operator from NTC. The proposed Grid Code should be viewed against this backdrop of both changing ownership and changing functional roles.

2. Comments

2.1 Technical Aspects

The Grid Code includes provisions that go beyond technical standards and are in conflict with a transparent, competitive wholesale electricity market; or are inconsistent with the market structure being envisioned.

For example, Article 6, Outage Program confers on the Transco the final and binding decision as to the scheduling of maintenance outages for all generating, transmission and sub-transmission facilities. Enforcement of a policy of mandatory outage co-ordination, if such a policy is intended, would be more appropriately handled by the ERB.

Scheduling of generation maintenance has large commercial implications as well as the possibility of market disruption and aberrations. Traditionally, in vertically integrated utilities, the command and control mode has been employed to co-ordinate the scheduling of outages of generation and associated transmission or sub-transmission. In transparent competitive markets signaling behavior through prices and forecast of prices has lessened the need for central command and control. In any case, outage co-ordination, as written in the current Grid Code, goes beyond the bounds of technical standards and becomes either an enforcement process and/or a market process. As such it should be removed from the Grid Code and included in the market trading rules.

The Grid Code is written on an organizational basis rather than a functional basis.

The proposed Grid Code fails to identify which functional portion of Transco: system operator, grid operator, grid owner, dispatcher or market operator is acting in any particular situation. This lack of differentiation clouds the functional responsibilities within and between the various parts of Transco. By referring to functional roles rather than a single organization it is clear to all parties who is responsible for the various technical aspects of electric system operations.

Further, the structure of the market clearly has certain functions being shifted from the Transco to other entities. Defining the Grid Code relationships on a functional basis will ease the process of identifying which responsibilities will transfer to the wholesale market entity and which responsibilities will be retained by the private transmission company.

The lack of functional definition will be most troublesome in Article 15, Generation Scheduling and Article 16, Scheduling and Dispatch Control.

Although the proposed Grid Code goes on at great length about the various types of operating reserves (Article 20 and Article 17) the Grid Code fails to define the technical standards of power quality that are to be attained. Power quality standards are the essential foundation of electric system operation from which the operating and spinning reserve requirements are derived. This is a glaring omission.

2.2 Data and Information Aspects

To facilitate the development of a transmission plan, the Grid Code requires users of the transmission system to supply a voluminous amount of data.

Article 5, Demand Forecasts, requires Generators, Distributors and consumers connected to the transmission system to supply information covering a five-year period. One could question the need for the transmission company to require this extensive level of data as the responsibility for system adequacy rests with the Distributors. Likewise the Grid Code requires the Generators to provide data on estimated generation patterns that is excessive for the needs of a transmission company.

The time frame, five years into the future, appears to be in excess of the data required by the Omnibus Act. There appears to be the potential for double reporting to both the NTC and the DOE unless DOE designated NTC as the party responsible for preparing the national development plan. The propriety of having a private company responsible for the Philippine Electricity Pool (PEP) is not clear.

VI. INITIAL COMMENTS ON THE PHILIPPINES MARKET RULES

1. Introduction and Background

The draft Rules of the Philippine Electricity Pool have been prepared by the Trading Mechanism committee and NPC. The document is intended to define the commercial relationship between the buyers and the sellers of electricity at the wholesale level. The authors of the draft have obviously been influenced by market rules from other jurisdictions and that influence is reflected in the words of the draft market rules. The following comments are intended to be a general commentary of issues raised by the document rather than a detailed review and analysis of the draft Market Rules.

The Omnibus Bill states "*the DOE in consultation with the ERB, and the industry participants, shall formulate the detailed rules for said spot market. Said rules shall form part of the IRR, and shall reflect the accepted economic principles and provide safeguards against anti-competitive behavior*". The Omnibus Bill envisions a mandatory wholesale electricity market where all generating companies above a certain size, all distribution companies, all retailers of electricity and all end use customers directly connected to the grid will be members of the market and adhere to the market rules. Along with the Grid Code and the Distribution Code, the Market rules form the foundation for the restructured electricity sector and will influence the success of the privatization process.

2. Comments

2.1 Omissions from the Draft Market Rules

The draft market rules are missing a number of key sections as seen in the following non-exhaustive list:

- Rules on the procedure for appointing members to the Philippine Electricity Market (PEM) board.
- Rules on the term, liability, conflict of interest, ownership interest in an industry sector and qualifications of PEM board members.
- Rules on the procedures for removal of a PEM board member.
- Rules on the voting rights and veto rights, if any, of PEM board members as well as the procedures for conducting meetings and other board business.
- Rules on the methodology for funding the activities of the Market Operator, settlement System Operator, Funds Administrator, PEM Auditor and associated staff necessary to carry out the functions described in the market rules.
- Rules on operation of the wholesale electricity market during times of emergencies or shortages.

- Rules on the procedure and conditions precedent for suspension of the market.
- Rules on the procedures for surveillance and monitoring for anti-competitive behavior by members of the PEM.
- Rules on the collection and disclosure of information by the market operator and the requirement, if any, for reporting to the ERB.

2.2 Additional Inputs to the Draft Market Rules

The draft market rules have a number of sections that need additional drafting and expansion, namely the following:

- Rules on the composition, qualifications, term, liability, conflict of interest and allowed ownership interest of the members of the Rules Committee and Dispute Resolution Committee.
- Rules on the procedure for both the Rules Committee and the Dispute Resolution committee to conduct business.
- Rules on the relationship and contractual obligations of the Grid Operator and the Meter Operator to the PEM.
- Rules on initial Billing, final billing, and invoicing the PEM members for electricity purchased as well as procedures to handle the billing of amounts under dispute.
- Rules on the procedures to be followed in the event of a payment default by a PEM member, i.e. the application of security deposits, the liability of other PEM members for the defaulting party and the disconnection policy to members in default.
- Rules on the rights and obligations of PEM members with regards to the funds set-aside for prudential requirements and the establishment and monitoring of said funds.

The draft market rules lack clear definitions and have some internal inconsistencies.

VII. TRANSITIONING

It should be noted that the goals of the GOP as set out in these legislative proposals--as with any group of public policy objectives--involve many tradeoffs and competing objectives. For example, the objective of achieving total electrification of the country must be balanced with the goals of attracting private investment to the sector, minimizing financial risk of the Government, and rationalizing and making electricity prices competitive. Similarly, other goals such as optimizing the value to the Government of privatizing the generating assets of the National Power Company (NPC) involve a tradeoff between the objectives of the Government in receiving revenue from the sale of NPC assets and ensuring competition and increased efficiency in generation markets. These tradeoffs need to be explicitly considered and reflected in development of the final legislative proposal implemented by the GOP and in the associated IRRs.

These tradeoffs will affect the many public policy decisions that need to be made during the transition from the current vertically integrated, predominately government-owned electricity sector to the restructured, competitive sector envisioned by the GOP. This transitional period is critical to the achievement of the Government's objectives. It is within this period that many critical decisions and tradeoffs need to be made that will affect the final outcome of the GOP's restructuring and privatization program. The timing and order in which decisions are made and policies are put into place during this period require attention. Decisions made in the short-term will have long-term consequences and often prove difficult to rectify once they are put into place. An overriding objective during this transition period should be to keep an eye to the future while implementing policies that address short-term problems and issues. This "do no harm" strategy will help ensure that policies and procedures implemented in the short-term will have no major unintended adverse long-term consequences.

With this concept in mind, it may be advantageous for the GOP to explicitly consider and develop a strategy for a transition period within which it will develop and implement a consistent and comprehensive set of policies and programs designed to ensure a smooth transition from the current industry and regulatory structures to a set of conditions that will help it achieve its long-term objectives. Nowhere in the legislative proposals currently under consideration is there an explicit discussion of the need for, or elements of, such a transition period. Presumably, this issue will be addressed in the IRRs now being developed by the DOE and ERB. However, a brief discussion of this necessary transition period and how it relates to the various elements of the legislative proposals may be useful.

For example, House Bill No. 4579 contains provisions to privatize NPC's generating assets. However, it does not state how this is to take place. In developing the IRR to accomplish this task, the GOP should develop a time table for privatizing these assets and a strategy that will balance the need to receive the maximum amount of revenue for the Government while also ensuring development of a competitive and efficient generating sector. Related to this set of objectives is the need to address the stranded cost problem associated with the sale of these assets. The GOP should develop policies that will allow recovery of these costs with minimum distortion of market prices for electricity and without reducing incentives for producers to improve efficiency and mitigate stranded costs as much as possible. Here the

issue of specifically incorporating a transition period over which the assets will be sold and stranded costs recovered will provide a much-needed degree of certainty and fairness to the process. This will assure investors and consumers that their needs are being addressed and that the competing short-term and long-term goals of the privatization and restructuring process are adequately balanced.

The GOP may also consider the interrelationship of privatization of NPC's generating assets with the creation of the National Transmission Corporation (NTC), reorganization of the distribution sector, and development of new tariff policies for the sector. The value of NPC's generating assets will depend, in part, on the revenue stream associated with those assets. Therefore, tariff reform and consolidation of the distribution sector to improve its efficiency and financial viability will have important impacts on when and how these generation assets should be sold and the amount of stranded costs to be recovered from consumers. Moreover, the GOP intends to deregulate the generation sector on the basis that a competitive generation sector does not require price and rate-of-return regulation. However, deregulation should only take place if the Government can assure that the generation sector is effectively competitive. The Government needs to consider the interrelationship of these issues and develop both short-term and long-term policies to ensure that its ultimate objectives are met in a way that maximizes the benefits to the economy and to consumers.

Privatization and restructuring also can take different forms, depending on the success of efforts to consolidate and improve the financial viability of the distribution sector and to expand and improve the efficiency of the transmission grid. The Philippines includes many small islands with minimal generating capacity availability and limited or no interconnection to the transmission grid. It is difficult to see how the generation market in these areas can become competitive without significant improvements and expansion of the transmission and distribution sectors. This raises the issue of whether and how to deregulate generation in these areas or whether generation can be deregulated in the larger and more fully integrated markets in Luzon, Visayas and Mindanao but not in the smaller and more isolated markets elsewhere in the Philippines.

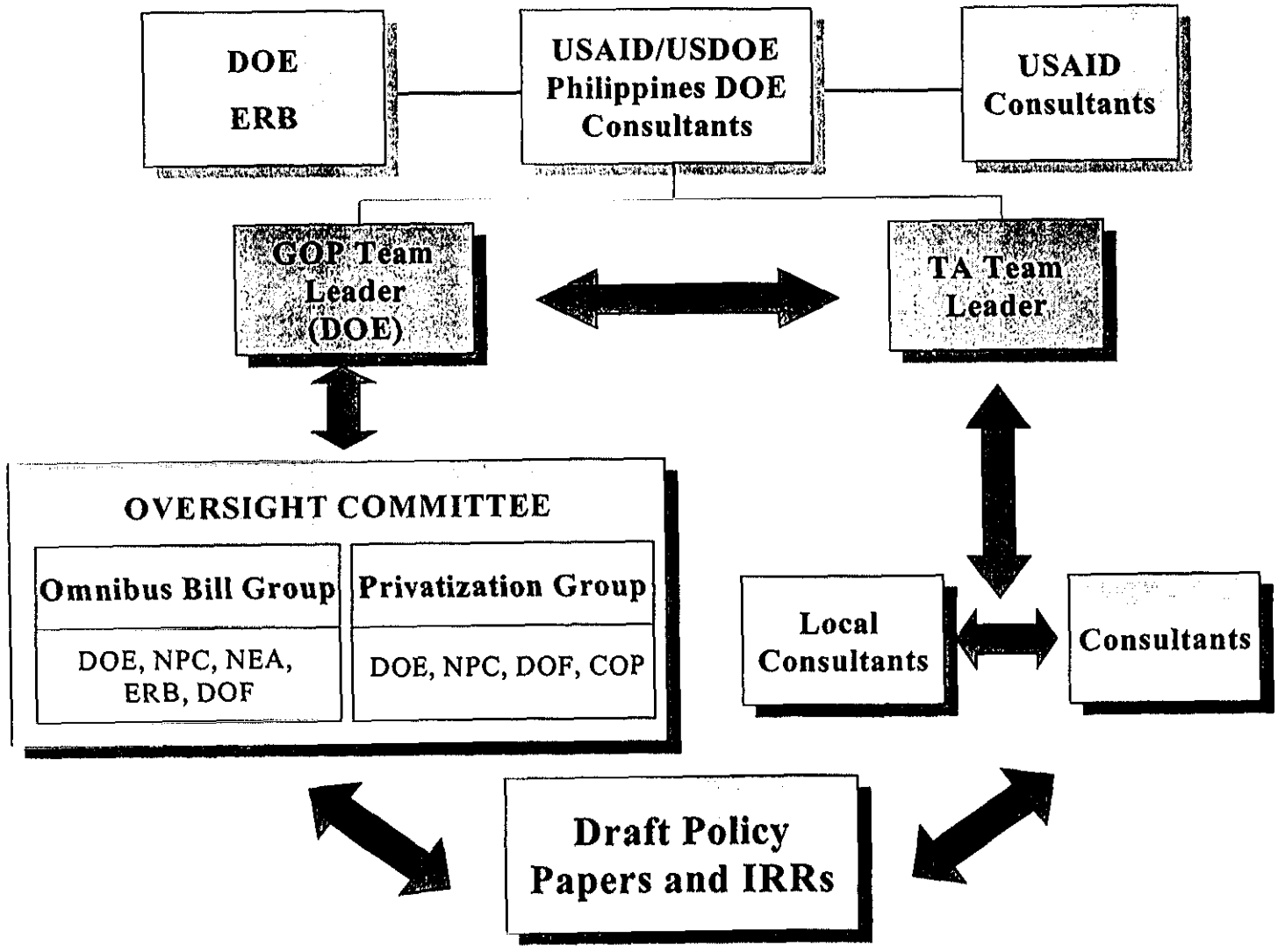
If consolidation and improvement of the performance of the distribution sector cannot be achieved in a reasonable period of time and the transmission grid expanded to include these more remote areas, the GOP may want to develop its restructuring and privatization of the generating and transmission sectors of the industry to take this into account. Without significantly improved performance, most small distribution utilities could not purchase significant amounts of power directly from private sector generators. This could limit the competitiveness of the generation sector and the ability of the sector to attract private investment.

Therefore, the Government may want to limit its reconstruction efforts to development of a competitive generation market through the sale of NPC's plants and a competitive bidding program for new plants, combined with an independent NTC that would act as the purchaser and guarantor for sales to the majority of distribution utilities. The difficulty of achieving significant improvements in the structure and financial viability of the distribution sector implies that the GOP may want to address these difficult issues first before it proceeds with privatization and restructuring of the generation and transmission sectors of the industry.

Elements in the proposed legislation also discuss the role of the DOE in developing a national energy plan for the Philippines; promulgating rules relating to the choice of technology and fuel mix in power producers' project development decisions; and overall responsibility for the quality, reliability and security of the supply of electric power. These authorities imply a fairly rigorous role for the DOE in energy sector planning and decision making that seems at odds with the Government's stated objective of relying on private sector investment and competitive markets to achieve its energy objectives. The GOP needs to consider whether and how these roles for the DOE can be compatible with the development of competitive electricity markets.

In developing a strategy for the transition from regulated to competitive electricity markets, the GOP may want to consider how to ensure that these functions of the DOE do not interfere with the development of competitive electricity markets. It also may want to consider how to incorporate procedures within the DOE programs that can be used to turn at least a portion of these functions over to other market participants as electricity markets develop and become more competitive.

This complex set of overlapping issues shows the critical need to establish a specific transitional period during which a comprehensive set of policies and programs can be developed and implemented that effectively integrate the Government's and the industry's short-term and long-term needs objectives. The major goal here is to ensure that short-term policies and programs do not effectively preclude or severely limit the ability to achieve other longer-term objectives.

Attachment A

ANNEX A