

**United States Energy Association
Philippine Energy Partnership Program (PEPP)
Cooperative Agreement (492-A-0098-00033-00)
Third Quarterly Report
April 1, 2000 through June 30, 2000**

I. INTRODUCTION

The United States Energy Association (USEA) and the United States Agency for International Development (USAID)/Philippines signed a Cooperative Agreement Award No. (492-A-0098-00033-00) on August 11, 1998. In accordance with the cooperative agreement, USEA will submit a brief quarterly program report to the Office of Environment and Management, USAID/Philippines for the period beginning April 1, 2000 and ending June 30, 2000.

II. GOALS AND OBJECTIVES

While it is not specifically described in the PEPP cooperative agreement, USAID/Philippines has provided funding for USEA to assist USAID/Philippines in accomplishing its **Strategic Support Objective 5: Reduced Emissions of Greenhouse Gases** in the Philippines. In particular, PEPP will assist the Philippines to (1) avoid, reduce, and mitigate the climate changing impacts of its energy sector activities and (2) improve the operational efficiency and increased financial viability of its utilities.

A. GOAL OF PEPP

The goal of PEPP is to assist the **Philippines Energy Regulatory Board (ERB) and electric utilities/cooperatives with policy and regulatory reform, with power sector restructuring, and with fulfilling their responsibility to provide sustainable and environmentally sound energy production and use for the nation.**

PEPP encourages the employment of private sector, market-oriented approaches in order to improve the planning, management, financing, and environmental improvement in the power sectors of the Philippines.

Central to PEPP is the peer-to-peer sharing of real experiences in the day-to-day planning, operation, and management of utilities and regulatory agencies. These exchanges occur between the senior executives and managers who are responsible for the making the major decisions necessary to reform and improve their companies and agencies.

B. OBJECTIVES OF PEPP

Through the establishment of long-term partnerships between U.S. and developing Philippine utilities and regulatory agencies, PEPP will help achieve the following objectives:

- To help in the transformation of regulatory bodies and electric utilities in the Philippines into autonomous, commercially oriented, and efficient entities;
- To help assure the sustainable and environmentally sound supply, use, and regulation of electric power;
- To help the Philippines power sector avoid, mitigate, and sequester greenhouse gas emissions; and
- To assist in the development of U.S. investments and joint ventures in the Philippine power sector.

III. MAJOR PEPP ACTIVITIES DURING THE LAST QUARTER

Major activities conducted during the last quarter are summarized below:

A. UTILITY PARTNERSHIPS

1. ENERGY REGULATORY BOARD AND MINNESOTA PUBLIC UTILITIES COMMISSION AND NEW MEXICO PUBLIC REGULATION COMMISSION

Activities:

- a. ERB-MPUC-NMPRC Signing Ceremony and Executive Exchange, April 3-5, 2000

The Philippine Energy Regulatory Board (ERB) and the Minnesota Public Utilities Commission (MPUC) and the New Mexico Public Regulatory Commission (NMPRC). Commenced their two year regulatory partnership at a signing ceremony held Monday, April 3, 2000, at 10:30 a.m. at the Embassy of the Philippines in Washington, DC.

USAID was represented by Mr. Robert Randolph, Assistant Administrator, Bureau for Asia and the Near East. Ambassador Ernesto Maceda, Philippine Ambassador to the United States also participated.

The ERB was represented by Chairman Melinda Ocampo, Commissioner Nicomedes Deynata, and Ms. Elsa Gonzaga. Executive Director Burl Haar represented the Minnesota PUC, and Chairman Bill Pope and Commissioner Jerome Block represented the NMPRC.

The partnership key issues will include:

- Regulation for competition
- Organizational structure
- Pricing/Rate Setting
- Energy Efficiency and Demand Side Management
- Environmental Externalities
- Consumer Education

Following the signing ceremony, the ERB representatives traveled to NMPRC to meet with the full commission. An informal briefing by PRC Commissioners and staff was provided for the ERB. The briefing included an overview of NMPRC; discussion on the reorganization of two regulatory commissions into a single body; discussion on pricing/rate setting (including unbundling, rate of return, stranded costs, and spot market pricing methodology. Public Service Company of New Mexico explained an industry perspective on restructuring.

Milestones:

1. ERB, MPUC and NMPRC signed Cooperative Agreement and Memorandum of Understanding agreeing to a 2-year, USEA-organized, USAID-funded partnership.

Results:

IR:	Capacity Building
Result: 3.14	Improved Decision-Making and Management by Host-Country Institutions
Indicator:	Number of USAID-brokered exchanges made of Filipino and U.S. professionals, regulators, and/or policy makers to share expertise in the energy and/or environmental sectors
Unit of Measure:	Number of experts exchanged
Total:	3

Next Steps: ERB will participate in Performance Based Ratemaking course in Chicago, Illinois in July 2000, followed by an executive exchange visit to MPUC and NMPRC.

2. **DAVAO LIGHT & POWER COMPANY, INC. AND AMERICAN ELECTRIC POWER**

Activities:

- a. **DLPC to AEP in Columbus, Ohio, May 1-5, 2000**

A delegation from DLPC visited AEP in Columbus, Ohio. The six-person DLPC delegation involved: Raul Lucero, Irwin Pagdalian, Ben Arkoncel, Fernando Refuerzo, Arvin Capul, and Shem Cardosa. The week-long visit was full and productive and covered the following areas:

- Distribution planning group organization
- AEP Planning Process
- Transformer Thermal Loading Limits
- Substation Operation and Maintenance Practices
- Transmission and Distribution Line Operation and Maintenance Practices
- Metering Practices
- Power Quality
- Load flow analysis and network modeling and analysis

The delegation participated in the following tours of AEP facilities:

- Control Centers
- Transmission and Distribution Facilities

Milestones:

1. DLPC learned the factors for identifying systems improvement projects and the process for planning the projects. This will enable DLPC to evaluate the system and address system deficiencies, thus improving the efficiency of the distribution system.
2. DLPC learned how to collect and manipulate standard reliability indices to measure system average interruption frequency, system average interruption duration, customer average interruption frequency, customer average interruption duration, and momentary average interruption frequency. By incorporating these standard reliability indices into project planning, DLPC will improve the distribution system performance and reduce the frequency and duration of outages to customers.

Results:

IR:	Capacity Building
Result: 3.14	Improved Decision-Making and Management by Host-Country Institutions
Indicator:	Number of USAID-brokered exchanges made of Filipino and U.S. professionals, regulators, and/or policy makers to share expertise in the energy and/or environmental sectors
Unit of Measure:	Number of experts exchanged
Total:	6

IR:	Capacity Building
Result:	Improved planning process for distribution and transmission system network.

Indicator: Tools for improved energy sector development and management, provided with assistance from USAID capacity building, implemented or used by Philippine government agencies or electric utilities.

Unit of Measure: Number of processes improved.

Total: 1

Next Steps: DLPC will visit AEP in Columbus, Ohio in August, 2000.

2. ILIGAN LIGHT AND POWER INC. (ILPI) AND SACRAMENTO MUNICIPAL UTILITY DISTRICT (SMUD)

Activities:

a. SMUD executive exchange visit to ILPI

On April 7-14, 2000, a delegation from SMUD traveled to Cagayan de Oro, Philippines for an exchange visit with ILPI. The SMUD staff who participated in the visit were Richard Ferreira, Assistant General Manager; Nick Henery, Senior Power Contracts Specialist; David Collier, Principal Electrical Engineer, PV & Distributed Technologies; Rosanna Herber, Key Accounts Manager; Glenda Stewart, Change Manager.

The executive exchange was focused on three main issues: 1) corporate reengineering and change management; 2) photo-voltaics; and 3) power contracts. ILPI is planning to reorganize the management and operational structure of the company to become a more efficient organization. SMUD – who has recently undergone reorganization – shared their experience in the reorganization process from planning through implementation stages.

Rosanna Herber discussed the SMUD Customer Service program and specifically, shared with ILPI information on the SAP software that is currently being installed at SMUD that will enable the customer representatives to better serve customers. The system integrates the customer representatives' computers and the phone system to track customers and identify the location, billing history, and status of payments for the customers.

Nick Henery discussed the key elements of a power contract, including pricing of transmission services. He also reviewed the ILPI distribution system network and provided his comments.

The ILPI-SMUD partnership – which started in October 1999 - will conclude in September of 2000. At that point, ILPI will initiate another 1-year partnership, this time with Peninsula Light Company (PLC) of Gig Harbor, Washington.

Results:

IR: Capacity Building
Result: 3.14 Improved Decision-Making and Management by Host-Country Institutions
Indicator: Number of USAID-brokered exchanges made of Filipino and U.S. professionals, regulators, and/or policy makers to share expertise in the energy and/or environmental sectors
Unit of Measure: Number of experts exchanged
Total: 5

IR: Increased Energy Efficiency
Result: Improved Decision-Making and Management by Host-Country Institutions through implementation of improved planning and monitoring mechanisms
Indicator: Number of host-country institutions adopting improved operating policies, practices or technologies
Unit of Measure: Number of electric utilities, government agencies, businesses
Total: Pending

IR: Capacity Building
Result: SMUD is advising ILPI on the factors involved in the development of a sub-transmission interconnection in the CIC to improve reliability and power quality.
Indicator: Increased capability in integrated resource planning and power system planning.
Unit of Measure: Number of power system plans affected.
Total: Pending

Next Steps:

SMUD will host a delegation from ILPI for an executive exchange visit in June.

b. ILPI executive exchange to SMUD, June 19-22, 2000, Sacramento, California

A delegation from ILPI traveled to Sacramento, California for an exchange visit at SMUD. The ILPI staff that participated in the visit were Patricia Borja, Treasurer; Rolando Estopia, Audit Manager; Christina Mejia, Human Resources Development Supervisor; Cynthia Rico, Accounting Supervisor; Danilo Bagtasos, Design & Construction Supervisor; Dionisio Tano, Technical Services Supervisor; and Jonathan Casino, Design Engineer. The executive exchange key issues were 1) human resources; 2) customer service; 3) line construction; 4) pilferage detection; and 5) asset management.

In the issue of human resources, ILPI is considering several aspects of the job standards development and evaluation used by SMUD. SMUD develops job standards through a committee that 1) continuously studies job specifications submitted supervisors, and 2) conducts surveys involving similar positions in the Sacramento community and compares the results to SMUD positions. SMUD has also developed a “career ladder” for employee advancement in order to provide a basis for negotiating rates with labor unions and to develop a base of merit for employee compensation. This issue was timely for ILPI as they are reviewing the job classification and salary structure in the company.

ILPI participants observed the actual operation of the SMUD Call Center to understand how customer complaints are handled. As the ILPI delegates observed, the customer service personnel were given a level of authority for decision-making (i.e. with approval of loan requests for cooling/heating installations, extension of payment due dates, and preparation of job orders). ILPI is presently implementing its own in-house version of a call center to improve customer service and plan to apply some of the process used at SMUD in the call center being developed in ILPI.

ILPI observed the SMUD line construction program – particularly noting the SMUD standard manual for line planning, design and construction. The manual includes details of coded distribution line structures with corresponding materials inventory. The standard manual is constantly revised by the design group to accommodate actual field conditions, thus insuring accurate information for the design and construction of the lines. ILPI is currently using an in-house developed software called ESTIMATES, DESIGN AND INVENTORY SYSTEM (ESDIS). The computerized system includes a summary of line hardware materials and materials costing. Similar to the SMUD system, the ESDIS is constantly updated and monitored. ILPI is trying to integrate this system with their existing computerized mapping system.

ILPI observed SMUDs pilferage detection process and learned that the main source of their information regarding pilferage is their meter readers. SMUD video-tapes and properly documents all pilferage apprehensions. SMUD uses two useful instruments from H.J. Arnett Industries, Inc. of Portland, Oregon to detect pilferage – The White Night; and the Block Box. With the exception of these two equipment pieces, ILPI and SMUD have similar pilferage detection and control procedures and thus will be able to share and apply details for improved implementation of anti-pilferage measures.

ILPI is considering adopting some of the asset management practices used by SMUD. For example, SMUD maintains rotating stocks that allow materials to be transferred from one location to another – a more efficient process.

ILPI also observed, and is considering modeling, an organization of pole owners and users called the Northern California Joint Pole Association. The organization was created to handle joint pole usage and agreement issues. The organization is responsible for the establishment of rules and regulations governing joint pole practices. This may be a possible program that could be implemented by ILPI along with the other utilities and coops in the CIC region.

The ILPI-SMUD partnership – which started in October 1999 - will conclude in September of 2000. At that point, ILPI will initiate another 1-year partnership, this time with Peninsula Light Company (PLC) of Gig Harbor, Washington.

Results:

IR:	Capacity Building
Result: 3.14	Improved Decision-Making and Management by Host-Country Institutions
Indicator:	Number of USAID-brokered exchanges made of Filipino and U.S. professionals, regulators, and/or policy makers to share expertise in the energy and/or environmental sectors
Unit of Measure:	Number of experts exchanged
Total:	7

IR:	Capacity Building
Result:	SMUD is advising ILPI on improving the efficiency of the line construction planning and procurement process.
Indicator:	Technical/management manuals used to improve energy sector efficiencies
Unit of Measure:	Number of manuals improved or development.
Total:	Pending

Next Steps:

1. ILPI will host a delegation from SMUD for an executive exchange visit in August.

C. OTHER PHILIPPINE PARTNERSHIPS

The following partnerships are funded by USAID/Washington, Office of Energy, Environment & Technology as part of Cooperative Agreement No. LAG-A-00-98-00045-00. The partnerships between Manila Electric Company (Meralco) and Central & South West, and Cagayan Electric Power & Light Co. (Cepalco) and Sacramento Municipal Utility District (SMUD) will end in April 2000.

1. **MANILA ELECTRIC COMPANY (MERALCO) AND CENTRAL & SOUTH WEST (CSW)**

Activities:

a. **Meralco final executive exchange visit to CSW, April 25-28, 2000**

A Meralco delegation including Ivanna dela Pena, Rodolfo Quetua, Noemi Jimenez, Larry Fernandez, and Gil Sandiego met with CSW executives to conclude the three-year partnership between Meralco and CSW. The exchange meetings were held in Dallas, Texas. The executive exchange was focused on regulatory issues including costs of tariffs unbundling for wires and retail businesses, the organization of power pools and market rules, and the role authority and scope of the utility regulator in a deregulated market. As the restructuring of the Philippine electric industry is being considered, Meralco is seeking to understand the implications of deregulation and the relationship between the utility and the regulator in a restructured environment.

Milestones:

- a. Meralco and CSW completed a three-year utility partnership administered through USEA and USAID.

Results:

IR:	Capacity Building
Result: 3.14	Improved Decision-Making and Management by Host-Country Institutions
Indicator:	Number of USAID-brokered exchanges made of Filipino and U.S. professionals, regulators, and/or policy makers to share expertise in the energy and/or environmental sectors
Unit of Measure:	Number of experts exchanged
Total:	5

2. CAGAYAN ELECTRIC POWER & LIGHT COMPANY (CEPALCO) AND SACRAMENTO MUNICIPAL UTILITY DISTRICT (SMUD)

a. **SMUD final executive exchange visit to Cepalco, April 10-12, 2000**

On April 10-12, 2000, a delegation from SMUD traveled to Cagayan de Oro, Philippines for an exchange visit with ILPI. The SMUD staff that participated in the visit were Richard Ferreira, Assistant General Manager; Nick Henery, Senior Power Contracts Specialist; David Collier, Principal Electrical Engineer, PV & Distributed Technologies; Rosanna Herber, Key Accounts Manager; Glenda Stewart, Change Manager.

Cagayan Electric Power & Light Co. (Cepalco) of the Philippines and Sacramento

Municipal Utility District (SMUD), concluded their three-year utility partnership with a final visit by SMUD to Cepalco. The Cepalco/SMUD partnership has been integral in preparing Cepalco for the ensuing restructuring and privatization of the Philippine electric power sector. One example of this restructuring effort is that Cepalco is adopting a key accounts program modeled directly from SMUD's own Key Accounts Program, and will create a permanent full-time position for its management. SMUD also assisted Cepalco in developing a demand side management (DSM) plan, which was submitted to the Energy Regulatory Board for final approval, and Cepalco has developed an organizational unit for the implementation of DSM programs.

Under the issue of photo-voltaics, David Collier reviewed the initial findings and recommendations of a consultant hired by Cepalco to prepare a proposal for a possible Clean Development Project (CDP) between Cepalco and the International Finance Corporation (IFC). In addition to providing reviewing the CDP proposal, Collier briefed ILPI on the latest PV technologies being implemented by SMUD.

Finally, with SMUD's assistance, Cepalco has prepared a "Rate Position Paper" describing a proposed tariff structure based on factors such as time of-use rates for Philippine distribution utilities in a competitive environment.

Results:

IR:	Capacity Building
Result: 3.14	Improved Decision-Making and Management by Host-Country Institutions
Indicator:	Number of USAID-brokered exchanges made of Filipino and U.S. professionals, regulators, and/or policy makers to share expertise in the energy and/or environmental sectors
Unit of Measure:	Number of experts exchanged
Total:	5

IR:	Capacity Building
Result:	Improved Decision-Making and Management by Host-Country Institutions
Indicator	Number of host-country institutions adopting improved operating policies, practices or technologies
Unit of Measure:	Number of electric utilities, government agencies, businesses
Total:	1

V. FUTURE ACTIVITIES TIME TABLE

July 2000

ERB to Performance Based Ratemaking Course, Chicago, Illinois
ERB exchange visit to MPUC and NMPRC, St. Paul, Minnesota and Santa Fe, New Mexico

August 2000

DLPC exchange visit to AEP, Columbus, Ohio
ILPI Signing Ceremony with PLC, Gig Harbor, Washington
SMUD exchange visit to ILPI, Cebu, Philippines

September 2000

MPUC exchange visit to ERB, Manila, Philippines

VI. COST SHARING

Total cost sharing amount for PEPP partnership activities during the Third Quarter of FY 2000, in the period of April 1 – June 30, 2000 is \$582,750. Philippines - \$110,250/US - \$472,500.

VI. OTHER USEA ACTIVITIES APPLICABLE TO THE PHILIPPINES

A. HANDBOOK ON CLIMATE CHANGE MITIGATION OPTIONS

With assistance from U.S. utilities and regulatory agencies, USEA and ERI, Inc. published the *Handbook on Climate Change Mitigation Options for Developing Country Utilities and Regulatory Agencies*. It is a hands-on, practical guide of climate change mitigation options for consideration by senior executives in developing country utilities and regulatory agencies.

USEA has widely distributed and promoted the Handbook, and is currently working on a 2nd edition.

Summary

Description: Final Version of the *Handbook on Climate Change Mitigation Options for Developing Country Utilities and Regulatory Agencies* to be distributed by USEA.
Objective: To assist developing country utilities and regulatory agencies to understand various options for mitigating GHG emissions and to assist U.S. companies identify possible mitigation projects for implementation overseas.
Result: Increased awareness of options for mitigating GHG emissions in developing countries and the U.S.

B. INTERNATIONAL CLIMATE CHANGE PROJECT FUND

1. Fund Objective

The objective of this activity is to provide funding support to U.S. investor-owned utilities, their subsidiaries, and other investor-owned energy companies that are seeking to assess and implement specific projects in USAID-assisted countries to avoid, reduce, and mitigate the climate changing impacts of GHG emissions. By employing an existing and well-proven funding support mechanism, USEA would provide funding support for up to 10 pre-investment analyses with an average contribution from the Fund of \$100,000 per analysis. It is anticipated that many of these projects would qualify as Joint Implementation/CDM projects or for emissions trading activities, as set forth in the United Nations Framework Convention on Climate Change.

The selected projects would be suitable for follow-on funding from private sector financial institutions, export credit agencies and/or multilateral development institutions -- including such sources as the World Bank (including the Global Environmental Facility, International Finance Corporation, InterAmerican Development Bank, and African Development Bank), U.S. Export-Import Bank, Overseas Private Investment Corporation, Asian Development Bank, and other multilateral financial institutions.

2. Fund Administration

USEA has partnered with the IUEP program, which is affiliated with the Edison Electric Institute (EEI), to administer this activity. IUEP was one of five initiatives developed by EEI for the Climate Challenge program -- a joint effort between the electricity industry and the U.S. Government to support the Clinton Administration's *Climate Change Action Plan* for reducing U.S. GHG emissions. IUEP was established to be a vehicle to provide funding support for projects that avoid, reduce, mitigate or avoid GHG emissions.

Since its incorporation in 1996, IUEP has established a program to solicit, evaluate, and fund proposals from U.S. utilities and energy companies interested in developing and implementing international projects that avoid, reduce, or mitigate GHG emissions in a credible, creative, and cost-effective manner. Through February 28, 1998, IUEP has supported pre-investment analyses for 10 projects that could result in potential offset reductions of 70 million metric tons of CO₂. To date, three of these projects have received official U.S. Government certification as under the U.S. Initiative on Joint Implementation, and four more projects are currently under consideration for certification.

IUEP has provided a commitment letter to USEA expressing their willingness to administer this activity.

3. Eligible Climate Change Mitigation Activities

USEA and IUEP plan to support a wide variety of climate change mitigation projects. Eligible activities could include the following:

- Fuel System Actions
- Conventional Power Generation System Actions
- Transmission System Actions
- Distribution System Actions

- End Use Energy Efficiency & Demand-side Management Actions
- Renewable Energy Actions
- Offset Actions and Emissions Trading Actions

Summary

Date/Location: Throughout FY 2000; U.S.

Description: Through IUEP, Inc., USEA will establish this Fund to support projects in developing countries to avoid, mitigate or reduce GHG emissions.

IR 3.3 Increased production & use of cleaner energy

Indicator.1 GHG emissions avoided catalyzed by projects supported by the EPP2 Fund