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PARTICIPANT FOLLOW-UP STUDY  
CONVENTIONAL ENERGY TRAINING PROJECT  
(Project No. 936-9997)

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A. EXECUTIVE SUMMARY

AID initiated the Conventional Energy Training Project (CETP) in 1981 to help developing nations explore, produce, and use efficiently such energy forms as fossil fuels and non-nuclear electricity. As a basis for assessing the impact of CETP on its participants and their countries, this Participant Follow-up Study was initiated in early 1985. From extensive interviews with CETP participants, their supervisors and AID Mission and Embassy officials in selected countries, a study team of four energy and education specialists sought to assess the impact of CETP and to analyze the policies, program and procedures that have been employed.

During March and April 1985, members of the team visited 12 countries in four regions of the world, locating and interviewing 209 persons of whom 127 were former CETP trainees, 47 were their supervisors, and the remainder, U.S. officials. Of the 127 trainees, 9 had participated in graduate programs in U.S. institutions of higher learning; 118 attended non-academic programs.

From interviews with frank and candid witnesses, a snapshot of a highly effective and productive program of energy training has emerged. Bearing in mind the short time frame in which the CETP has operated, impact has been greater than might reasonably have been expected.

Participants learned critical new skills and knowledge and have begun to apply them in their employing organizations. Largely as a consequence of their training, many have been assigned to greater responsibilities consistent with their newly acquired abilities, and some have been formally promoted. Participants also experienced personal growth, leading them toward greater self-confidence, assertiveness, a questioning attitude, and initiative in taking action --

qualities which should serve them well as they attain positions in which they can introduce new ideas at their workplaces. English language proficiency also grew, a matter of importance to professionals whose fields of study commonly adopt English as the principal language of communication.

Colleagues of CETP participants have benefitted as the returned participants have engaged them in training sessions, seminars or discussion of matters directly growing out of their training. Some CETP alumni are teaching courses at universities and institutes in their own countries based on that subject matter. Printed technical materials and books provided during training are being shared widely with colleagues and students, further multiplying the impact of CETP training.

Political benefits to the U.S. are difficult to measure, but many trainees report being enlightened about, and impressed with, such American beliefs, practices and values as sophisticated management systems, a seriously-held work ethic, the absence of favoritism and adherence to rigorous work standards and schedules. Misconceptions about Americans and their way of life were also often corrected; for example, the oft-held idea that all Americans are wealthy was put to rest, and the self-reliance related to a near-total lack of servants here was often noted with surprise. Those in a position to judge, furthermore, were able to compare CETP training programs with those of other nations, including some in the Eastern bloc, almost always finding the former superior in most respects.

Economic advantages to the U.S. are likely to develop over time; more immediately, exposure to American organizations during CETP training has opened the way to contacts with U.S. firms, and in a few instances, purchases of U.S. goods and services. As trainees move over time into positions where they can authorize such purchases, an increased number of them may be expected to occur.

Impact on countries' energy programs have already been documented. Numerous examples of former participants' direct technical contributions to national progress were uncovered, revealing that CETP beneficiary countries gained in many ways from the training received by their nationals.

The CETP has clearly achieved a high level of productivity in a relatively short period of time. Participants, their employers and their countries are receiving a diverse range of benefits from both academic and non-academic training in an overall program that has been almost universally praised.

Room still exists, nevertheless, for improvement as a means of increasing CETP's impact and maximizing AID's return on investment. In order to accomplish this, the team believes that a combination of related actions should be considered.

Some of these actions call for increased involvement by AID Mission personnel overseas. They should be asked to:

- Encourage host countries to conduct manpower training needs assessments so that the best qualified and most appropriate persons are nominated in accord with national manpower requirements for the energy sector;
- Seek the means to widen distribution of information on CETP offerings, using both American and host-country channels to reach the largest number of eligible organizations and qualified nominees;
- Meet with and interview nominees, screening them for technical merit and English language competency; and
- Become involved in post-training evaluation.

Other steps suggested to capitalize further on CETP's training are to:

- Ensure adequate budgets for purchase of printed technical materials and to expedite the shipment of all books, journals, and training materials to participants' countries;
- Consider how complimentary copies of training documents may be sent to participants' supervisors;
- Provide continued emphasis on course compatibility with host country needs and interests; and,
- Encourage continuing exchange of ideas and information among CETP staff, AID/Washington and Mission personnel, participants, and private sector/academic personnel whenever and however possible.

Long-term benefits are most likely to accrue under the above conditions. Early indications from the Participant Follow-Up Study indicate that continuing professional relations exist and that the potential for more linkages between U.S. and developing country energy specialists, as well as between U.S. private sector interests and their counterparts in AID-assisted countries, is both real and consistent with the best interests of U.S. foreign policy.

## B. PURPOSE OF THE STUDY

This study sought to determine the extent to which the Conventional Energy Training Project (CETP), now four years old, is contributing to the realization of its basic goal: to increase the capability of developing countries to explore, develop, produce and use efficiently the conventional energy resources available to them, especially indigenous resources. ("Conventional energy" for the purpose of this project, means fossil fuels and non-nuclear electricity.) The study seeks to place in perspective the influence and effectiveness of CETP's training by:

- providing information on current activities and status of returned CETP participants;
- offering insight into the impact of the CETP on subsequent technical capabilities and accomplishments of individual participants;
- providing insight into the capabilities and accomplishments of the organizations in which CETP participants are subsequently employed, including the "ripple effects" of the training on other members of those organizations;
- providing information on the national programs of conventional energy development and use in the former participants' countries; and
- making recommendations related to future AID-funded training in the area of conventional energy.

The results of the study may guide AID's Office of Energy to the further development of CETP beyond its currently-authorized life (in which FY 1986 is the last year of funding), or the possible design of future AID energy-related training projects. Recommendations emerging from the analysis may also be used for consideration of modifications to the current program's basic terms of reference, its training offerings, or its operational procedures.

C. OBJECTIVES AND ACTIVITIES OF THE CONVENTIONAL ENERGY TRAINING PROJECT

Established in 1981 by the United States Agency for International Development (USAID), the Conventional Energy Training Project (CETP) trains working engineers, geoscientists, managers, planners, economists, and other energy professionals from developing countries to develop and better use their oil, gas, coal, and non-nuclear electric power resources. The CETP is founded on AID's belief that highly trained professionals and strong institutions are essential to economic development and progress. CETP is currently the only energy training program available to the full spectrum of AID-assisted countries.

CETP's objective is to provide relevant education and experience in both industrial and academic settings, developing practical skills that participants can take back to their jobs and use immediately.

The CETP is funded by AID's Office of Energy, Bureau for Science and Technology (S&T/EY), which is responsible for its overall management. It is administered by the Institute of International Education (IIE) in Washington D.C. Founded in 1919, IIE is the oldest and largest private, non-profit educational exchange organization in the United States.

CETP has designed and conducted special courses in areas where none previously existed, including those in power plant operation; energy conservation; the fundamentals of petroleum engineering, geology, geophysical exploration and economics; and promoting investment in developing indigenous oil resources.

Approximately one-third of CETP participants annually attend graduate programs at the Master's degree level in universities throughout the United States while

others are placed in special industry short courses or serve as interns with energy companies in such fields as seismographic analysis, data processing, oil well cementing, enhanced oil recovery or resource analysis.

Most participants under CETP sponsorship will have but one opportunity to benefit from training in the U.S. Therefore, every endeavor has been made to ensure that CETP training responds to the needs defined by the participant, his or her employer, and the AID Mission. A statement of training objectives is required with each CETP application, as are an endorsement of those objectives by the nominee's employer and certification of the individual's competency in English language usage.

CETP grants provide for tuition, a living allowance, health insurance, books, field trips, and other training expenses such as thesis preparation and computer time. The participant's own country contributes roundtrip airfare to the training site in the United States and continues to underwrite the participant's salary.

Since 1981, CETP has trained 482 individuals from 45 countries, in academic and non-academic programs. Of these participants, 347 have completed training and returned home as of the date of this report. Regional and categorical distribution of CETP graduates are shown in Table 1.

TABLE 1  
DISTRIBUTION BY REGION OF CETP GRADUATES

<u>REGION</u>	<u>ACADEMIC</u>	<u>NON-ACADEMIC</u>	<u>TOTAL</u>
Africa	24	78	102
Asia	7	122	129
Latin America	8	49	57
Near East	<u>6</u>	<u>53</u>	<u>59</u>
TOTAL:	45	302	347

D. METHODOLOGY FOR THE STUDY

A team of four senior specialists in the fields of higher education and conventional energy were selected by AID/S&T/EY to undertake the CETP Participant Follow-Up Study.

In preparation, team members spent several days in Washington, D.C. familiarizing themselves with CETP offerings, the backgrounds of former participants, their training programs and employing organizations, and each country's conventional energy situation.

Statistics on participants by country, field of specialization and training courses were compiled to provide a data base for selection of countries to visit (subject to approval by AID/Washington, the USAID Missions and host countries). The sample of countries represented broad geographic distribution, variety of training experiences and maximum cost-effectiveness (that is, potential for interviewing the greatest concentration of returnees possible given limits on the study's budget, travel schedules and manpower, and factors beyond the team's control that made it impossible to visit some countries.)

Twelve countries were ultimately selected for the Study, three to be visited by each member of the team: Sudan, Egypt, Morocco, Philippines, Thailand, Indonesia, Bangladesh, Nepal, India, Costa Rica, Dominican Republic and Jamaica.

To ensure a consistent data collection in interviews with former participants and their supervisors by all four team members, a document was drafted by the team, reviewed and refined by a specialist in survey design, and reviewed by AID/S&T/EY and CETP administrators. While not a formal questionnaire, the document offered a series of broad questions to serve as a structural guidelines for interviews. A copy of the interview guideline document is attached.

From the list of potential interviewees drawn up before leaving the States, the team sought to see as many former participants and supervisors as possible. To accomplish this in the short time allowed, visits were scheduled in the areas of highest participant concentration. Meetings with USAID energy officers (and other Mission personnel where possible) were requested as well.

Because it was not possible for the interviewers to make individual appointments in advance of their arrival in-country, appointments were made almost entirely by USAID training officers, based on the team's cabled suggestions. Consequently, there was no way to ensure before the country visits that the aggregate numbers and distribution of persons met constituted a representative sampling of former participants. Subsequent review of those seen indicates, however, that the sample is quite representative, despite the practical constraints mentioned above.

Initial meetings were held in each country with AID energy and/or training officers to review the purpose of the study and to go over the suggested interview questions, copies of which were given to all AID Missions. Interviewers kept contact with AID energy and/or training officers during each visit and at the visit's end, informally reviewing participants' and supervisors' comments. In some instances, the training officer or other staff member accompanied the interviewer.

Interviews, conducted in English, averaged from sixty to ninety minutes in length, permitting sufficient time for interviewers to probe for insights and information supplementing the interview document, and to discuss participants' and supervisors' comments and questions.

In all, 127 former participants were interviewed in 12 countries. Of these, 9 received Master's Degrees and 118 attended CETP non-academic programs. In addition, the team met with 47 supervisors of former participants and 32 AID employees. The distribution of interviews appears in Table 2.

TABLE 2

DISTRIBUTION OF INTERVIEWS CONDUCTED, BY INTERVIEWERS AND COUNTRY

Inter- viewer	Country	Academic	Non- Academic	Supervisors/ Managers* Govt. or Managers	USAID/Emb	Other	TOTAL
Lear	Sudan	3	8	3	2	3	19
	Egypt	0	6	6	4	-	16
	Morocco	1	7	2	4	-	14
McCoy	Philippines	0	13	5	2	-	20
	Thailand	2	15	3	2	-	22
	Indonesia	0	10	0	1	-	11
Pelham	Bangladesh	0	13	4	4	-	21
	Nepal	0	8	3	4	-	15
	India	1	15	4	3	-	23
West	Costa Rica	0	14	10	2	-	26
	Dominican Republic	2	4	2	2	-	10
	Jamaica	<u>0</u>	<u>5</u>	<u>5</u>	<u>2</u>	-	<u>12</u>
GRAND TOTAL		9	118	47	32	3	209

Note: Some participants were at managerial levels prior to training or were placed in management positions subsequent to training. In all cases they are included only once, as participants.

Information provided by participants and supervisors generally followed the suggested structure and questions, though not rigidly so. Team members compiled country reports summarizing each country's interviews, and these in turn fed into regional summaries. Copies of the four regional summaries and lists of persons interviewed in each country are provided in Part II.

The 9 academic participants interviewed represent 50% of all M.S. recipients who have returned to the countries visited, while the 118 non-academic participants represent 63% of returnees in that category in the selected countries.

Of the 9 academic participants interviewed, 2 had attended the University of Pittsburgh and one each the University of Arizona, University of Texas (El Paso), University of Kansas, Texas A & M, Carnegie Mellon University, Massachusetts Institute of Technology, and Rensselaer Polytechnic Institute.

Greatest concentrations of non-academic participants (10 or more) attended the following courses or programs:

- Petroleum Management Program, Arthur D. Little Management Education Institute, Inc.
- Fundamentals of Petroleum Engineering, Geology, Geographical Exploration, Petroleum Engineering and Economics. Course given by International Petroleum Consulting Services, Inc. (IPCS).
- Electric Utility Engineering program conducted by the Tennessee Valley Authority.
- Industry and Utility Energy Conservation. Course given by the Tennessee Valley Authority.
- Advanced School in Power Systems Engineering conducted by the Power Systems Division of the Westinghouse Corporation.

Twelve received training through individually tailored industrial internships. Upon return to the U.S., the team de-briefed the AID project manager for CETP, the IIE/CETP staff and the survey design specialist; the entire team also presented its findings to the IIE/CETP Advisory Committee at its meeting in Washington on April 12, 1985. This report represents the team's final task.

Raw data for the report are on file with AID/S&T/EY, while other materials (annual reports of organizations visited, participant files, etc.) are located at the Institute of International Education (IIE), Washington office.

The report endeavors to respond to five major questions:

- Did the participants receive the skills and knowledge they sought?
- Did the participants apply those skills and knowledge to their jobs, has their job performance improved, and have they gained promotion or received greater responsibility?
- Have the participants' employing organizations and colleagues benefitted from the training?
- Have any commercial or political relations between the U.S. and participants' countries accrued through CETP training?
- Has the CETP improved a country's ability to explore and/or produce energy resources?

### E. GENERAL FINDINGS

Six principal findings resulted from the 209 interviews conducted with former CETP participants, their supervisors, and AID personnel:

1. Returned participants are using their training directly and effectively.
2. Both academic and non-academic training have been important and effective in helping developing countries to realize their conventional energy objectives.
3. CETP training has contributed significantly to participants' personal and professional development.
4. CETP is having multiplier effects that benefit former participants' colleagues and organizations.
5. The criteria and procedures used for selection of candidates are important determinants of individual participants' success and the benefits they receive from training.
6. Written course texts and trade, technical, and research materials are invaluable and such materials are heavily used in post-training work.

These six key findings are explained more fully below.

1. Returned participants are using their training directly and effectively.

CETP training courses are regarded by participants and supervisors as superior to those available in their own countries or non-US foreign sources. Nearly all participants and supervisors agreed that CETP training had provided a broader perspective on the energy industry, had sharpened skills in use of English and ability to use technical literature in English, and was valuable to the individual, the employer, and (less directly) the country. Participants' objectives were usually met and sometimes exceeded.

Most participants returned to their former organizations and positions, often with expanded job responsibilities. Some salary increases were realized, while formal promotions were much less frequent. In some instances, participants were placed on loan to other organizations requiring their new skills, usually in

positions of greater responsibility. In a very few cases, participants were not rehired by their parent organizations, and in even fewer instances (2 among the 127 interviewed) did participants seek work outside of their country or not return home following training.

Former CETP participants have frequently made direct impacts and measurable contributions to their countries' energy situations as seen in these examples:

- An environmental control section was planned and established in the country's electrical authority in Jamaica.
- Electrical transmission line losses were reduced through application of a participant's new design skills in grid refurbishment in Costa Rica.
- Research on thermal techniques for enhanced oil recovery and tracer studies for reservoir description was used for greater in-country petroleum exploitation in India.
- A draft national energy plan for 1985-2000 was developed under a former participant's leadership in the Sudan.
- Bangladesh's first university-level course in petroleum well-log interpretation was developed by a former participant, who will teach it for the first time in the fall of 1985.
- Economic modelling and forecasting techniques learned in the U.S. were applied by an Indian participant giving technical assistance to Thailand.
- Extensive industrial energy audits resulted in considerable energy conservation in Costa Rica.
- Computer and data processing techniques learned in the U.S. are providing Bangladesh's first capability for monitoring and interpreting seismic field data.
- The only coal analysis laboratory in Central America has been created under the direction of a former participant, a woman.

Returned participants also multiply the benefits of (and to) CETP:

- They have held both formal and informal meetings or seminars with supervisors and colleagues to share training received in the U.S. through CETP.
- They have occasionally met with other CETP trainees (especially when they are in the same organization) to discuss professional matters of common interest.

- ° They are being involved to a greater extent in distributing information on CETP courses.
- ° They have recommended purchase of U.S. goods and services to their supervisors, and are likely to influence such purchases more frequently as they attain decision-making responsibilities in their organizations.

2. Both academic and non-academic training are important and effective.

The impact of CETP short-term non-academic training has been usually immediate and job-specific, as indicated in many of the examples given above and the more detailed case studies presented later in this report.

Longer-term academic training has achieved broader and more theoretical benefits in areas such as national energy planning, economic modelling and forecasting, and development of country-wide manpower needs and training assessments.

Of the 127 CETP participants interviewed, twelve-to-one received non-academic training. It is understandable, therefore, that a majority felt that practical short-term training was more valuable and that they would advocate more of it.

Academic and non-academic training meet different needs, however, and the team concluded that both are necessary for the development of effective, in-country energy policies and procedures.

Critical to the success of both practical and academic training, according to the study, are:

- ° Advance identification of a country's training needs to ensure that nominations of candidates reflect national needs and priorities.

Results of the study indicate that where there was a single office responsible for identifying national training needs, there was a better probability of training opportunities being allocated according to need.

° Better distribution of detailed information on CETP programs.

Where offices responsible for identifying national energy training needs existed, there also existed a good probability that information on opportunities would be distributed widely to appropriate organizations.

° Competence in English language comprehension and usage.

English is the global language of the energy industry. Among the reasons some CETP training experiences were less successful than others was limited English comprehension and usage.

Given that most non-academic training is short-term and taught to groups, it is vital that training not be impeded for the group as a whole because of a lack of English comprehension and use in some group members.

A few participants (and a few more supervisors) expressed some concern over the high language standards required for short-term technical training. However, there was general approval of English competency requirements, regardless of the program or course. The telling point made by many interviewees was: when one person's English is weak, a entire class is slowed down. Some suggested, however, the review of different tests to measure better English competency specifically geared to technical training in energy fields.

3. CETP training contributed significantly to participants' personal and professional development.

Almost all participants indicated that they recieved personal as well as professional gains from their training. Training led to increased confidence and self-esteem, which made it easier to take initiative, share information with colleagues, and address complex professional issues at home with greater assurance. Simultaneously, career enhancement came in the form of increased job responsibilities or being groomed for further advancement.

Training also contributed to a greater awareness of better work and management practices, such as meeting deadlines or being punctual and fully productive at work and in some instance personal uses of CETP training led to development of small private businesses, such as energy auditing firms.

Training in the U.S. provided important insights into the American way of life, work ethic, and self-reliance. The openness of social and professional relationships especially was enlightening and generally resulted in a warm and positive feeling toward the U.S.

4. CETP is having multiplier effects.

Participants have passed on their new skills and knowledge in a number of ways: Some have prepared specialized courses base on their training experience for local technical institutes and universities. A number of these have been the first in their field to be offered in the participants' country. Others have circulated written materials received during CETP training or purchased while they were in the U.S. Still others have provided formal and informal workshops and seminars for their colleagues and subordinates on the job.

Other multiplier effects include the preparation of materials for third-country use which result directly from CETP training and, on occasion, the preparation of information on the latest economic forecasting and modelling techniques for government and private-sector officials and in-country long-term energy and economic planning.

Less dramatic but nevertheless important ripple effects which benefit CETP include the distribution of information on new CETP programs to others an expressed interest among some participants of developing "alumni" networks to share professional information and interest further, and the involvement of some participants in meeting CETP nominees to share with them their own experiences in the U.S.

5. The quality of the selection process correlates highly with benefits of training received and used.

In reviewing the effectiveness of training, based on responses of participants and supervisors, it became apparent that where need and merit were the principal criteria for selection, positive outcomes almost always occurred. Where seniority, reward, or similar criteria were used, on the other hand, the results of training were frequently less positive. Only a few participants were selected on the basis of seniority and reward systems within their countries; most had been identified because of a specific need within their organization or department and/or because of their professional ability. A handful learned about CETP programs from sources outside the "official channels" and promoted their own applications and nominations within their departments or organizations, eventually winning endorsement from their superiors and from AID.

The ages of the participants tended to correlate with the selection practices; that is, those chosen for seniority (or reward) were somewhat older than those selected on the basis of need or merit. The ages of the participants ranged from the mid-20' to early 50's.

Consistently good selection of participants most often resulted when:

- ° The AID energy officer, training officer, or others AID staff were directly involved in the widespread distribution of information on CETP programs;
- ° Direct mailings from IIE on the new courses and revised programs were sent to former participants;
- ° A member of the IIE or AID/Washington staff visited overseas missions and host country organizations personally to provide information on CETP and its course offerings;
- ° AID energy officers or former participants were able to interview nominees and review program contents and training objectives prior to final selection; and
- ° Supervisors or close colleagues of those nominated for training were a former CETP participants.

6. Training materials are extremely valuable and frequently used after training. According to almost all participants interviewed, the printed matter provided in the CETP courses is one of the Program's greatest assets. Materials are used extensively by most participants, and are shared with colleagues. Copies (less frequently originals) are often given to organization or office libraries for their collections. Occasionally course materials are kept at home or not shared, because participants fear their loss or theft, and duplicates are hard to come by.

Materials are used to train subordinates; for lectures, speeches, and as references; and in preparing courses for local technical institutes and universities. Regular use or reference to materials obtained through CETP institute and training also helps to publicize the Program.

Many interviewees expressed a need and eagerness for additional technical literature. Foreign exchange scarcity places real constraints on continuing subscriptions to U.S. technical journals and trade magazines, as well as purchase of technical books published in the U.S. The participants indicated that expedited shipment of participants' materials home would assure more immediate and timely use in-country. A year's transit by sea freight is not unusual, and AID's \$60 shipping allowance almost always dictates using this route.

Pre-mailing complimentary course materials to each participant's supervisor was also suggested by some interviewees as a way to provide further information on CETP and U.S. training and provide the supervisor with advance knowledge of the trainee's program.

## F. CASE HISTORIES

A selected number of individual case histories demonstrate more precisely the short-term and long-range impacts of CETP training.

### 1. Academic Participants

#### a. BASHIR (Sudan): University of Pittsburgh

Ishaq Bashir, currently a Senior Planning Officer with the National Energy Administration (NEA) of Sudan, is one of ten academic participants interviewed. He received his Master of Science degree in Energy Resources from the University of Pittsburgh in 1983.

Prior to selection for training, Bashir was a manager in the economic planning division of NEA. He indicated that in hiring him, his government had promised that NEA professionals would be given the opportunity for graduate study abroad. Bashir was pleased with the content of his academic program and particularly the flexibility it provided in selecting the courses he felt would be most useful to him. When he returned to the Sudan and NEA, Bashir was promoted to the position of Senior Planning Officer, a position in which he reports directly to Dr. M. Shulli, Director General of NEA. He attributes the promotion partly to the CETP experience. His primary duty now is coordinating production of a national energy planning document (1985-2000). He works with subcommittees on electricity, petroleum and the other energy forms. Integrated energy planning includes technical, social, environmental and economic considerations, and it is largely Bashir's responsibility to bring them together in a coherent document.

Bashir is clearly using a substantial amount of his graduate school training and materials in this endeavor. He specifically cited the environmental considerations which were unknown to him prior to his M.S. degree program and which he now applies regularly in planning.

Bashir is also developing a computerized energy planning data base for senior management, another by-product of his training at the University of Pittsburgh. A third result is his continuing contact with a Dr. Cobb of the Pittsburgh faculty who occasionally sends him literature useful to him in his new position.

Bashir supervises Maha M. Ahmed, another CETP participant, who completed an M.S. degree in Energy Economics at Pittsburgh in 1984. She, too, has been recently promoted, in this case to the position of Head, Planning and Coordination Section, and is directly under Bashir's supervision.

It can be seen that Bashir's CETP training has materially enhanced the Sudan's energy planning capability, an advance that promises to be important to the country's future economic development.

b. RAGHAVENDRAN (India): Massachusetts Institute of Technology

P. Raghavendran's selection for admission to a CETP academic program was partly by fortuitous coincidence and partly through his own initiative. From 1976 to 1981, he worked as Deputy Project Manager at the Petroleum Conservation Research Association of India, where he was gave technical advice to large energy consumers on petroleum conservation and prepared papers for the government on policy measures for promotion of efficient utilization of petroleum products.

His interest in graduate work was focused on increasing his knowledge of and skills in energy forecasting, planning techniques, and modelling, and in obtaining an overview of various energy options.

In 1980, Raghavendran applied for graduate school in the U.S. through information provided at the U.S. Embassy. He was accepted at both the University of Pennsylvania and MIT, but had insufficient funds to attend. When his interest was made

known to AID through his department, sponsorship came through the newly-established CETP and he became a degree candidate at the Sloan School at MIT in fall of 1981.

On his return to India in 1984, Raghavendran was assigned to the National Planning Commission where he works as a Joint Advisor with the Public Investment Board, which is responsible for the appraisal of all major public sector investments including those in petroleum.

The economic modelling and forecasting techniques Raghavandran learned through academic training have been put to immediate and effective use. Raghavendran prepared and delivered several seminars for top Indian government and private sector management personnel on the models he had prepared at MIT, and his economic forecasting has been directly applied to India's new Seventh (Five-Year) Plan, which went into effect April 1, 1985. Furthermore, the demand and planning models he developed are being refined for third-country use, beginning with Thailand. He has also presented a paper on economic forecasting in Norway.

Raghavendran has also introduced Apple microcomputers into the National Planning Commission, where he is putting a refined version of his model on-line so that the analytical methods he learned may be available on a daily basis to his colleagues as they investigate India's resource base and means for its efficient development and use.

In assessing his experience, Raghavendran indicated that the energy-related lab and "tools" at MIT were excellent and available to him on a regular basis and that he is grateful to Dr. Robert Kaufman of MIT for his continued interest in and direct support of the work he is pursuing in India.

2. Non-Academic Participants: Short Courses and Internships in Petroleum

a. LOPEZ (Costa Rica): International Petroleum Consulting Services, Inc.

Ronald R. Lopez from Costa Rica attended the ICPS Petroleum Fundamentals course in 1984. He is presently the Head, Drilling Fluid Engineering Department in the national oil company, the Petroleum Refinery of Costa Rica (RECOPE).

Lopez has continued his pre-training work as a mud engineer but has also taken on new petroleum engineering duties in well drilling since his training. He was selected for training to help meet the needs of the joint RECOPE-PEMEX petroleum exploration drilling program.

On his return from the U.S., Lopez has conducted training for many of his RECOPE colleagues and has helped to establish a petroleum fundamentals course which he teaches on regular basis at the University of Costa Rica.

The ICPS course enhanced Lopez's technical and professional understanding of petroleum engineering fundamentals. The materials he obtained while in the U.S. are kept in his office to provide a major reference resource for his associates, and copies of the materials are used in Lopez's class at the University. Lopez's supervisor indicated that he was pleased with the results of his training, that selection was based on RECOPE's exploration needs and the best qualified individual, and that he was in the process of selecting four more candidates for CETP programs. He stated that since Costa Rica hoped to find commercially-recoverable oil deposits, the country needs to develop greater ability in attracting and negotiating contracts for foreign participation.

b. BENJELLOUN (Morocco): A.D. Little Petroleum Management Program

Mohamed Benjelloun was an economist with Morocco's National Office of Petroleum Exploration and Exploitation (ONAREP) when he was nominated to attend the Arthur

D. Little Petroleum Management Program in 1982. Following his return, he was promoted and named Director of the Division of Human Resources within ONAREP, a new division in a company that itself represents a new venture for Morocco.

Benjelloun's principal responsibility is to implement a manpower development program recommended by an AID-funded consulting firm, Williams Brothers. The program includes preparation of a training needs assessment, focusing more on specialized rather than general training, and a pilot training program in several ONAREP divisions. The Performance Management System (PMS), developed by Williams Brothers, will produce a training and work experience matrix for use in determining training needs for the next 3-5 years. Benjelloun feels that training in management will be much needed, but that the ability of ONAREP to send trainees will depend on success in petroleum discovery and revenue generation. He believes that the current English requirement is a major barrier for ONAREP employees.

Benjelloun feels that the ADL program was particularly valuable in teaching him financial and time management, something new to him and especially useful in his present position. He believes also that the ADL course broadened his horizons by introducing him to a global picture of oil supply and demand, exploration techniques, transportation economics, management skills, and English. He returned home with a new appreciation of the petroleum industry and with worldwide contracts.

With his broadened horizons, his new responsibility and the belief that his training was partly responsible for this appointment, Mr. Benjelloun is hopeful that a still-better position in the area of finance and economics will become available within ONAREP.

c. ASHRAF, JAMALUDDIN AND TALUKDER (Bangladesh): Gulf Oil and Seismograph Services Corporation (Internships)

Three CETP participants interviewed by the study team -- all from Bangladesh -- represent the smallest category of participants, those who have held specially-arranged internships in the U.S. private sector. Such internships are difficult and labor-intensive to arrange, requiring extensive negotiation and planning between the IIE project staff and the companies involved. As the Bangladesh cases show, however, these specialized training experiences often produce very tangible, practical results and appear to have the greatest immediate impact in terms of advancement of the participants's capabilities, as well as those of their countries. The cases also suggest that they may produce eventual benefits for the U.S. private sector in terms of sales of goods and services.

Dr. Muhammad H. Ashraf received his Ph.D in Geophysics from the Department of Applied Geophysics at the Indian School of Mines in 1978. His B. Sc. (Hons) and M.Sc. degrees were earned in his native Bangladesh. He is 40 years old and had been employed by the Oil and Gas Corporation of Bangladesh (Petrobangla) for three years prior to training.

Ashraf was selected for training because of his seniority, experience and a critical in-country need for skills in seismic exploration and interpretation. While at Petrobangla he initiated seismic stratigraphic studies of the Bangladesh sedimentary basins where oil exploration is underway. Seismic stratigraphy is not being taught in the universities of Bangladesh.

When selected for training, Ashraf was a senior geophysicist and a field engineer. The program that was arranged for Ashraf was a non-degree internship at the Gulf Oil Exploration and Production Company in its Houston Technology Center. At the

Center he worked directly under the supervision of Dr. W.J. Ludwig, Section Director, Interpretation Department. He learned by participating fully in the daily work of the department.

In addition to the Gulf seismic research Ashraf completed in Houston, he attended a 4-week Gulf course in modern techniques of seismic data acquisition and processing and a course in stratigraphic interpretation of seismic data in Dallas conducted by the American Association of Petroleum Geologists (AAPG).

When he returned from training, he became project manager in charge of seismic interpretation on a project jointly funded by the British Overseas Development Agency (ODA) and the Federal Republic of Germany. It is a major project for Bangladesh and Ashraf has considerable responsibility both in the field and in its management. He believes the extraordinary intellectual and practical opportunities he was given in the U.S. have made it possible to meet those responsibilities. His training has also put him in a position to compare and evaluate the techniques and technologies of the joint partners, which he finds not as state-of-the-art as those to which he was exposed in the United States.

Ashraf has also used his training to develop an elementary course in seismic interpretation to be offered at the Bangladesh Petroleum Institute (BPI), the country's only in-service training institute, of which he is also a director. He is drawing heavily upon materials and information he obtained in the U.S. for the new course curriculum.

M. Jamaluddin was selected for CEPT training in 1983. He is a geophysicist and received his M.Sc. in solid-state physics at the University of Bangladesh. At the time he was nominated he was employed by Petrobangla as a field and interpretative geophysicist.

Jamaluddin undertook an internship at the Gulf Oil Exploration and Production Company in Houston, Texas. His specialized training was in computer theory for seismic interpretation.

Before his training there were no computers for seismic data processing in Bangladesh and no individual knowledgeable in either the programming required or in data interpretation. All processing and interpretation were done by contract with other countries including Algeria, the U.K. and Malaysia. The need for in-country specialists was obvious.

The first computer to be used for these activities was imported in 1984 by Patty Rae Geophysical Corporation, a U.S. firm, with funds provided by World Bank loan to Bangladesh. GeoSource, a subsidiary of Patty Rae, is under an 18-month contract to develop appropriate software and computer training for six or more programmers.

Jamaluddin's training at Gulf resulted directly in his being named manager-geophysicist of the newly created Data Processing Department within Petrobangla. He is responsible for overseeing three field crews who send in seismic data for programming and analysis. He is also responsible for certain management decisions regarding the GeoSource contract, and he is the only person currently in Petrobangla with the combined knowledge of the raw field data and techniques for computer programming and data interpretation; as such, he is able to monitor the in-country training of computer programmers and the software development.

His relationships with Gulf and now with GeoSource provide an excellent opportunity for continuing U.S.-Bangladesh relations in this critical field of seismic exploration and interpretation.

While in the U.S., Jamaluddin became a member of the Society of Exploration Geophysicists through the assistance of IIE. He expects to benefit from the ongoing professional contacts and technical literature he will receive from the Society.

Yousef Talukder, petroleum geologist with Petrobangla, the national oil and gas company of Bangladesh, received CETP training in 1983 in a specialized internship in well-log, open-hole log, and acoustic (sonic) log interpretation. A graduate of the University of Moscow, USSR, with a Master of Science degree in petroleum geology, Talukder and his supervisors recognized that there were no well-log interpretation specialists in his native country. For his CETP internship, he was assigned to the Birdwell Division of the Seismograph Services Corporation in Tulsa, Oklahoma, Mr. Talukder also received a month's field training in Indiana, Pennsylvania.

Talukder's training at Birdwell has provided him with the distinction of being the first specialist in his field in Bangladesh. Furthermore, since there were also no university courses or degrees offered in this field in Bangladesh, he has returned to prepare a semester course being offered at the University of Bangladesh for the first time this year. He hopes to introduce a full year's course in well logging in the geology department within the year.

Since returning to Bangladesh, Talukder has also overseen the start-up of two new wells and has recommended use of Birdwell as the possible service company to become involved. Well-log interpretation that had heretofore been provided by Soviet specialists will be partially his responsibility in the future. While receiving no promotion as yet, Talukder's responsibilities have increased appreciably and his contacts with Birdwell have continued.

3. Non-Academic Participants: Short Courses in Electric Power

a. KAMPOL (Thailand): TVA Electric Utility Engineering Course

Wipassakornawarawuth Kampol is an engineer with the Provincial Electric Authority (PEA) of Thailand, which supplies electricity to 70 provinces in the country, excluding the 3 surrounding Bangkok. PEA is within the Ministry of the Interior. Kampol is 30 years old and has a B.S. degree in Electrical Engineering.

Kampol received CETP training in electric utility engineering at the Tennessee Valley Authority from September 1983 through March 1984. He believes his training fulfilled the three objectives he identified in a letter accompanying his November 8, 1982 application: 1) to gain in-depth theoretical knowledge of electrical equipment and to receive broad, practical training on its installation, operation and maintenance; 2) to study electric power transmission and distribution systems; and, 3) to find practical solutions to technical problems in transmission and distribution engineering.

Kampol has been promoted since returning to Thailand. His new responsibilities include coordinating certain PEA projects with Electric Generating Authority of Thailand (EGAT). His training has given him a much better grasp of what EGAT does and hence his role and relations are much smoother. He has also been asked to assist in putting together a new periodical for his department, and will use this opportunity to utilize further information received at TVA.

One component of the TVA course, covering energy conservation and rates as well as material on non-conventional energy, has enabled Kampol to be appointed to a new PEA committee on Non-conventional Energy Research and Development. This committee is considering various energy-generating projects and Kampol has prepared

a proposal for a "Biomass Gasification Energy Project" in which he used his TVA reference materials. The project would distribute energy in a rural area where EGAT's grid presently does not reach.

Since Thailand buys a significant amount of U.S.-made electrical equipment, Kampol's exposure to such equipment through his training at TVA has given him an advantage in both understanding and using it, and may eventually help to stimulate further U.S. sales.

b. PERDOMO (Dominican Republic): Denver Research Institute Hydropower Course  
Fernando Perdomo of the Dominican Republic received non-academic training in 1982 at Denver University's short course in Hydropower Design and Development and is presently employed by the Dominican Electricity Corporation (CDE) as Head of the Hydroelectric Development Design and Supervision Division.

Perdomo indicated he was selected by his supervisor who felt that CDE needed this specialized training and that Perdomo was the best qualified person to go. Perdomo's duties and responsibilities were expanded significantly following his training in the U.S., and he received both a promotion and an increase in salary.

The one-month course at Denver provided good practical knowledge of hydropower design and development which were directly related to his job as hydro project engineer. The course assisted Perdomo in designing and managing hydropower projects, specifically the technical data for the final design and specifications of the Rio Blanco Hydropower Project, and in developing the design and feasibility study for the Alto Yaque River Hydroelectric Project. Perdomo thus believes he fully achieved his stated objects of obtaining technical training directly related to his work.

Furthermore, Perdomo reports making excellent contacts while in the U.S. and obtaining much useful technical data which he and his colleagues use regularly. Allis Chalmers, for example, provided excellent data on hydropower design and equipment. The contacts made also led directly to contracting for consulting services of the U.S. firm, Planning Research Corporation.

Perdomo informally trains his CDE colleagues using course material obtained in Denver. In addition, he serves formally as a director and teacher of civil engineering at the Instituto Tecnologico de Santo Domingo. Materials, handbooks, and technical data purchased in the U.S. are used regularly in his office by his colleagues.

4. Non-Academic Participants: Short Courses in Energy Conservation

a. KORKOR (Egypt): University of Tennessee

Hamed Korkor, Senior Energy Technician in the Egyptian General Petroleum Company (EGPC), was selected by his supervisor to attend the 1982 course on Energy Conservation at the University of Tennessee because of the need for a program of applied energy conservation within EGPC. His selection was also aided by his facility with English.

Korkor (and a colleague, Abd El Din Hussein) were both reassigned on return from training in the U.S. to a newly-created Office of Energy Planning (OEP), where both men are on loan from EGPC for an indefinite period. Korkor's responsibilities have increased along with his salary, for which he credits the CETP course.

As a direct result of his training, Korkor is involved in an OEP project to plan for Egypt's energy needs between 1985 and 2000. He has particular responsibility in conservation planning for the metals and dye-stuff industries in Egypt.

While Korkor felt that his training was useful in general and that he was able to use much of what he had learned, he also felt that too much time spent on theory, that there could have been more emphasis on conservation in specific industries, and that the material presented was oriented more toward economics than engineering. A concentrated followup was needed which apparently the site visits did not accomplish since they were very general ("tour group visits" as another participant referred to them). The energy conservation program has since been modified and moved to TVA in response to the comments of Korkor and others.

b. RAFOLS (Philippines): TVA

Raymundo R. Rafols, Jr. is the only person interviewed by the study team who is employed in his country's private sector. He is Engineering Manager of the Armco-Marsteel Alloy Corporation of the Philippines. He attended the two-month TVA program, "Energy Conservation Course for Utility and Industrial Plant Engineers" in the summer of 1984.

Rafols heard about the TVA course from the Energy Management Association of the Philippines (ENMAP). He read the materials that were available, spoke to his supervisor, and applied. (Generally in the Philippines, especially in government offices, selection is based on the needs of a given department or ministry and the decision is made "at the top", not by the trainee's immediate supervisor.)

Since training, Rafols was asked to set up a conservation committee within his corporation, which is to consider specific ways to reduce energy consumption. He has also adapted the energy auditing forms used by TVA and they are now in standard use throughout Armco-Marsteel. Rafols holds a formal weekly seminar with his subordinates to pass along information he learned.

As a direct result of his training, Rafols was also appointed by his company to a commission sponsored by Taiwan and Japan to view energy conservation methods in those countries and to bring back ideas for possible use in the Philippines. In further recognition of his capabilities, his employer has also awarded him two pay increases in only a few months' time.

Of the TVA course, Rafols' only criticism was that the emphasis was tilted too heavily in favor of the utility side, as opposed to industrial energy conservation, his own major interest. He believes this was because TVA, a large utility, conducted the course. Given his background and corporate responsibility, he would have preferred a more balanced distribution between industrial and utility energy conservation.

## G. RECOMMENDATIONS

The CETP has accomplished a high degree of productivity during its brief history. The quality and contents of its offerings have been positively appraised by the majority of participants, the trainees, their employers and countries are reaping a diverse range of benefits.

In recognition of this and based upon its findings in the Participant Follow-up Study, the team makes seven recommendations and related suggestions to increase CETP's impact and maximize AID's return on its training investment, in terms of programmatic benefits.

The seven principal recommendations are:

1. Improving the selection process through greater overseas AID Mission involvement;
2. Disseminating program information more vigorously, systematically, and widely;
3. Finding ways to make more technical materials, information, and contacts available to participants both during training and after their return home;
4. Placing renewed emphasis on the importance of English language qualifications;
5. Continuing emphasis on practical and specialized courses;
6. Encouraging in-depth employer evaluations of participants' training; and
7. Increasing efforts to promote private-sector interests and relations, including sales of U.S. goods and services.

The recommendations are detailed more fully below.

1. Improving the selection process through greater involvement by AID Missions overseas.

There is general consensus among team members that greater direct involvement by AID Mission personnel, especially energy officers, would benefit CETP generally and enhance the program's effectiveness.

Active Mission participation in screening prospective participants is recommended, along with the distribution of information on training opportunities among the widest possible range of qualified persons and appropriate institutions. Direct contact between technical staffs of AID and counterpart agencies, where possible, is likely to be more effective than only written communications through non-technical channels.

As one member of the team noted, "If the limited number of training slots are to be used with maximum effectiveness, it is imperative that the local AID Mission -- and specifically the energy officer -- take a much more active hand than is now the case in both the selection process and in the follow-up (evaluation) with returning participants."

Another interviewer recommended "a detailed and searching pre- and post-training interview of every candidate be conducted by the Mission energy or training officer."

Mission personnel can also encourage countries to conduct manpower assessments and to develop comprehensive national energy training plan so that the best qualified and most appropriate persons are nominated in accord with national manpower requirements. Encouragement can also be given to centralizing the trainee nomination process, tying it to projected energy manpower needs.

2. Disseminating program information more vigorously, systematically, and widely. Current information on CETP produced by IIE and AID/Washington is adequate: it includes an annual cable on overall CETP offerings, semi-annual cables on academic nominations, and individual course announcement cables and supporting materials which are produced throughout the year.

CETP serves a large number of countries, and as one member of the team noted, "The countries visited have their own systems of selection." Given the impossibility of AID/Washington and IIE tailoring its course announcements individually to the schedules and procedures of over 40 different countries, the burden of such country-specific adjustment must fall on the Missions. The overall objective, however, is to widen the distribution of information about CETP offerings within each country, using both American and host country channels to reach the greatest possible number of eligible, interested organizations and qualified candidates.

Direct mailings made by IIE to former participants were rated as highly effective in spreading the word about CETP. With updated, comprehensive, and computerized lists of CETP alumni being developed by IIE and some AID Missions, program information and announcements could be sent regularly to all former trainees. Making certain that the exact nature of the training to be undertaken was understood fully by the participant and his/her supervisor prior to the participant's departure was universally acknowledged to be very important. Each course brochure should, therefore, include a detailed course outline noting professional qualifications, prerequisite training and other requirements for admission.

3. Making more technical materials, information and contacts available to participants during and after training.

Materials provided participants as part of their courses are an extremely important resource for CETP professionals. To enhance the value of this resource, the following measures should be considered:

- A higher book allowance for participants along with a higher shipping allowance to expedite return of printed matter to the trainee's home country;

- A complimentary duplicate set of basic course texts sent to each participant's supervisor, in advance of the participant's return home, perhaps with similar set sent to each USIA or AID Mission library;
- Regular distribution of abstracted information on energy subjects from sources in the U.S. government, industry associations, and technical or professional societies sent to the participants, their organizations, USIA libraries and/or AID Missions.
- Publication of a CETP newsletter highlighting technical achievements of current and past participants.
- Assistance in installation of laboratory or other equipment including computers that will enable trainees to apply what they learned in training immediately upon returning home.

Greater personal contact among former participants is also recommended; many participants expressed interest in meeting occasionally for professional and personal reasons. Meetings could be planned occasionally by AID Mission personnel to update former participants on current CETP programs and introduce them to CETP nominees who might appreciate predeparture information on the U.S. and training. Meetings could be oriented around periodic visits of AID/Washington and/or IIE personnel.

4. Placing renewed emphasis on the importance of English language qualifications.

Comprehension of written and spoken English is an essential criterion in selection for training. To ensure the highest levels of English language achievements, AID should encourage and where possible finance in-country English language training as part of a selected individual's career development plan. As noted in the General Findings Section of this report, weak English skills do a disfavor to the individual, slows down the training progress of other students who have good skills, and generally dilute the effectiveness of training.

It is also recommended that all language competency tests currently required for CETP training be reviewed to ensure their relevance to particular programs as well as to the cultural and technical backgrounds of participants for whom programs may be planned. Although ALIGU and TOEFL are the tests most readily available to Missions and candidates, it may be possible in some cases to apply a test of technical English, perhaps even geared specifically to an energy vocabulary, rather than (or in addition to) tests of general English usage and grammar.

5. Continuing emphasis on practical and specialized courses.

The success of short-term, practical courses and those which combined standard programs with individualized internship experiences was significant. It is recommended strongly that they be continued and, where possible, expanded. Where possible, more emphasis could be given to problem-solving exercises and group-activity sessions, replacing some lectures and theory in short-term programs, along with greater emphasis on field trips involving professional interaction with personnel of the facilities visited. CETP staff should continue to encourage trainees to bring to the training real-life problems to be worked upon as part of the training process.

More short-term courses for mid- and senior-level administrators in fiscal and management training should be planned and offered. Programs of six to eight weeks are the most desirable.

Specialized training in computer science/data processing (as pertinent to the conventional energy field) should be expanded.

Exploration of in-country training either as a precursor or a follow-up to U.S. programs is recommended.

APPENDIX 1

COMPREHENSIVE LISTS OF ACADEMIC AND NON-ACADEMIC CETP  
GRADUATES BY REGION, COUNTRY, TRAINING INSTITUTION, STUDY FIELD,  
EMPLOYER AND END DATE OF ACADEMIC OR NON-ACADEMIC TRAINING

Comprehensive Lists of Academic and Non-Academic  
CETP Graduates by Region, Country, Training Insti-  
tution, Study Field, Employer and End of Date of  
Academic or Non-Academic Training

Page No.

REGIONAL REPORT  
ACADEMIC GRADUATES  
AFRICA  
IIE/AID/CETP

APPENDIX 1

06/18/85

NAME	TRAINING INSTITUTION	STUDY FIELD	EMPLOYER	END DATE
** COUNTRY: KENYA				
PETER M.M NULLI	P.I.N.Y.	ENERGY ECONOMICS	MIN. OF ENERGY	12/24/83
JOHN K. MWEGA	P.I.N.Y.	ENERGY ECONOMICS	MIN. OF ENERGY	07/20/83
SAMUEL SATUMI GICHERE	P.I.N.Y.	ENERGY ECONOMICS	MIN. OF ENERGY	08/31/83
MDFATOS MUMYU	U. PENN.	ENERGY POLICY & MANAGEMENT	MIN. OF ENERGY	11/11/83
JOHN NGANDU GITHINJI	VA. P.I.	ELECTRICAL ENGINEERING	MIN. OF ENERGY	06/15/83
BENJAMIN KINHUA NJITA	VA. P.I.	ELECTRICAL ENGINEERING	MIN. OF ENERGY	06/15/83
** COUNTRY: SIERRA LEONE				
SHEIK JIBRIL K. DABOH	U. PITT.	ENERGY RESOURCES	MIN. OF ENERGY	04/15/84
** COUNTRY: SOMALIA				
YUSUF AHMAD MUSE	U. MICH.	ELECTRICAL ENGINEERING	NATIONAL UNIVERSITY OF SOMALIA	12/30/84
** COUNTRY: SUDAN				
AHMED EL ZEIN EL HASSAM	TEX. A&M	CHEMICAL ENGINEERING	NAT. ENERGY ADMIN.	04/10/84
MOHAMED EL AMAN	U. PITT.	ENERGY RESOURCES	NAT. ENERGY ADMIN.	10/28/83
SAIF SULIMAN	U. PITT.	ENERGY RESOURCES	NATIONAL ENERGY ADMINISTRATION	10/31/84
ISHAG ADAM BASHIR	U. PITT.	ENERGY RESOURCES	NEA	12/31/83
MAHA MOHMED AHMED	U. PITT.	ENERGY ECONOMICS	NEA	04/27/84
FATIMA I.R. ANIS	U. PITT.	ENERGY RESOURCES	NEA	05/04/83
NIEMAT MOHAMED EL AMIN	U. PITT.	ENERGY RESOURCES	NEA	08/05/84
** COUNTRY: TANZANIA				
MAMENO J. KATYESA	G.W.	ENERGY	TANZANIA ELEC. SUPPLY CO.	02/17/84
KAMDIDUS PETER LUPINDU	MONT. TECH	GEOPHYSICS ENGINEERING	MIN. OF MINERALS	08/09/83
ELIKUNDA G.J. KANZA	MONT.TECH.	GEOLOGY ENGINEERING	MIN. OF MINERALS	08/30/83
THEODOR KAPIGA	P.I.N.Y.	OPERATIONS RESEARCH	RUFIJI BASIN DEV. AUTH.	01/07/85
SHAABAN NGAMA	U. PITT.	CIVIL ENGINEERING	MIN. OF WATER & ENERGY	10/24/83
ESTONIAH NGAYA SAME	U. UTAH	CIVIL ENGINEERING	MIN. OF WATER & ENERGY	09/05/83
PASCAL M. SERKINA	W.VA. U.	GEOLOGY	MINISTRY OF MINERALS	11/07/83
BASHIR MRINDOKO	WA. ST. U.	GEOLOGY	MIN. OF WATER & ENERGY	08/30/83
CHARLES I.Z. KINAMBO	WA. ST. U.	CIVIL ENGINEERING	MIN. OF WATER & ENERGY	08/30/83

REGIONAL REPORT  
ACADEMIC GRADUATES  
ASIA  
IIE/CETP

06/11/85

NAME	TRAINING INSTITUTION	STUDY FIELD	EMPLOYER	END DATE
** COUNTRY: INDIA P. RAGHAVENDRAM KARUPPIAH INBASAGARAM BHUPENDRA BHATIA	M.I.T. NYU U. PENN.	ENERGY MANAGEMENT ENERGY RESOURCES ENERGY RESOURCE PLAN. & MGMT	INDIAN OIL CORP. LTD. UNKNOWN CENTRAL ELECT. AUTH./GOVT. OF INDIA	06/04/83 09/01/84 03/07/85
KRISHNAN DHARMARAJAN	U. PENN.	ENERGY POLICY & MANAGEMENT	MINISTRY OF ENERGY, GOVT. OF INDIA	03/07/85
** COUNTRY: PAKISTAN ARIF ALAUDDIN	MIT	TECH. & POLICY	UNKNOWN	07/27/83
** COUNTRY: THAILAND SUTHER CHIMKLAJ NIWAT ADIREK	CARM.-MELL RPI/ELEC.	ELECTRICAL ENGINEERING ELECTRICAL ENGINEERING	E.G.A.T. ELEC. GEN. AUTH. OF THAI.	12/17/84 08/23/84

REGIONAL REPORT  
ACADEMIC GRADUATES  
LATIN AMERICA  
IIE/CETP

06/11/85

NAME	TRAINING INSTITUTION	STUDY FIELD	EMPLOYER	END DATE
** COUNTRY: BARBADOS ANDREW FABIAN COZ ALLISON DAVIS	U. KANSAS U.CO. BOUL	ENERGY ECONOMICS ELECTRICAL ENGINEERING	MIN. OF TRADE & INDUSTRY B'DOS LIGHT & POWER CO.	07/09/83 12/23/84
** COUNTRY: COSTA RICA JAVIER A. LOUZAO ADRIAN F. FLORES	U. KENTUCK U. PENN.	MECHANICAL ENGINEERING	INST. TECH. OF COSTA RICA	12/31/83 01/24/85
** COUNTRY: DOMINICAN REPUBLIC WILLIAM E. MOYA VICTOR SIGFRIDO HERNANDEZ VICTOR D. SANTOS	U. ARIZONA U. KANSAS U. SO. CAL	MINERAL ECONOMICS GEOLOGY	DIRECCION GEN OF MINERIA UCMH STUDENT	07/23/83 03/31/84 11/25/83
** COUNTRY: HONDURAS SALVADOR RIVERA CANALES	G.W.U.	MECHANICAL ENGINEERING		04/30/84

REGIONAL REPORT  
ACADEMIC GRADUATES  
NEAR EAST  
IIE/AID/CETP

06/18/85

NAME	TRAINING INSTITUTION	STUDY FIELD	EMPLOYER	END DATE
** COUNTRY: EGYPT				
NABIL MOSTAFA AMIN	U. PITT.	ENERGY RESOURCES	EL NASR PET. CO	08/14/83
SHAWKY F. ARAFA	U. PITT.	ENERGY RESOURCES	MINISTRY OF PETROLEUM	08/14/83
MOHAMED M.W. SALEM	U. SO. CAL	PETROLEUM ENGINEERING	NASR PETROLEUM CO.	01/17/83
** COUNTRY: MOROCCO				
MOHAMMED BOUHADDI	U. ALABAMA	PETROLEUM ENGINEERING	ONAREP	02/10/83
AHMED KORACHI-ALAOUI	U. ALABAMA	PETROLEUM ENGINEERING	ONAREP	12/22/84
ADMAR IBENBRAHIM	U.T.E.P.	GEOPHYSICS		07/16/85

REGIONAL REPORT  
NON ACADEMIC GRADUATES  
AFRICA  
IIE/CETP

06/11/85

NAME	TRAINING INSTITUTION	STUDY FIELD	EMPLOYER	END DATE
** COUNTRY: BOTSWANA REUBEN J. GASETISWE	TVAI	ENERGY CONSERVATION	BOTSWANA POWER CORP.	07/28/84
** COUNTRY: BURUNDI DANIEL SEJJI	U. OF CT.	ENERGY ECONOMICS	REGIDESO	08/15/82
** COUNTRY: CAMEROON ANDRE DAVID NGNET ANATOLE MEBE ANDRE NGUESSEU IRENE MEE K NGUENE	IPCS IPCS IPCS IPCS	PETROLEUM ENGINEERING PETROLEUM ENGINEERING PETROLEUM ENGINEERING PETROLEUM ENGINEERING	MINISTRY OF MINES & POWER MINISTRY OF MINES & POWER MINISTRY OF MINES & POWER	09/14/84 09/14/84 09/14/84 09/14/84
** COUNTRY: I.COAST AYEKOE JACQUES M'DA GASTON VEI	IPCS WEST.	PETROLEUM GEOPHYSICS POWER SYSTEMS ENGINEERING	PETROCI ENERGIE ELECTRIQUE COTE D IVORIRE	09/14/84 12/14/84
** COUNTRY: KENYA EVANSON OBARE OMOGA MARY W. MAKUMI GEORGE OGERA GILBERT M.W. MURIAMKI NASHON KINGDINA WILLIAM MUNDIA JOHNSON OTTAWA OMBOTI PUNIT L. SHAH JAMES OTIENO OMONDI PETERSON KIMANI DORRIS SHIKUKU ESHITEMI	ADL ADL SIGNAL CO. TVA/TM TVA/TM TVA/TM TVA/TM TVA/TM TVA/TM TVAI TVAI TVAI	PETROLEUM MANAGEMENT PETROLEUM MANAGEMENT PETROLEUM REFINING ELECTRICAL ENGINEERING ELECTRICAL ENGINEERING ELECTRICAL ENGINEERING ELECTRICAL ENGINEERING ELECTRICAL ENGINEERING ELECTRICAL ENGINEERING ENERGY CONSERVATION ENERGY CONSERVATION ENERGY CONSERVATION	MINISTRY OF ENERGY MINISTRY OF ENERGY KENYA CANNERS, LTD. KENYA POLYTECHNIC MAGADI SODA CORP. PAN AFRICAN PAPER MILLS UNITED TEXTILES IND. KENYA BREWERIES LTD. KENYA COOPERATIVE CREAMERIES MUNIAS SUGAR CORP.	12/03/83 12/03/83 11/28/84 09/18/83 09/18/83 09/18/83 09/18/83 09/18/83 09/18/83 07/28/84 07/28/84 07/28/84
** COUNTRY: LESOTHO MOSIUOA R. MOTA MASUPHA E. SOLE	TVA/TM TVA/TM	ELECTRICAL ENGINEERING ELECTRICAL ENGINEERING	UNKNOWN UNKNOWN	11/20/83 12/30/83
** COUNTRY: LIBERIA J. EDMUND CHENOMETH JUSU J. HENA ROSE O. SMITH T. OLIVER BLAY FRANCIS MORLU SAM RICKS FRANCIS K. KAPUMA THOMAS A. TUBMAN CHARLES G. DUANA GEORGE F. KPAMULU WILLIAM M. JR. MILLER SEKU E. MARSHALL MIMIE NEUFVILLE	ADL ADL ADL IPCS TVA2 U. OF CT. U. OF TM. U. OF TM. UNITAR	PETROLEUM MANAGEMENT PETROLEUM MANAGEMENT PETROLEUM MANAGEMENT PETROLEUM GEOLOGY UTILITY ENGINEERING ENERGY ECONOMICS ENERGY CONSERVATION ENERGY CONSERVATION ENERGY CONSERVATION ENERGY CONSERVATION ENERGY CONSERVATION ENERGY CONSERVATION ENERGY CONSERVATION ENERGY CONSERVATION OIL AND GAS	LIBERIA PET. REF. CO. MIN. LANDS, MINES & ENERGY NAT. INVEST. COMM. MINISTRY LANDS MINES & ENERGY LIBERIA ELEC. CORP MAMO RIVER UNION LIBERIA ELEC. CORP. LIBERIA ELECTRICITY CORP. LIBERIA PETRO. REF. CO. LIBERIA PETRO. REF. CO. LIBERIA PETRO. REF. CO. LIBERIA PETRO. REF. CO. LIBERIA PETRO. REF. CO.	12/17/82 12/17/82 12/17/82 09/14/84 12/08/84 08/15/82 08/29/82 08/29/82 08/29/82 08/29/82 08/29/82 08/29/82 08/29/82 08/06/84

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** COUNTRY: MALI SEKOU KONATE CHEICKWA DIAWARA	ADL IPCS	PETROLEUM MANAGEMENT PETROLEUM GEOLOGY	PETROSTOCK NATL DIRECTION GEOLOGY & MINES	11/30/84 09/14/84
** COUNTRY: NIGER HAMADOU OUMAROU	UNITAR	OIL AND GAS	MINISTRY OF MINES & INDUSTRY	08/06/84
** COUNTRY: RWANDA JEAN PIERRE RUIHRA	TVA/DRI	HYDROELECTRIC ENERGY	MIN. OF NAT. RESOURCES	12/29/83
** COUNTRY: SENEGAL BABACAR FAYE	UNITAR	OIL AND GAS	MINISTERE DU DEVELOPPEMENT IND.	08/06/84
** COUNTRY: SEYCHELLES GEORGE EDWARD PILLAY	AMOCO, TI	PETROLEUM ENGINEERING	MIN. PLNG. & EX. REL.	09/06/83
** COUNTRY: SIERRA LEONE SAMUEL THEOPHIL POWERS	TVAI	ENERGY CONSERVATION	NATIONAL POWER AUTHORITY	07/28/84
** COUNTRY: SUDAN AHMED MOHAMED IBRAHIM BAAFAR FAKI ALI ELAMIM ELSADIG ELZUBIE ALI HAYAT EL HAJ YOUSIF AZHARI A. ABDALLA SAMI TAKA ABDEL BAGI AZHARI ALI MUSTAFA AHMED AMIR YOUSIF MUSSEIN MAHMOUD MURSI	ADL ADL GNU IPCS IPCS IPCS IPCS IPCS IPCS IPCS	PETROLEUM MANAGEMENT PETROLEUM MANAGEMENT ENERGY ECONOMICS PETROLEUM GEOLOGY PETROLEUM GEOLOGY PETROLEUM GEOLOGY PETROLEUM GEOLOGY PETROLEUM GEOLOGY PETROLEUM GEOLOGY PETROLEUM GEOLOGY	GENERAL PETROLEUM CORP. SUDAN GOV./FORESTRY DIV. NATL. ENERGY ADMIN. DEPT. GEOLOGICAL & MINERAL RES. GEN. PET. CORP. GENERAL PETROLEUM CORP. GENERAL PETROLEUM CORP., GEOL & MIN RES DEPT/MINIS OF ENERGY GEOL & MIN RES DEPT MIN OF ENERGY	11/30/84 12/17/82 07/06/83 08/27/83 06/18/84 09/14/84 09/14/84 09/14/84 09/14/84 09/14/84
MOHAMED M. BUSHARA AZAM ABUZID I. SHAMBATI ABDEL MONTEM EL IDRIS FADL OSMAN MUSTAFA ABDALLA YABDOUB MOHAMED YOUSIF AHMED AMIR M.M. SHERIF MOHAMED MUSTAFA SALAM ABDEL RAZIG MOH IDRIS MAHMOUD RASHAD EL HAKEEM MOHAMED OKER ALI HATIM EL TAHIR EL MAEIM IBRAHIM IDRIS ALI ALI SAIED ABDALLA KHALID MOHAMED EL HASSAM MOHAMED OSMAN MUGUD HASHIM MOHAMED MARIO PETER USALI	IPCS IPCS IPCS IPCS IPCS IPCS IPCS NRECA,U.MO NRECA/DC NRECA/DC PETEX TVA/TM TVA/TM TVA/TM TVA/TM TVA/TM TVA2 UNITAR WEST. WEST.	PETROLEUM ENGINEERING PETROLEUM ENGINEERING PETROLEUM ENGINEERING PETROLEUM GEOPHYSICS PETROLEUM GEOLOGY PETROLEUM GEOLOGY ENGINEERING MISC. ELECTRICAL ENGINEERING ELECTRICAL ENGINEERING PETROLEUM ENGINEERING ELECTRICAL ENGINEERING ELECTRICAL ENGINEERING ELECTRICAL ENGINEERING ELECTRICAL ENGINEERING ELECTRICAL ENGINEERING UTILITY ENGINEERING OIL AND GAS POWER SYSTEMS ENGINEERING POWER SYSTEMS ENGINEERING	GEOL & MINING RES./MIN. ENGY & MIN. GEOL & MINING RES/MIN. ENGY & MINING. GEOL. & MINING. RES/MIN. ENGY & MINING GEOLOGICAL & MINERAL RES. DEPT. MINISTRY ENERGY & MINES MINISTRY ENERGY & MINES NAT. ELEC. CORP. NAT. ELEC. CORP. NAT. ELEC. CORP. NAT. ENERGY ADMIN. NAT. ELEC. CORP. NAT. ELEC. CORP. NAT. ELEC. CORP. NAT. ELEC. CORP. NAT. ELEC. CORP. NATL ELEC CORP GEN. PETR. CORP NAT. ELEC. CORP.	08/27/83 08/27/83 08/27/83 08/27/83 01/01/84 01/01/84 07/23/83 09/28/83 09/28/83 03/30/84 09/18/83 09/18/83 09/18/83 09/18/83 09/18/83 12/14/84 08/06/84 09/14/84 03/30/84

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AHMED KHALIL AHMED	WEST.	POWER SYSTEMS ENGINEERING	NAT. ELEC. CORP.	03/30/84
** COUNTRY: TANZANIA				
ELIAB NGOGOMBA	ADL	PETROLEUM MANAGEMENT	TANZANIA PET. DEV. CORP.	12/17/82
MARTHA SAKAFU	ADL	PETROLEUM MANAGEMENT	TANZANIA PET. DEV. CORP.	12/17/82
MURADALI M. FAZAL	TVA/TM	ELECTRICAL ENGINEERING	TANZANIA ELEC. SUPPLY	04/03/84
AMBROSE KUNDI	TVA/TM	ELECTRICAL ENGINEERING	TIPER CO., LTD.	09/18/83
RENE POINTE	U.MO-ROLLA	ELECTRICAL ENGINEERING	TANZANIA ELEC. SUPPLY CO.	04/25/83
ISAAC MINJA	WEST.	POWER SYSTEMS ENGINEERING	TANZANIA ELEC. SUPPLY CO.	12/17/83
AIDAWO MWINGIZI	WEST.	POWER SYSTEMS ENGINEERING	TANZANIA ELECTRIC. SUPPLY	12/17/83
** COUNTRY: TOGO				
ADABA KODZO	TVA/TM	ELECTRICAL ENGINEERING	CO ENERGY ELEC. DU TOGO (CEET)	03/30/84
KPAKPO TOUNOU	TVA/TM	ELECTRICAL ENGINEERING	UNKNOWN	09/18/83

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** COUNTRY: BANGLADESH				
WALI UL ISLAM	ADL	PETROLEUM MANAGEMENT	BANGLADESH PETR. CORP.	12/17/82
M. ISMAIL	ADL	PETROLEUM MANAGEMENT	PETROBANGLA	12/17/82
AZIZUL A.K.M. HAQUE	ADL	PETROLEUM MANAGEMENT	PETROBANGLA	12/17/82
MUHAMMAD H. ASHRAF	GULF OIL,	PETROLEUM ENGINEERING	PETROBANGLA	05/06/83
M. JAMALUDDIN	GULF OIL,	PETROLEUM ENGINEERING	PETROBANGLA	02/15/84
BELAL-E-ISLAM RUKUMUDDIN	IPCS	PETROLEUM ENGINEERING	PETROBANGLA	08/27/83
A.M.M. HOSSAIN	IPCS	PETROLEUM ENGINEERING	PETROBANGLA	08/27/83
M. AZIUR RAZA	ML INDUSTR	PETR./COAL/GAS ENG.	PETROBANGLA	05/12/84
MATIUR RAHMAN	ML INDUSTR	MUD ENGINEERING	PETROBANGLA	05/12/84
YOUSUF ALI TALUKDER	SEISM. SER	PETROL.GEOL./WELL LOG INTERP.	PETROBANGLA	03/02/83
ABDUL JABBAR MOLLAH	SHELL OIL,	PETROLEUM ENGINEERING	PETROBANGLA	12/31/82
MOLLAH A.K.M. AHKAF	TVA2	UTILITY ENGINEERING	BANGL. PWR DEV. BOARD	12/15/84
WASIF ISLAM	TX SO-LAW	NATURAL RESOURCES LAW	BANGLADESH PET. CORP.	12/29/83
EHSAMUL HUQ	U.S. ILL. PC	PETROLEUM ENGINEERING	MINERAL DEVEL. CORP.	01/10/84
M.A. SHAFUR	UNITAR	OIL AND GAS	PETROBANGLA	08/06/84
** COUNTRY: BURMA				
U. AUNG MIN	ADL	PETROLEUM MANAGEMENT	MYANMA OIL CORP.	11/30/84
U. MYINT THEIN	ADL	PETROLEUM MANAGEMENT	MYANMA OIL CORP.	02/09/83
AUNG HLAING U SAN	IPCS	PETROLEUM GEOLOGY	MYANMA OIL CORP.	09/14/84
TUM U TIM	IPCS	PETROLEUM GEOLOGY	MYANMA OIL CORP.	09/14/84
U NYO MYINTO	TVA/TM	ELECTRICAL ENGINEERING	ELEC. POWER CORP.	03/30/84
MAUNG MAUNG	WEST.	POWER SYSTEMS ENGINEERING	ELEC. POWER CORP.	12/14/84
** COUNTRY: INDIA				
KIRAN CHADHA	AD LIT&E	PETROLEUM MANAGEMENT	MIN. OF PETRO.	12/17/82
VINAY BANSAL	ADL	PETR./COAL/GAS/ENERGY	DEPT. OF PETROLEUM, GOVT. OF INDIA	11/30/84
LALIT MOHAN GOYAL	ADL	PETROLEUM MANAGEMENT	GOVT. OF INDIA	12/03/83
K. RAVICHANDRA	ADL	PETROLEUM MANAGEMENT	HINDUSTAN PET. CORP.	12/03/83
MUHAMMAD ASAD PATHAN	ADL	PETROLEUM MANAGEMENT	INDIAN OIL CORP	11/30/84
PRASAD KUMAR CHANDRA	ADL	PETROLEUM MANAGEMENT	OIL & NAT. GAS. COMM.	12/17/82
MANMOHAN KUMAR CHOPRA	D.R.INST.	HYDROELECTRIC ENERGY	CENTRAL ELEC. AUTH.	02/08/83
PRAKASH BHAMBHANI	D.R.INST.	HYDROELECTRIC ENERGY	NAT. HYDRO. POWER CORP.	02/08/83
ASHOK M. JOSHI	DRI	HYDROELECTRIC ENERGY	CENTRAL ELECT. AUTHORITY	06/30/84
TUHIN KUMAR GHOSH	S. ILL. U. -C	ENERGY ECONOMICS	PLNG. COMM./GOI	12/21/83
S.W.H. NAQVI	TVA/TM	ELECTRICAL ENGINEERING	CENTRAL ELEC. AUTH.	09/18/83
MAHESH JONEJA	TVA/TM	ELECTRICAL ENGINEERING	CENTRAL ELEC. AUTH.	12/14/83
S. RAJAGOPAL	TVA/TM	ELECTRICAL ENGINEERING	NAT. THERMAL PWR. CORP.	10/31/82
S.K. AGGARWAL	TVA1	ENERGY CONSERVATION	CENTRAL ELECTRICITY AUTH.	07/28/84
VIRAPANDI VENKATASAMY	TVA1	ENERGY CONSERVATION	TAMIL MADU ELECTRICITY BOARD	07/28/84
PRABUDDHA JAIN	U. OF SO.	PETROLEUM ENGINEERING	OIL & NAT. GAS COMM.	01/01/81
S. ROY CHAUDHURY	U. OF SO.	PETROLEUM ENGINEERING	OIL & NAT. GAS COMM.	01/01/81
RAJENDRA VITHAL MARATHE	U. OF SO.	PETROLEUM ENGINEERING	OIL & NAT. GAS COMM.	01/01/81
JAWAHIR LAL THUSSU	U. OF UTAH	GEO THERMAL ENERGY	GEO. SURVEY OF INDIA	03/16/83
KOLLI NABI REDDY	U. MD-ROLLA	ELECTRICAL ENGINEERING	RURAL ELEC. CORP.	02/25/83
MARAYANASAMY SWAMINATHAN	U. MD-ROLLA	ELECTRICAL ENGINEERING	RURAL ELEC. CORP.	02/25/83

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PREM NATH GURUMURTHY S. RAMAMURTHY	UNITAR WEST.	OIL AND GAS POWER SYSTEMS ENGINEERING	BHARAT HEAVY ELEC., LTD.	08/06/84 12/20/82
** COUNTRY: INDONESIA				
SOEPARTONO SOELEIMAN	ADL	PETROLEUM MANAGEMENT	SUB-DIR. OF EXPLOR.&EXPLOIT.OF OIL	11/30/84
JOHN KAMSIL	IPCS	PETROLEUM ENGINEERING	LEMIGAS	08/27/83
EBERT SITUMORANG	IPCS	PETROLEUM ENGINEERING	LEMIGAS	08/31/83
J.F.S. MANDAGIE	TVA/TM	ELECTRICAL ENGINEERING	LEMIGAS	09/18/83
JABARTO PRADOMO	TVA/TM	ELECTRICAL ENGINEERING	PLM PUSAT	09/18/83
SOETINAM SOEPOMO	TVA2	UTILITY ENGINEERING	ELEC. STATE CORP.	12/08/84
TJOKORDA A. SUATMA	TVA2	UTILITY ENGINEERING	PLM/STATE ELEC. CO.	12/15/84
SOETRISNO DERIP	U. OF TM.	ENERGY CONSERVATION	PLM NAT. PWR. CORP.	08/29/82
MERDEKA SEPAYANG	U.MO-ROLLA	ELECTRICAL ENGINEERING	DIR. GEN. OF POWER	02/25/83
JACOBUS PURWONO	U.MO-ROLLA	ELECTRICAL ENGINEERING	DIR. GEN. OF POWER	02/25/83
INAM SANTOSO	WEST.	POWER SYSTEMS ENGINEERING	STATE ELEC. CO	12/14/84
** COUNTRY: NEPAL				
MURARI PRASAD UPADHAYA	GE	ELECTRICAL ENGINEERING	DEPARTMENT OF ELECTRICITY	04/20/85
RAJENDRA PRASAD SHAH	GE	ELECTRICAL ENGINEERING	DEPT. ELECTRICITY	04/20/85
SODRYA BAHADUR SHRESTHA	GE	POWER SYSTEMS ENGINEERING	ELECTRICITY DEPT./DURBAR MARG	04/20/85
DEEPAK BASNET	NRECA	ENERGY		06/08/84
BADRI BIMOD DHUNCAMA	NRECA	ENERGY		06/08/84
PREM RAJ LAHOMI	NRECA			06/08/84
MAMIKA RATNA TULADHAR	TVA/TM	ELECTRICAL ENGINEERING	DEPT. ELEC., MIN. WTR.RSRCS,HGM/M	06/19/84
MEGH RAJ UPADHYAY	TVA/TM	ENERGY CONSERVATION	MIN. OF WATER/DPT. ELEC.	09/16/83
NIMA TSHERING BHUTIA	TVA/TM	ELECTRICAL ENGINEERING	NEPAL ELEC. CORP.	12/23/83
LALIT NARAYAN THAKUR	TVA1	ENERGY CONSERVATION	BIRGANJ SUGAR FACTORY	07/28/84
JAGAT NARAYAN NAYAK	TVA1	ENERGY CONSERVATION	ELECTRICITY DEPARTMENT	07/28/84
GOPAL SINGH THAPA	UNITAR	OIL AND GAS	DEPT. MINES & GEOLOGY	08/06/84
GANESH POKHREL	WEST.	POWER SYSTEMS ENGINEERING	DEPT. OF ELEC.	12/06/84
RAJ KUMAR BAJRACHARYA	WEST.	POWER SYSTEMS ENGINEERING	DEPT. OF ELECTRICITY, H.M.G.	06/17/84
BASHKER M. SINGH	WEST.	POWER SYSTEMS ENGINEERING	NEPAL ELEC. CORP.	12/20/82
** COUNTRY: PAKISTAN				
ENTISHAM HAIDER	IPCS	PETROLEUM GEOLOGY	OIL & GAS DEVELOPMENT CORP.	09/14/84
DAUD BEG	NRECA	ELECTRICAL ENGINEERING	WAPDA	05/21/83
A.H. NASEEM	NRECA	ENERGY	WTR./POWER AUTH.	08/07/82
MEHRAJ AHMED	NRECA	ENERGY	WTR./POWER AUTH.	08/07/82
MIR ZAMAN	NRECA	ENERGY	WTR./POWER AUTH.	08/07/82
SHAUKAT ALI CHUGHTAI	RURAL ELE.	ELECTRICAL ENGINEERING	USAID/PAKISTAN	01/01/83
MIR	STUDY TOUR		PG&E	01/01/00
MAIM ABDUL QAYUM	U. OF TM.	ENERGY CONSERVATION		/ /
ABDUL HAMEED QUERESHI	US ARMY-OH	WATER	WAPDA	07/23/82
MAKZUR AHMAD	US ARMY-OH	WATER	WAPDA	07/23/82
** COUNTRY: PHILIPPINES				
TEODORO REYES	ADL	PETROLEUM MANAGEMENT	PHIL. NAT. OIL CO.	12/17/82
GENEROSO KAMPITAN	IPCS	PETROLEUM	PHILIPPINE NATL.OIL CORP.	09/14/84

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NELSON LLABAN	IPCS	PETROLEUM GEOLOGY	PNOP EXPLORATION CORP.	09/14/84
CRISANTA CASTRO	KRECA,U.MO	ENGINEERING MISC.	NATL. ELECT. ADMIN. (NEA)	07/23/83
LUTILINDO NATIVIDAD	KRECA,U.MO	ENGINEERING MISC.	NATL. ELECT. ADMIN. (NEA)	07/23/83
VALIA TOLRENTINO	KRECA,U.MO	ENGINEERING MISC.	NATL. ELECT. ADMIN. (NEA)	07/23/83
CORDELL DEL ROSARIO	TVA/TN	ELECTRICAL ENGINEERING	NATIONAL POWER CORP.	01/30/84
RAYMUNDO RAFOLS JR.	TVA1	ENERGY CONSERVATION	ARMCO-MARSTEEL ALLOY CORP.	07/28/84
WAYNE ABAYAN	TVA1	ENERGY CONSERVATION	MINISTRY OF ENERGY, PNPC COMPOUND	07/28/84
YEMUSTO D. HAMOY	TVA2	UTILITY ENGINEERING	NATL. POWER CORP	12/08/84
DAMILO B. CANTILLER	U. OF CT.	ENERGY ECONOMICS	NATIONAL POWER CORP.	08/15/82
ORLANDO M. CRUZ	U. OF TN.	ENERGY CONSERVATION	NATIONAL POWER CORP.	08/29/82
ROQUE F. CORPUZ	U. OF TN.	ENERGY CONSERVATION	NATL. POWER CORP.	08/29/82
WILFREDO S. TOLEDO	U. OF TN.	ENERGY CONSERVATION	PHIL. NAT. OIL CO.	08/29/82
MARCIAL T. DCAMPO	U. OF TN.	ENERGY CONSERVATION	PHIL. NAT. OIL CO.	08/29/82
LEON MANZANILLO	U. OF TN.	ENERGY CONSERVATION	PHIL. NAT. OIL CO.	08/29/82
QUINTIN VERZOSA, JR.	WEST.	POWER SYSTEMS ENGINEERING	NAT. POWER CORP. (SYS. OPERA. DEPT.)	12/14/84
** COUNTRY: SRI LANKA				
RAKJAN KODIKARA	PA POWER &	PETROLEUM ENGINEERING/COAL	CEYLON ELEC. BOARD	06/30/82
DEVENI V.E.M. FERNANDO	PA POWER &	COAL-ALL ASPECTS	CEYLON ELEC. BOARD	02/28/83
GINTOTAGE FERNANDO	TVA/TN	ELECTRICAL ENGINEERING	CEYLON ELEC. BOARD	09/18/83
KANDIAH SIVASUBRAMANIAM	TVA1	ENERGY CONSERVATION	CEYLON ELECTRICITY BOARD	07/28/84
KURUGAMAGE S.P. JAYAWARDEMA	TVA2	UTILITY ENGINEERING	CEYLON ELEC BOARD	12/15/84
MUTTIAH MADARAJAH	U. OF TN.	ENERGY CONSERVATION	CEYLON ELEC. BOARD	08/29/82
EDWARD NELSON WIJEMANNE	U. OF TN.	ENERGY CONSERVATION	CEYLON ELECTRICITY BOARD	08/29/82
** COUNTRY: THAILAND				
THIRAPHONG VIKITSET	ADL	PETROLEUM MANAGEMENT	M.I.D.A./SCHOOL OF DEV. ECON.	12/17/82
CHAM NIVATPUMJIN	ADL	PETROLEUM MANAGEMENT	PET. AUTH. OF THAILAND	12/17/82
KAINAL WAIYANONG	ADL	PETROLEUM MANAGEMENT	PET. AUTH. OF THAILAND	12/17/82
SUMON POCHAMART	ADL	PETROLEUM MANAGEMENT	PET. AUTH. OF THAILAND	12/03/83
KETINEE TANTIBLAPHOL	ADL	PETROLEUM MANAGEMENT	PETRO. AUTH. OF THAILAND	11/30/84
SONCHAI YAMBOOKRUANG	ADL	PETROLEUM MANAGEMENT	PETRO. AUTH. OF THAILAND	11/30/84
MS. PANADA KANOKWAT	ADL	PETROLEUM MANAGEMENT	PETROLEUM AUTH. OF THAILAND	11/30/84
SURACHAI ASANAPRECHA	GE	ELECTRICAL ENGINEERING	METROPOLITAN ELECTRIC AUTHORITY	04/20/85
RUM HERABAT	TVA/TN	ELECTRICAL ENGINEERING	ELEC. GENERATING AUTH OF THAI-EGAT	02/10/84
PRASERT WIJITTONGRUANG	TVA/TN	ELECTRICAL ENGINEERING	METRO. ELEC. AUTH.	04/20/84
KAMPOL WIPASSAKORNWARA	TVA/TN	ELECTRICAL ENGINEERING	PROVINCIAL ELEC. AUTH. (RESEARCH DIV	03/30/84
NINGSAK TANSTRAKUL	TVA1	ENERGY CONSERVATION	NATL ENERGY ADMINISTRATION	07/28/84
DHIENCHAI BHUVADOLKIJ	TVA2	UTILITY ENGINEERING	PROVINCIAL ELEC. AUTH.	12/15/84
SARANIT ANGSUSINGH	WEST.	POWER SYSTEMS ENGINEERING	METRO. ELEC. AUTH	12/14/84
PRAIBOON NUCHARATMOND	WEST.	POWER SYSTEMS ENGINEERING	METRO. ELEC. AUTH.	12/17/83
KIWATE BOONWITTAYA	WEST.	POWER SYSTEMS ENGINEERING	PROVINCIAL ELEC. AUTH.	12/17/83

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** COUNTRY: BARBADOS				
JOSEPH MERVYN GORDON	IPCS	PETROLEUM GEOLOGY	MINISTRY FINANCE/PLANNING ENERGY DPT./60V ST. KITTS ST. VINCENT ELEC. SERVICES	09/14/84
DOUGLAS WALYMN	TVA/TM	ELECTRICAL ENGINEERING		09/18/83
SYLVESTER KULINDA	TVA/TM	ELECTRICAL ENGINEERING		09/18/83
** COUNTRY: BOLIVIA				
JAIKE DE LA ZERDA	TVA2	UTILITY ENGINEERING	NAT. ELEC. CO NAT. ELEC. CO.	12/08/84
HUMBERTO BURGOS	WEST.	POWER SYSTEMS ENGINEERING		12/14/84
** COUNTRY: COSTA RICA				
JOSE RUBEN MARAMJO	ADL	PETROLEUM MANAGEMENT	RECOPE	11/30/84
RODOLFO GALLEGOS	ADL	PETROLEUM MANAGEMENT	RECOPE	11/30/84
LOURDES QUEGADA	GEO. TESTI	COAL & ROCK ANALYSIS	RECOPE, S.A.	05/05/84
RONALD LOPEZ	IPCS	PETROLEUM GEOLOGY	MINISTRY MINES & POWER	09/14/84
ALFONSO SAMADRIA	IPCS	PETROLEUM GEOLOGY	RECOPE/EXPLORATION DEPT.	09/14/84
LUIS A. BARQUERO	TVA/TM	ELECTRICAL ENGINEERING	INST. COSTAR. DE ELEC.	01/20/84
JAVIER SANCHEZ	TVA/TM	ELECTRICAL ENGINEERING	INST. COSTAR. DE ELEC. (ICE)	12/29/83
FERNANDO PINTO CALDAS	TVA/TM	ELECTRICAL ENGINEERING	MIN. OF INDUSTRY	09/18/83
ROGER SOLANO	TVA1	ENERGY CONSERVATION	INST. TECNOLOGICO DE COSTA RICA	07/28/84
JUAN JOSE GUTIERREZ	TVA1	CONSERVATION	UNIVERSITY OF COSTA RICA	07/28/84
ULYSES ODIO	TVA2	UTILITY ENGINEERING	INST. COSTAR. DE ELEC.	12/15/84
LUIS KOSS	U. OF TN.	ENERGY CONSERVATION	INST. TECH. OF C.R.	08/29/82
PEDRO AFONSO	UNITAR	OIL AND GAS		08/06/84
RAFAEL CORRALES	UNITAR	OIL AND GAS	REFIN. COSTAR. DE PETROLEO	08/06/84
KENNETH BOLANOS	USBS, VA	PETROLEUM ENGINEERING	COSTA RICAN PET. REF. (RECOPE)	07/18/83
JAVIER BRENES	WEST.	ELECTRICAL ENGINEERING	INST. COSTAR. DE ELEC.	12/17/83
** COUNTRY: DOMINICAN REPUBLIC				
FERNANDO PERDOMO	D.R. INST.	HYDROELECTRIC ENERGY	ELEC. DOMINICAN CORP.	10/29/82
LUIS G. ALDU	D.R. INST.	HYDROELECTRIC ENERGY	NAT. COM. OF ENERGY POLICY	02/09/83
RAFAEL AUGUSTO MARTINEZ	TVA1	ENERGY CONSERVATION	CORP. DOMINICANA ELECTRICIDAD	07/28/84
NELSON CHAVEZ	TVA1	ENERGY CONSERVATION	CORP. DOMINICANA ELECTRICIDAD	07/28/84
** COUNTRY: ECUADOR				
RITA M. ZUMARRAGA	IPCS	PETROLEUM GEOLOGY	CORPORACION ESTATAL PETROLERA	09/14/84
JUAN PABLO ALMEIDA	IPCS	PETROLEUM GEOLOGY	MINISTERIO HYDROCARBUROS	09/14/84
JORGE GOYES	TVA1	ENERGY CONSERVATION	IMECEL	07/28/84
GALO OSWALDO MINA	WEST.	POWER SYSTEMS ENGINEERING	IMECEL	03/15/85
** COUNTRY: GUATEMALA				
CARLOS PEREZ	TVA/TM	ELECTRICAL ENGINEERING	NAT. INST. OF ELEC.	09/18/83
DOUGLAS ROSALES JUAREZ	UNITAR	OIL AND GAS		08/06/84
** COUNTRY: GUYANA				
MELVIN B. SANKIES	TVA1	ENERGY CONSERVATION	DEPT. OF MECH. ENG.	02/09/83
MARVON S. PERSAUD	TVA1	ENERGY CONSERVATION	GUYANA SUGAR CORP.	02/09/83
BERL B. BLAIR	U. OF TN.	ENERGY CONSERVATION	GUYANA MINING ENTERP.	02/09/82

REGIONAL REPORT  
NON ACADEMIC GRADUATES  
LATIN AMERICA  
IIE/CETP

06/11/85

NAME	TRAINING INSTITUTION	STUDY FIELD	EMPLOYER	END DATE
** COUNTRY: HAITI				
WILFRID ST. JEAN	IDEA, INC.	ENERGY ECONOMICS	MINISTRY OF MINES	04/14/84
MONIQUE PIERRE-ANTOINE	IDEA, INC.	ENERGY ECONOMICS	MINISTRY OF MINES	04/14/84
DANIELLE LUSTIN	IDEA, INC.	ENERGY ECONOMICS	MINISTRY OF MINES & ENERGY RES.	04/14/84
** COUNTRY: HONDURAS				
RAMON IZAGUIERRE	IPCS	PETROLEUM ENGINEERING	DIRECCION GEN. MINAS E HIDROCARBONS	09/14/84
ORLANDO HENRIQUEZ	TVAZ	UTILITY ENGINEERING	ENEE	12/15/84
PERCY A. BUCK	U. OF TN.	ENERGY CONSERVATION	NATIONAL ELEC. CO.	08/29/82
MARTHA DE SAMRA	UNITAR	OIL AND GAS	DIR. GRA. DE MINAS E HIDROCARBS.	08/06/84
RODOLFO ANTONIO ZELAYA	WEST.	POWER SYSTEMS ENGINEERING	ENEE	12/17/83
** COUNTRY: JAMAICA				
LEWARD G.O. HOLNESS	TVA/TN	ELECTRTRICAL ENGINEERING	JAMAICAN PUB. SERV. CO.	09/18/83
AUBREY MURRAY	TVA1	ENERGY CONSERVATION	JAMAICA PUBLIC SERVICE CO.	07/28/84
ERROL THAMES	TVA1	ENERGY CONSERVATION	JAMAICA PUBLIC SERVICE CO. (JPS)	07/28/84
LEONARD EDWARDS	U. OF TN.	ENERGY CONSERVATION	MIN. OF MIN. & EMERGY	08/29/82
JOHN CHANNER	WEST.	POWER SYSTEMS ENGINEERING	JAMICA PUBLIC SERV. CO.	12/14/84
** COUNTRY: PANAMA				
CLEMENTE L. RINCON	TVA1	ENERGY CONSERVATION	CEMENTO PANAMA SA	07/28/84
** COUNTRY: PERU				
ALBERTO ALVAREZ	UNITAR	OIL AND GAS		08/06/84

REGIONAL REPORT  
NON ACADEMIC GRADUATES  
NEAR EAST  
IIE/CETP

06/11/85

NAME	TRAINING INSTITUTION	STUDY FIELD	EMPLOYER	END DATE
** COUNTRY: EGYPT				
MOHAMED SOKKAR	ADL/S.I.L.U	PETROLEUM MANAGEMENT	SOUTHERN ILL. U.	08/27/84
MOSTAPHA YOUSSEF	COL.SC.MNS	HEAT TRANSFER	CAIRO OIL REFINING CO.	/ /
MOHAMED H. EL D AZIZ	IPCS	PETROLEUM GEOLOGY	E.G.P.C.	01/01/84
ADEL MOHAMED SA KAMEL	IPCS	PETROLEUM GEOLOGY	E.G.P.C.	09/01/84
MOHAMED HOSSAM MOUSTAFA	IPCS	PETROLEUM GEOLOGY	E.G.P.C.	09/14/84
MOHAMED YOUSSEF	IPCS	PETROLEUM ENGINEERING	EGYPTIAN GEN. PET. CORP.	08/27/83
SHALABY KASEEM	IPCS	PETROLEUM ENGINEERING	GAS & OIL PROJECT (UNKNOWN)	08/27/83
ZEINAB MOHAMED KHALIK	IPCS	PETROLEUM ENGINEERING	GEN. PET. CO.	08/27/83
IBRAHIM ABDEL H SHARAF	IPCS	PETROLEUM ENGINEERING	GENERAL PETROLEUM CORP.	09/14/84
MAHFOUZ IBRAHIM AHMED	IPCS	PETROLEUM GEOLOGY	GENERAL PETROLEUM CORP.	09/14/84
ADEL FOUAD AZIZ	PETEX	PETROLEUM ENGINEERING	GENERAL PETROLEUM CORP.	06/30/84
HODA WADIE YOUMAN	TVA/TM	ELECTRICAL ENGINEERING	EGYPTIAN ELEC. AUTH.	09/18/83
FATMA MOUSTAFA	TVA/TM	ELECTRICAL ENGINEERING	EGYPTIAN ELEC. AUTH.	09/18/83
SOMNIA ABD SOLIMAN	TVA/TM	ELECTRICAL ENGINEERING	EGYPTIAN ELEC. AUTH.	03/16/84
MAHER AZIA BEDROUS	TVA/TM	ELECTRICAL ENGINEERING	EGYPTIAN ELEC. AUTH.	03/16/84
MAHER AZIZ BEDROUS	U. OF TN.	ENERGY CONSERVATION	EGYPTIAN ELEC. AUTH.	08/29/82
SOMNIA ABD EL H SOLIMAN	U. OF TN.	ENERGY CONSERVATION	EGYPTIAN ELEC. AUTH.	08/29/82
HAMED ALY HAMED KORKOR	U. OF TN.	ENERGY CONSERVATION	EGYPTIAN GEN. PET. CO.	08/29/82
ABD E.M.S. EL DIN MUSSIM	U. OF TN.	ENERGY CONSERVATION	EGYPTIAN GEN. PET. CO.	08/29/82
** COUNTRY: JORDAN				
HAMED SHEIKH TAMINI	TVA1	ENERGY CONSERVATION	JORDAN ELECTRICITY AUTH.	07/28/84
WALID DOLEH	WEST.	POWER SYSTEMS ENGINEERING	JORDAN ELEC. AUTH.	12/06/84
MOHAMMAD ABU SHARKH	WEST.	POWER SYSTEMS ENGINEERING	JORDAN ELEC. AUTH.	12/17/83
** COUNTRY: MOROCCO				
M'BAREK ALI MOHSINE	ADL	PETROLEUM MANAGEMENT	OMAREP	12/17/82
AHMED MARSIL	ADL	PETROLEUM MANAGEMENT	OMAREP	12/17/82
MOHAMED BENJELLOUM	ADL	PETROLEUM MANAGEMENT	OMAREP	11/30/84
MAKMOUD ZIZI	IPCS	PETROLEUM ENGINEERING	BRPM	08/27/83
FATIMA CHARRAT	IPCS	PETROLEUM ENGINEERING	OMAREP	08/27/83
MOHAMED HAFID	IPCS	PETROLEUM ENGINEERING	OMAREP	08/27/83
EL ARBI TOTO	IPCS	PETROLEUM ENGINEERING	OMAREP	08/27/83
HADDOU JABOUR	IPCS	PETROLEUM ENGINEERING	OMAREP	08/27/83
BOUZEKRI OUARO	IPCS	PETROLEUM ENGINEERING	OMAREP	08/27/83
MOHAMED IDRISSE	IPCS	PETROLEUM ENGINEERING	OMAREP	09/14/84
HAMMADI SELLAMI	IPCS	PETROLEUM ENGINEERING	OMAREP	09/14/84
ABDEL HAMID YAHYA	IPCS	PETROLEUM ENGINEERING	OMAREP (DIR. PRODUCTION DIV)	09/14/84
IMAKOR MOHAMED	IPCS	PETROLEUM ENGINEERING	OMAREP/BRPM	02/09/83
ABDELKHALEK EL MORABET	TVA/TM	ELECTRICAL ENGINEERING	O.V.E.	09/18/83
MOHAMED AZDINE BENNIS	UNITAR	OIL AND GAS		08/06/84
	UNITAR	OIL AND GAS	OMAREP	08/06/84
** COUNTRY: PORTUGAL				
JOSE LUIS MOITA CRUZ	TVA1	ENERGY CONSERVATION	EMPRESA GERAL DE FOMENTO	07/28/84
JORGE ALBERTO RIBEIRO	TVA1	ENERGY CONSERVATION	PETROBRAS	07/28/84
CARLOS E.F.L. AMARAL	U. OF TN.	ENERGY CONSERVATION	MAGUE	08/29/82
JORGE V.A. SEQUEIRA	U. OF TN.	ENERGY CONSERVATION	QUASIS	08/29/82

REGIONAL REPORT  
NON ACADEMIC GRADUATES  
NEAR EAST  
IIE/CETP

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NAME	TRAINING INSTITUTION	STUDY FIELD	EMPLOYER	END DATE
** COUNTRY: TUNISIA				
JANELEDINE KASBI	IPCS	PETROLEUM ENGINEERING	ETAP	08/27/83
ALAYA BETTAIEB	IPCS	PETROLEUM ENGINEERING	ETAP	08/27/83
HECHMI BEN CHAABANE	IPCS	PETROLEUM ENGINEERING	ETAP	08/27/83
KABIL ABDELKAFI	IPCS	PETROLEUM ENGINEERING	ETAP	08/27/83
SAMIR OUALKA	IPCS	PETROLEUM ENGINEERING	ETAP	08/27/83
HICHEM DHAME	IPCS	PETROLEUM ENGINEERING	ETAP	08/27/83
KEDHILI GOSSA	IPCS	PETROLEUM ENGINEERING	ETAP	08/27/83
BOUBAKER HAMOUDA	SCI.SOFT			05/31/84
MOULDI MOURI-AMAR	U. OF TN.	ENERGY CONSERVATION	MIN. OF MAT. ECON.	08/29/82
ABDESSATAR ABID	U. OF TN.	ENERGY CONSERVATION	MIN. OF MAT. ECON. - TUNIS	08/29/82
HASSEN MOHMOUD	U.MO-ROLLA	ELECTRICAL ENGINEERING	S.J.E.A.	03/05/82
** COUNTRY: YEMEN				
ABDUL ELAH AHME AL-KIRSHI	TVA2	ENERGY CONSERVATION	YEMEN GEN.ELECTRICITY CORP.	07/28/84

APPENDIX 2

DESCRIPTIONS OF SPECIAL CETP-SPONSORED COURSES  
AND OTHER NON-ACADEMIC TRAINING COURSES ATTENDED  
BY CETP PARTICIPANTS

NON-ACADEMIC TRAINING COURSES ATTENDED BY CETP PARTICIPANTS

## 1. SPECIAL CETP SPONSORED COURSE

Promoting Investment in Indigenous Oil Exploration and Development

This course is designed to improve the participant's ability to promote cooperation with international oil companies and financial institutions on oil and gas ventures, and to negotiate prudent, productive and equitable contracts.

Applicants must be senior level officials from private or public sector, petroleum or financial companies, ministries, and other appropriate entities. This course is given by Oil and Gas Consultants International (OGCI) of Tulsa, Oklahoma.

Fundamentals of Petroleum Engineering, Geology, Geophysical Exploration, Petroleum Engineering and Economics

The course objective is to provide non-degree applied training in petroleum technologies (petroleum exploration, geophysics, engineering and economics) to mid-level technical personnel.

The course is given by Professional Training Resources International (PTRI) of Tulsa, Oklahoma.

Utility and Industry Energy Conservation

This eight-week practical training energy conservation seminar is designed for utility and industrial plant engineers and supervisors. The program includes classroom study, field training and work in plant, and gives the participants a solid theoretical and practical background in the implementation of in-plant energy conservation programs. Resulting energy savings have been outstanding according to reports received from previous participants.

The course is given by the Tennessee Valley Authority (TVA).

Electric Utility Engineering at TVA

This course will provide electric utility engineers with practical knowledge of engineering practices and technology in the fields of fossil and hydro-power production, systems operation, transmission and distribution and long-term power planning.

The course is conducted by the Tennessee Valley Authority (TVA), the largest power producer in the United States. The first nine weeks will be spent in classroom training on all aspects of power production, followed by a seven-week period of specialized training in selected areas

NON-ACADEMIC TRAINING COURSES ATTENDED BY CETP PARTICIPANTS

of study. The course has been held for the past two years and has proved very useful for the utility plant engineers and managers from developing countries who have attended.

All applicants must meet the criteria specified below:

- be currently employed by an electric utility;
- have a minimum of five years of increasing responsibility in power production activities;
- have an undergraduate degree in engineering; and
- be prepared to commit themselves to the entire course schedule.

## 2. OTHER NON-ACADEMIC TRAINING COURSES ATTENDED BY CETP PARTICIPANTS

### Petroleum Management Program at Arthur D. Little

The course objective is to provide non-degree training for managers and staff analysts in the administration of hydro-carbon resources. It emphasizes the development of practical skills for decision-making and management within the petroleum industry. The course is conducted by Arthur D. Little, Inc. (ADL). Up to ten seats are available through the CETP.

### Advanced School in Power Systems Engineering at Westinghouse

This intensive thirteen-week course is designed to give utility engineers a comprehensive view of power generation, transmission, distribution, operation and system planning. It consists of formal classroom work, workshops and visits to research facilities. All classes are taught at graduate level and are coordinated to provide a broad-based comprehension of those electric utility problems which are subject to engineering and mathematical analysis. The course is conducted by the Power Systems Division of the Westinghouse Corporation. Up to ten seats are available through the CETP.

### Power Systems Engineering Course at General Electric

A rigorous thirty-week program on power systems engineering designed for mid-level utility engineers. The first semester covers power systems fundamentals (advanced circuit analysis, synchronous machines, economics and planning, reliability, thermal cycles, and distribution systems engineering). The second semester deals with power systems computations, operations, protective relaying, surge phenomena, stability, and special topics. The course is conducted by General Electric. Up to five seats are available through the CETP.

### Signal Company (UOP Inc.)

Design Engineering Seminar. Two-month course for chemical engineers in design engineering practices for refineries and petrochemical plants.

### Amoco

Petroleum Geology and Reservoir Engineering. One-month course in sandstone reservoir analysis.

NON-ACADEMIC TRAINING COURSES ATTENDED BY CETP PARTICIPANTS

National Rural Electric Cooperatives Association (NRECA)

Organization and operation of Rural Electric Distribution Systems. Six-week course exposing participants to history and practices of cooperative transmission and distribution systems.

Denver Research Institute

Small Hydropower Course. Six-week course to familiarize civil, mechanical and electrical engineers with small hydropower installations.

Petroleum Extension Service of Texas (PETEX)

Oil Field Equipment Courses designed to train field engineers in practices, procedures, maintenance and use of oil field surface equipment, including well pumps, generators, drilling rigs.

University of Missouri/Rolla

Modern Computer-Aided Distribution System Practices. A one-month course for electric utility engineers involved with electric power distribution system planning and control.

NL Industries, Inc.

Career Development Center, Drilling Technology. A hands-on program in oil field drilling, including fluids technology, well control, workover, completion drilling techniques.

University of Connecticut

Energy Project Management and Analysis. A twelve-week program in the preparation, analysis, evaluation and management of projects for the energy sector.

Idea, Inc.

Energy Planning and Modeling Seminar. National and sectoral energy planning, with heavy emphasis on hands-on computer modeling.

Scientific Software

Reservoir Engineering. Four-month hands-on course in reservoir modeling and analysis using specialized application oriented software.

**APPENDIX 3**

**ACADEMIC INSTITUTIONS AND DEGREES EARNED BY  
CETP ACADEMIC GRADUATES**

ACADEMIC INSTITUTIONS AND DEGREES EARNED BY  
CETP ACADEMIC GRADUATES

<u>UNIVERSITY</u>	<u>FIELD OF STUDY</u>
University of Alabama	Petroleum Engineering (2)
Carnegie-Mellon University	Electrical Engineering
University of Colorado	Geophysics
George Washington University	Energy Technology
University of Kansas	Mineral Economics
University of Kentucky	Energy Economics (2)
Massachusetts Institute of Technology	Energy Management
University of Michigan	Electrical Engineering
Montana College of Mineral Science and Technology	Geophysics Engineering
New York University	Energy Resources
University of Pennsylvania	Energy Policy & Management (3)
University of Pittsburgh	Energy Resources (9) Civil Engineering
Polytechnic Institute of New York	Energy Economics (3) Operations Research
Rensselaer Polytechnic Institute	Electrical Engineering
University of Southern California	Geology Petroleum Engineering
Texas Agriculture and Mining	Chemical Engineering
University of Texas at El Paso	Electrical Engineering (2)
University of Utah	Civil Engineering
Washington State University	Geology Civil Engineering
West Virginia University	Geology

APPENDIX 4

CETP INTERVIEW DOCUMENT

## GETP INTERVIEW DOCUMENT

- A. DISCUSSION WITH TRAINEES (Begin interview with a discussion of the mission, plans and responsibilities of the organization, and his role.)
1. What specific job-related benefits did you gain from your training experience? Please give examples of specific technical application: copies of studies, analyses, recommendations that you made that have been implemented, etc.
  
  2. Did you return to the same position after your training? If not, to what job? What is your job today?
  
  3. Have you been promoted since your training experience? Demoted? Transferred laterally? Received a raise?
  
  4. Have your duties been broadened (even though you might not have been promoted)?
  
  5. When you completed your application for United States training, you were asked to "write a clear and detailed description of your study objectives". (Interviewer to read this to trainee.) Do you feel that you achieved your objectives fully? Only partially? If so, why? Please be specific and give examples. Did your objectives change during your training program. If so, provide details.

6. Why do you think that you were chosen by your supervisor for training in the United States?
  
7. Have you personally conducted training (formal/informal) for your subordinates or peers to pass along what you learned in your training experience? If so, please provide details of such a program.
  
8. Did your training change any of your views and opinions about your work? Your career? Did it change your work habits? Please be specific and give examples.
  
9. Now that you have had the chance to reflect on the value of your training experience, can you provide any specific suggestions on ways to strengthen the program so that your impact on your job would be of greater consequence and importance?
  
10. What did you do with the reference materials that you received as part of your training program? Are they in your employer's library? At your home? In your office? Shared with associates?

11. Have your peers shown interest in your training program to the extent that you shared detailed learning with them? Have they expressed any interest in undergoing a similar experience?
  
12. Did you ever submit a formal, written report to your employer covering your training experience in the United States? If so, please provide a copy.
  
13. Can you give some specific examples of how you used your training experience to:
  - improve efficiency in your job?
  - reduce costs?
  - increase work load handling capacity?
  - improve morale, reduce frustration?
  - speed up the flow of work and communications?
  
14. Have you maintained a continuing relationship with:
  - professional colleagues from other countries with whom you trained?
  - teachers, mentors, etc.?
  - new friends that you made in the country?Please cite examples.
  
15. Have you experienced any difficulty in returning to your job, or using the information you learned? (Elaborate during the discussion.)

16. Have returned CETP trainees met within the country to discuss the continuing impact/effectiveness of their training? Have any trainees expressed interest in continuing relationships/contacts?

B. DISCUSSION WITH EMPLOYERS (Begin interview with a discussion of the mission, plans and responsibilities of the organization, and his role.)

1. How has the United States training been utilized? Cite specific examples.
  
2. How effective has training been in terms of your organization's needs and expectations? Cite any changes in policy, operational procedures, approaches, and work performance resulting specifically from the trainee's United States experience. (Get hard evidence.)
  
3. Did the trainee achieve the major objectives of his United States training as detailed in his application? Read the stated objectives and ask for specific answers.

4. Have you observed specific changes in the trainee's work attitudes and performance, such as greater initiative, maturity, hours of work and other work habits, better communication of skills, contributions to overall goals, etc.?
  
5. Are you inclined to select, prepare, and send other candidates for training based on the trainee's experience? What are your current plans for doing so?
  
6. What criteria and procedures are being used for selection?
  
7. Have other employees approached you seeking a similar training experience?
  
8. As a result of the trainee's experience and your perception of current energy problems or future projects, do you see specific needs for additional training opportunities? If so, their nature, timing, etc.





5. Has training contributed directly to establishing a professional relationship (or relationships) with any United States firms? If so, have those relations led to the use/purchase of goods and services? Specify.
  
6. What has been the impact of training upon other programs of the Mission? Has CETP training enhanced Mission's stated energy program objectives within the country? Have the Mission's in-country programs been affected? If so, how?
  
7. Do the training objectives of applicants portray realistically and accurately the interests of the applicant? Or, do they reflect the interests of the applicant's superiors or what the applicant believes CETP staff wishes to read?

D. OBSERVATIONS BY INTERVIEWERS

1. Assessment of roles/relations between USAID Mission and principal, appropriate ministries, bureaus, agencies, etc., and private sector representation regarding energy, training, etc. Assessment of status of United States training comparative to other in-country training opportunities/projects.

2. Be sensitive to relationships between trainee, supervisor, co-workers and others, with particular concern for any changes which may have resulted from training.
  
3. Assessment of relative effectiveness of training on categories of participants (degree of experience; generalists, specialists) and between participants in academic and non-academic training programs.
  
4. Do trainee's statements compare favorably with his accomplishment/achievement during the training experience?
  
5. To what extent does one sense in the participant the awareness of larger, country-related, regional or global energy issues?
  
6. Sensitivity to distribution of information on variety of energy training opportunities offered by United States and other countries and in host country government and non-government offices.
  
7. Sensitivity to/assessment of procedures used to identify, nominate, screen, select trainees. Identification of priorities. Selection according to needs or other qualifications/priorities?

8. Be alert to any relationships between the public and private sector energy organizations in the host country.

PART II: REGIONAL SUMMARIES AND LIST OF PARTICIPANTS AND  
OTHER PERSONS INTERVIEWED

SECTION A. Bangladesh, Nepal, India	
Peter D. Pelham . . . . .	1
B. Morocco, Egypt, Sudan	
William E. Lear . . . . .	10
C. Philippines, Thailand, Indonesia	
Donald Y. McCoy . . . . .	16
D. Costa Rica, Dominican Republic, Jamaica	
James A. West . . . . .	22

A. BANGLADESH, NEPAL AND INDIA

A total of 57 interviews were conducted in Bangladesh, Nepal, and India. Thirty-five (35) were with former participants, 11 with supervisors, and the remainder with USAID or U.S. Embassy personnel. All but one participant interviewed had attended non-academic programs. Approximately 75% of all returned trainees were seen.

Examples of effectiveness of training include:

- recommended use of API standard mud testing apparatus and chemicals to facilitate safer, faster and more economic drilling;
- initial in-country skills in well-log interpretation and the initiation and interpretation of geophysical seismic data processing;
- the introduction of a Management Information System in the largest petroleum corporation in the country;
- the extended use of economic modelling and forecasting techniques to provide seminars for ministerial and corporate level officers in-country and the further simplification of those models developed for use in other Third World countries;
- a continuing professional relation with a professor at MIT and that individual's assistance in obtaining access to computer hardware;
- a paper on developing small scale hydropower resources in-country resulting directly from training received; and
- continuing research on enhanced oil recovery (thermal techniques) and on tracer studies for reservoir description which was initiated in the U.S.

Some immediate benefits of training are:

- professional self-esteem and assurance;
- greater professional contacts internationally;

- ° opportunity to use and share materials received while in training;
- ° greater responsibilities in scope of work (but usually without immediate promotion and raise in salary);
- ° opportunities to initiate and utilize techniques and technologies learned and, in some instances, to make direct contributions to further (and sometimes first-time) in-country developments in conventional energy planning, research, exploration and exploitation; greater command of English language; and
- ° greater recognition professionally by colleagues.

National and ministerial manpower development and training plans do not exist. In only one instance had such a plan been developed by a major government corporation. Selection for training is based on need, merit, and seniority.

Practical, short-term, technical training is preferred. It is often difficult for mid-level management or technical specialists to be granted leave for periods exceeding six months. Academic training is a luxury which few individuals can realize; however, the continued importance of such training should be considered relative to its long-term effectiveness and in comparison to that offered by other competitor nations. Arrangements for specialized internships achieved great impact and recognition abroad. Where possible, the combination of standard programs with individualized, in-field, hands-on experiences should be emphasized. Some interest was also expressed in in-country training.

Little continuity of leadership exists at the ministerial level in the countries visited, unfortunately this produces a lack of continuum in manpower planning and development. Formal evaluation of training is limited also. Brief written reports are required but seldom read. Since much of the training received is

contemporary in content, it is also questionable as to whether or not the trainee's immediate superior would be conversant with it.

The selection and evaluation processes could be more closely monitored by USAID personnel. While countries have their own systems of selection, additional care in the distribution of program information and follow-up visits to appropriate government offices might stimulate additional knowledge (and interest) in CETP programs. Several trainees, for example, learned about CETP offerings independently. Similarly, a brief review of training received upon the participant's return might prove useful to all parties. Sometimes it appeared as if the USAID training officer was attending to a variety of numerous centrally funded and mission funded training programs, with limited dialogue with other USAID and/or U.S. Embassy personnel. Greater knowledge by energy and training officers of what training has been successful and why would be of value to the Mission generally and to CETP specifically.

In like manner, in the absence of national manpower training plans, increased sensitivity to appropriate distribution of trainees throughout the variety of CETP courses and programs is important.

Trainees ranged in age from the late twenties to early fifties; most were in their thirties. Even in India, where no training had been available from late 1971 to 1978 and consequently where there had been initial interest from relatively high-level, older participants, when training opportunities were renewed the age distribution was only from 30 to 46.

Limited U.S. private sector investment has occurred to date through CETP training. Principally this is due to the age and professional levels of the trainees. They simply are not yet positioned to do other than recommend the involvement of U.S. (or other) private sector interests. One such recommendation--the use of API

standard mud testing apparatus and chemicals--has been noted. Other U.S. involvement would be apparent through "pieces" of major ADB or UNDP funded projects, such as Geo Source, a subsidiary of Patty Rae Geophysical, which is to provide both computer hardware and training for a major seismic interpretation project, according to one trainee.

Other nationalities significantly involved in in-country and training opportunities abroad (including academic scholarships) are: France, Japan, Norway, U.K. and USSR, the latter providing considerable scholarship opportunities at both undergraduate and graduate levels. In India the Soviets also have major conventional energy training programs, including advisers, most notably at Dehra Dun, the headquarters of the Oil and Natural Gas Commission (ONGC) and location of two of its key research institutes.

While all the CETP offerings contained important and useful ingredients, individualized academic and/or field-related programs which produced the greatest "results," that is, the immediate and applicable use of information and technology. The Arthur D. Little course was helpful to many, especially those involved in fiscal and management planning, TVA's program was well received (Chattanooga, too) especially since it combined theory/classroom with the practical/on-site visitations. Westinghouse's program was regarded favorably as were the offerings at the University of Missouri (Rolla). There was a general regret expressed over the lack of opportunity to study nuclear energy developments.

A final observation on all programs is the need to ensure, in so far as is possible, levels of professional competency and English language proficiency to provide the highest common denominator possible for each group of participants. Less strict language requirements were thought possible for some in-field, technicians and a review of English language tests specifically designed for training of technical personnel was requested.

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BANGLADESH - Interviews

USAID:

H.P. "Pat" Petersen

Deputy Director, USAID

Graham C. Thompson

Chief, P D & E Division, USAID  
(former Energy Officer)

Gene V. George

Energy Officer, USAID

M.A. Ghafoor

Training Officer, USAID

SUPERVISORS:

Montagul Karim

Director of Administration,  
Petrobangla

A.G. Naoman

Senior Manager, Division of  
Training, Petrobangla

Fiqui H. Hilmi

Senior Administrator, Division  
of Training, Petrobangla

M.A. Ghafur

Chief Manager, Division of  
Petroleum and Mineral Resources,  
Petrobangla

Lt. Col. A.S.M. Wali Ullah

Director, Purchase and Logistics  
Division, Petrobangla

PARTICIPANTS:

Ahkaf Mollah

Deputy Director, Project Planning  
Directorate, Bangladesh Power  
Development Board (BPDB)  
TVA2 '84

M. H. Ashraf

Project Manager, ODA/FRG Seismic  
Interpretation, Petrobangla  
Gulf Oil '83

Azizul Haque

Manager, Bangladesh Gas Fields Co.,  
Ltd. (subsidiary of Petrobangla)  
ADL '82

Ehsan Ul Hug

Senior Engineer, Planning Division,  
Bangladesh Mineral Exploration and  
Development Corporation  
U. of Illinois, Carbondale '84

Wasif Islam

Operations Manager (Export/Import)  
Bangladesh Petroleum Corporation  
Texas Southern University '83

BANGLADESH - Interviews (Continued)

M. Ismail	Senior Manager, Laboratory Division, Petrobangla ADL '82
J. Jamaluddin	Manager Geophysicist, Data Processing Dept., Petrobangla Gulf Oil '84
Abdul Jabbar Mollah	Senior Manager, Cementation, Petrobangla Shell Oil '82
M.M. Rahman	Manager/Dept. Head, Mud and Chemicals Dept., Petrobangla NL Industries '84
M. Azizur Raza	Manager, Mud and Chemicals Dept., Petrobangla NL Industries '84
M. Yousef Ali Talukder	Geologist, Reserve Engineering, Petrobangla Seismograph Services Corp. '83

NEPAL - Interviews

USAID:

Janet Ballentine	Deputy Director, USAID/Nepal
Don Clark	Project Development Officer USAID/Nepal
Jack Perry	Chief Engineer, USAID/Nepal
Lawrence M. Pradhan	Training Officer, USAID/Nepal

SUPERVISORS:

Harsh Man Shresta	Chief Engineer, Dept. of Electricity
Rabindra B. Sinresta	Project Director, Small Hydrel Development Board (SHDB)
Piachar M. S. Pradhan	Acting Superintending Engineer, Small Hydrel Development Board (SHDB)

NEPAL - Interviews (Continued)

PARTICIPANTS:

Raj K. Bajracharya	Chief, Electricial Design Division, Dept. of Electricity Westinghouse '84
Nima T. Bhutia	Chief, Planning and Research Division, Nepal Electric Corporation TVA/TN '83
Jagat N. Nayak	Project-in-Charge (Manager of single project), Dept. of Electricity TVAI '84
Ganesh P. Pokhrel	Senior Engineer, Rural Electrification Development Division (REDD), Dept. of Electricity Westinghouse '84
Lalit N. Thakur	Works Manager, Birjani Sugar Factory, Ministry of Industry TVAI '84
Gorpal S. Thapa	Senior Geologist, Dept. of Mines and Geology, Ministry of Industry UNITAR '84
Manika R. Tuladhar	Senior Electrical Engineer/Project Manager, 5th Power Project, Dept. of Electricity TVA/TN '84
Megh R. Upadhyay	Senior Mechanical Engineer, Dept. of Electricity TVA/TN '83

INDIA - Interviews

USAID:

Robert W. Nachtrieb	Chief, Office of Project Design and Portfolio Management, USAID/New Delhi
G. Gene Griffiths	Resources Attaché , U.S. Embassy/ New Delhi
M. A. Sabbaral	Training Officer, USAID/New Delhi

INDIA - Interviews (Continued)

SUPERVISORS:

K. A. Krishna Moorthy	Under Secretary, Dept. of Economic Affairs, Ministry of Finance
R.K. Sachdev	Director, Department of Coal, Ministry of Steel, Mines and Coal
A.T.R. Raju	Deputy General Manager (Acting Director 4/4/84), Institute of Reservoir Studies, Oil and Natural Gas Commission
A.V. Raju	Joint Director, Institute of Reservoir Studies, Oil and Natural Gas Commission

PARTICIPANTS:

S.K. Aggarwal	Chief Engineer (Planning) Central Electricity Authority TVA1 '84
K. Balasubramanian	Deputy Director, Annual Power Survey Directorate, Central Electricity Authority D.R. Institute '83
Vinay Bansal	Director (Exploration) Dept. of Petroleum, Ministry of Energy ADL '84
Mrs. Kiran Chadha	Under Secretary (Marketing) Ministry of Petroleum ADL '82
M.K. Chopra	Deputy Director, HEDP Directorate Central Electricity Authority D.R. Institute '83
Tuhin Kumar Ghosh	Deputy Advisor (Coal), Planning Commission, Power and Energy Division So. Illinois University-Carbondale '83
Lalit Mohan Goyal	Director, Dept. of Petroleum, Ministry of Energy ADL '83
Prabuddha Jain	Deputy Director, Oil and Natural Gas Commission, Institute of Reservoir Studies USC '81

INDIA - Interviews (continued)

Ashok M. Joshi	Deputy Director, Central Electricity Authority D.R. Institute '84
M.C. Juneja	Director, Central Electricity Authority TVA/TN '83
Jyotirmoy Mandal	Deputy Finance Adviser, Dept. of Petroleum, Chemical and Fertilizer ADL '81
Rajendra Vitha Marathe	Deputy Director, Oil and Natural Gas Commission, Institute of Reservoir Studies USC '81
S.W.H. Naqvi	Deputy Director, Central Electricity Authority TVA/TN '83
P. Raghavendran	Joint Advisor, Planning Commission MIT '83
Samarendra Roychoudhury	Deputy Director, Oil and Natural Gas Commission, Institute of Reservoir Studies USC '81
Narayanasamy Swaminathan	Deputy Project Engineer, Rural Electrification Corporation U. of Missouri-Rolla '83

A. MOROCCO, EGYPT AND SUDAN

The observations which follow are based on interviews conducted with thirty-nine (39) individuals, former CETP participants and their supervisors, during the period March 11-22, 1985. Assessment of CETP impact was also sought from the local AID energy officer in each country and from other appropriate individuals in the mission.

The degree to which participants are making direct use of their CETP training varies considerably from country to country and within a given country. Notable examples of application of the training material are in energy conservation programs involving participants in Egypt and Sudan, environmental control in Egypt, energy planning in Sudan, and exploration joint venture development in Morocco. Less evident application of specific training skills are found in other areas, and in particular those for which the training had been broad (e.g., IPCS) rather than focussed on a given subject. Even so, there was unanimous agreement among participants and supervisors that the training had given the individual a much broader perspective on the industry, had sharpened his/her skills in the use of English and in the ability to use the technical literature in English, and was therefore very valuable to the participant, the organization and the country.

The fact that some participants return to their jobs not having acquired a specific skill which can be used regularly appears to be due almost entirely to three things:

- 1) lack of a national system or rational selection process for those people to be recommended for training;
- 2) lack of the sponsoring employer in matching individual training needs to available programs; and

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- 3) an uncertainty in some cases both by the participant and the employer of the exact content of the training program.

In no case was there any suggestion, implied or otherwise, that the quality of a CETP course was at fault. This is not to say that there were not a number of suggestions from participants and employers about ways in which programs could be modified, particularly in making them more practical and less theoretical, to meet specific training needs.

Although new procedures in the selection process are being introduced by sponsoring employers, some of whom are developing a more comprehensive system for proposing an individual for training, it is unrealistic to expect that there will not continue to be other motives for nominations. Therefore, this makes it imperative, if the limited number of training slots are to be used with maximum effectiveness, that the local AID mission and specifically the energy officer, not the training officer -- take a much more active hand than is now the case in both the selection process and in a followup with returning participants.

The local mission could also help to develop maximum effectiveness of the CETP by insuring that literature describing the complete range of training opportunities is made available to individuals at all appropriate levels within potential sponsoring organizations and that the exact nature of the training experience is understood by the participant and his/her supervisor prior to the participant's departure for the program. In short, although the program is not funded by the local mission, the effectiveness of CETP would be enhanced by a more active role on the part of the energy officer and others on the staff.

One facet of the CETP which appears to need improvement is the follow-up experience in industry following the IPCS classroom period. Former participants in the

program were near unanimous in saying that it had not given them the opportunity to see theory put into practice but had generally been in the category of guided tours of facilities.

MOROCCO - Interviews

OFFICE NATIONAL DE RECHERCHES ET D'EXPLOITATIONS PETROLIERES (ONAREP):

Idrissi, Mohamed	Geologist, IPCS '84
Chrrat, Fatima	Geologist, IPCS '83
Yahya, Abdeliamid	Geologist, IPCS '82
Marsil, Ahmed	Director, Div. of Marketing, ADL '82
Benjelloun, Mohamed	Chief, Human Resources Div. ADL '82
Ibenbrahim	Geologist MS U TX-E1 Paso '84
Mouhsine, M'Barek Ali	Dir., Div. of Petroleum Participation and Promotion ADL '82
Morabet, Almoundir	Deputy Dir. of Exploration
Morabet, Abdelhalek	Asst. Dir., Regional Projection UNITAR
Hajji, Ahmed	Director of Administration

USAID:

Bricker, Gary	Energy Officer
Bidaou, Monique	Training Officer
El Alouani, Rachida	Asst. Training Officer
Chase, Robert	Director

EGYPTIAN ELECTRICITY AUTHORITY (EEA):

Bedrous, Maher	Environmental Protection Sect. Mgr. UTN '82
Younan, Hoda	Engineer TVA '83
Awad, Mohamed	Director General Research and Testing
El Sharkawi, Emad	Deputy Chairman, EEA

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EGYPT - Interviews (Continued)

EGYPTIAN GENERAL PETROLEUM CORPORATION (EGPC):

Gaeber, Raafar	Engineering Sector Manager
Youssef, Mohamed	Geologist, Evaluation Study Group IPCS '83
Eloui, Mahammed	Sector Manager, Evaluation Study Group
Korkor, Hamed	Energy Specialist, Min. of Petroleum UTN '82
Hussein, Abd El Din	Energy Specialist, Min. of Petroleum UTN '82
Kamel, Abdel	Geologist IPCS '84
Marzouk, Mahmoud	General Manager, Exploration
Beherli, Ahmed	Training Director

USAID:

Ervin, Lawrence	Science and Technology Officer
Peterson, Eric	Energy Officer
Arif, Sherif	Project Officer
Fales, Elmer	Training Officer

SUDAN - Interviews

NATIONAL ELECTRIC CORPORATION (NEC):

Ahmed, Ahmed Khalil	Director of Training, Westinghouse '83
Farouk, Ibrahim	Senior Director, Operations and Engineering
Mohamed, Omer Ali	Div. Mgr., Central Energy Workshops TVA '83
El Naeim, Hattim	Manager, Thermal Stations Div., TVA '83
El Hassan, Khalid	Chief Network Planning Engr., TVA '84
Ugali, Mario	Mgr., Standards & Specifications, Westinghouse '83

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SUDAN - Interviews (Continued)

NATIONAL ENERGY ADMINISTRATION (NEA):

El Hassan, Ahmed	Mgr. Commercial Energy Div., MS, ChE, TX A&M '83
Ahmad, Maha Mohed	Head, Planning and Coordination Sect., MS, U of Pitt. '84
Bashir, Ishaq	Senior Planning Officer, MS, U of Pitt, '83
Shullfi, Mohamed	Director General, NEA

GENERAL PETROLEUM CORPORATION (GPC):

Abdalla, Azhari A.G.	Exploration Geologist, IPCS '83
Zahir, Abdul	Director of Exploration
Moustafa, Azhari A.	Geologist, IPCS '84

MINISTRY OF ENERGY AND MINES  
(GEOLOGICAL AND MINERAL RESOURCES):

Yousif, Hayat El Haj	Geologist, IPCS '83
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US CONTRACTORS:

Sheehy, John	Chief of Party, Nile Grid Project, Harza
Rodewald, Larry	Systems Planning Engineer, Harza
Doudon, Marc	Acting Chief, Energy Planning and Management Project, NEA, EDI

USAID:

Carter, Jay	Energy Officer
Awatif, Barag	Training Officer

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C. PHILIPPINES, THAILAND AND INDONESIA

One week each was spent in Manila, Bangkok and Jakarta. Forty-eight (48) persons were interviewed of whom 40 were participants and 8 were supervisors.

The following general conclusions were arrived at:

- ° The USAID Missions in each country provided excellent support and were most helpful in arranging appointments.
- ° With only one exception, the participants were eager to share their views, opinions and suggestions, and did so candidly.
- ° Although at times it was laborious and time consuming, language was not a problem in the interviewing process.
- ° There is no doubt that one of the very pronounced ancillary benefits of the training experience was a warm, friendly feeling toward the USA. This was gratuitously mentioned, not solicited.
- ° Training in the Philippines and Thailand is being used most effectively. In Indonesia, on the other hand, the training value is more "general" in nature, and has less specific application to the trainee's day-to-day duties.

Specific examples of excellence in training include:

Ray Rafols, Armco - Marsteel Alloy Corporation; Philippines

- set up "ENERCON" Committee
- completed an exhaustive energy audit within his company
- used the TVA forms to prepare "Authorizations For Expenditures" and "Project Analyses" based on the audit findings.

Mr. Kampol, Provincial Electricity Authority - (PEA) of Thailand:

- Thailand buys a lot of of US-made electrical equipment which he now knows in detail based on his training at TVA.

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- He is contributing to the publishing of an internal magazine and he is using his TVA training to write articles.
- His TVA reference material enabled him to write a proposal for a "Biomass Gasification Energy Project".

Although there are several similarly specific examples of benefits of training in Indonesia, most trainees indicated that their training gave them "greater confidence", a "broader view", and similarly vague benefits.

Examples of CETP effectiveness include:

- Materials provided trainees as part of their courses are used extensively as reference data, to train subordinates, are donated to company libraries, and are used as the basis for lectures and speeches. They are an important part of the training experience.
- The selection process of trainees varies from the highly-structured and effective approach such as the Department of Technical and Economic Cooperation - (DTEC) in Thailand to a less organized procedure in Indonesia. The Philippines and Thailand have selected younger participants to fill specific needs, while in Indonesia, the trainees' average age is 12 years older (45), and there is less focus on the nominations process.
- USAID training opportunities are being provided to junior-level employees in some organizations. Unless the training programs are reduced in length (to a maximum of 4-5 weeks) and focused more sharply on a narrower subject, middle management-level employees can not attend.

Suggestions for increased effectiveness of training:

- USAID Missions play a more active role in the selecting process. Pre and post-training interviews of all participants be conducted by the energy or training officer whenever possible.

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- ° All course announcements be accompanied by a specific course outline indicating percentages of time spent on each subject area to provide a better basis for making a sounder decision as to the applicability of the specific course to a candidate's job.
- ° All courses should strive for greater "hands on" activity, problem-solving challenges, and group activity sessions, and fewer lectures and less concept and theory sessions in the classroom. Field trips should never be "tour visits" but rather opportunities to "touch and feel" and ask technical questions from knowledgeable guides.
- ° USAID Missions should assist in developing a means to bring former trainees together periodically, not only to provide an opportunity for social contact on a periodic basis, but more importantly, to provide a source for new trainees to contact before they go to the U.S. for training.
- ° USAID Missions should encourage energy institutions in foreign countries, particularly those with international contacts where English is the commercial language, to launch English courses as a part of all nominees' career development plans. It is very apparent after conducting 48 interviews that English skills and value of training are closely related; the better the English, the more learned, the more applied, and the more passed on to associates and subordinates. An effort should be made to upgrade English before the participant reaches the U.S. By accepting candidates with marginal scores in English one is slowing down the training progress of other individuals who do have good English skills and thereby diluting course effectiveness. It is suggested, therefore, that requirements for English be continually monitored by appropriate USAID personnel.

PHILIPPINES - Interviews

13 participants and 5 supervisors were interviewed. Four persons (4) were not interviewed because of distance.

Participants were from the following organizations:

N.E.A. (National Power Corporation)

- Ms. Valia Tolentino
- Ms. Christie Castro
- Mr. "Jun" Natividad

N.P.C. (National Power Corporation)

- Danilo Cantiller
- Quintin Verzosa
- Cordell del Rosario

B.E.U. (Bureau of Energy Utilization-Division of Conservation and Utilization)

- Wilfredo Toledo
- Leon Manzanillo
- Ted Reyes
- Wayne Abayan
- Marcial Ocampo

P.N.O.C.-Exploration Corporation (Philippines National Oil Corporation)

- Generoso Kampitan

Armco-Marsteel Alloy Corporation

- Ray Rafols

Supervisors (5) were in the following organizations:

N.E.A.

- General Pedro G. Dumol

N.P.C.

- Ms. Malaine Manzo
- Mr. Manuel Pascual

P.N.O.C. Exploration Corporation

- Eriberto Garcia

B.E.U.

- Ben Lim

THAILAND - Interviews

17 participants and 3 supervisors were interviewed. All CETP trainees were seen.

Participants interviewed were in the following organizations:

PTT - Petroleum Authority of Thailand

- Kaiwal Waiyahong
- Ms Metinee Tanliblanphol
- Ms Sumon Pochanart
- Ms Panada Konakwat
- Sonchai Yamboonruang
- Chaw Nivatpumin

MEA - Metropolitan Electricity Authority

- Prasert Wijittongruang
- Praiboon Nuchnartnond
- Saranit Angsusingh

NEA - National Energy Administration

- Mingsak Tangtrakul

EGAT - Electric Generating Authority of Thailand

- Niwat Adirek
- Suthep Chimklai
- Rum Herabut

NIDA - National Institute of Development Administration

- Thiraphong Vikitset

PEA - Provincial Electricity Authority

- Niwate Boonwittaya
- Kampo Wipassakornwarawuth
- Dhienchai Bhuvadolkij

Supervisors (3) interviewed were in the following organizations:

PTT

- Viset Choopiban, Assistance Governor, Technical and Planning

MEA

- Mr. Siri, Chief of the Electrical Design Division

NEA

- Dr. Itthi Biyayendrayodhin, Director of Energy Economics Division

INDONESIA - Interviews

10 Participants were interviewed in the following organizations:

<u>PLN</u>	<u>Perusahaan</u>	<u>Umum</u>	<u>Listrik</u>	<u>Negara</u>
	(Company)	(General)	(Electricity)	(Government)
National Power Company				

- Mr. T. Agung Ganthasuatuna
- Mr. Soetiman Soepono
- Mr. Svestrisno Jerip
- Mr. Sabarto Pradono

PLN - LMK

LMK = Pusat Penyelidikan Masalah Kelistrikan  
Electric Power Research Center

- Mr. Iman Santoso

Directorate General of Electric Power and New Energy

- Mr. Jacobus Purwons
- Mr. Merdeka Sebayang

Lemigas - Ore and Gas Technology Development Centre

- Mr. J.F. Sam Mandagie
- Mr. John Kansil

Directorate of Exploration and Production

- Mr. Sveproptono Sveleiman

No supervisors were interviewed.

D. COSTA RICA, DOMINICAN REPUBLIC AND JAMAICA

Comparative analyses of the impact of training with respect to these countries and general findings and conclusions are as follows:

In all three countries, CETP training was regarded as vastly superior to that available from in-country or from other foreign country sources. This is particularly true with respect to non-academic training of engineers, scientists, and technicians in the TVA, IPCS, ADL, Westinghouse, and UNITAR programs. Also, the quality of academic training programs was considered equal to or better than that of others.

Academic programs were not as effective as non-academic training in terms of direct, measurable benefits, return replacement and retention of participants in jobs, achievement of major training objectives of either the trainees or their sponsoring institutions, nor in effective short-term utilization of the CETP training in-country. There has been only four CETP academic trainees from the three subject countries. Three were from the Dominican Republic and one was from Costa Rica. All earned M.S. degrees in engineering or other technical areas.

It must be recognized that academic training is needed to meet the legitimate long-term energy interests and objectives of these countries and is warranted in terms of potential benefits to the countries and to Mission energy program objectives.

Non-academic training was uniformly praised and although effectiveness of utilization and demonstrable benefits varied somewhat among the three countries and the various sponsoring organizations, it has been an exceptionally beneficial program in general. Its impact on Mission and country energy objectives and projects has been immediate and outstanding in all three countries.

Prime examples of effectiveness are: the direct application of CETP training in petroleum engineering and coal technologies at RECOPE, Costa Rica's national oil company; the improved energy conservation programs and plant audits by trainees in Jamaica's Public Service Company; and the direct project design applications of hydropower technologies by CDE, the Dominican Electricity Company, and COENER, the National Energy Planning Commission, as well as improved energy conservation audits and results in CDE powerplants.

Communications among trainees in-country, and to a much lesser extent with regional, global, and U.S. contacts, has been quite good. All expressed interest in maintaining both professional and personal contacts. It was suggested a brief newsletter be prepared for periodic distribution giving information on other CETP participants' work experiences and related activities since returning to their countries.

For the most part, sharing of training on a regular and continuous informal basis with subordinates and colleagues is widely and effectively practiced by former CETP participants. Formal instruction in corporation and university classes by former CETP trainees is being done in all three countries to a limited extent, but there is growing and widespread interest and support for in-country training in energy technologies. An excellent example is the introduction in February of Petroleum Engineering Fundamentals course at the University of Costa Rica, which was developed and is being taught by three former CETP trainees.

Reference materials, manuals, books, and other technical information acquired during CETP training is unanimously reported as the best reference and instructional materials available to the trainees and their organizations. Such materials are kept in offices or company libraries where use is shared with all

associates. Most trainees reported difficulties in receiving on-going technical materials from the U.S. and most have to exercise great personal initiative in getting needed new technical information and data on a regular and timely basis. Many requested greater book allowances during training and stated that some assistance from USAID and the CETP staff would be the single greatest contribution to meeting their continuing needs for technical information. Therefore it is suggested that USAID investigate the possibility of establishing a regular distribution of U.S. Government Industry Associations, Technical Societies, and similar sources of such technical information.

Essentially all CETP trainees were young engineers, scientists, or other technicians, therefore, no meaningful assessment can be made of the relative effectiveness of training by age, experience, educational preparation, or related factors. In all countries visited, there was an observed need for training of senior and mid-level managers. A case in point is that of the Ministry of Minerals and Energy in the Dominican Republic and the Costa Rican Electricity Co., where indifferent or passive management seriously limits the effectiveness of CETP training. Often, the successful application of technologies and their benefits are lost or not fully realized because of lack of understanding or active support by such managers.

For the most part, former CETP trainees have established or maintain on-going commercial relations with U.S. manufacturing and engineering service firms. All three countries have current contracts involving engineering consulting services on energy projects and purchases of U.S. testing equipment and other manufactured goods and supplies.

Dissimination of information concerning CETP training opportunities and new course announcements through normal government, university, and company channels is too

often deficient in making timely information available to potentially qualified applicants in far too many of the organizations in all three countries. The most effective method is that used increasingly by the CETP staff of direct mailing of course announcements to former CETP participants. This practice should be established as standard procedure for all three countries.

CETP training has made a direct and positive contribution to Mission energy projects and objectives in all three countries. The participants have introduced improved energy audit and conservation technologies and are applying them in all three countries. Development, design, and planning of hydropower, petroleum, coal, geothermal, and biomass programs to use these indigenous alternative energy sources to relieve the economic distress of high oil import bills is being enhanced by CETP trainees' direct involvement and contributions to many USAID sponsored programs.

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COSTA RICA - Interviews

Fourteen (14) of the 17 Costa Rican CETP trainees were interviewed all of whom were engineers, scientists, or technicians who received non-academic specialized training only. All were sponsored by public sector operating organizations or by academic institutions. Included were all 8 trainees from RECOPE (Refinadora Corterricense de Petroleo), the national oil company; all 4 trainees from ICE (Instituto Costarricense de Electricidad), the national electric power company; and 1 each from ITCR (Instituto Tecnológico de Costa Rica at Cartago) and UCR (Universidad de Costa Rica at San Jose), respectively. They are identified below:

RECOPE

AFONSO, Pedro S. - UNITAR Conference, University of Oklahoma, 1984  
BOLANOS, Kenneth - USGS Coal Technology, 1983  
GORRALES, Rafael P. - UNITAE Conference, University of Oklahoma, 1984  
LOPEZ, Ronald R. - IPCS Petroleum Fundamentals, 1984  
NARANJO, Jose R. - ADL Petroleum Management, 1984  
QUESADA, Lourdes - USGS Coal Chemistry and Testing, 1984  
SANAHRIA, Alfonso - IPCS Petroleum Fundamentals, 1984

ICE

BAROUERO, Luis A. - TVA 2 Power Systems, 1983  
BRENES, Javier A. - Westinghouse Power Systems, 1983  
ODIO, Ulises - TVA 2 Power Systems, 1984  
SANCHEZ, Javier - TVA 2 Power Systems, 1983

ITCR

SOLANO, Roger - TVA 1 Energy Conservation, 1984

UCR

GUTIERREZ, Juan J. - TVA 1 Energy Conservation, 1984  
Trainee Luis I. KOSS, TVA 1 1982, from ITCR was out of the country on a training assignment.

The only academic trainee, Javier A. LOUZAQ, who received a M.S. in Technical Engineering from the University of Kentucky in 1984, was not interviewed.

Fernando CALDAS, TVA 1 1983, from the Ministry of Industry, Directorate of Energy, was out of the country on academic leave to study for a M.S. degree in the United Kingdom.

Five (5) supervisors of CETP trainees in RECOPE, ICE, and UCR were interviewed. They were: Pedro Afonso, Manager of Petroleum Exploration, Rafael Corrales, Assistant Manager of Exploration, and Rodolfo Gallegos, Director of Exploration of RECOPE. Armando Balma Esquivera, General Manager, Electricity Production and Energy Transmission of ICE, and Dr. Oscar Coto, Head of the Mechanical Engineering school at UCR.

#### DOMINICAN REPUBLIC - Interviews

All four of the non-academic and two of the three academic CETP trainees were interviewed.

##### Non-academic:

ALOU, Luis - COENER (National Energy Planning Commission)  
U. of Denver Hydropower Short Course, 1982

CHAVEZ, Nelson - CDE (Dominican Electricity Corp.) TVA 1  
- Energy Conservation, 1984

FERDOMO, Fernando - CDE, U. of Denver Hydropower Short Course, 1982

MARTINEZ, Rafael - CDE, TVA 1, Energy Conservation, 1984

##### Academic:

HERNANDEZ, Victor - UNCMM (Santiago Catholic University)  
MS in Mechanical Engineering, Kansas U., 1984

MOYA, William - Directorate of Mines, MS in Minerals Economics, Arizona U.

Only two of the six supervisors were available for interviews.

#### JAMAICA - Interviews

All 5 of the CETP trainees in Jamaica were interviewed. All training was non-academic and specialized for engineers or technicians who came from public sector organizations. Four were from the Soel Electric Power Company and one from the Ministry of Mines and Energy. They are:

CHANNER, John Arthur - JPS (Jamaica Public Service Co.), Westinghouse Power Systems, 1984

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JAMAICA Interviews - (Continued)

EDWARDS, Leonard J. - MME (Ministry of Mines and Energy), TVA 1 Energy Conservation, 1982

HOLNESS, LENWARD G. O. - JPS, TVA 1 Energy Conservation, 1983

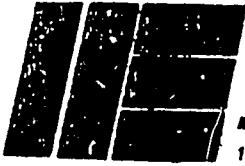
MURRAY, Aubrey A. - JPS (now with SEPROD Corp.). TVA 1 Energy Conservation, 1984

THAMES, Errol L. - JPS (now with SHELL ETHANOL Plant), TVA 1, Energy Conservation, 1984

Direct supervisory and training personnel in both organizations who were familiar with the subject, trainees and the impact of their training on the organizations were also interviewed. Human resource development needs and objectives, problems, and effectiveness of CETP training were discussed. The following MME officials were met with:

Winston Boyne, Director of the Energy Department  
Nigel Grant, Chief of Economic Planning and Energy Programs  
Cosford Roberts, Administrator of USAID Programs

At JPS, Kenton C. Tomlinson, Superintendent of Generation, Production and Technical Services, who directly supervised all the JPS trainees was interviewed. He is also the official in charge of the selection process and director of training in plant facilities.



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CONVENTIONAL ENERGY TRAINING PROJECT

Monthly Statistics

January 14, 1987

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CETP MATRIX  
 CODES

	<u>Courses</u>	<u>Institutes</u>	<u>Interns</u>	<u>Academic</u>
ACTIVE	AC	AI	AT	AA
PENDING	PC	PI	PT	PA
COMPLETE	CC	CI	CT	CA
WITHDRAWN	WC	WI	WT	WA

COURSES: Applied Petroleum Geology = PTRI or IPCS  
 Managing National Petroleum Enterprise = OGCI  
 Industry and Utility Energy Conservation = TVA1  
 Electric Utility Engineering = TVA2  
 Energy Management and Policy = UPAL  
 ASEAN Coal Technology = ASEAN/COAL  
 ASEAN Energy Planning in Malaysia = ASEAN/PLANNING

INSTITUTES: Power Systems Engineering (Westinghouse) = WEST.  
 Petroleum Management Program (Arthur D. Little) = ADL  
 Power Systems Engineering (General Electric) = GE  
 National Rural Electric Cooperatives Assoc. = NRECA

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SUMMARY TABLE  
DATE: 01/14/87

NON-ACADEMIC STATISTICS  
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	PENDING -----	ACTIVE -----	COMPLETE -----	RETIRED -----	TOTAL -----
COURSES:	125	22	398	193	738
INSTITUTES:	14	0	136	73	223
INTERNS:	25	1	53	33	112
SUBTOTAL:	164	23	587	299	1073

ACADEMIC STATISTICS  
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	24	10	95	72	201
TOTAL:	188	33	682	371	1274

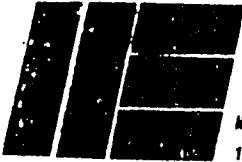
11/11

SUMMARY TABLE  
DATE: 01/14/87

DISTRIBUTION BY REGION OF CETP GRADUATES

REGION -----	ACADEMIC -----	NON-ACADEMIC -----	TOTAL -----
AFRICA	36	120	156
ASIA	22	267	289
LATIN AMERICA	14	96	110
NEAR EAST	23	104	127
TOTAL:	95	587	682

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INSTITUTE OF INTERNATIONAL EDUCATION - WASHINGTON OFFICE  
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CONVENTIONAL ENERGY TRAINING PROJECT

Active Participants

January 14, 1987

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CETP MATRIX  
 CODES

	<u>Courses</u>	<u>Institutes</u>	<u>Interns</u>	<u>Academic</u>
ACTIVE	AC	AI	AT	AA
PENDING	PC	PI	PT	PA
COMPLETE	CC	CI	CT	CA
WITHDRAWN	WC	WI	WT	WA

- COURSES:
- Applied Petroleum Geology = PTRI or IPCS
  - Managing National Petroleum Enterprise = OGCI
  - Industry and Utility Energy Conservation = TVA1
  - Electric Utility Engineering = TVA2
  - Energy Management and Policy = UPAL
  - ASEAN Coal Technology = ASEAN/COAL
  - ASEAN Energy Planning in Malaysia = ASEAN/PLANNING
- INSTITUTES:
- Power Systems Engineering (Westinghouse) = WEST.
  - Petroleum Management Program (Arthur D. Little) = ADL
  - Power Systems Engineering (General Electric) = GE
  - National Rural Electric Cooperatives Assoc. = NRECA

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ACTIVE NON ACADEMIC PARTICIPANTS  
REGIONAL REPORT  
IIE/CETP/USAID

1/14/87

ODE	NAME	STUDY FIELD	EMPLOYER	TRAINING SITE	GRADUATE
REGION: AF					
COUNTRY: DJIBOUTI					
IC	NOUR, YACOB MAHAMOUD	ENERGY MANAGEMENT	MIN. OF INDUSTRY & INDUSTRIAL DEVEL	UPA1	08/01/87
COUNTRY: KENYA					
IC	MWAKE, PAUL MUTTIE	ENERGY MANAGEMENT	MINISTRY OF ENERGY	UPA1	08/01/87
COUNTRY: LIBERIA					
IC	KING, JOEL	ENERGY MANAGEMENT	MINISTRY OF LANDS, MINES & ENERGY	UPA1	08/01/87
IC	SMITH, MELVIN	ENERGY MANAGEMENT	MINISTRY OF LANDS, MINES & ENERGY	UPA1	08/01/87
COUNTRY: UGANDA					
IC	ABDALLA, YUSUF ATIKU	ENERGY MANAGEMENT	BANK OF UGANDA	UPA1	08/01/87
IC	TUGUME, KENNETH FRANCIS	ENERGY MANAGEMENT	MINISTRY OF ENERGY	UPA1	08/01/87

ACTIVE NON ACADEMIC PARTICIPANTS  
REGIONAL REPORT  
IIE/CETP/USAID

11/14/87

CODE	NAME	STUDY FIELD	EMPLOYER	TRAINING SITE	GRADUATE
REGION: AS					
COUNTRY: BURMA					
IC	LWIN, KYAW	ENERGY MANAGEMENT	MYANMA OIL CORPORATION	UPAI	08/01/87
IC	SHWE, KHIN MAUNG	ENERGY MANAGEMENT	PETROCHEMICAL INDUSTRIES CORP.	UPAI	08/01/87
COUNTRY: FIJI					
IC	LOU, TIP CHANG	ENERGY MANAGEMENT	MINISTRY OF ENERGY, GOF	UPAI	08/01/87
COUNTRY: INDONESIA					
IC	SAMIN, SJAHROEL	ENERGY MANAGEMENT	PLANNING STATE ELECTRICITY COMPANY	UPAI	08/01/87
C	SOEMARSO, CHRISTOPHORUS	ENERGY MANAGEMENT	LEMIGAS	UPAI	08/01/87
C	SUSMOYO,	ENERGY MANAGEMENT	PPT MIGAS	UPAI	08/01/87
COUNTRY: PAKISTAN					
C	HASAN, MIRZA TALIB	GEOLOGY	GEOLOGICAL SURVEY OF PAKISTAN	INTERNSHIP-SIU	12/31/86
COUNTRY: PAKISTAN					
C	GUL, TARIQ	ENERGY MANAGEMENT	ENAR PETROTECH SERVICES LIMITED	UPAI	08/01/87
COUNTRY: PHILIPPINES					
IC	ALBINO, MARIA ASUNCION	ENERGY MANAGEMENT	BUREAU OF ENERGY UTILIZATION	UPAI	08/01/87
IC	ESPANTO, ZOSIMO	ENERGY MANAGEMENT	BUREAU OF ENERGY DEVELOPMENT	UPAI	08/01/87
IC	TAMANG, JESUS P.	ENERGY MANAGEMENT	BUREAU OF ENERGY UTILIZATION	UPAI	08/01/87
COUNTRY: THAILAND					
IC	VITHESPONGSE, SUN	ENERGY MANAGEMENT	MINISTRY OF FINANCE	UPAI	08/01/87

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ACTIVE NON ACADEMIC PARTICIPANTS  
 REGIONAL REPORT  
 IIE/CETP/USAID

1/14/87

ODE	NAME	STUDY FIELD	EMPLOYER	TRAINING SITE	GRADUATE
REGION: LA					
COUNTRY: HAITI					
IC	AUGUSTIN, CHARLES	ENERGY MANAGEMENT	MINISTRY OF COMMERCE AND INDUSTRY	UPAI	08/01/87
IC	PIERRE, BETONUS	ENERGY MANAGEMENT	MINISTRY OF MINES & ENERGY RESOURCCE	UPAI	08/01/87
COUNTRY: PANAMA					
IT	ROVI, JULIO I.	ENERGY ECONOMICS	IRHE	U. PENN.	01/05/87

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age No.

ACTIVE NON ACADEMIC PARTICIPANTS  
REGIONAL REPORT  
IIE/CETP/USAID

1/14/87

ODE ---	NAME -----	STUDY FIELD -----	EMPLOYER -----	TRAINING SITE -----	GRADUATE -----
REGION: ME					
COUNTRY: EGYPT C	KORKOR, HAMED ALY HAMED	ENERGY MANAGEMENT	ORGANIZATION FOR ENERGY PLANNING	UPA1	08/01/87
COUNTRY: JORDAN C	QAQISH, BASIL FOUAD	ENERGY MANAGEMENT	MIN. OF PLANNING AND NAT. RESOURCES	UPA1	08/01/87

ACTIVE ACADEMIC PARTICIPANTS  
REGIONAL REPORT  
IIE/CETP/USAID

1/14/87

ODE	NAME	STUDY FIELD	EMPLOYER	TRAINING SITE	GRADUATE
	REGION: AF				
	COUNTRY: SEYCHELLES				
IA	BELLE, EDDIE R.	PETROLEUM GEOLOGY		U.T.E.P.	12/31/86
	COUNTRY: SOMALIA				
IA	AWAD, BARRE MOHAMED	GEOLOGICAL ENGINEERING	BAARDHEERE DAM PROJECT	U. ARIZONA	08/09/86
	COUNTRY: SUDAN				
IA	EL SHAFEI, ISMAIL	UTILITY ENGINEERING	NATIONAL ENERGY ADMINISTRATION	U PENN/MS/ENGY MGMT & POL	02/28/87
IA	FAWZ, MOHAMED	ENERGY MGMT/RESOURCE PLANNING	NATIONAL ENERGY ADMIN.	U. PENN.	02/28/87

ACTIVE ACADEMIC PARTICIPANTS  
REGIONAL REPORT  
ITE/CETP/USAID

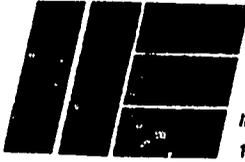
1/14/87

IDE	NAME	STUDY FIELD	EMPLOYER	TRAINING SITE	GRADUATE
REGION: AS					
COUNTRY: BURMA					
	DAN, THEIN	ELEC. POWER-DISTR & LOAD MGMT.	RANGOON INSTITUTE OF TECHNOLOGY	RPI	06/30/87
COUNTRY: NEPAL					
	SHRESTHA, BALARAM	ELECTRICAL ENGINEERING	ELECTRICITY DEPARTMENT	UT/CHAT.	02/28/87
COUNTRY: PAKISTAN					
	GHAZNAVI, M. ISHAQ	GEOLOGY	GEOLOGICAL SURVEY OF PAKISTAN	S. ILLINOIS U.	01/05/87
COUNTRY: THAILAND					
	SOPHONPHONGPHIP, PRAPHAT	GEOTHERMAL RESOURCES	GEOL. SURVEY/DEPT. MINRL.	NM TECH	08/16/88

ACTIVE ACADEMIC PARTICIPANTS  
REGIONAL REPORT  
IIE/CETP/USAID

1/14/87

ODE	NAME	STUDY FIELD	EMPLOYER	TRAINING SITE	GRADUATE
REGION: NE					
COUNTRY: EGYPT					
IA	HEGAZY, YOUSSEF A.	ENERGY ECONOMICS	NEA (EGYPT ENERGY AUTHORITY)	U. PENN.	01/05/87
COUNTRY: TUNISIA					
IA	BECHRAOUI, NADIA	ENERGY RESOURCE PLANNING & MGMT	OPNT	U. PENN	12/31/87



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CONVENTIONAL ENERGY TRAINING PROJECT

Pending Nominations

January 14, 1987

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CETP MATRIX  
 CODES

	<u>Courses</u>	<u>Institutes</u>	<u>Interns</u>	<u>Academic</u>
ACTIVE	AC	AI	AT	AA
PENDING	PC	PI	PT	PA
COMPLETE	CC	CI	CT	CA
WITHDRAWN	WC	WI	WT	WA

COURSES: Applied Petroleum Geology = PTRI or IPCS  
 Managing National Petroleum Enterprise = OGCI  
 Industry and Utility Energy Conservation = TVA1  
 Electric Utility Engineering = TVA2  
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 ASEAN Coal Technology = ASEAN/COAL  
 ASEAN Energy Planning in Malaysia = ASEAN/PLANNING

INSTITUTES: Power Systems Engineering (Westinghouse) = WEST.  
 Petroleum Management Program (Arthur D. Little) = ADL  
 Power Systems Engineering (General Electric) = GE  
 National Rural Electric Cooperatives Assoc. = NRECA

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PENDING NON ACADEMIC NOMINATIONS  
REGIONAL REPORT  
IIE/CETP/USAID

1/14/87

ODE	NAME	STUDY FIELD	EMPLOYER	TRAINING SITE	NOM DATE
REGION: AF					
COUNTRY: BURUNDI					
C	HAKIZIMANA, GODEFROY	UTILITY ENGINEERING	KIN. OF PUBLIC WORK, ENERGY & MINES	UPA1	07/14/86
C	NITUNGA, LIBERE	ENERGY MANAGEMENT	REGIDESO	UPA1	07/14/86
C	SAKUBU, SALVATOROT	PETROLEUM TECHNOLOGY	MIN. OF PUBLIC WORKS, ENERGY & MINES	PTRI	04/18/86
COUNTRY: CAMEROON					
PC	FOMBUTU, FOGAKOH	PETROLEUM GEOLOGY	MINISTRY OF MINES AND POWER	PTRI	03/12/86
PC	FORGWEI, KEBENEI	PETROLEUM TECHNOLOGY	MINISTRY OF MINES AND POWER	PTRI	03/13/86
COUNTRY: CONGO					
PC	ITOUAONDONGO, ALPHONSE	ENERGY CONSERVATION	SOCIETE NATIONALE D'ELECTRICITE	TVA1	04/17/86
COUNTRY: GHANA					
PC	ABAVANA, C.B.	ENERGY MANAGEMENT	ELECTRICITY CORPORATION OF GHANA	UPA1	10/20/86
PC	AKNOKO, STEPHEN	ENERGY CONSERVATION	ELECTRIC CORPORATION OF GHANA	TVA1	/ /
PC	ASARE, MARTIN	ENERGY PLANNING	MINISTRY OF FUEL AND POWER	UPA1	10/22/85
PC	DANQUAH, EMMANUEL	ENERGY PLANNING	GHANA NATIONAL PETROLEUM CORP	UPA1	11/01/85
PC	DUAH, GEORGE KWAKU	ENERGY CONSERVATION	ELECTRICITY CORPORATION OF GHANA	TVA1	/ /
PC	KYEREMATENG, WILLIAM K.	ENERGY MANAGEMENT	ELECTRICITY CORPORATION OF GHANA	UPA1	10/20/86
PC	MINTAH, ISAAC	ENERGY PLANNING	MINISTRY OF FUEL AND POWER	UPA1	10/22/85
PC	OFORI, E.G.	ENERGY MANAGEMENT	ELECTRICITY CORPORATION OF GHANA	UPA1	10/20/86
PC	OPONG ADDO, ISAAC	ENERGY MANAGEMENT	ELECTRICITY CORPORATION OF GHANA	UPA1	10/20/86
COUNTRY: MADAGASCAR					
PC	RAKOTONDRAFARA, BENJAMINA	UTILITY ENGINEERING	JIRAMA	TVA2	05/30/86
PC	RANDRIAMANGA, ALINE	UTILITY ENGINEERING	JIRAMA	TVA2	05/30/86
COUNTRY: MALI					
PC	MAIGA, DRAMANE	PETROLEUM TECHNOLOGY	DIRECTION GEOLOGIE & MINES	PTRI	01/14/85
PI	LY, TOURE	PETROLEUM MANAGEMENT	GOVERNMENT OWNED SLAUGHTER HOUSE	ADL	03/25/86
PI	TOURE, SAMBA	PETROLEUM MANAGEMENT	NATIONALE DIRECTORATE OF GEO.&MINES	ADL	03/25/86
COUNTRY: RWANDA					
PC	BWANAKEYE, JEAN BAPTISTE	UTILITY ENGINEERING	NATIONAL UNIVERSITY OF RWANDA	TVA2	05/28/86
COUNTRY: SOMALIA					
PC	ABDI, MOHAMUD	PETROLEUM MANAGEMENT	NATIONAL PUBLIC TRANSPORT COOP	OGCI	04/10/86
PC	AHMED, ISSE ALI	ENERGY CONSERVATION	MINISTRY OF NATIONAL PLANNING	TVA1	/ /

PENDING NON ACADEMIC NOMINATIONS  
REGIONAL REPORT  
IIE/CETP/USAID

11/14/87

CODE	NAME	STUDY FIELD	EMPLOYER	TRAINING SITE	NOM_DATE
COUNTRY: SUDAN					
'C	ABDUL FADIL, FATHIA SAEED	ENERGY MANAGEMENT	GENERAL PETROLEUM CORPORATION	UPAI	11/04/86
'C	AHMED, SOAD SIDDIQ	ENERGY MANAGEMENT	NATIONAL ENERGY ADMINISTRATION	UPAI	11/04/86
'C	AHMED, MAHA MOHAMED	ENERGY MANAGEMENT	NATIONAL ENERGY ADMINISTRATION	UPAI	11/04/86
'C	GADIR, KAWTHAR ABDEL	ENERGY MANAGEMENT	NATIONAL ENERGY ADMINISTRATION	UPAI	11/04/86
'C	SHAFEEG, ANIS	ENERGY CONSERVATION	NEC	TVAI	02/05/86
'I	BASHIR, ISHAG ADAM	PETROLEUM MANAGEMENT	NATIONAL ENERGY ADMINISTRATION(NEA)	ADL	07/23/84
'I	GORAMI, MOHAMMED ELAMIN	PETROLEUM MANAGEMENT	GENERAL PETROLEUM CORPORATION	ADL	07/07/86
'I	SHULLI, A. RAHMAN A.		MINISTRY OF ENERGY AND MINING	R&D INSTITUTE MANAGEMENT	03/11/86
'T	ALI TAHA, ATTA	OIL SUPPLY-MECHANICAL ENGG.	GENERAL PETROLEUM CORP.	INTERNSHIP	/ /
'T	MARHOUM, ABDEL	PETROLEUM PROJECT PLANNING	GENERAL PETROLEUM CORP.	INTERNSHIP	/ /
'T	MOHAMED, ABUL	SAS PIPELINE	GENERAL PETROLEUM CORP.	INTERNSHIP	/ /
'T	MUREIN, ALI	PETROLEUM REFINING	GENERAL PETROLEUM CORP.	INTERNSHIP	/ /
COUNTRY: TANZANIA					
'I	SALAKANA, JUSTIN	ENERGY MANAGEMENT	AGIP (T) LTD.	STONY BROO	/ /
COUNTRY: UGANDA					
'C	MUGANWA, DAISY BARUNGI	ENERGY MANAGEMENT	MINISTRY OF ENERGY	UPAI	/ /

PENDING NON ACADEMIC NOMINATIONS  
REGIONAL REPORT  
IIE/CETP/USAID

1/14/87

JDE	NAME	STUDY FIELD	EMPLOYER	TRAINING SITE	NOM_DATE
REGION: AS					
COUNTRY: BANGLADESH					
T	ALAM, SHAMSUL	WELL DRILLING	PETROBANGLA	INTERNSHIP	/ /
T	ALI, ARZI	WELL CEMENTING	PETROBANGLA	INTERNSHIP	/ /
T	CHOWDHURY, HASNAT	WELL DRILLING	PETROBANGLA	INTERNSHIP	/ /
COUNTRY: BRUNEI					
C	HASHIN, YSMAEL BIN POKS		DEPARTMENT OF ELECTRICAL SERVICES	ASEAN	03/19/86
COUNTRY: BURMA					
C	SAN, HLAINS MYINT	POWER SYSTEMS ENGINEERING	PETROCHEMICAL INDUSTRIES CORP.	WEST.	06/17/86
COUNTRY: INDIA					
C	BOWDA, CHANDRAPPA	ENERGY MANAGEMENT	KARNATAKA ELECTRICITY BOARD	UPAI	01/05/87
C	JAIN, M. L.	PETROLEUM TECHNOLOGY	OIL AND NATURAL GAS COMMISSION	PTRI	02/05/86
C	PRADHAM, U.M.	ENERGY MANAGEMENT	GUJARAT ELECTRICITY BOARD	UPAI	11/19/86
C	SHAH, R.S.	ENERGY MANAGEMENT	GUJARAT ELECTRICITY BOARD	UPAI	11/19/86
C	SINGH, A.	PETROLEUM TECHNOLOGY	OIL AND NATURAL GAS COMMISSION	PTRI	12/17/85
C	SINGH, ARJUN	UTILITY ENGINEERING	U.P. STATE ELECTRICITY BOARD	TYA2	07/16/86
I	DAS, DEVADUTTA	ENERGY MANAGEMENT	U.OF ROORKEE, DEPT. NON-CONV. ENERGY	STONY BROO	/ /
I	NATARAJAN, ESWARAN	PETROLEUM PLANNING/MGMT	BHARAT PETR. CORP.	STONY BROO	/ /
I	UDAYASIRI, NAREN	ENERGY MANAGEMENT	INDIAN INST. OF MGMT./CTR. ENGY MGMT	STONY BROO	/ /
COUNTRY: INDONESIA					
PC	ATMOWJOJO, DWOEWIT		NATIONAL INSTITUTE OF PHYSICS	ASEAN	03/19/86
PC	BUDIYONO, ILYATI	ENERGY PLANNING	STATE OF ELECTRIC POWER COMPANY	ASEAN/PLANNING	/ /
PC	KOMBAITAN, BENEDICTUS	ENERGY PLANNING	LEMBAGA PENELITIAN ITB	ASEAN/PLANNING	/ /
PC	MOELJOPAWIRO, WARGONO	ENERGY MANAGEMENT	PPT MIGAS	UPAI	/ /
PC	MUSLIKI, SABARDI	PETROLEUM TECHNOLOGY	MIGAS / EXPLORATION DEPT.	PTRI	12/26/84
PC	PRAWIROUSANTO, SUMARTONO	ENERGY PLANNING	GADJAH MADA UNIVERSITY	ASEAN/PLANNING	/ /
PC	SINURAJA, SYAHBAN	COAL TECHNOLOGY	PLM	ASEAN/COAL	/ /
PC	SITUMORANG, BONA	PETROLEUM MANAGEMENT	LEMIGAS	O6CI	01/21/86
PC	SOEMARYO, ASMOROWATI	ENERGY CONSERVATION	PPT-MIGAS/MIN. OF MINES AND ENEGY	TYA1	01/24/85
PC	SUHARSO, SITI DJUHARMI	ENERGY PLANNING	DIRECTORATE GENERAL OIL & GAS	UPAI	03/12/85
COUNTRY: MALAYSIA					
PC	ABD. RAHIM, NORLIAN	ENERGY PLANNING	LEMBAGA LETRIC SABAH	ASEAN/PLANNING	/ /
PC	ABDUL RAHMAN, ROHANI	ENERGY PLANNING	PETRONAS	ASEAN/PLANNING	/ /
PC	AZMI, SHAHRYN	ENERGY PLANNING	ESSO PRODUCTION MALAYSIA	ASEAN/PLANNING	/ /
PC	BAHARUDDIN, BIN ALI	ENERGY PLANNING	UNIVERSITY OF MALAYA	ASEAN/PLANNING	/ /
PC	CHAN, SIEM PING CHRIS	ENERGY PLANNING	SABAH GAS INDUSTRIES	ASEAN/PLANNING	/ /
PC	CHIN, SHIH LOON	ENERGY PLANNING	MINISTRY OF ENERGY	ASEAN/PLANNING	/ /
PC	HASHIM, NORAINI	ENERGY PLANNING	MINISTRY OF ENERGY	ASEAN/PLANNING	/ /

PENDING NON ACADEMIC NOMINATIONS  
REGIONAL REPORT  
IIE/CETP/USAID

1/14/87

ODE	NAME	STUDY FIELD	EMPLOYER	TRAINING SITE	NOM DATE
C	HASSAM, MASJUKI HJ.	ENERGY PLANNING	U. OF MALAYA	ASEAN/PLANNING	/ /
C	IBRAHIM, JAMAL KHAER	ENERGY PLANNING	PRIME MINISTER'S DEPT/NUCLEAR ENRGY	ASEAN/PLANNING	/ /
C	KOH, KIM HOE	ENERGY PLANNING	NATIONAL ELECTRICITY BOARD	ASEAN/PLANNING	/ /
C	LAU, ING HUO	ENERGY PLANNING	SARAWAK ELECTRIC SUPPLY CORPORATION	ASEAN/PLANNING	/ /
C	LEONG, SO SEH	ENERGY PLANNING	ECONOMIC PLANNING UNIT	ASEAN/PLANNING	/ /
C	MOHD.NOR, A. RAHIM BIN	ENERGY PLANNING	PRIME MINISTER'S DEPT/NUCLEAR ENRGY	ASEAN/PLANNING	/ /
C	PALIL, ISMAIL	ENERGY PLANNING	SABAH ENERGY CORPORATION	ASEAN/PLANNING	/ /
C	PERUMAL, KOMALA DEVI	ENERGY PLANNING	MALAYSIAN INDUSTRIAL DEVEL. AUTH.	ASEAN/PLANNING	/ /
C	THARMARAJAH, AMUTHAMBIGAI	ENERGY PLANNING	PETRONAS	ASEAN/PLANNING	/ /
C	YAACOB, AB.KARIM	ENERGY PLANNING	UNIVERSITI TEKNOLOGI MALAYSIA	ASEAN/PLANNING	/ /
COUNTRY: NEPAL					
C	SHAH, BHANN	PETROLEUM INVESTMENT	DEPT. MINES & GEOLOGY		12/22/84
COUNTRY: PAKISTAN					
C	HYDER, NAJAM	ENERGY PLANNING	OIL AND GAS DEVELOPMENT CORP.	OBCI	11/20/85
C	KHAN, MOHAMMAD SAEED	PETROLEUM MANAGEMENT	OIL AND GAS DEVELOPMENT CORPORATION	OBCI	02/10/86
T	AFZAL, MUHAMMED	GEOPHYSICAL INSTRUMENTS	GEOLOGICAL SURVEY OF PAKISTAN	INTERNSHIP	/ /
T	AHMED, RAFIQ	PETROLOGY EQUIPMENT	GEOLOGICAL SURVEY OF PAKISTAN	INTERNSHIP	/ /
T	HUSSAIN, FIDA	PETROLOGY EQUIPMENT	GEOLOGICAL SURVEY OF PAKISTAN	INTERNSHIP	/ /
T	MAKHDOMI, M. ZAHID	DRILLING	GEOLOGICAL SURVEY OF PAKISTAN	INTERNSHIP	/ /
T	MUSLIM, MOHAMMAD	COAL & GEOTHERMAL RESOURCES	GEOLOGICAL SURVEY OF PAKISTAN	INTERNSHIP	/ /
COUNTRY: PHILIPPINES					
C	ABAYA, REMON	ENERGY MANAGEMENT	CAGAYAN ELECTRIC POWER & LIGHT CO.	UPA1	/ /
C	ARTIFICIO, EDGAR	ENERGY PLANNING	PCIERD	ASEAN/PLANNING	/ /
C	BABILONIA, BIENVENIDO	COAL TECHNOLOGY	NATIONAL POWER CORPORATION	ASEAN/COAL	/ /
C	CABATINGAN, MANUEL	ENERGY CONSERVATION	NATIONAL POWER CORPORATION	TVA1	02/20/86
C	CABLAO, JOCELYN FLORES	ENERGY PLANNING	PCIERD	ASEAN/PLANNING	/ /
C	DE CASTRO, LAARNI D.	ENERGY PLANNING	PNOC ENERGY RESEARCH DEVELOPMT CTR	ASEAN/PLANNING	/ /
C	SALSIM, MA. LOURDES	ENERGY PLANNING	BUREAU OF ENERGY UTILIZATION	ASEAN/PLANNING	/ /
C	GO, SIMEON	ENERGY PLANNING	MANILA ELECTRIC COMPANY	ASEAN/PLANNING	/ /
C	MARTIN, BASILIO ROBLES	ENERGY PLANNING	BUREAU OF ENERGY UTILIZATION	ASEAN/PLANNING	/ /
C	PASION, HERMANI SULIT	COAL TECHNOLOGY	CEMENT TECHNOLOGY SERVICES, INC.	ASEAN/COAL	/ /
C	QUIRANTE, CHARLIE	ENERGY CONSERVATION	BUREAU OF ENERGY UTILIZATION	TVA1	/ /
C	REYES, TEODORO	ENERGY PLANNING	PHILIPPINE NATIONAL OIL CO. - ERDC	ASEAN/PLANNING	/ /
C	SEVILLA, REYNALDO	ENERGY PLANNING	NATIONAL ELECTRIFICATION ADMIN.	ASEAN/PLANNING	/ /
C	TANSINSIN, LYDIA		NATIONAL SCIENCE & TECH. AUTHORITY	ASEAN	03/19/86

PENDING NOM ACADEMIC NOMINATIONS  
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CODE	NAME	STUDY FIELD	EMPLOYER	TRAINING SITE	NOM_DATE
COUNTRY: SINGAPORE					
'C	CHOU, SK		NATIONAL UNIVERSITY OF SINGAPORE	ASEAN	03/19/86
'C	WONG, MUI QUEE	ENERGY PLANNING	PUBLIC UTILITIES BOARD	ASEAN/PLANNING	/ /
COUNTRY: SRI LANKA					
'C	PERERA, M.N. SUSANTHA		U. OF SRI LANKA	UPAI	09/10/85
COUNTRY: THAILAND					
'C	BAVORNSETHANANT, SURACHAI	COAL TECHNOLOGY	XMIT THONBURI	ASEAN/COAL	/ /
'C	CHAMPONG, PRAMOUL	ENERGY PLANNING	NATIONAL ENERGY ADMINISTRATION	ASEAN/PLANNING	/ /
'C	KITTISOBHOW, AMARAPORN	ENERGY PLANNING	NATIONAL ENERGY ADMINISTRATION	ASEAN/PLANNING	/ /
'C	LADTREPETCH, PARANEE	ENERGY PLANNING	MIN OF SCIENCE, TECHNOLOGY & ENERGY	ASEAN/PLANNING	/ /
'C	LOHA, VEARA	COAL TECHNOLOGY	KING MONGKUT'S INSTITUTE OF TECH.	ASEAN/COAL	/ /
'C	MANQACH, IDDER	ENERGY CONSERVATION	NATIONAL OFFICE OF ELECTRICITY	TVAI	02/28/86
'C	SAILASUTA, SIRIPORN	ENERGY PLANNING	NATIONAL ENERGY ADMINISTRATION	ASEAN/PLANNING	/ /
'C	SIRATANAPANTA, SIRIKWIN, KITTI	ENERGY PLANNING	CHIANG MAI UNIVERSITY	ASEAN/PLANNING	/ /
'C		CIVIL ENGINEERING	ELECTRICITY GENERATING AUTHORITY	INTERNSHIP	/ /
C	TERDTOON, PRADIT	ENERGY PLANNING	CHIANG MAI UNIVERSITY	ASEAN/PLANNING	/ /
C	TIA, WARUNEE	ENERGY PLANNING	KING MONGKUT'S INSTITUTE OF TECH.	ASEAN/PLANNING	/ /
C	WICHAGUL, PRAPHASS	COAL TECHNOLOGY	ELECTRICITY GENERATING AUTHORITY	ASEAN/COAL	/ /
'C	WILBUSWAS, PRIDA		KING MONGKUT INSTITUTE OF TECH.	ASEAN	03/19/86
PC	WONGSEREE, WIROTH	COAL TECHNOLOGY	SOUTH-EAST ASIA TECHNICAL INSTITUTE	ASEAN/COAL	/ /
PC	WONGSIRIPATANAK, PIROJ	ENERGY PLANNING	SCIENCE, TECH., & ENERGY POL. & PLANNING	ASEAN/PLANNING	/ /
PT	CHINATIPRA, ONGARN	POWER SYSTEMS ENGINEERING	METROPOLITAN ELECTRICITY AUTHORITY	INTERNSHIP	05/25/84
PT	HOTRABHAVANANDA, KAJORNSAK	POWER SYSTEMS ENGINEERING	ELECTRICITY GENERATING AUTHORITY	INTERNSHIP	05/25/84
PT	PLOYSANGWARN, ADISORN	GAS PROCESSING	PETROLEUM AUTHORITY OF THAILAND	INTERNSHIP	/ /
PT	SRIVICHIEMSOMBA, NAKHORN	ELECTRICAL ENGINEERING	ELECTRICITY GENERATING AUTHORITY	INTERNSHIP	05/17/85
PT	TANGNOI, VIJIT	CNG UTILIZATION	PETROLEUM AUTHORITY OF THAILAND	INTERNSHIP	/ /
T	VONGTIRAVICHAKU, JERASAK	ELECTRICAL ENGINEERING	METROPOLITAN ELECTRICITY AUTHORITY.	INTERNSHIP	05/17/85
COUNTRY: TONGA/FIJI					
C	TUPOU, ETUENI	ENERGY MANAGEMENT	MIN. OF LANDS, SURVEY & NAT. RES.	UPAI	11/07/86

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PENDING NON ACADEMIC NOMINATIONS  
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DE	NAME	STUDY FIELD	EMPLOYER	TRAINING SITE	NOM_DATE
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PENDING NON ACADEMIC NOMINATIONS  
REGIONAL REPORT  
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ODE	NAME	STUDY FIELD	EMPLOYER	TRAINING SITE	NOM_DATE
REGION: LA					
COUNTRY: BARBADOS					
'C	RENWICK, VAUGHAN	PETROLEUM TECHNOLOGY		PTRI	04/21/86
COUNTRY: BELIZE					
'C	LOCKE, JEFFERY RONALD	ENERGY MANAGEMENT	BELIZE ELECTRICITY BOARD	UPAI	10/20/86
COUNTRY: COSTA RICA					
'C	OBANDO, JORGE	PETROLEUM TECHNOLOGY	RECOPE	PTRI	/ /
'I	GARRIDO QUESADA, ADRIANA	PETROLEUM MANAGEMENT	RECOPE	ADL	/ /
'I	POVEDANO, ALFREDO J.	POWER SYSTEMS ENGINEERING	DYPSA	WEST.	02/14/86
COUNTRY: DOMINICAN REPUBLIC					
'C	BERROA, BOLIVAR ANTONIO	ENERGY MANAGEMENT	NATIONAL ENERGY POLICY COMMISSION	UPAI	10/27/86
'C	BETANCES, VICTOR	ENERGY CONSERVATION	CATHOLIC UNIVERSITY	TVAI	03/14/86
COUNTRY: ECUADOR					
'C	ARELLANO, MARIA ALEXANDRA	COMMERCIAL ENGINEERING	CEPE		/ /
'C	ARTEAGA, LUPERCIO RAFAEL	PETROLEUM MANAGEMENT	CEPE	OGCI	/ /
'C	DARQUEA, PATRICIO	ENERGY MANAGEMENT AND PLANNING	CEPE		/ /
'C	ESCALANTE, GALO EDISON	MANAGEMENT	CEPE		/ /
'C	GUERRERO, VICTOR MANUEL	PETROLEUM MANAGEMENT	CEPE	OGCI	/ /
'C	HEREDIA, IVAN HOMERO	MANAGEMENT	CEPE		/ /
'C	VALENCIA, GUILLERMO	FINANCIAL MANAGEMENT	CEPE		/ /
'C	VASCONEZ, FRANCISCO	ADMINISTRATION/MANAGEMENT	CEPE		/ /
'C	VILLAMAR, SOL DEL CARMEN	ADMINISTRATION	CEPE		/ /
'T	BUEMANO VINUEZA, MANUEL	OIL WELL WORKOVER	NATIONAL DIRECTORATE HYDROCARBONS	INTERNSHIP	/ /
'T	MENCIAS, CARLOS	RESERVOIR ENGINEERING	NATIONAL DIRECTORATE HYDROCARBONS	INTERNSHIP	/ /
'T	NIETO GUERRERO, IVAN	PETROCHEMICAL PLANNING	MINISTRY NATURAL & ENERGY RESOURCES	INTERNSHIP	/ /
'T	REINA, JOSE	PETROLEUM ENGINEERING	NATIONAL DIRECTORATE HYDROCARBONS		07/16/85
'T	VERDESOTO, CARLOS	ENHANCED OIL RECOVERY	NATIONAL DIRECTORATE HYDROCARBONS	INTERNSHIP	/ /
'T	YANCHAPAXI, MARIO	PETROLEUM ENGINEERING	NATIONAL DIRECTORATE HYDROCARBONS	INTERNSHIP	/ /
COUNTRY: GUATEMALA					
'C	AQUINO, JAIME FRANCISCO	PETROLEUM TECHNOLOGY	MINISTRY OF ENERGY	PTRI	02/25/86
'C	PENA, JORGE ALFREDO	ENERGY CONSERVATION	INDE	TVAI	/ /
'C	POSADAS, ORLANDO VALDEZ	ENERGY CONSERVATION	ICAITI		/ /

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PENDING NON ACADEMIC NOMINATIONS  
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DE	NAME	STUDY FIELD	EMPLOYER	TRAINING SITE	NOM_DATE
REGION: ME					
COUNTRY: EGYPT					
	ABGU AREF, FIKRY ALWAKEEB, HANI	ENERGY CONSERVATION ENERGY CONSERVATION	EGYPTIAN IRON & STEEL CO. ORGANIZATION OF ENERGY PLANNING	TVAI TVAI	06/13/85 / /
	AZIM, FOUAD ABDEL BARAKAT, ABDEL MAHAB	PETROLEUM MANAGEMENT ENERGY CONSERVATION	GENERAL PETROLEUM COMPANY ORGANIZATION FOR ENERGY PLANNING	OGCI TVAI	03/17/86 08/14/86
	EL DIN HUSSEIN, ABDEL R.H.S.	ENERGY MANAGEMENT	ORGANIZATION FOR ENERGY PLANNING	UPAI	11/13/86
	EL SHAFFEI, IBRAHIM MOUFTAH, ISMAIL OMAR, SAYED	PETROLEUM MANAGEMENT PETROLEUM MANAGEMENT PETROLEUM MANAGEMENT	PETROLEUM BALAIM COMPANY SUEZ OIL COMPANY EGYPTIAN GENERAL PETROLEUM CORP.	OGCI OGCI OGCI	03/17/86 03/17/86 03/17/86
	EL KADI, ADEL	INDUSTRIAL FUEL CONSERVATION	EL NASR COKE & CHEMICALS CO.	INTERNSHIP	/ /
COUNTRY: JORDAN					
	ALEES, MAHMOUD	ENERGY MANAGEMENT	MIN. OF ENERGY & MINERAL RESOURCES	UPAI	12/01/86
	ABDULLAH, SHALEB MOHAMMED TALAL, MAZEN MOHAMMAD	POWER SYSTEMS ENGINEERING ENERGY MANAGEMENT	JORDAN ELECTRICITY AUTHORITY	GE STONY BROO	/ / 12/27/84
COUNTRY: MOROCCO					
	SUEMHIQUI, KARIM EL	ENERGY MANAGEMENT	INAU	UPAI	09/19/86
COUNTRY: TUNISIA					
	BERRICH, ABDELKRIM	ENERGY MANAGEMENT	DOE, MIN. NATL. ECONOMY	STONY BROO	/ /

PENDING ACADEMIC NOMINATIONS  
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1/14/87

CODE	NAME	STUDY FIELD	EMPLOYER	TRAINING SITE	NOM_DATE
: REGION: AF					
: COUNTRY: SUDAN					
'A	ELSHEIKH, ABDEL HALIM A.	ENGY, ENGY COSERV, DEMAND MGMT	NATIONAL ENERGY ADMINISTRATION	U PENN/NS/ENGY MGMT & POL	03/09/84
'A	FARAGALLA, TAGELDIN	ELECTRICAL ENGR./POWER PROD.	NATIONAL ELECTRICITY CORP.	UTENK-CHAT.	09/16/84

PENDING ACADEMIC NOMINATIONS  
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IIE/CETP/USAID

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ODE	NAME	STUDY FIELD	EMPLOYER	TRAINING SITE	NOM_DATE
REGION: AS					
COUNTRY: BANGLADESH					
A	HAMID, MOHAMMAD ABDUL	DESIGN, PLANNING AND DISTR.	BANGLADESH POWER DEVELOPMENT BOARD		/ /
A	ISLAM, MD. BADRUL	TRANSMISSION AND DISTRIBUTION	BANGLADESH POWER DEVELOPMENT BOARD		/ /
COUNTRY: BURMA					
A	THAN, AUNG	ELECTRICAL ENGINEERING	RANGOON INSTITUTE OF TECHNOLOGY		09/04/86
A	THEIN, SOE	GEOPHYSICS	RANGOON UNIVERSITY		03/30/85
COUNTRY: THAILAND					
A	CHUENCHUJIT, AMPHON	TURBO-MACHINERY	ELECTRICITY GENERATING AUTHORITY		/ /
A	DANGSMAKR, PASKORN	NATURAL GAS ENGINEERING	GENERATING AUTHORITY OF THAILAND		/ /
A	JANTRACHOTECHAT, SONCHAI	CIVIL ENGINEERING	ELECTRICITY GENERATING AUTHORITY	NMSU	03/08/85
A	KOSIN, KAMONPORN	ENERGY RESOURCE PLANNING & MGMT	ELECTRICITY GENERATING AUTHORITY		03/08/85
A	PITASUMAN, SUPPACHAI	CIVIL ENGINEERING	ELECTRICITY GENERATING AUTHORITY		/ /
A	RONGVISIT, WICHAI	DISTRIBUTION/ LOAD MANAGEMENT	METROPOLITAN ELECTRICITY AUTHORITY		/ /
A	RUANGRONG, PALLAPA	ENERGY RESOURCE PLANNING & MGMT	NESDB, ECONOMIC PROJECT DIVISION	U. PENN.	03/08/85
A	SIRIPOL, VARAVOOT	ELECTRICAL ENGINEERING	ELECTRICITY GENERATING AUTHORITY	U.T./CHAT.	03/08/85
A	THYRASOONTRAKUL, KESARA	PETROLEUM ENGINEERING	MINISTRY OF INDUSTRY		/ /
A	TUNGCHAROENKITK, KITTIPONG	MECHANICAL ENGINEERING	ELECTRICITY GENERATING AUTHORITY	U. KANSAS	02/29/84

PENDING ACADEMIC NOMINATIONS  
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1/14/87

ODE	NAME	STUDY FIELD	EMPLOYER	TRAINING SITE	NOM_DATE
REGION: LA					
COUNTRY: COSTA RICA					
'A	ARAUZ, BERNAL	MECHANICAL ENGINEERING	COSTARR	U.FL/GA.TECH/NORTHEASTERN	08/23/84
'A	MATAMOROS, MARIA	PETROLEUM REFINERY	REFINADORA COSTARRICENSE DE PETRO. RECOPE	ACADEMIC	02/14/86
'A	RODRIGUEZ, JAIME				04/01/86
'A	SAENZ, ANDRES	CHEMICAL/PETROLEUM ENGINEER			04/01/86
COUNTRY: DOMINICAN REPUBLIC					
'A	ESPIBAL ALMONTE, EVARISTO	ELECTRICAL ENGINEERING		UTEM/UCOL/CA.MEL/UTE1/ISU	07/16/84
COUNTRY: JAMAICA					
'A	ECCLES, SOLVALYN	ENERGY PLANNING AND MANAGEMENT	MINISTRY OF MINING	U. PITT./NYU/PRINCETON	/ /
'A	SMITH, PETER PAUL	ENERGY MANAGEMENT AND CONSERV.	JAMAICA BUREAU OF STANDARDS	U. OF PITTSBURGH	03/12/86

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JDE	NAME	STUDY FIELD	EMPLOYER	TRAINING SITE	NOM_DATE
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REGION: NE

COUNTRY: EGYPT

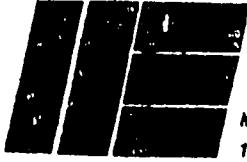
1 YOUSSEF, EL NABAWI ABDEL

MECHANICAL ENGINEERING

EGYPTIAN ELECTRICITY AUTHORITY

03/11/86





INSTITUTE OF INTERNATIONAL EDUCATION · WASHINGTON OFFICE  
1400 K STREET, N.W., WASHINGTON, D.C. 20005 · (202) 698-0600

CONVENTIONAL ENERGY TRAINING PROJECT

Quarterly Graduate Report  
October/November/December 1986

January 14, 1987

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CETP MATRIX  
CODES

	<u>Courses</u>	<u>Institutes</u>	<u>Interns</u>	<u>Academic</u>
ACTIVE	AC	AI	AT	AA
PENDING	PC	PI	PT	PA
COMPLETE	CC	CI	CT	CA
WITHDRAWN	WC	WI	WT	WA

COURSES: Applied Petroleum Geology = PTRI or IPCS  
 Managing National Petroleum Enterprise = OGCI  
 Industry and Utility Energy Conservation = TVA1  
 Electric Utility Engineering = TVA2  
 Energy Management and Policy = UPAL  
 ASEAN Coal Technology = ASEAN/COAL  
 ASEAN Energy Planning in Malaysia = ASEAN/PLANNING

INSTITUTES: Power Systems Engineering (Westinghouse) = WEST.  
 Petroleum Management Program (Arthur D. Little) = ADL  
 Power Systems Engineering (General Electric) = GE  
 National Rural Electric Cooperatives Assoc. = NRECA

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CETP GRADUATES  
 QUARTERLY REPORT  
 OCTOBER/NOVEMBER/DECEMBER 1986  
 IIE/CETP

1/14/87

CODE	NAME	STUDYFIELD	TRAINING SITE	CALL FORWARD	GRADUATE	OFFICER
REGION: AF						
COUNTRY: BURUNDI						
1 CC	NDAHIBESHE, EGIDE	PETROLEUM MANAGEMENT	06CI	07/17/86	10/10/86	
Subsubtotal *						
1						
COUNTRY: GHANA						
1 CC	ADDAE, PHILIP	UTILITY ENGINEERING	TVA2	09/07/86	12/19/86	
1 CC	COLEMAN, JOSEPH M.	UTILITY ENGINEERING	TVA2	09/07/86	12/19/86	
1 CC	DAPATEM, BARNSLEY K.	UTILITY ENGINEERING	TVA2	09/07/86	12/19/86	
1 CC	FORSON, ROBERT	PETROLEUM MANAGEMENT	06CI	07/17/86	10/10/86	
1 CC	LAWSON, FRANCIS R. L.	UTILITY ENGINEERING	TVA2	09/07/86	12/19/86	
1 CC	OPOKU, JOSEPH	UTILITY ENGINEERING	TVA2	09/07/86	12/19/86	
Subsubtotal *						
6						
COUNTRY: LIBERIA						
1 CC	MASSAQUOI, QUELLIE	UTILITY ENGINEERING	TVA2	09/07/86	12/19/86	WEICK
Subsubtotal *						
1						
COUNTRY: SEYCHELLES						
1 AA	BELLE, EDDIE R.	PETROLEUM GEOLOGY	U.T.E.P.	08/23/85	12/31/86	SMITH
Subsubtotal *						
1						
COUNTRY: SUDAN						
1 WA	IDRIS, NOUR	ENERGY MGMT/DATA PROCESSING	U. PENN.	08/07/85	12/31/86	SMITH
Subsubtotal *						
1						
Subtotal **						
10						

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CETP GRADUATES  
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 IIE/CETP

1/14/87

CODE	NAME	STUDYFIELD	TRAINING SITE	CALL FORWARD	GRADUATE	OFFICER
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REGION: AS

COUNTRY: BURMA

1 CC	CHO, MAUNG	UTILITY ENGINEERING	TVA2	09/07/86	12/19/86	
1 CC	LWIN, TINT	PETROLEUM MANAGEMENT	OGCI	07/17/86	10/10/86	
1 CC	LWIN, THEIN	PETROLEUM MANAGEMENT	OGCI	07/16/86	10/10/86	
1 CC	SHEIN, TUN	UTILITY ENGINEERING	TVA2	09/07/86	12/19/86	
1 CC	TIN, THAUNG	PETROLEUM MANAGEMENT	OGCI	07/17/86	10/10/86	
1 CC	WIN,	PETROLEUM MANAGEMENT	OGCI	07/16/86	10/10/86	
1 CI	HLAING, SEIN	PETROLEUM MANAGEMENT	ADL	08/10/86	11/22/86	
1 CI	KYAW, SOE	PETROLEUM MANAGEMENT	ADL	08/10/86	11/22/86	
1 CI	WIN, SAW	POWER SYSTEMS ENGINEERING	GE	09/01/86	12/19/86	

Subsubtotal \*

9

COUNTRY: INDIA

1 CC	CHAWLA, V.P.	UTILITY ENGINEERING	TVA2	09/07/86	12/19/86	
1 CC	DEENADAYALAN, S.	UTILITY ENGINEERING	TVA2	09/07/86	12/19/86	
1 CC	KAPOOR, S.K.	PETROLEUM MANAGEMENT	OGCI	07/16/86	10/10/86	
1 CC	MITTAL, SHIV KUMAR	UTILITY ENGINEERING	TVA2	09/07/86	12/19/86	
1 CC	SHARMA, B.B.	PETROLEUM MANAGEMENT	OGCI	07/16/86	10/10/86	
1 CC	SUBBU, SIVARAMA V.	PETROLEUM MANAGEMENT	OGCI	08/17/86	10/10/86	
1 PC	SINGH, ARJUN	UTILITY ENGINEERING	TVA2	09/07/86	12/19/86	

Subsubtotal \*

7

COUNTRY: INDONESIA

1 CC	AKMAL, FIRDAUS	COAL TECHNOLOGY	ASEAN/COAL	08/24/86	12/19/86	
1 CC	ROESLAN, KENDARSI	COAL TECHNOLOGY	ASEAN/COAL	08/24/86	12/19/86	
1 CC	SAMBODJA,	PETROLEUM MANAGEMENT	OGCI	07/17/86	10/10/86	
1 CC	SETIYOBAKTI,	COAL TECHNOLOGY	ASEAN/COAL	08/24/86	12/19/86	
1 CC	SOEHARTOYO,	COAL TECHNOLOGY	ASEAN/COAL	08/24/86	12/19/86	
1 CC	WIDYANA, DIDIT	COAL TECHNOLOGY	ASEAN/COAL	08/24/86	12/19/86	
1 CC	YUSUF, RACHMAT	COAL TECHNOLOGY	ASEAN/COAL	08/24/86	12/19/86	
1 WC	MUCHJIDIN,	COAL TECHNOLOGY	ASEAN/COAL	08/24/86	12/19/86	

Subsubtotal \*

8

COUNTRY: MALAYSIA

1 CC	AMIR, BIN HAJI MAHMUD	COAL TECHNOLOGY	ASEAN/COAL	08/24/86	12/19/86	
1 CC	JANTAN, MOHD NASIR	COAL TECHNOLOGY	ASEAN/COAL	08/24/86	12/19/86	
1 CC	KANDASAMY, ARRNASLAM	COAL TECHNOLOGY	ASEAN/COAL	08/24/86	12/19/86	
1 CC	MOHD.SOM, MAZLAN	COAL TECHNOLOGY	ASEAN/COAL	08/24/86	12/19/86	
1 CC	NG, BOON HEE	COAL TECHNOLOGY	ASEAN/COAL	08/24/86	12/19/86	
1 WC	MAHAMUD, ANMIL BIN	COAL TECHNOLOGY	ASEAN/COAL	08/24/86	12/19/86	

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CETP GRADUATES  
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IIE/CETP

1/14/87

CODE	NAME	STUDYFIELD	TRAINING SITE	CALL FORWARD	GRADUATE	OFFICER
Subsubtotal *						
COUNTRY: NEPAL						
1 CC	KAYASTHA, ARANJALI	UTILITY ENGINEERING	TVA2	09/07/86	12/19/86	
1 CC	SHAKYA, TIRTHA MAN	UTILITY ENGINEERING	TVA2	09/07/86	12/19/86	
1 CC	SHRESTHA, DWARIKA MAN	PETROLEUM MANAGEMENT	OGCI	07/17/86	10/10/86	
1 CC	SHRESTHA, MAHENDRA LAL	UTILITY ENGINEERING	TVA2	09/07/86	12/19/86	
Subsubtotal *						
4						
COUNTRY: PAKISTAN						
1 AC	HASAN, MIRZA TALIB	GEOLOGY	INTERNSHIP-SIU	01/06/86	12/31/86	SMITH
1 CI	ALI, SYED AZKAR	PETROLEUM MANAGEMENT	ADL	08/10/86	11/22/86	
1 CI	CHAUDHRY, WAHEED-UD-DIN	POWER SYSTEMS ENGINEERING	WEST.	09/02/86	12/12/86	WEICK
1 CI	SYED-ZAIDI, HASSAM JAFAR	POWER SYSTEMS	WEST.	09/02/86	12/12/86	
Subsubtotal *						
4						
COUNTRY: PHILIPPINES						
1 CC	ALMAZAN, VALERIANO	UTILITY ENGINEERING	TVA2	09/07/86	12/19/86	
1 CC	ANUNCIACION, JESUS	COAL TECHNOLOGY	ASEAN/COAL	08/24/86	12/19/86	
1 CC	COMTRERAS, CONRADO RAMOS	COAL TECHNOLOGY	ASEAN/COAL	08/24/86	12/19/86	
1 CC	ELARDO, TEODORE UY	COAL TECHNOLOGY	ASEAN/COAL	08/24/86	12/19/86	
1 CC	ENRIQUEZ, JOSELITO BAYAPA	COAL TECHNOLOGY	ASEAN/COAL	08/24/86	12/19/86	
1 CC	GALES, ISIDORO RULIDA	COAL TECHNOLOGY	ASEAN/COAL	08/24/86	12/19/86	
1 CC	GUIEB, RENATO A.	COAL TECHNOLOGY	ASEAN/COAL	08/24/86	12/19/86	
1 CC	MACAPAGAL, NORMA ROSALES	COAL TECHNOLOGY	ASEAN/COAL	08/24/86	12/19/86	
1 CC	MANALO, SOFRONIO M.	COAL TECHNOLOGY	ASEAN/COAL	08/24/86	12/19/86	
1 CC	PASCUA, JR., JOSE	COAL TECHNOLOGY	ASEAN/COAL	08/24/86	12/19/86	
1 MC	ABAYAN, WAYNE D.	COAL TECHNOLOGY	ASEAN/COAL	08/24/86	12/19/86	
Subsubtotal *						
11						
COUNTRY: THAILAND						
1 CC	BULAKUL, SURONG	PETROLEUM MANAGEMENT	OGCI	07/17/86	10/10/86	
1 CC	BUNTEPIN, PHANSAG	COAL TECHNOLOGY	ASEAN/COAL	08/24/86	12/19/86	
1 CC	CHANDAVASU, KICCHA	PETROLEUM MANAGEMENT	OGCI	07/17/86	10/10/86	
1 CC	CHETANACHAN, SUMIT	COAL TECHNOLOGY	ASEAN/COAL	08/24/86	12/19/86	
1 CC	ISARANUCHEEP, KRIANGSAK	UTILITY ENGINEERING	TVA2	09/07/86	12/19/86	
1 CC	MARKSWASDI, JAYANT	COAL TECHNOLOGY	ASEAN/COAL	08/24/86	12/19/86	
1 CC	PURIMAPORN, TAMMARAT	UTILITY ENGINEERING	TVA2	09/07/86	12/19/86	
1 CC	RATANAWIMON, CHAITAWAT	UTILITY ENGINEERING	TVA2	09/07/86	12/19/86	
1 CC	SAIPAN, CHUMPOL	COAL TECHNOLOGY	ASEAN/COAL	08/24/86	12/19/86	
1 CC	SALADYANANT, SUMKID	COAL TECHNOLOGY	ASEAN/COAL	08/24/86	12/19/86	
1 CC	TEERAVATE, NARIS	COAL TECHNOLOGY	ASEAN/COAL	08/24/86	12/19/86	
1 MC	THAMVINAISTIT, LUECHAI	COAL TECHNOLOGY	ASEAN/COAL	08/24/86	12/19/86	

age No. . 4

CETP GRADUATES  
QUARTERLY REPORT  
OCTOBER/NOVEMBER/DECEMBER 1986  
IIE/CETP

1/14/87

CODE	NAME	STUDYFIELD	TRAINING SITE	CALL FORWARD	GRADUATE	OFFICER
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Subsubtotal \*

12

Subtotal \*\*

61

12

CETP GRADUATES  
 QUARTERLY REPORT  
 OCTOBER/NOVEMBER/DECEMBER 1986  
 IIE/CETP

1/14/87

CODE	NAME	STUDYFIELD	TRAINING SITE	CALL FORWARD	GRADUATE	OFFICER
REGION: LA						
COUNTRY: COSTA RICA						
1 CC	GRAY JONES, RAYMOND	UTILITY ENGINEERING	TVA2	09/07/86	12/19/86	
1 CC	SOTO, MANUEL	UTILITY ENGINEERING	TVA2	09/07/86	12/19/86	
Subsubtotal *						
2						
COUNTRY: ECUADOR						
1 CC	HEREDIA, IVAN HOMERO	PETROLEUM MANAGEMENT	06CI	07/16/86	10/10/86	
1 CC	RECALDE, ERNESTO	PETROLEUM MANAGEMENT	06CI	07/16/86	10/10/86	
1 CC	RECALDE DIAZ, ERNESTO	PETROLEUM MANAGEMENT	06CI	07/16/86	10/10/86	
Subsubtotal *						
3						
COUNTRY: GUATEMALA						
1 WC	RINZE, OTTO	PETROLEUM MANAGEMENT	06CI	07/17/86	10/10/86	
Subsubtotal *						
1						
Subtotal **						
6						

CETP GRADUATES  
 QUARTERLY REPORT  
 OCTOBER/NOVEMBER/DECEMBER 1986  
 IIE/CETP

11/14/87

CODE	NAME	STUDYFIELD	TRAINING SITE	CALL FORWARD	GRADUATE	OFFICER
REGION: NE						
COUNTRY: EGYPT						
1 CC	YOUSSEF, FIKRY MOHAMED	PETROLEUM MANAGEMENT	OGCI	07/17/86	10/10/86	
1 WC	OSMAN, AMR AHMED	PETROLEUM MANAGEMENT	OGCI	07/17/86	10/10/86	
Subsubtotal *						
2						
COUNTRY: JORDAN						
1 CC	BSIESO, MUMTHER	UTILITY ENGINEERING	TVA2	09/07/86	12/19/86	
1 CC	HAWWA, KHAIRELDEEN	UTILITY ENGINEERING	TVA2	09/07/86	12/19/86	
1 CC	MARJI, MAZEN HIKMAT	UTILITY ENGINEERING	TVA2	09/07/86	12/19/86	
1 CC	SHEHADEH, ABDALLAH Y.	PETROLEUM MANAGEMENT	OGCI	07/16/86	10/10/86	
1 WC	SHEIYYAB, KHALID	PETROLEUM MANAGEMENT	OGCI	07/17/86	10/10/86	BOLLE
Subsubtotal *						
5						
COUNTRY: MOROCCO						
1 CC	DEMNAI, AHMED	PETROLEUM MANAGEMENT	OGCI	07/17/86	10/10/86	
Subsubtotal *						
1						
COUNTRY: OMAN						
1 CC	AL BALUSHI, SULEIMAN SHAMBE	PETROLEUM MANAGEMENT	OGCI	07/16/86	10/10/86	
Subsubtotal *						
1						
COUNTRY: PORTUGAL						
1 CC	CLARA, MARIA JOSE	UTILITY ENGINEERING	TVA2	09/07/86	12/19/86	
1 CC	MORAIS, JORGE M. DACRUZ	UTILITY ENGINEERING	TVA2	09/07/86	12/19/86	
Subsubtotal *						
2						
COUNTRY: YEMEN						
1 CC	SHUKRI, ABDUL	PETROLEUM MANAGEMENT	OGCI	07/17/86	10/10/86	
Subsubtotal *						
1						
* Subtotal **						
12						
** Total ***						
89						

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CETP PARTICIPANTS BY TRAINING SITE AND COUNTRY

NAME	EMPLOYER	GRADUATE DATE
** TRAINING SITE: ADL		
* COUNTRY: BANGLADESH		
ISMAIL, M.	PETROBANGLA	12/17/82
ISLAM, WALI UL	BANGLADESH PETROLEUM CO.	12/17/82
HAQUE, AZIZUL A.K.M.	PETROBANGLA	12/17/82
* COUNTRY: BURMA		
MIN, AUNG	MYANMA OIL CORP.	11/30/84
THEIN, MYINT	MYANMA OIL CORP.	02/09/83
OO, PE	MYANMA OIL CORP.	11/22/85
MYINT, AUNG	MYANMA OIL CORP.	11/22/85
KYAM, SOE	MYANMA OIL CORPORATION	11/22/86
HLAING, SEIN	MYANMA OIL CORPORATION	11/22/86
* COUNTRY: COSTA RICA		
NARANJO, JOSE RUBEN	RECOPE	11/30/84
GALLEGOS, RODOLFO	RECOPE	11/30/84
* COUNTRY: GHANA		
AIGOD, ARCHIBALD	GHAIP CO. LTD.	11/22/85
* COUNTRY: GUATEMALA		
RINZE, OTTO	MINISTRY OF ENERGY & MINES	11/22/85
* COUNTRY: INDIA		
BANSAL, VINAY	DEPT. OF PETROLEUM, GOVT. OF INDIA	11/30/84
PATHAN, MOHAMED ASAD	INDIAN OIL CORP.	11/30/84
CHADHA, KIRAN	MINISTRY OF PETROLEUM	12/17/82
CHANDRA, PRASAD KUMAR	OIL & NAT. GAS COMM.	12/17/82
GOYAL, LALIT MOHAN	GOVT. OF INDIA	12/03/83
RAVICHANDRA, K.	HINDUSTAN PET. CORP.	12/03/83
SRIVASTAVA, SUDHANSHU KUMAR	MINISTRY OF PETROLEUM	11/22/85
SENGUPTA, DILIP	OIL INDIA LTD./BAY EXPLORATION PROJ	11/22/85
* COUNTRY: INDONESIA		
SOELEIMAN, SOEPARTONO	SUB-DIR. OF EXPLOR.&EXPLOIT.OF OIL	11/30/84
* COUNTRY: KENYA		
OMBOGA, EVANSON OBARE	MINISTRY OF ENERGY	12/03/83
MAKUI, MARY W.	MINISTRY OF ENERGY	12/03/83
* COUNTRY: LIBERIA		
SMITH, ROSE O.	NATIONAL INVESTMENT COMM.	12/17/82
HENA, JUSU J.	MINISTRY LANDS, MINES & ENERGY	12/17/82
CHENDWETH, J. EDMUND	LIBERIA PETRO. REFINERY CO.	12/17/82
* COUNTRY: MALI		
KONATE, SEKOU	PETROSTOCK	11/30/84
* COUNTRY: MOROCCO		
MOUSINE, M'BAREK ALI	ONAREP	12/17/82
MARSIL, AHMED	ONAREP	12/17/82

CETP PARTICIPANTS BY TRAINING SITE AND COUNTRY

NAME	EMPLOYER	GRADUATE DATE
BENJELLOUN, MOHAMED	ONAREP	11/30/84
* COUNTRY: NEPAL SHARMA, RISHI RAM	DEPARTMENT OF MINES & GEOLOGY	11/22/85
* COUNTRY: PAKISTAN ALI, SYED AZKAR	OIL AND GAS DEVELOPMENT CORPORATION	11/22/86
* COUNTRY: PHILIPPINES REYES, TEDDORD MONSADA, ZENAIDA	PHIL. NAT. OIL CO. BUREAU OF ENERGY UTILIZATION	12/17/82 11/22/85
* COUNTRY: SUDAN ELAMIN, GAAAFAR FAXI ALI IBRAHIM, AHMED MOHAMED	SUDAN GOV./FORESTRY DIV. GENERAL PETROLEUM CORP.	12/17/82 11/30/84
* COUNTRY: TANZANIA NGOGOMBA, ELIAB SAKAFU, MARTHA	TANZANIA PET. DEV. CORP. TANZANIA PET. DEV. CORP.	12/17/82 12/17/82
* COUNTRY: THAILAND TANTIBLAPHOL, METINEE YAMBOONRUANG, SONCHAI NIVATPUKIN, CHAM VIKITSET, THIRAPHONG WAIYAHONG, KAIWAL POCHANART, SUMON KANOKWAT, MS. PANADA	PETROLEUM AUTHORITY OF THAILAND PETROLEUM AUTHORITY OF THAILAND PETROLEUM AUTHORITY OF THAILAND N.I.D.A./SCHOOL OF DEV. ECON. PETROLEUM AUTHORITY OF THAILAND PETROLEUM AUTHORITY OF THAILAND PETROLEUM AUTHORITY OF THAILAND	11/30/84 11/30/84 12/17/82 12/17/82 12/17/82 12/03/83 11/30/84
** TRAINING SITE: ADL/S. ILLINOIS U.		
* COUNTRY: EGYPT SOKKAR, MOHAMED HASSAN	SOUTHERN ILL. U.	08/27/84
** TRAINING SITE: AMOCO, TX		
* COUNTRY: SEYCHELLES PILLAY, GEORGE EDWARD	MINISTRY OF NATIONAL DEVELOPMENT	09/06/83
** TRAINING SITE: ASEAN/COAL		
* COUNTRY: INDONESIA ROESLAN, KENDARSI WIDYANA, DIDIT YUSUF, RACHMAT AKMAL, FIRDAUS SETIYOBAKTI, SOEHARTOYO.	DIRECTORATE OF COAL MINERAL TECHNOLOGY DEVELOPMENT CTR MINERAL TECHNOLOGY DEVELOPMENT CTR PIN KITLUR JAWA BAGIAN BARAT PLN-LMK PLN	12/19/86 12/19/86 12/19/86 12/19/86 12/19/86 12/19/86
* COUNTRY: MALAYSIA MOHD.SOM, MAZLAN NG, BOON HEE	PORT KLANG POWER STATION NATIONAL ELECTRICITY BOARD	12/19/86 12/19/86

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CETP PARTICIPANTS BY TRAINING SITE AND COUNTRY

NAME	EMPLOYER	GRADUATE DATE
AMIR, BIN HAJI MAHMUD	NATIONAL ELECTRICITY BOARD	12/19/86
JANTAN, MOHD NASIR	NATIONAL ELECTRICITY BOARD	12/19/86
KANDASAMY, ARRNASLAM	NATIONAL ELECTRICITY BOARD	12/19/86
* COUNTRY: PHILIPPINES		
GUIEB, RENATO A.	NATIONAL POWER CORPORATION	12/19/86
ENRIQUEZ, JOSELITO GAYAPA	PNOC COAL CORPORATION	12/19/86
MACAPAGAL, NORMA ROSALES	NATIONAL POWER CORPORATION	12/19/86
ANUNCIACION, JESUS	BUREAU OF ENERGY UTILIZATION	12/19/86
CONTREKAS, CONRADO RAMOS	PNOC COAL CORPORATION	12/19/86
GALES, ISIDORO BULIDA	NONOC MINING AND INDUSTRIAL CORP.	12/19/86
HANALO, SOFRONIO M.	NPC	12/19/86
ELARDO, TEODORE UY	NATIONAL POWER CORPORATION	12/19/86
PASCUA, JR., JOSE	NONOC MINING AND INDUSTRIAL CORP.	12/19/86
* COUNTRY: THAILAND		
SALADYANANT, SOMKID	CHIANG MAI UNIVERSITY	12/19/86
BUNTEPIN, PHANSAG	EGAT	12/19/86
CHETANACHAN, SUWIT	KING MONKUT'S INST. OF TECH.	12/19/86
TEERAVATE, NARIS	TISTR	12/19/86
SAIPAN, CHUMPOL	NATIONAL ENERGY ADMINISTRATION	12/19/86
MARKSWASDI, JAYANT	EGAT	12/19/86
** TRAINING SITE: CARNEGIE MELLON		
* COUNTRY: THAILAND		
CHIMKLAI, SUTHEP	ELECTRICITY GENERATING AUTHORITY	12/17/84
** TRAINING SITE: COL.SCH.MNS.		
* COUNTRY: EGYPT		
BANAWAN, AHMED SAMY	ALEXANDRIA PETROLEUM CO.	09/14/85
YOUSEF, MOSTAPHA	CAIRO OIL REFINING CO.	/ /
* COUNTRY: THAILAND		
SANTIPONG, NOPADOL	ELECTRICITY GENERATING AUTHORITY	01/01/86
* COUNTRY: TUNISIA		
CHEBBI, RACHID	MINISTRY OF THE NATIONAL ECONOMY	09/14/85
REJAIBI, ABDESSATAR	MINISTRY OF THE NATIONAL ECONOMY	09/14/85
** TRAINING SITE: COLORADO S.U.		
* COUNTRY: NEPAL		
SHRESTHA, ARJUN	MINISTRY OF WATER RESOURCES	12/20/85
** TRAINING SITE: D.R.INST.		
* COUNTRY: DOMINICAN REPUBLIC		
PERDOMO, FERNANDO	ELEC. DOMINICAN CORP.	10/29/82
ALOU, LUIS G.	NATIONAL COMM. OF ENERGY POLICY	02/09/83

CETP PARTICIPANTS BY TRAINING SITE AND COUNTRY

NAME	EMPLOYER	GRADUATE DATE
* COUNTRY: INDIA BHAMBHANI, PRAKASH CHOPRA, MANMOHAN KUMAR JOSHI, ASHOK M.	NAT. HYDRO. POWER CORP. CENTRAL ELECTRICITY AUTHORITY CENTRAL ELECTRICITY AUTHORITY	02/08/83 02/08/83 06/30/84
** TRAINING SITE: EDI		
* COUNTRY: LIBERIA DDE, P. CHRISTIANA	MINISTRY LANDS, MINES & ENERGY	02/20/86
** TRAINING SITE: GE		
* COUNTRY: BURMA WIN, SAW	ELECTRIC POWER CORPORATION	12/19/86
* COUNTRY: COSTA RICA GUZMAN, ADRIAN RODOLFO	INST. COSTARRICENSE ELECTRICIDAD	06/20/85
* COUNTRY: EGYPT HELMY, ABDEL REHIM	EGYPTIAN ELECTRICITY AUTHORITY	04/25/86
* COUNTRY: JAMAICA JACKSON, PHILIP	JAMAICA PUBLIC SERVICE	04/25/86
* COUNTRY: JORDAN MUSTAFA SULIMAN, FATIM IBRAHIM	JORDAN ELECTRICITY AUTHORITY	12/20/85
* COUNTRY: LIBERIA SAWYER, ARCHIE THOMAS, ERNEST A.	LIBERIA ELECTRICITY CORP. (LEC) LIBERIA ELECTRICITY CORP. (LEC)	04/25/86 04/25/86
* COUNTRY: NEPAL SHRESTHA, SOORYA BAHADUR UPADHAYA, MURARI PRASAD SHAH, RAJENDRA PRASAD UPADHYAY, KESHAV PRASAD	ELECTRICITY DEPT. /DURBAR MARG DEPT. OF ELECTRICITY DEPT. OF ELECTRICITY NEPAL ELECTRICITY CORP.	04/20/85 04/20/85 04/20/85 04/25/86
* COUNTRY: PERU ORMENDO, VICTOR	ELECTROLIMA	04/25/86
* COUNTRY: PHILIPPINES LEYNES, FORTUNATO C.	NATIONAL POWER CORP.	04/25/86
* COUNTRY: THAILAND ASAWAPRECHA, SURACHAI CHIENKUL, WATTANA BOONCHOU, ROONGSAK KIATBOONSRI, SUKIT	METROPOLITAN ELECTRICITY AUTHORITY ELECTRICITY GENERATING AUTHORITY ELECTRICITY GENERATING AUTHORITY METROPOLITAN ELECTRICITY AUTHORITY	04/20/85 04/25/86 04/25/86 04/25/86

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CETP PARTICIPANTS BY TRAINING SITE AND COUNTRY

NAME	EMPLOYER	GRADUATE DATE
** TRAINING SITE: GEOCHEMICAL TESTING		
* COUNTRY: COSTA RICA QUESADA, LOURDES	RECOPE	05/05/84
** TRAINING SITE: GEORGE WASHINGTON U.		
* COUNTRY: DOMINICAN REPUBLIC FERNANDEZ, CARLOS	DOMINICAN PREINVESTMENT FUND	07/10/85
* COUNTRY: HONDURAS RIVERA CANALES, SALVADOR		04/30/84
* COUNTRY: TANZANIA KATYEGA, MANENO J.	TANZANIA ELEC. SUPPLY CO.	02/17/84
* COUNTRY: SUDAN ALI, ELSADIG ELZUBIE	NATIONAL ENERGY ADMIN.	07/06/83
** TRAINING SITE: GULF OIL		
* COUNTRY: BANGLADESH ASHRAF, MUHAMMAD H. JAMALUDDIN, M.	PETROBANGLA PETROBANGLA	05/06/83 02/15/84
** TRAINING SITE: HNG/INTERNORTH, HOUSTON		
* COUNTRY: BANGLADESH ALAM, KHURSHID	JALABAD GAS, PETROBANGLA	03/01/86
** TRAINING SITE: IDEA. INC.		
* COUNTRY: HAITI ST. JEAN, WILFRID PIERRE-ANTOINE, MONIQUE LUSTIN, DANIELLE	MINISTRY OF MINES MINISTRY OF MINES MINISTRY OF MINES & ENERGY RES.	04/14/84 04/14/84 04/14/84
** TRAINING SITE: INTERNSHIP-SIU		
* COUNTRY: PAKISTAN HASAN, MIRZA TALIB	GEOLOGICAL SURVEY OF PAKISTAN	12/31/86
** TRAINING SITE: IPCS		
* COUNTRY: BANGLADESH RUKUNUDDIN, BELAL-E-ISLAM HOSSAIN, A.N.M.	PETROBANGLA PETROBANGLA	08/27/83 08/27/83
* COUNTRY: BARBADOS GORDON, JOSEPH MERVYN	MINISTRY FINANCE/PLANNING	09/14/84

CETP PARTICIPANTS BY TRAINING SITE AND COUNTRY

NAME	EMPLOYER	GRADUATE DATE
* COUNTRY: BURMA		
SAW, AUNG HLAING	MYANMA OIL CORP.	09/14/84
TIN, TUN	MYANMA OIL CORP.	09/14/84
* COUNTRY: CAMEROON		
MEBA, ANATOLE	MINISTRY OF MINES & POWER	09/14/84
NGUESSEU, ANDRE	MINISTRY OF MINES & POWER	09/14/84
NGUENE, IRENE NEE K	MINISTRY OF MINES & POWER	09/14/84
NGWET, ANDRE DAVID		09/14/84
* COUNTRY: COSTA RICA		
LOPEZ, RONALD	RECOPE	09/14/84
SANABRIA, ALFONSO	RECOPE/EXPLORATION DEPT.	09/14/84
* COUNTRY: ECUADOR		
ALMEIDA, JUAN PABLO	MINISTERIO HYDROCARBURDS	09/14/84
ZUMARRAGA, RITA M.	CORPORACION ESTATAL PETROLERA/CEPE	09/14/84
* COUNTRY: EGYPT		
KHALIK, ZEINAB MOHAMED	GENERAL PETROLEUM CORPORATION	08/27/83
YOUSSEF, MOHAMED	EGYPTIAN GENERAL PETROLEUM CORP.	08/27/83
KASEEM, SHALABY	GAS & OIL PROJECT (UNKNOWN)	08/27/83
SHARAF, IBRAHIM ABDEL H	GENERAL PETROLEUM CORP.	09/14/84
AZIZ, MOHAMED H. EL D	EGYPTIAN GENERAL PETROLEUM CORP.	01/01/84
AHMED, MAHFOUZ IBRAHIM	GENERAL PETROLEUM CORP.	09/14/84
KAMEL, ADEL MOHAMED SA	EGYPTIAN GENERAL PETROLEUM CORP.	09/01/84
MOUSTAFA, MOHAMED HOSSAN	EGYPTIAN GENERAL PETROLEUM CORP.	09/14/84
* COUNTRY: HONDURAS		
IZAGUIRRE, RAMON	DIRECCION GEN. MINAS E HIDROCARBONS	09/14/84
* COUNTRY: INDONESIA		
KANSIL, JOHN	LEMIGAS	08/27/83
SITUMORANG, EBERT	LEMIGAS	08/31/83
* COUNTRY: IVORY COAST		
N'DA, AYEKDE JACQUES	PETROCI	09/14/84
* COUNTRY: LIBERIA		
BLAY, T.OLIVER	MINISTRY LANDS, MINES & ENERGY	09/14/84
* COUNTRY: MALI		
DIAMARA, CHEICKNA	DIRECTION GEOLOGIE & MINES	09/14/84
* COUNTRY: MOROCCO		
YAHYA, ABDEL HAMID	ONAREP/BRFM	02/09/83
CHARRAT, FATIMA	ONAREP	08/27/83
HAFID, MOHAMED	ONAREP	08/27/83
TOTO, EL ARBI	ONAREP	08/27/83
ZIZI, MAHMOUD	ONAREP/BRFM	08/27/83
JABOUR, HADDOU	ONAREP	08/27/83
OUARDI, BOUZEKRI	ONAREP	09/14/84

CETP PARTICIPANTS BY TRAINING SITE AND COUNTRY

NAME	EMPLOYER	GRADUATE DATE
IDRISSI, MOHAMED	ONAREP	09/14/84
SELLAMI, HAMMADI	ONAREP (DIR.PRODUCTION DIV)	09/14/84
* COUNTRY: PAKISTAN		
HAIDER, EHTISHAM	OIL & GAS DEVELOPMENT CORP.	09/14/84
* COUNTRY: PHILIPPINES		
LLABAN, NELSON	PNOP EXPLORATION CORP.	09/14/84
KAMPITAN, GENEROSO	PHIL. NAT. OIL CO.	09/14/84
* COUNTRY: SUDAN		
ABDALLA, AZHARI A.	GENERAL PETROLEUM CORP.	06/18/84
MUSTAFA, FADL OSMAN	GEOLOGICAL & MINERAL RES. DEPT.	08/27/83
YOUSIF, HAYAT EL HAJ	DEPT. GEOLOGICAL & MINERAL RES.	08/27/83
BUSHARA, MOHAMED N.	GEOL & MINING RES/MIN. ENGY & MING.	08/27/83
SHAMBATI, AZHAR ABUZID I.	GEOL & MINING RES/MIN. ENGY & MING.	08/27/83
IDRIS, ABDEL MONIEM EL	GEOL & MINING RES/MIN. ENGY & MING.	08/27/83
MOHAMED, ABDALLA YAGDOUB	GEOLOGICAL AND MINERAL RESOURCES	01/01/84
BASI, SAMI TAHA ABDEL	GENERAL PETROLEUM CORP.	09/14/84
MUSTAFA, AZHARI ALI	GENERAL PETROLEUM CORP.	09/14/84
MURSI, HUSSEIN MAHMOUD	GEOL & MIN RES DEPT/MIN. OF ENERGY	09/14/84
AMIR, YOUSIF AHMED	MINISTRY ENERGY & MINES	01/01/84
YOUSIF, AHMED AMIR	GEOL & MIN RES DEPT/MIN. OF ENERGY	09/14/84
* COUNTRY: TUNISIA		
KASBI, JAMELLEDINE	ETAP	08/27/83
BETTAIEB, ALAYA	ETAP	08/27/83
BEN CHAABANE, HECHMI	ETAP	08/27/83
ABDELKEFI, NABIL	ETAP	08/27/83
DUALHA, SAMIR	ETAP	08/27/83
DHANE, HICHEM	ETAP	08/27/83
GOSSA, HEDHILI	ETAP	08/27/83
** TRAINING SITE: KAMO ELECTRIC COOP		
* COUNTRY: COSTA RICA		
SOLANO SOTO, CARLOS	INST. COSTARRICENSE ELECTRICIDAD	11/01/85
** TRAINING SITE: M.I.T.		
* COUNTRY: INDIA		
RAGHAVENDRAN, P.	INDIAN OIL CORP.	06/04/83
* COUNTRY: PAKISTAN		
ALAUDDIN, ARIF	UNKNOWN	07/27/83
** TRAINING SITE: MONT.TECH.		
* COUNTRY: TANZANIA		
LUPINDO, KANDIDUS PETER	MINISTRY OF MINERALS	08/09/83
KANZA, ELIKUNDA G.J.	MIN. OF MINERALS	08/30/83

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CETP PARTICIPANTS BY TRAINING SITE AND COUNTRY

NAME	EMPLOYER	GRADUATE DATE
** TRAINING SITE: N.Y.U.		
* COUNTRY: INDIA INBASAGARAN, KARUPPIAH	UNKNOWN	09/01/84
** TRAINING SITE: NL INDUSTRIES		
* COUNTRY: BANGLADESH RAZA, M. AZIZUR RAHMAN, MATIUR	PETROBANGLA PETROBANGLA	05/12/84 05/12/84
** TRAINING SITE: NM TECH		
* COUNTRY: THAILAND SOPHONPHONGSHIP, PRAPHAT	GEOL. SURVEY/DEPT. MINRL. RESCS.	08/16/88
** TRAINING SITE: NRECA		
* COUNTRY: NEPAL BASNET, DEEPAK DHUNGANA, BADRI BINOD LAHOMI, PREM RAJ	NEPAL ELECTRICITY CORPORATION	06/08/84 06/08/84 06/08/84
* COUNTRY: PAKISTAN NASEEM, A.H. AHMED, MEHRAJ ZAMAN, MIR BEG, DAUD	WTR./POWER AUTH. WTR./POWER AUTH. WTR./POWER AUTH. WAPDA	08/07/82 08/07/82 08/07/82 05/21/83
** TRAINING SITE: NRECA,U.MO		
* COUNTRY: PHILIPPINES CASTRO, CRISANTA TOLRENTINO, VALIA NATIVIDAD, LUTILINDO	NATIONAL ELECT. ADMIN. (NEA) NATIONAL ELECT. ADMIN. (NEA) NATIONAL ELECT. ADMIN. (NEA)	07/23/83 07/23/83 07/23/83
* COUNTRY: SUDAN SHERIF, M.M.	NAT. ELEC. CORP.	07/23/83
** TRAINING SITE: NRECA/DC		
* COUNTRY: SUDAN SALAM, MOHAMED MUSTAFA IDRIS, ABDEL RAZIS MDH	NAT. ELEC. CORP. NATIONAL ELECTRIC CORPORATION	09/28/83 09/28/83
** TRAINING SITE: OSCI		
* COUNTRY: BOLIVIA SAUCEDO ELIAS, ADOLFO	YACIMIENTOS PETROLIFEROS	07/27/85

CETP PARTICIPANTS BY TRAINING SITE AND COUNTRY

NAME	EMPLOYER	GRADUATE DATE
* COUNTRY: BURMA		
LWIN, TINT	MYANMA OIL CORPORATION	10/10/86
WIN,	MYANMA OIL CORPORATION	10/10/86
TIN, THAUNG	MYANMA OIL CORPORATION	10/10/86
LWIN, THEIN	MINISTRY OF ENERGY	10/10/86
* COUNTRY: BURUNDI		
NDAHIBESHE, EGIDE	MIN. OF PUBLIC WORKS, ENERGY & MINES	10/10/86
* COUNTRY: COSTA RICA		
JASER, GERARDO	RECOPE	07/27/85
* COUNTRY: ECUADOR		
HEREDIA, IVAN HOMERO	CEPE	10/10/86
RECALDE, ERNESTO	CEPE	10/10/86
RECALDE DIAZ, ERNESTO	CEPE	10/10/86
* COUNTRY: EGYPT		
SALAMA, ANMAR	EGYPTIAN GENERAL PETROLEUM CORP.	07/27/85
ISMAIL, AWATEF	GENERAL PETROLEUM CORP.	07/27/85
YOUSSEF, FIKRY MOHAMED	ENPPI	10/10/86
* COUNTRY: GHANA		
FORSON, ROBERT	GHANAIAH ITALIAN PETROLEUM COMPANY	10/10/86
* COUNTRY: HONDURAS		
CACEKES AVILA, FAUSTO	SECRETARIAT OF MINES & NAT. RES	07/27/85
* COUNTRY: INDIA		
SHARMA, B.B.	OIL INDIA LIMITED	10/10/86
SUBBU, SIVARAMA V.	MADRAS REFINERIES LTD.	10/10/86
KAPOOR, S.K.	HINDUSTAN PETROLEUM CORPORATION LTD	10/10/86
* COUNTRY: INDONESIA		
SUDARSONO,	MIGAS	07/27/85
NAZARUDDIN, NASWAR	LENIGAS	07/27/85
SAMBODJA,	PPTMIGAS	10/10/86
* COUNTRY: JORDAN		
NABULSI, MOH'D ALI	NATURAL RESOURCES AUTHORITY	07/27/85
SABBAH BASHIR, AHMED ABDALLAH	NATRL. RES. AUTH./MIN. ENGY & MIN.	07/27/85
SHEHADEH, ABDALLAH Y.	NATURAL RESOURCES AUTHORITY	10/10/86
* COUNTRY: MALI		
TOURE, SAMBA	DIRECTION GEOLOGIE & MINES	07/27/85
* COUNTRY: MOROCCO		
ELKOUALALI, JAAFAR	ONAREP	07/27/85
DEMMATI, AHMED	ONAREP	10/10/86

CETP PARTICIPANTS BY TRAINING SITE AND COUNTRY

NAME	EMPLOYER	GRADUATE DATE
* COUNTRY: NEPAL ADHIKARI, DEEPAK SHRESTHA, DWARIKA MAN	DEPT. MINES & GEOLOGY DEPARTMENT OF MINES AND GEOLOGY	07/27/85 10/10/86
* COUNTRY: OMAN AL BALUSHI, SULEIMAN SHAMBE	MINISTRY OF PETROLEUM AND MINERALS	10/10/86
* COUNTRY: PERU BARANDIARAN, FERNANDO	PETROPERU	07/27/85
* COUNTRY: THAILAND BULAKUL, SURONG CHANDAVASU, KICCHA	PETROLEUM AUTHORITY OF THAILAND ESSO EXPLORATION & PRODUCTION HORAT	10/10/86 10/10/86
* COUNTRY: YEMEN SHUKRI, ABDUL	MINISTRY OF OIL & MINERAL RESOURCES	10/10/86
** TRAINING SITE: OGLETHORPE POWER CORP.		
* COUNTRY: THAILAND PIRIYAPUN, NUPONG	ELECTRICITY GENERATING AUTHORITY	12/15/85
** TRAINING SITE: OKLAHOMA S.U.		
* COUNTRY: EGYPT EBRAHIM, MOHAMED	SUEZ OIL PROCESSING CO.	09/08/85
* COUNTRY: SUDAN OSMAN, ABDEL MUTAAL	GENERAL PETROLEUM CORP.	02/08/86
** TRAINING SITE: P.I.N.Y.		
* COUNTRY: KENYA MULLI, PETER M.M MWEGA, JOHN K. GICHERE, SAMUEL GATUHI	MINISTRY OF ENERGY MINISTRY OF ENERGY MINISTRY OF ENERGY	12/24/83 07/20/83 08/31/83
* COUNTRY: SUDAN HAMEED, ALI A.	NATIONAL ENERGY ADMINISTRATION	12/20/85
* COUNTRY: TANZANIA KAPIGA, THEODOR	RUFIJI BASIN DEV. AUTH.	01/07/85
** TRAINING SITE: PA POWER & LIGHT		
* COUNTRY: SRI LANKA KODIKARA, RANJAN FERNANDO, DEVENTI V.E.N.	CEYLON ELEC. BOARD CEYLON ELEC. BOARD	06/30/82 02/28/83

CETP PARTICIPANTS BY TRAINING SITE AND COUNTRY

NAME	EMPLOYER	GRADUATE DATE
** TRAINING SITE: PETEX		
* COUNTRY: EGYPT		
AZIZ, ADEL FOUAD	GENERAL PETROLEUM CORP.	06/30/84
* COUNTRY: SUDAN		
EL HAKEEM, MAHMOUD RASHAD	NATIONAL ENERGY ADMINISTRATION	03/30/84
** TRAINING SITE: PTRI		
* COUNTRY: BURMA		
NU,	MYANMA OIL CORP.	10/04/85
KYI, SOE	MYANMA OIL CORP.	10/04/85
KO, MAUNG	MYANMA OIL	09/19/86
SWE, KHIN MAUNG	MYANMA OIL CORPORATION	09/19/86
MYINT, KYEE	MYANMA OIL CORPORATION	09/19/86
LATT, KHIN MAUNG	MYANMA OIL CORPORATION	09/19/86
* COUNTRY: BURUNDI		
HARAKANDI, ONESPHORE	AMOCO BURUNDI PETROL. CO.	10/04/85
* COUNTRY: COSTA RICA		
BARRANTES, ALEXANDER	RECOPE	10/04/85
BARBOZA, OLMAN	RECOPE	10/04/85
MARTINEZ, JUAN FELIX	RECOPE	10/04/85
CORRALES, LUIS	RECOPE	10/04/85
* COUNTRY: EGYPT		
EL MINIAMI, ATEF ALI AHMED	EGYPTIAN GENERAL PETROLEUM CORP.	10/04/85
FATHI, HANI AHMED	GENERAL PETROLEUM CORP.	10/04/85
IBRAHIM, ABU BAKR	GENERAL PETROLEUM CORP.	10/04/85
MOHAMED AHMED, MOHAMED HUSSEIN	EGYPTIAN GENERAL PETROLEUM CORP.	10/04/85
NASR, HANI HUSSEIN	GENERAL PETROLEUM CORP.	10/04/85
DAHROUG, TAREK ABDEL	GENERAL PETROLEUM COMPANY	09/19/86
AL ZAHRY, MOHAMED EZZ	GENERAL PETROLEUM COMPANY	09/19/86
* COUNTRY: GHANA		
DAGADU, BENJAMIN S.K.	GHANA NATL. PETROLEUM CORP.	10/04/85
FORDJOR, CHRISTIAN K.	GHANA NATL. PETROLEUM CORP.	10/04/85
ACKAH, FRANCIS B.	GHANA NATIONAL PETROLEUM CORP.	09/19/86
AMO, WORLANYO	GHANA NATIONAL PETROLEUM CORP.	09/19/86
* COUNTRY: INDIA		
MISHRA, JITENDRIYA	OIL & NATURAL GAS COMMISSION	10/04/85
MATHEW, JYOTHI JACOB	OIL INDIA LTD.	10/04/85
BORGHAIN, DHURBAJYOTI	OIL INDIA LTD.	10/04/85
BORGHAIN, ROMEN	OIL INDIA LTD.	09/19/86
GOSOI, ANUP KUMAR	OIL INDIA LTD.	09/19/86
BHARALI, N.K.	OIL INDIA LTD.	09/19/86

CETP PARTICIPANTS BY TRAINING SITE AND COUNTRY

NAME	EMPLOYER	GRADUATE DATE
* COUNTRY: INDONESIA		
UTOMO, KRISNO	MIGAS / EXPLOITATION DEPT.	10/04/85
YUSUF, ABUS	PPPTMGB "LEMIGAS"	09/19/86
MARDJOHAN,	FPPTMGB "LEMIGAS"	09/19/86
* COUNTRY: IVORY COAST		
KEITA, ABIBATOU	PETROCI	10/04/85
* COUNTRY: JORDAN		
SHINAQ, RAFIE	NATURAL RESOURCES AUTHORITY	10/04/85
DAIRI, AHMAD	MINISTRY OF ENERGY & MIN. RESOURCES	09/19/86
* COUNTRY: LIBERIA		
TARNUE, RUFUS MCDROYCO	MINISTRY LANDS, MINES & ENERGY	10/04/85
WILKINS, JERRY	MINISTRY OF LANDS, MINES AND ENERGY	09/19/86
SUMD, KPADESON	MINISTRY OF LANDS, MINES AND ENERGY	09/19/86
* COUNTRY: MALI		
XANTAO, IBRAHIM	DIRECTION GEOLOGIE & MINES	10/04/85
* COUNTRY: NEPAL		
KUNWAR, BHARAT	DEPARTMENT OF MINES & GEOLOGY	10/04/85
MANANDHAR, KUBER	DEPARTMENT OF MINES AND GEOLOGY	09/19/86
* COUNTRY: PAKISTAN		
HUMAYOON, SHAHZAD	OIL & GAS DEVELOPMENT CORP.	10/04/85
KAMRAM, MUHAMMAD	HYDROCARBON DEVELP. INST.PAKISTAN	10/04/85
KHAN, ABDUL LATIF	OIL AND GAS DEVELOPMENT CORPORATION	09/19/86
* COUNTRY: PERU		
SIERRA, JOSE	PETROPERU	09/19/86
* COUNTRY: PHILIPPINES		
GARCIA, ADOLFO G.	PHIL. NAT. OIL CO. (PNOC-EC)	10/04/85
SAN JOSE, ERNESTO S.	PHIL. NAT. OIL CO. (PNOC-EC)	10/04/85
DOMINGO, CATALINO	PNOC EXPLORATION CORPORATION	09/19/86
* COUNTRY: SEYCHELLES		
BELLE, EDDIE	SEYCHELLES GOVERNMENT/PETROL.OFFICE	08/23/85
* COUNTRY: SUDAN		
NOURELDIN, AHMED	GENERAL PETROLEUM CORPORATION	09/19/86
* COUNTRY: THAILAND		
PRADITAN, SURAWIT	DEPARTMENT OF MINERAL RESOURCES	09/19/86
* COUNTRY: YEMEN		
NASHER ALHEMIER, AHMED MOHAMED	MINISTRY OF OIL & MINERAL RESOURCES	09/19/86
AL-HIMI, FADIL MOHAMED	MINISTRY OF OIL & MINERAL RESOURCES	09/19/86

CETP PARTICIPANTS BY TRAINING SITE AND COUNTRY

NAME	EMPLOYER	GRADUATE DATE
** TRAINING SITE: RENSSELAER		
* COUNTRY: BURMA MYINT, U MYO	RANGOON INSTITUTE OF TECHNOLOGY	08/23/85
* COUNTRY: ECUADOR ANDRADE, JUAN DUQUE, JORGE	POLYTECHNIC OF GUAYAQUIL ESPOL, GUAYAQUIL	08/23/85 08/23/85
* COUNTRY: THAILAND ROADRUNGWASINKU, SOMCHAI TAPSAKAR, EAK	METROPOLITAN ELECTRICITY AUTHORITY ELECTRICITY GENERATING AUTHORITY	12/20/85 03/01/87
** TRAINING SITE: RENSSELAER/ELEC.		
* COUNTRY: THAILAND ADIREK, NIWAT	ELECTRICITY GENERATING AUTHORITY	08/23/84
** TRAINING SITE: RPI		
* COUNTRY: BURMA DAN, THEIN	RANGOON INSTITUTE OF TECHNOLOGY	06/30/87
** TRAINING SITE: RURAL ELE.		
* COUNTRY: PAKISTAN CHUGHTAI, SHAUKAT ALI	USAID/PAKISTAN	01/01/83
** TRAINING SITE: S. ILLINOIS U.		
* COUNTRY: PAKISTAN GHAZNAVI, M. ISHAQ	GEOLOGICAL SURVEY OF PAKISTAN	01/05/87
** TRAINING SITE: S. ILLINOIS U./CARBONDALE		
* COUNTRY: INDIA GHOSH, TUHIN KUMAR	PLANNING COMM./GOI	12/21/83
** TRAINING SITE: SCIENTIFIC SOFTWARE		
* COUNTRY: TUNISIA HAMOUDA, BOUBAKER	ETAP	05/31/84
** TRAINING SITE: SEISMIC SERVICES		
* COUNTRY: BANGLADESH TALUKDER, YOUSUF ALI	PETROBANGLA	03/02/83

CETP PARTICIPANTS BY TRAINING SITE AND COUNTRY

NAME	EMPLOYER	GRADUATE DATE
** TRAINING SITE: SHELL OIL		
* COUNTRY: BANGLADESH MOLLAH, ABDUL JASBAR	PETROBANGLA	12/31/82
** TRAINING SITE: SIGNAL CO.		
* COUNTRY: KENYA OGERA, GEORGE		11/28/84
** TRAINING SITE: SOUTHERN ENGINEERING		
* COUNTRY: COSTA RICA LONGHI, CARLOS	COMPANIA NACIONAL DE FUERZA Y LUZ	04/06/86
** TRAINING SITE: STONY BROO		
* COUNTRY: PHILIPPINES FONACIER, CLARIBEL ARRIDLA, RHODORA	NAT. POWER CORP./ECON.DEPT. BUREAU OF ENERGY UTILIZATION	04/27/85 04/27/85
** TRAINING SITE: STUDY TOUR		
* COUNTRY: PAKISTAN MIR,	P&E	
** TRAINING SITE: TEXAS A&I		
* COUNTRY: BANGLADESH ALAM, KHURSHID	PETROBANGLA	12/20/85
** TRAINING SITE: TEXAS A&M		
* COUNTRY: SUDAN EL HASSAN, AHMED EL ZEIN	NATIONAL ENERGY ADMINISTRATION	04/10/84
** TRAINING SITE: TEXAS SO-LAW		
* COUNTRY: BANGLADESH ISLAM, WASIF	BANGLADESH PETROLEUM CO.	12/29/83
** TRAINING SITE: TVA		
* COUNTRY: RWANDA RUHIRA, JEAN PIERRE	MIN. OF NATL. RESOURCES	12/29/83
** TRAINING SITE: TVA1		
* COUNTRY: BARBADOS WALWYN, DOUGLAS KULINDA, SYLVESTER YEARWOOD, WAYNE	ENERGY DPT./GOV ST. KITTS ST. VINCENT ELEC. SERVICES BARBADOS LIGHT & POWER CO., LTD.	09/18/83 09/19/83 06/27/86

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CETP PARTICIPANTS BY TRAINING SITE AND COUNTRY

NAME	EMPLOYER	GRADUATE DATE
* COUNTRY: BOTSWANA GASEITSIME, REUBEN J.	BOTSWANA POWER CORP.	07/28/84
* COUNTRY: BURMA MYAING, THAN MYINT, MAUNG MAUNG	SITTANG PAPER MILL CORP. PETROCHEMICAL INDUSTRIES CORP.	08/30/85 08/30/85
* COUNTRY: COSTA RICA KOSS, LUIS CALDAS, FERNANDO PINTO GUTIERREZ, JUAN JOSE SOLANO, ROGER PACHECO, LUIS	INST. TECNOLOGICO COSTA RICA MINISTRY OF INDUSTRY UNIVERSITY OF COSTA RICA INST. TECNOLOGICO COSTA RICA INST. COSTARRICENSE DE ELECTRICIDAD	08/29/82 09/18/83 07/28/84 07/28/84 06/27/86
* COUNTRY: DOMINICAN REPUBLIC MARTINEZ, RAFAEL, AUGUSTO CHAVEZ, NELSON	CORP. DOMINICANA ELECTRICIDAD CORP. DOMINICANA ELECTRICIDAD	07/28/84 07/28/84
* COUNTRY: ECUADOR DROUET, RAFAEL GOYES, JORGE PAZ, RUDOLPHO DUQUE, JORGE	INECEL INECEL ESPOL ESPOL	07/26/85 07/28/84 07/26/85 07/26/85
* COUNTRY: EGYPT KORKOR, HAMED ALY HAMED EL DIN HUSSIN, ABD E.M.S. BEDROUS, MAHER AZIZ SOLIMAN, SOMMIA ABD EL H YGUNAN, HODA WADIE MOUSTAFA, FATMA SOLIMAN, SOMMIA ABD MANSOUR, MOHAMED MOSTAFA LOFTI, ALI EL SAYED FANOUS, SHERIF KAMAL SAMY MAGUIB, ELHANY MOHAMED ABD-EL-MALEK, SAMIR ISKANDAR ELSAIED, IBRAHIM ABDEL ELNAKEEB, HANI ABDEL-	EGYPTIAN GENERAL PETROLEUM CORP. EGYPTIAN GENERAL PETROLEUM CORP.. EGYPTIAN ELECTRICITY AUTHORITY EGYPTIAN ELECTRICITY AUTHORITY EGYPTIAN ELECTRICITY AUTHORITY EGYPTIAN ELECTRICITY AUTHORITY EGYPTIAN ELECTRICITY AUTHORITY EGYPTIAN ELECTRICITY AUTHORITY ORGANIZATION FOR ENERGY PLANNING ORGANIZATION FOR ENERGY PLANNING EGYPTIAN ELECTRICITY AUTHORITY ORGANIZATION FOR ENERGY PLANNING ORGANIZATION FOR ENERGY PLANNING EGYPTIAN ELECTRICITY AUTHORITY ORGANIZATION FOR ENERGY PLANNING ORGANIZATION FOR ENERGY PLANNING ORGANIZATION FOR ENERGY PLANNING ORGANIZATION FOR ENERGY PLANNING	08/29/82 08/29/82 08/29/82 08/29/82 09/18/83 09/18/83 03/16/84 07/26/85 07/26/85 07/26/85 07/26/85 06/27/86 06/27/86 06/27/86 06/27/86
* COUNTRY: GHANA YARTEY, SAMUEL Y. TONGA, SAMPSON BAKPESA SEKYIM, NGISSAH GEORGE DITSA, KINGSLEY KOFI	ELECTRICITY CORPORATION OF GHANA ELECTRICITY CORPORATION OF GHANA ELECTRICITY CORPORATION OF GHANA GHANA-ITALIAN PETROLEUM CO. LTD.	06/27/86 06/27/86 06/27/86 06/27/86
* COUNTRY: GUATEMALA PEREZ, CARLOS CALDERON REYES, EDUARDO ALFREDO	NAT. INST. OF ELEC. ICAITI	09/18/83 06/27/86

CETP PARTICIPANTS BY TRAINING SITE AND COUNTRY

NAME	EMPLOYER	GRADUATE DATE
* COUNTRY: GUYANA		
BLAIR, BERL B.	GUYANA MINING ENTERP.	02/09/82
SANKIES, MELVIN B.	DEPT. OF MECH. ENG.	02/09/83
PERSAUD, NARVON S.	GUYANA SUGAR CORP.	02/09/83
* COUNTRY: HONDURAS		
BUCK, PERCY A.	NATIONAL ELEC. CO.	08/29/82
* COUNTRY: INDIA		
RAJAGOPAL, S.	NATIONAL THERMAL PWR. CORP.	10/31/82
NAQVI, S.W.H.	CENTRAL ELECTRICITY AUTHORITY	09/18/83
JONEJA, MAHESH	CENTRAL ELECTRICITY AUTHORITY	12/14/83
AGGARWAL, S.K.	CENTRAL ELECTRICITY AUTHORITY	07/28/84
VENKATASAMY, VIRAPANDI	TAMIL NADU ELECTRICITY BOARD	07/28/84
AGARWAL, SHED NARRAIN	ELECTRICITY TRANSMISSION CIRCLE	06/27/86
DESAI, HARENDRA	GUJARAT ELECTRICITY BOARD	06/27/86
* COUNTRY: INDONESIA		
LAPIAN, EMIL JORN	BPP TEKNOLOGI/AGENCY APPLD. TECH.	07/26/85
DERIP, SOETRISNO	PLN NAT. PWR. CORP.	08/29/82
MANDASIE, J.F.S.	LEMIGAS	09/18/83
PRADONO, JABARTO	PLN PUSAT	09/18/83
SEMAN, ARDIANSYAH	PPT/MIGAS	07/26/85
SOEMINOTO, SOELARKSONO	PPT/MIGAS	07/26/85
SOEMARYO,	PPT-MIGAS/MIN. OF MINES AND ENERGY	06/27/86
* COUNTRY: JAMAICA		
BROWN, CASSANOVA	JAMAICA PUBLIC SERVICE	07/26/85
LEWIS, DERMONT	JAMAICA PUBLIC SERVICE	07/26/85
SCOTT, H.	ECONERGY ENGINEERING SERVICES	07/26/85
EDWARDS, LEONARD	MIN. OF MIN. & ENERGY	08/29/82
HOLNESS, LENWARD G.O.	JAMAICA PUBLIC SERVICE	09/18/83
MURRAY, AUBREY	JAMAICA PUBLIC SERVICE	07/28/84
THAMES, ERROL	JAMAICA PUBLIC SERVICE	07/28/84
THOMAS, CARLTON	JAMAICA PUBLIC SERVICE COMPANY LTD.	06/27/86
CUMPER, JOHN	PETROLEUM CORPORATION OF JAMAICA	06/27/86
* COUNTRY: JORDAN		
TAMINI, HAMED SHEIKH	JORDAN ELECTRICITY AUTHORITY	07/28/84
NAWFAL, HANI	MIN. OF ENERGY & MINERAL RESOURCES	06/27/86
* COUNTRY: KENYA		
DRARD, MAURICE	KICOMI COTTON MILLS	07/26/85
MUNDIA, WILLIAM	MAGADI SODA CORP.	09/18/83
OMBOTO, JOHNSON OTTAWA	PAN AFRICAN PAPER MILLS	09/18/83
KINGDINA, NASHON	KENYA POLYTECHNIC	09/18/83
MURIANKI, GILBERT M.N.	KENYA CANNERS, LTD.	09/18/83
SHAH, PUNIT L.	UNITED TEXTILES IND.	09/18/83
OMONDI, JAMES OTIENO	KENYA BREWERIES LTD.	07/28/84
ESHITEMI, DONNIE SHIKUKU	MUMIAS SUGAR CORP.	07/28/84
KIMANI, PETERSON	KENYA COOPERATIVE CREAMERIES	07/28/84
BAIYA, HARUN N.	ENERGY DEV. INTER/MIN. OF ENERGY	07/26/85

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## CETP PARTICIPANTS BY TRAINING SITE AND COUNTRY

NAME	EMPLOYER	GRADUATE DATE
WENYAA, JOHN	PAN-AFRICAN PAPER MILLS	06/27/86
MWABE, PHILIP	EAST AFRICAN PORTLAND CEMENT	06/27/86
MALOD, MOORALI	BAMBURI PORTLAND CEMENT	06/27/86
MUNYIRI, GIBSON MUTI	BRITISH AMERICAN TOBACCO COMPANY	06/27/86
* COUNTRY: LIBERIA		
KAPUWA, FRANCIS K.	LIBERIA ELECTRICITY CORP. (LEC)	08/29/82
DUANA, CHARLES G.	LIBERIA PETRO. REFINERY CO.	08/29/82
KPAWULU, GEORGE F.	LIBERIA PETRO. REFINERY CO.	08/29/82
MILLER, WILLIAM M. JR.	LIBERIA PETRO. REFINERY CO.	08/29/82
MARSHALL, SEKU E.	LIBERIA PETRO. REFINERY CO.	08/29/82
TUBMAN, THOMAS A.	LIBERIA ELECTRICITY CORP. (LEC)	08/29/82
* COUNTRY: MEXICO		
MORENO, JOSE FRANCISCO	INST. INVESTIGACIONES ELECTR.	07/26/85
RUIZ, ROSELTO	INST. INVESTIGACIONES ELECTR.	07/26/85
* COUNTRY: MOROCCO		
MOHAMED, IMAKOR	ONAREP	09/18/83
* COUNTRY: NEPAL		
RIJAL, KAMAL		07/26/85
UPADHYAY, MESH RAJ	MINISTRY OF WATER/DPT. ELEC.	09/16/83
NAYAK, JAGAT NARAYAN	ELECTRICITY DEPARTMENT	07/28/84
THAKUR, LALIT NARAYAN	BIRGANJ SUGAR FACTORY	07/28/84
THAKURI, BHUWAN CHAND	DEPT. OF ELECTRICITY	07/26/85
* COUNTRY: PAKISTAN		
RASHID, ABDUR		07/26/85
QAYUM, MAIN ABDUL		/ /
AHMAD, ANJUM	OFFICE OF ENERGY AND ENVIRONMENT	06/27/86
* COUNTRY: PANAMA		
RINCON, CLEMENTE L.	CEMENTO PANAMA SA	07/28/84
* COUNTRY: PHILIPPINES		
CASACOP, TEDDY	BUREAU OF ENERGY UTILIZATION	07/26/85
COLICO, JOHN	BUREAU OF ENERGY UTILIZATION	07/26/85
HABITAN, ARTEMIO	BUREAU OF ENERGY UTILIZATION	07/26/85
SOLERA, GINES	BUREAU OF ENERGY UTILIZATION	07/26/85
TOLEDO, WILFREDO S.	PHIL. NAT. OIL CO.	08/29/82
OCAMPO, MARCIAL T.	PHIL. NAT. OIL CO.	08/29/82
MAYZANTILLO, LEON	PHIL. NAT. OIL CO.	08/29/82
CRUZ, ORLANDO M.	NATIONAL POWER CORP.	08/29/82
ORPUZ, ROQUE F.	NATIONAL POWER CORP.	08/29/82
ABAYAN, WAYNE	MINISTRY OF ENERGY, PNPC COMPOUND	07/28/84
RAFOLS JR., RAYMUNDO	ARMCO-MARSTEEL ALLOY CORP.	07/28/84
TORRES, ONOFRE	ARMCO-MARSTEEL ALLOY CORP.	07/26/85
CORDERO, CHARLES	BUREAU OF ENERGY UTILIZATION	06/27/86
PINANO, DANILO	BUREAU OF ENERGY UTILIZATION	06/27/86
TUPAS, CLOVIS	BUREAU OF ENERGY UTILIZATION	06/27/86
YAN, ALIPIO	SAN MIGUEL CORPORATION	06/27/86

CETP PARTICIPANTS BY TRAINING SITE AND COUNTRY

NAME	EMPLOYER	GRADUATE DATE
GEREMIAS, ALEX	NATIONAL POWER CORPORATION	06/27/86
* COUNTRY: PORTUGAL		
AMARAL, CARLOS E.F.L.	MAGUE	08/29/82
SEQUEIRA, JORGE V.A.	QUASIS	08/29/82
CRUZ, JOSE LUIS MOITA	EMPRESA GERAL DE FOMENTO	07/28/84
RIBEIRO, JORGE ALBERTO	PETROGRAL	07/28/84
* COUNTRY: SIERRA LEONE		
POWERS, SAMUEL THEOPHIL	NATIONAL POWER AUTHORITY	07/28/84
* COUNTRY: SRI LANKA		
NADARAJAH, MUTTIAH	CEYLON ELEC. BOARD	08/29/82
WIJEMANNE, EDWARD NELSON	CEYLON ELEC. BOARD	08/29/82
FERNANDO, GINTOTAGE	CEYLON ELEC. BOARD	09/18/83
SIVASUBRAMANIAM, KANDIAH	CEYLON ELEC. BOARD	07/28/84
* COUNTRY: SUDAN		
ALI, MOHAMED OMER	NAT. ELEC. CORP.	09/18/83
EL WAEIM, HATIM EL TAHIR	NAT. ELEC. CORP.	09/18/83
ALI, IBRAHIM IDRIS	NAT. ELEC. CORP.	09/18/83
ABDALLA, ALI SAIED	NAT. ELEC. CORP.	09/18/83
SAIED, OMSI SHAFIEK	NATIONAL ELECTRICITY CORPORATION	06/27/86
* COUNTRY: TANZANIA		
KUNDI, AMBROSE	TIPER CO., LTD.	09/18/83
* COUNTRY: THAILAND		
NA NAKORN, SIWANAH	ELECTRICITY GENERATING AUTHORITY	07/26/85
HERABAT, RUM	ELECTRICITY GENERATING AUTHORITY	02/10/84
TANGTRAKUL, MINGSAK	NATIONAL ENERGY ADMINISTRATION	07/28/84
RIANPAISARN, SOMSAK	DEPART. OF INDUSTRIAL WORKS	06/27/86
RAHMAN, MUHAMMUD	ASIAN INSTITUTE OF TECHNOLOGY	06/27/86
* COUNTRY: TOGO		
TOUNOU, KPAKPO	UNKNOWN	09/18/83
* COUNTRY: TUNISIA		
BAYINI, AHMED	STEG	07/26/85
NOURI-AMAR, MOULDI	MINISTRY OF THE NATIONAL ECONOMY	08/29/82
ABID, ABDESSATAR	MINISTRY OF THE NATIONAL ECONOMY	08/29/82
** TRAINING SITE: TVA2		
* COUNTRY: BANGLADESH		
AHKAF, MOLLAH A.K.M.	BANGL. PWR DEV. BOARD	12/15/84
* COUNTRY: BOLIVIA		
DE LA ZERDA, JAIME	NAT. ELEC. CO	12/08/84
ULLOA, CARLOS	EMPRESA NACIONAL DE ELECTRICIDAD	12/20/85

CETP PARTICIPANTS BY TRAINING SITE AND COUNTRY

NAME	EMPLOYER	GRADUATE DATE
* COUNTRY: BURMA		
MYINT, MYO	ELEC. POWER CORP.	03/30/84
SHWE, SEIN	ELECTRIC POWER CORPORATION	12/20/85
LWIN, SOE	ELECTRIC POWER CORPORATION	12/20/85
CHO, MAUNG	ELECTRIC POWER CORPORATION	12/19/86
SHEIN, TUN	ELECTRIC POWER CORPORATION	12/19/86
* COUNTRY: COSTA RICA		
SANCHEZ, JAVIER	INST. COSTARRICENSE ELECTRICIDAD	12/29/83
BARQUERO, LUIS A.	INST. COSTARRICENSE ELECTRICIDAD	01/20/84
DDIO, ULYSES	INST. COSTARRICENSE ELECTRICIDAD	12/15/84
GRAY JONES, RAYMOND	INSTITUTO COSTARRICENSE ELECTRICIDAD	12/19/86
SOTO, MANUEL	ICE	12/19/86
* COUNTRY: EGYPT		
FOLDA, HASSAM ALY	EGYPTIAN ELECTRICITY AUTHORITY	12/20/85
BEDROUS, MAHER AZIA	EGYPTIAN ELECTRICITY AUTHORITY	03/16/84
ATTIA, MOURAD BATIE	EGYPTIAN ELECTRICITY AUTHORITY	12/20/85
ABU EL FADL, DIAA EL DIN	EGYPTIAN ELECTRICITY AUTHORITY	12/20/85
NASRALLAH, MASR WAYHIB	EGYPTIAN ELECTRICITY AUTHORITY	12/20/85
* COUNTRY: GHANA		
COLEMAN, JOSEPH M.	ELECTRICITY CORPORATION OF GHANA	12/19/86
LAWSON, FRANCIS R. L.	ELECTRICITY CORPORATION OF GHANA	12/19/86
DAPATEM, BARNSLEY K.	ELECTRICITY CORPORATION OF GHANA	12/19/86
OPOKU, JOSEPH	ELECTRICITY CORPORATION OF GHANA	12/19/86
ADDAE, PHILIP	ELECTRICITY CORPORATION OF GHANA	12/19/86
* COUNTRY: HONDURAS		
HENRIQUEZ, ORLANDO	ENEE	12/15/84
OLIVA, ENRIQUE ARMANDO	HONDURAN NATIONAL POWER CORP.	12/20/85
* COUNTRY: INDIA		
MALHOTRA, VINAY KUMAR	CENTRAL ELECTRICITY AUTHORITY	12/20/85
PALIT, AMALENDU	BADARPUR THERMAL PWR STA.	12/20/85
CHAWLA, V.P.	U.P. STATE ELECTRICITY BOARD	12/19/86
DEENADAYALAN, S.	TAMIL NADU ELECTRICITY BOARD	12/19/86
MITTAL, SHIV KUMAR	U.P. STATE ELECTRICITY BOARD	12/19/86
* COUNTRY: INDONESIA		
SUATMA, TJOKORDA A.	PLN/STATE ELEC. CO.	12/15/84
SOEPOMO, SOETIMAN	ELEC. STATE CORP.	12/08/84
* COUNTRY: JAMAICA		
HAYE, MANLEY MICHAEL	JAMAICA PUBLIC SERVICE	12/20/85
* COUNTRY: JORDAN		
MARJI, MAZEN HIKMAT	IRBID DISTRICT ELECTRICITY CO.	12/19/86
HAWWA, KHAIRELDEEN	JORDAN ELECTRICITY AUTHORITY	12/19/86
BSIESO, MUNTHER	JORDAN ELECTRICITY AUTHORITY	12/19/86

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## CETP PARTICIPANTS BY TRAINING SITE AND COUNTRY

NAME	EMPLOYER	GRADUATE DATE
* COUNTRY: LESOTHO		
MOTA, MOSIUDA R.	UNKNOWN	11/20/83
SOLE, MASUPHA E.	UNKNOWN	12/30/83
* COUNTRY: LIBERIA		
MORLU, FRANCIS	LIBERIA ELECTRICITY CORP. (LEC)	12/08/84
BROWN, PATRICK	LIBERIA ELECTRICITY CORP. (LEC)	12/20/85
MASSAQUOI, QUELLIE	LIBERIA ELECTRICITY CORP. (LEC)	12/19/86
* COUNTRY: NEPAL		
KADARYIA, GAURI MAN	MINISTRY OF WATER RESOURCES	12/20/85
RANA, SHREE PRAKASH	NEPAL ELECTRICITY CORP.	12/20/85
TULADHAR, MANIKA RATNA	DEPT. ELEC., MIN. WTR. RSRC	06/19/84
BHUTIA, NIMA TSHERING	NEPAL ELEC. CORP.	12/23/83
KAYASTHA, ARANJALI	NEPAL ELECTRICITY AUTHORITY	12/19/86
SHRESTHA, MAHENDRA LAL	NEPAL ELECTRICITY AUTHORITY	12/19/86
SHAKYA, TIRTHA MAN	NEPAL ELECTRICITY AUTHORITY	12/19/86
* COUNTRY: PERU		
ARAOZ, CARLOS	ELECTROLIMA	12/20/85
* COUNTRY: PHILIPPINES		
DEL ROSARIO, CORDELL	NATIONAL POWER CORP.	01/30/84
HAMOY, VENUSTO D.	NATIONAL POWER CORP.	12/08/84
AUSTRIA, RICARDO R.	NATIONAL POWER CORP.	12/20/85
ALMAZAN, VALERIANO	NATIONAL POWER CORPORATION	12/19/86
* COUNTRY: PORTUGAL		
MOREIRA, HERMINIO CRAVO	ELECTRICIDADE DE PORTUGAL	12/20/85
CLARA, MARIA JOSE	ELECTRICIDADE DE PORTUGAL	12/19/86
MORAIS, JORGE M. DACRUZ	ELECTRICIDADE DE PORTUGAL	12/19/86
* COUNTRY: SRI LANKA		
JAYAWARDENA, KURUGAMAGE S.P	CEYLON ELEC. BOARD	12/15/84
* COUNTRY: SUDAN		
EL HASSAN, KHALID MOHAMED	NATIONAL ELECTRIC CORP.	12/14/84
* COUNTRY: TANZANIA		
FAZAL, MURADALI M.	TANZANIA ELEC. SUPPLY CO.	04/03/84
* COUNTRY: THAILAND		
WIJITONGRUANG, FRASERT	METROPOLITAN ELECTRICITY AUTHORITY	04/20/84
WIPASSAKORNWARA, KAMPOL	PROVINCIAL ELEC. AUTH. (RESEARCH DIV)	03/30/84
BHUVADDLIKIJ, DHIENCHAI	PROVINCIAL ELEC. AUTH.	12/15/84
ROJPRASIT, SRAWOOT	METROPOLITAN ELECTRICITY AUTHORITY	12/20/85
RATANAWIMON, CHAITAWAT	EGAT	12/19/86
ISARANUCHEEP, KRIANGSAK	METROPOLITAN ELECTRICITY AUTHORITY	12/19/86
PURIMAPORN, TAMMARAT	PROVINCIAL ELECTRICITY AUTHORITY	12/19/86

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## CETP PARTICIPANTS BY TRAINING SITE AND COUNTRY

NAME	EMPLOYER	GRADUATE DATE
* COUNTRY: TOGO KODZO, ADABA	CEET	03/30/84
* COUNTRY: YEMEN AL-KIRSHI, ABDUL ELAH AHME	YEMEN GEN.ELECTRICITY CORP.	07/28/84
** TRAINING SITE: U PENN/MS/ENGY MGMT & POL		
* COUNTRY: SUDAN EL SHAFEI, ISMAIL	NATIONAL ENERGY ADMINISTRATION	02/28/87
** TRAINING SITE: U. ALABAMA		
* COUNTRY: MOROCCO BOUHADDI, MOHAMMED KORACHI-ALAGUI, AHMED	DNAREP DNAREP	02/10/83 12/22/84
** TRAINING SITE: U. ARIZONA		
* COUNTRY: SOMALIA AWAD, BARRE MOHAMED	BAARDHEERE DAM PROJECT	08/09/86
* COUNTRY: COSTA RICA BAQRIT, DANIEL	BEL INGENIERIA S.A.	08/10/86
* COUNTRY: DOMINICAN REPUBLIC MOYA, WILLIAM E.	DIRECCION GEN OF MINERIA	07/23/83
* COUNTRY: NEPAL PUN, LOK BAHADUR	MINISTRY OF WATER RESOURCES	08/07/86
** TRAINING SITE: U. COLORADO BOULDER		
* COUNTRY: BARBADOS DAVIS, ALLISON	B'DOS LIGHT & POWER CO.	12/23/84
** TRAINING SITE: U. KANSAS		
* COUNTRY: BARBADOS COX, ANDREW FABIAN	MIN. OF TRADE & INDUSTRY	07/09/83
* COUNTRY: DOMINICAN REPUBLIC HERNANDEZ, VICTOR SIGFRIDO	UCMM	03/31/84
* COUNTRY: TUNISIA BEN DALY, RACHID DHANE, HICHEM OUALHA, SAMIR	ETAP ETAP ETAP	10/20/85 10/13/85 12/10/85

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CETP PARTICIPANTS BY TRAINING SITE AND COUNTRY

NAME	EMPLOYER	GRADUATE DATE
** TRAINING SITE: U. KENTUCKY		
* COUNTRY: COSTA RICA LOUZAQ, JAVIER A.	INST. TECNOLOGICO COSTA RICA	12/31/83
* COUNTRY: TUNISIA YOUNES, NABIL		08/06/85
** TRAINING SITE: U. MICHIGAN		
* COUNTRY: SOMALIA MUSE, YUSUF AIMAB	NATIONAL UNIVERSITY OF SOMALIA	12/30/84
** TRAINING SITE: U. NORTH DAKOTA		
* COUNTRY: HAITI PIERRE, BETONUS JACQUES, FLORELLE LOUIS	MINISTRY MINES & ENERGY RESOURCES MINISTRY MINES & ENERGY RESOURCES	11/27/85 12/27/85
** TRAINING SITE: U. OF CT.		
* COUNTRY: BURUNDI SEJJI, DANIEL	REGIDESO	08/15/82
* COUNTRY: LIBERIA RICKS, SAM	MAND RIVER UNION	08/15/82
* COUNTRY: PHILIPPINES CANTILLER, DANILO B.	NATIONAL POWER CORP.	08/15/82
** TRAINING SITE: U. OF SO.		
* COUNTRY: INDIA JAIN, PRABUDDHA CHAUDHURY, S. ROY MARATHE, RAJENDRA VITHAL	OIL & NAT. GAS COMM. OIL & NAT. GAS COMM. OIL & NAT. GAS COMM.	01/01/81 01/01/81 01/01/81
** TRAINING SITE: U. OKLAHOMA		
* COUNTRY: TUNISIA KASBI, JAMELLEDINE	ETAP	08/17/85
** TRAINING SITE: U. PENN		
* COUNTRY: TUNISIA BECHRAOUI, NADIA	OPNT	12/31/87

CETP PARTICIPANTS BY TRAINING SITE AND COUNTRY

NAME	EMPLOYER	GRADUATE DATE
** TRAINING SITE: U. PENN.		
* COUNTRY: EGYPT HEGAZY, YOUSSEF A.	NEA (EGYPT ENERGY AUTHORITY)	01/05/87
* COUNTRY: SUDAN FAWZ, MOHAMED	NATIONAL ENERGY ADMIN.	02/28/87
* COUNTRY: PANAMA RCVI, JULIO I.	IRHE	01/05/87
* COUNTRY: BARBADOS KING, GEORGE R.	BARBADOS GOVT.	08/27/85
* COUNTRY: COSTA RICA BLANCO, JOSE	NATIONAL PLANNING OFFICE	08/31/85
* COUNTRY: INDIA BHATIA, BHUPENDRA DHARMARAJAN, KRISHNAN	CENTRAL ELECT. AUTH./GOVT. OF INDIA MINISTRY OF ENERGY, GOVT. OF INDIA	03/07/85 03/07/85
* COUNTRY: KENYA GATHURA, JAMES NYAMWANDA, ABSOLOM MUNYU, NOFATOS	MINISTRY OF ENERGY MINISTRY OF ENERGY MINISTRY OF ENERGY	12/20/85 12/20/85 11/11/83
* COUNTRY: PHILIPPINES VILLARBA, ANNA FE (MS.)	NATIONAL POWER CORP.	12/20/85
* COUNTRY: SUDAN FARAH, MOHAMED OSMAN, ALI	NATIONAL ENERGY ADMINISTRATION NATIONAL ENERGY ADMINISTRATION	12/20/85 12/20/85
* COUNTRY: THAILAND CHARUWAT, TEERANIT	ELECTRICITY GENERATING AUTHORITY	08/31/85
** TRAINING SITE: U. PITT.		
* COUNTRY: EGYPT ARIFA, SHAWKY F.	MINISTRY OF PETROLEUM	08/14/83
* COUNTRY: LIBERIA DOH, MUNYENEH SANDIKIE, JACOB WHITE, HALL YARKPA, GEORGE	MINISTRY OF FINANCE MINISTRY OF LANDS, MINES & ENERGY MIN. OF PLANN. & ECONOMIC AFFAIRS MINISTRY OF FINANCE	09/05/85 11/02/85 09/05/85 09/05/85
* COUNTRY: SIERRA LEONE DABOH, SHEIK JIBRIL K.	MIN. OF ENERGY	04/15/84

CETP PARTICIPANTS BY TRAINING SITE AND COUNTRY

NAME	EMPLOYER	GRADUATE DATE
* COUNTRY: SUDAN		
SULIMAN, SAIF	NATIONAL ENERGY ADMINISTRATION	10/31/84
BASHIR, ISHAG ADAM	NEA	12/31/83
AHMED, MAHA MOHMED	NATIONAL ENERGY ADMINISTRATION	04/27/84
EL AMAM, MOHAMED	NEA	10/28/83
ANIS, FATIMA I.M.	NATIONAL ENERGY ADMINISTRATION	05/04/83
EL AMIN, NIEMAT MOHAMED	NEA	08/05/84
DAFALLA, GAAFAR AHMED	NATIONAL ENERGY ADMIN.	04/30/85
* COUNTRY: TANZANIA		
MGANA, SHAABAN	MIN. OF WATER & ENERGY	10/24/83
** TRAINING SITE: U. S. CAROLINA		
* COUNTRY: MOROCCO		
JABOUR, HADDOU	S.R.P.M.	08/14/85
** TRAINING SITE: U. S. ILLINOIS -C		
* COUNTRY: BANGLADESH		
HUQ, EHSANUL	MINERAL DEVEL. CORP.	01/10/84
** TRAINING SITE: U. SO. CAL.		
* COUNTRY: DOMINICAN REPUBLIC		
SANTOS, VICTOR D.	STUDENT	11/25/83
* COUNTRY: EGYPT		
SALEM, MOHAMED M.W.	NASR PETROLEUM CO.	01/17/83
EL KHATIB, MOHAMED	GENERAL PETROLEUM CORP.	08/23/85
HELALI, MOHAMED	GENERAL PETROLEUM CORP.	08/23/85
KANDIL, AHMED ABDD	GENERAL PETROLEUM CORP.	09/20/85
* COUNTRY: TUNISIA		
ABDELKEFI, NABIL	ETAP	08/17/85
BETTAIEB, ALAYA		08/24/85
HAMDI, MONGI	NATIONAL PETROLEUM CO.	05/30/85
** TRAINING SITE: U. SO. CALIFORNIA		
* COUNTRY: BANGLADESH		
AMIN, RUHUL	NDP PETROBANGLA	12/20/85
** TRAINING SITE: U. SOUTH CAROLINA		
* COUNTRY: MOROCCO		
HAFID, MOHAMAD	ONAREF	01/05/87

CETP PARTICIPANTS BY TRAINING SITE AND COUNTRY

NAME	EMPLOYER	GRADUATE DATE
** TRAINING SITE: U. TULSA		
* COUNTRY: COSTA RICA WILLIAMSON, FRANKLIN OMAR	RECOPE	08/20/86
** TRAINING SITE: U. UTAH		
* COUNTRY: SUDAN YASSIN, MUHA AHMED	NATIONAL ENERGY ADMINISTRATION	07/16/85
* COUNTRY: TANZANIA SAME, ESTOMIAH NGAYA	MINISTRY OF WATER & ENERGY	09/05/83
* COUNTRY: INDIA THUSSU, JAWAHIR LAL	GEO. SURVEY OF INDIA	03/16/83
** TRAINING SITE: U.MO-ROLLA		
* COUNTRY: INDONESIA SEBAYANG, MERDEKA	DIR. GEN. OF POWER	02/25/83
* COUNTRY: TUNISIA MOHMOUD, HASSEN	STEG	03/05/82
* COUNTRY: INDIA REDDY, KOLLI MAGI SWAMINATHAN, NARAYANASAMY	RURAL ELEC. CORP. RURAL ELEC. CORP.	02/25/83 02/25/83
* COUNTRY: INDONESIA PURWONO, JACOBUS	DIR. GEN. OF POWER	02/25/83
* COUNTRY: TANZANIA POINTE, RENE	TANZANIA ELEC. SUPPLY CO.	04/25/83
** TRAINING SITE: U.T.E.P.		
* COUNTRY: SEYCHELLES BELLE, EDDIE R.		12/31/86
* COUNTRY: BURMA KHAN PAU, U JOSEPH H. NYUNT,	MINISTRY OF EDUCATION/U. MANDALAY MYANMA OIL CORP.	08/15/85 08/15/85
* COUNTRY: MOROCCO IBENBRAHIM, ADMAR		02/16/85
* COUNTRY: THAILAND RAKSASKULWONG, MANOP	ECON. GEOL. DIV., DEPT. MIN. RESOURCES	08/15/85

CETP PARTICIPANTS BY TRAINING SITE AND COUNTRY

NAME	EMPLOYER	GRADUATE DATE
** TRAINING SITE: UNITAR		
* COUNTRY: BANGLADESH SHAFUR, M.A.	PETROBANGLA	08/06/84
* COUNTRY: COSTA RICA AFONSO, PEDRO CORRALES, RAFAEL	RECOPE RECOPE	08/06/84 08/06/84
* COUNTRY: GUATEMALA JUAREZ, DOUGLAS ROSALES		08/06/84
* COUNTRY: HONDURAS SAMRA, MARTHA DE	DIRECCION GEN. MINAS E HIDROCARBONS	08/06/84
* COUNTRY: INDIA NATH, PREM	OIL AND GAS NATURAL DIVISION	08/06/84
* COUNTRY: LIBERIA NEUFVILLE, HIMIE		08/06/84
* COUNTRY: MOROCCO EL MORABET, ABDELKHALEK BENNIS, MOHAMED AZDINE	ONAREP ONAREP	08/06/84 08/06/84
* COUNTRY: NEPAL THAPA, GOPAL SINGH	DEPT. MINES & GEOLOGY	08/06/84
* COUNTRY: NIGER OUMAROU, HAMADOU	MINISTRY OF MINES & INDUSTRY	08/06/84
* COUNTRY: PERU ALVAREZ, ALBERTO		08/06/84
* COUNTRY: SENEGAL FAYE, BABACAR	MINISTERE DU DEVELOPPEMENT IND.	08/06/84
* COUNTRY: SUDAN NUGUD, MOHAMED OSMAN	GENERAL PETROLEUM CORP.	08/06/84
** TRAINING SITE: UPA1		
* COUNTRY: BURMA SHWE, KHIN MAUNG LWIN, KYAW	PETROCHEMICAL INDUSTRIES CORP. MYANMA OIL CORPORATION	08/01/87 08/01/87
* COUNTRY: DJIBOUTI NOUR, YACOB MAHAMOUD	MIN. OF INDUSTRY & INDUSTRIAL DEVEL	08/01/87
* COUNTRY: EGYPT KORKOR, HAMED ALY HAMED	ORGANIZATION FOR ENERGY PLANNING	08/01/87

CETP PARTICIPANTS BY TRAINING SITE AND COUNTRY

NAME	EMPLOYER	GRADUATE DATE
* COUNTRY: FIJI LOU, TIP CHANG	MINISTRY OF ENERGY, GOF	08/01/87
* COUNTRY: HAITI AUGUSTIN, CHARLES PIERRE, BETONUS	MINISTRY OF COMMERCE AND INDUSTRY MINISTRY OF MINES & ENERGY RESOURCE	08/01/87 08/01/87
* COUNTRY: INDONESIA SUSMOYO, SOEMARSO, CHRISTOPHORUS SAMIN, SJAHROEL	PPT MIGAS LEMIGAS PLANNING STATE ELECTRICITY COMPANY	08/01/87 08/01/87 08/01/87
* COUNTRY: JORDAN BAQISH, BASIL FOUAD	MIN. OF PLANNING AND NAT. RESOURCES	08/01/87
* COUNTRY: KENYA MWAKE, PAUL MUTTIE	MINISTRY OF ENERGY	08/01/87
* COUNTRY: LIBERIA SMITH, MELVIN KING, JOEL	MINISTRY OF LANDS, MINES & ENERGY MINISTRY OF LANDS, MINES & ENERGY	08/01/87 08/01/87
* COUNTRY: PAKISTAN GUL, TARIQ	ENAR PETROTECH SERVICES LIMITED	08/01/87
* COUNTRY: PHILIPPINES TAMANG, JESUS P. ALBINO, MARIA ASUNCION ESPANTO, ZOSIMO	BUREAU OF ENERGY UTILIZATION BUREAU OF ENERGY UTILIZATION BUREAU OF ENERGY DEVELOPMENT	08/01/87 08/01/87 08/01/87
* COUNTRY: THAILAND VITHESPONGSE, SUN	MINISTRY OF FINANCE	08/01/87
* COUNTRY: UGANDA ABDALLA, YUSUF ATIKU TUGUME, KENNETH FRANCIS	BANK OF UGANDA MINISTRY OF ENERGY	08/01/87 08/01/87
* COUNTRY: BURMA LWIN, SAN MINN, SEIN	MYANMA OIL CORPORATION ELECTRIC POWER CORPORATION	08/01/86 08/01/86
* COUNTRY: EGYPT MAAYOUF, FATMA	EGYPTIAN ELECTRICITY AUTHORITY	08/01/86
* COUNTRY: GHANA ACCUH-ADDO, SAMUEL ASANTE, FREDRICK	ELECTRIC CORPORATION OF GHANA ELECTRIC CORPORATION OF GHANA	08/01/86 08/01/86
* COUNTRY: HAITI CHAMPAGNE, LOUIS MCCALLA, DUDLEY ST. JEAN, WILFRID	ELECTRICITE DHAITI MINISTRY OF MINES & ENERGY/RESOURCE DIRECTORATE OF ENERGY RESOURCES	08/01/86 08/01/86 08/01/86

CETP PARTICIPANTS BY TRAINING SITE AND COUNTRY

NAME	EMPLOYER	GRADUATE DATE
* COUNTRY: HONDURAS RIVAS, OSKAR ROMERO, JOSE	CONSUPLANE NATIONAL AGRARIAN INSTITUTE	08/01/86 08/01/86
* COUNTRY: INDIA DASARI, SATYANARAYANA	CENTRAL ELECTRICITY AUTHORITY	08/01/86
* COUNTRY: INDONESIA DELIM, WAYAN	PLN	08/01/86
* COUNTRY: JORDAN QUALAGARI, MOHAMMAD MUSTAFA, ISAM	MINISTRY OF ENERGY AND MIN. RESOUR. MINISTRY OF ENERGY & MIN. RESOURCES	08/01/86 08/01/86
* COUNTRY: NEPAL UPADHYAYA, SUBHADRA PYAKUREL, MOHAN	NEPAL ELECTRICITY AUTHORITY NEPAL ELECTRICITY AUTHORITY	08/01/86 08/01/86
* COUNTRY: PERU NAHUI, ALIPIO	ITINTEC	08/01/86
* COUNTRY: PHILIPPINES BAILE, MARIO MANZANILLO, LEON	NATIONAL POWER CORPORATION MINISTRY OF ENERGY	08/01/86 08/01/86
* COUNTRY: SOMALIA ROBLE, YASSIN	BAARDHEERE DAM PROJECT	08/01/86
** TRAINING SITE: US ARMY-OH		
* COUNTRY: PAKISTAN QUERESHI, ADDUL HAMEED AHMAD, MANZUR	WAPDA WAPDA	07/23/82 07/23/82
** TRAINING SITE: USGS, VA		
* COUNTRY: COSTA RICA BOLANOS, KENNETH	RECOPE	07/18/83
** TRAINING SITE: UT/CHAT.		
* COUNTRY: NEPAL SHRESTHA, BALARAM BAJRACHARYA, DAIBAGYA BHATTARAI, DHRUVA R. PRADHAN, HARI	ELECTRICITY DEPARTMENT TRIBHUVAN U., THAPATHALI MINISTRY OF WATER RESOURCES MINISTRY OF WATER RESOURCES(KHDB)	02/28/87 10/26/85 10/26/85 11/05/85
* COUNTRY: TUNISIA BACH, HABIB BOUABDELLI, TAOUFIK BOUWAZRA, RACHID	S.T.E.G. ETAF STEG	11/15/85 10/15/85 10/15/85

CETP PARTICIPANTS BY TRAINING SITE AND COUNTRY

NAME	EMPLOYER	GRADUATE DATE
** TRAINING SITE: VA. P.I.		
* COUNTRY: KENYA		
GITHINJI, JOHN NGANDU	MINISTRY OF ENERGY	06/15/83
MUITA, BENJAMIN KINHUA	MINISTRY OF ENERGY	06/15/83
** TRAINING SITE: W. VIRGINIA U.		
* COUNTRY: TANZANIA		
SEMKIWA, PASCAL M.	MINISTRY OF MINERALS	11/07/83
* COUNTRY: TUNISIA		
BEN CHAABANE, HECHMI	ETAP	10/08/85
** TRAINING SITE: WA. ST. U.		
* COUNTRY: TANZANIA		
MRIMDOKO, BASHIR	MIN. OF WATER & ENERGY	08/30/83
KIMAMBO, CHARLES I.Z.	MIN. OF WATER & ENERGY	08/30/83
** TRAINING SITE: WEST.		
* COUNTRY: BOLIVIA		
ANDIA, JAIME MARCELO	EMPRESA NACIONAL DE ELECTRICIDAD	12/13/85
BURGOS, HUMBERTO	NATIONAL ELECTRICITY CO.	12/14/84
* COUNTRY: BURMA		
MAUNG, MAUNG	ELECTRIC POWER CORPORATION	12/14/84
SHEIN, TIN	ELECTRIC POWER CORPORATION	12/13/85
KYU, AYE	ELECTRIC POWER CORPORATION	12/13/85
* COUNTRY: COSTA RICA		
BRENES, JAVIER	INST. COSTARRICENSE ELECTRICIDAD	12/17/83
* COUNTRY: GHANA		
BAFFOUR, ANDREW	ELECTRICITY CORPORATION OF GHANA	12/13/85
GAKPO, CEPHAS	ELECTRICITY CORPORATION OF GHANA	12/13/85
* COUNTRY: HONDURAS		
ZELAYA, RODOLFO ANTONIO	ENEE	12/17/83
* COUNTRY: INDIA		
MAGUDAPATHI, A.	CENTRAL ELECTRICITY AUTHORITY	12/13/85
RAMAMURTHY, GURUMURTHY S.	BHARAT HEAVY ELEC., LTD.	12/20/82
* COUNTRY: INDONESIA		
SANTOSO, IMAN	STATE ELECTRICITY CO.	12/14/84
SUDIARTA, MADE	STATE ELECTRIC CO.-PLN	12/13/85

CETP PARTICIPANTS BY TRAINING SITE AND COUNTRY

NAME	EMPLOYER	GRADUATE DATE
* COUNTRY: IVORY COAST VEI, GASTON	EECI/ENERGIE ELECTRIQUE COTE IVOIRE	12/14/84
* COUNTRY: JAMAICA CHANNER, JOHN MURRAY, JOHN	JAMAICA PUBLIC SERVICE JAMAICA PUBLIC SERVICE	12/14/84 12/13/85
* COUNTRY: JORDAN DOLEH, WALID SHARKH, MOHAMMAD ABU AL-YOUNES, OMAR MOHD ASAD ABOU TEAMA, SULIMAN NUR, IMAD NAGI	JORDAN ELECTRICITY AUTHORITY JORDAN ELECTRICITY AUTHORITY JORDAN ELECTRICITY AUTHORITY JORDAN ELECTRIC POWER CORP. JORDAN ELECTRIC POWER CORP.	12/06/84 12/17/83 12/13/85 12/13/85 12/13/85
* COUNTRY: NEPAL POKHREL, GANESH SINGH, KULDEEP SARAN NEUPANE, PREM RAJ SINGH, BASHKER M. BAJRACHARYA, RAJ KUMAR	DEPT. OF ELECTRICITY H.M.G.-ELECTRICITY DEPARTMENT NEPAL ELECTRICITY CORP.-KTM NEPAL ELECTRICITY CORP. DEPT. OF ELECTRICITY	12/06/84 12/13/85 12/13/85 12/20/82 06/17/84
* COUNTRY: PAKISTAN CHAUDHRY, WAHEED-UD-DIN SYED-ZAIDI, HASSAN JAFAR	WAPDA/PLANNING AND POWER DIV. WAPDA	12/12/86 12/12/86
* COUNTRY: PHILIPPINES VERZOSA, JR., QUINTIN FREZ, JULITO B.	NAT. POWER CORP. (SYS. OPERA. DEPT.) NATIONAL POWER CORP.	12/14/84 12/13/85
* COUNTRY: SUDAN MOHMED, HASHIM UGALI, MARIO PETER AHMED, AHMED KHALIL	NAT. ELEC. CORP. NAT. ELEC. CORP.	09/14/84 03/30/84 03/30/84
* COUNTRY: TANZANIA MWINGIZI, AIDANO MINJA, ISAAC	TANZANIA ELEC. SUPPLY CO. TANZANIA ELEC. SUPPLY CO.	12/17/83 12/17/83
* COUNTRY: THAILAND ANGSUSINGH, SARANIT BOONWITTAYA, NIWATE NUCHNARTMOND, PRAIBOON CHIDSIN, PICHYUN	METROPOLITAN ELECTRICITY AUTHORITY PROVINCIAL ELEC. AUTH. METROPOLITAN ELECTRICITY AUTHORITY METROPOLITAN ELECTRICITY AUTHORITY	12/14/84 12/17/83 12/17/83 12/13/85
* COUNTRY: ECUADOR NINA, GALO OSWALDO	INECEL	05/15/85