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Subject: Report on the Meeting of the Ad Hoc Committee of Central American Energy Program, Panama, November 11-13, 1980

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ABSTRACT:
This paper is a summary report and commentary of the results of a meeting of the ad hoc committee of the UNDP sponsored Central American Energy Program (PEIC) held in Panama on November 11-13, 1980. The commentary focuses on the changing roles of various organizations in energy development programs in Central America and the potential impact for AID.

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INTRODUCTION

This paper is a summary report and commentary of the results of a meeting of the ad hoc committee of the UNDP* sponsored Central American Energy Program (PEIC) held in Panama on November 11-13, 1980. This commentary focuses on the changing roles of various organizations in energy development programs in Central America and the potential impact for AID.

BACKGROUND

Over the past four years the UNDP has provided substantial assistance to energy development programs in Central America. The PEIC organization, developed under UNDP sponsorship, consists of a regional directorate office and staff in Guatemala, UNDP staff and counterparts in each of the six countries, and funding of energy projects in a wide spectrum of energy development needs. Funding for PEIC, supported almost entirely by OPEC monies directed through UNDP, was radically curtailed with the OPEC withdrawal of financial support.

Current PEIC funding runs out at the end of March in 1981. The UNDP and PEIC are concerned about the potential loss of the regional infrastructure and a large portion of program gains over the last four years. As a result, the UNDP convened the Panama meeting of the ad hoc committee of PEIC along with representatives from the major international and regional development agencies to determine alternate paths for PEIC's future.

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*United Nations Development Program

In attendance were delegations from each of the six countries*, the Interamerican Development Bank (IDB), the Central American Bank for Economic Integration (BCIE), AID (both the Latin America and Caribbean Development Resources Office (LAC/DR) and the Regional Office of Central American Programs (ROCAP)), UNDP, OLADE, The Economic Commission for Latin America (CEPAL), the Secretariat for Economic Integration in Central America (SIECA), and the Central American Research Institute for Industry (ICAITI)**. The World Bank, although an invited participant, was not represented.

The discussion piece for the conference was a 400+ page draft proposal for a 1981-1983 program for PEIC complete with detailed project descriptions, proposed staffing, schedules, and costs. Consistent with PEIC work to date, the proposal stressed the regional intent of the program, projects being subdivided according to subprogram (energy areas) and then by country. In total, the program included 70 projects grouped into 7 subprograms. The cost of the proposed program totalled $28 million subdivided approximately into $11 million contribution from Central American governments and $17 million from international development agencies.

THE MEETING

Institutional Positions on the PEIC Proposal

The significant events of the first day were statements from the international and regional agencies concerning their institutional interest

*Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica, Panama.
** See Attachment A for the list of attendees.

and criteria in supporting the proposed program.

Latin American Energy Development Organization - OLADE The representative from OLADE related OLADE's interest in resolving the energy problems of Central America. He noted that most of the 70 projects "fell into" the OLADE program areas and if the countries wished to fit their programs into the OLADE structure, it would be relatively easy to do so. He suggested that concrete country proposals be developed and presented by country ministers at the Eleventh OLADE Meeting of Ministers in Bogota at the end of November, 1980. He listed four priorities for energy development as stipulated by OLADE to assist in the proposal preparation:

1) National Energy Plans

2) Development of Non-Conventional Energy Resources

3) Technology and Information Transfer and Development of Human Resources

4) Development of Energy Capital Equipment.

When pressed for information on OLADE's financial resources, the OLADE representative stated that money was not a problem and that OLADE had access to whatever funds were necessary. He did not present any figures, however.

Interamerican Development Bank - IDB The IDB representative related the bank's continuing interest in supporting energy development in Central America. He expressed his satisfaction with the country and regional achievements in forming institutions for coordination of energy activities. IDB stressed that the bank's role was to support the development priorities of the

countries of Central America. In this he emphasized the importance of the completion of the energy balance work and the national energy plans the energy balances will support. The bank also sees a need for the support of technical staff development so that energy plans may be brought to fruition.

On specific energy areas, IDB singled out mini-central hydro as a target for planning and development support. For non-conventional areas, such as biogas, solar, and wind energy, IDB recommended funding of technical institutions in the region so that there would be maximum use of existing knowledge and experience. IDB stressed the need for identifying and pursuing non-conventional energy systems that will achieve practical results.

Central American Bank for Economic Integration - BCIE The representative from BCIE in Tegucigalpa opened his remarks stating that BCIE support is restricted to investment opportunities. This proviso, however, does include the funding of feasibility studies that are directed to the justification of investment.

On specific areas, BCIE has a continuing interest in providing investment for electrical interconnection in Central America. As with IDB, BCIE showed interest in mini-hydro investment opportunities, and welcomed feasibility studies in renewable options such as biomass and biogas.

Economic Commission for Latin America - CEPAL CEPAL presented a review of the PEIC proposal stressing the need for definition of priorities and regional collaboration on

renewable energy studies to conserve limited development resources. CEPAL in the past has been heavily involved in regional electrical interconnection studies and recommended support of the plans of the Central American Electrification Council (CEAC) for electrical integration of the six countries.

CEPAL emphasized the need for continuing support of regional energy institutions, in particular, the Central American Energy Commission (COMENER) in addition to CEAC.

To implement these ideas, CEPAL suggested a list of additional projects for inclusion in the PEIC proposal.*

CEPAL stated that their organization had particular interest in three of the subprograms of the PEIC proposal: energy planning, energy transfers, and energy conservation and storage. CEPAL announced they would be able to assign 60 man months of their technical personnel time over 1981-1982 for support in studying in part, the impact of increased energy prices on the Central American economy.

United States Agency for International Development - AID

AID described the structure of its energy support activities in Central America through the individual missions in each country and through ROCAP in support of regional activities. The representative described AID's overall support philosophy; first, in the funding of energy projects not normally funded by the major development banks, which, if successful, would likely be followed by more significant development support; second, in the areas of human resource and

*There are excellent ideas in CEPAL's suggestions. AID/ROCAP should watch the development of these ideas and involve AID in cooperation and funding if necessary. (See Attachment B)

institutional development. AID also described its plans that are now developing for aid in the geothermal area.

ROCAP presented its current work in the Central American fuel wood project and in the plans for an AID-sponsored Central American energy conference in the spring.

Secretariat for Economic Integration in Central America - SIECA

SIECA provided an additional critique of the PEIC proposal. SIECA stressed the need for the completion of common energy balances for the countries of the region and the development of human resources within the region and each country. Of particular importance to SIECA is the continuing support of COMENER which represents a focal point for regional coordination of energy policy and energy development projects. SIECA also recommended the avoidance of duplication of efforts on non-conventional energy projects throughout the region.

United Nations Development Program - UNDP The UNDP announced that it could only provide $300,000 to the support of a skeleton directorate office and country offices and counterparts with the funds it now has. It was seeking an additional $300,000 for this infrastructure support from the Central American countries for 1981-1982. UNDP stressed the need and its emphasis on the completion of the energy balance forecast work by the end of March.

Meeting Summary

The second and third days of the UNDP meeting in Panama were dedicated to a mixture of working and plenary sessions with the goal of outlining alternative funding sources and recommendations for the PEIC program.

Table I provides a summary of the potential international and regional development agency support for the seven subprograms of the PEIC proposal as agreed upon in their working session. It should be stressed that potential support from the World Bank, Mexico and Venezuela*, the European Economic Community, and possibly the Organization of American States is not included.

The delegations from each of the countries represented were not able to commit any country funding resources to the PEIC program. The UNDP announced the formation of a mission to visit each country to seek PEIC funding support from each government. Each delegation agreed to put forward its best efforts in their countries in soliciting these funds prior to the mission visit.

The countries agreed that PEIC should be continued with maintenance of its regional character.

CONCLUSIONS

The discussions (but not so much the conclusions) at the Panama meeting suggest there may be some restructuring in form and possibly title of energy development programs in Central America. OLADE, although cooperative in form, made it clear that it wants to proceed under its own organizational terms for energy development programs. OLADE welcomed the submission of "subregional" programs, yet did not suggest any mechanism to provide them with such a program. It seems evident that UNDP will be providing the subregional mechanism initially along with support from CEPAL and SIECA. The obvious question now is how badly the Central American countries want the regional

*Potential support from Mexico and Venezuela for the Fossil Fuel Subprogram was identified by Costa Rica as a result of oil export agreements from those countries.

TABLE I

SUMMARY OF DEVELOPMENT AGENCY
POTENTIAL SUPPORT FOR PEIC PROPOSAL

DEVELOPMENT AGENCY	PEIC PROPOSAL SUBPROGRAMS						
	I Energy Planning	II Fossil Fuels	III Geothermal	IV Regional Energy Transfers	V Renewable Energy	VI Conservation and Storage	VII PEIC Organizational Support
AID	staff development-consultants	possible staff development	possible staff development		overall support interest-USAID sponsored Central American Energy Conference	all parties recommended this subprogram be included in subprogram I (Energy Planning)	
IDB	national energy plan projects	some activities now pending	some activities now pending		basic research-demonstration		
OLADE	no subprogram response - requested total proposal package for OLADE consideration						
BCIE				electrical interconnection studies	assist countries in loan negotiations		
CEPAL	CEPAL staff support on regional energy plans			CEPAL staff support			
UNDP	see VII						program directors-regional directors-country counterparts-support staff

structure. Is the regional interest limited to its role as a pathway to project funds or is there really an interest in regionalism as an essential part of the program? This author's feeling rests in the former and that either OLADE will need to be involved directly in the infrastructure support to PEIC, or that the organization will eventually fade.

At risk with this turn of events is the influence that SIECA has in regional energy development in Central America. COMENER, the ministerial level regional energy organization founded by efforts of SIECA and funding from UNDP, appears to have less raison d'etre. Maintaining the efficacy of this potentially useful organization may require a more intense focus of AID resources.

Other than the UNDP, AID is the only development agency with a complete infrastructure in place both regionally and in each country in Central America. If the UNDP structure loses its effectiveness in regional energy programs as may be the case, AID should be ready to offer coordination support through its organization. There is need to define lead and cooperation roles within the AID organization to make this support effective.

OLADE expressed high confidence in its ability to secure funds for Central American energy development programs. By its reluctance to divulge any measure of funding levels*, we could surmize that OLADE is still and/or will be in negotiations with OPEC and elsewhere for funds. It is not evident that the sucess of this negotiation is guaranteed. This development bears close watching.

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* OAS announced earlier this year that OPEC had granted OLADE 5 million for energy programs.

The UNDP Panama meeting identified an important need and also an open willingness for the international development community to cooperate on energy development programs in Central America. Country delegations made pointed requests to the development community to define funding priorities so that effective energy programs could be directed efficiently to appropriate agencies. There was widespread support in AID's statement that a forum for communication among the development agencies on Central American energy programs was being planned in preparation for the AID-sponsored Central American energy conference. This should be pursued by AID. The focus of this meeting should be on the expansion of what has been presented in Table I of this paper with the inclusion of all development agencies. There is a critical need to focus on shared responsibilitiy of the renewable energy area (subprogram V). The potential overlaps, redundancy, and omission in this funding area are very large.

Relative to AID's potential role in encouraging cooperation among the development community, AID should look into sponsorship of a Central American energy coordinating group as recently established by IDB for the Caribbean. If the development agency coordination meeting now planned is as fruitful as expected, a continuing structure for this contact would be useful.

ATTACHMENT A

REPUBLICA DE PANAMA

INSTITUTO DE RECURSOS HIDRAULICOS Y ELECTRIFICACION

"ASISTENTES"

PROGRAMA ENERGETICO DEL ISTMO CENTROAMERICANO

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LISTADO PRELIMINAR DE ESTUDIOS E IDEAS DE PROYECTOS ADICIONALES EN EL SECTOR ENERGETICO DEL ISTMO CENTROAMERICANO 1/

Descripción	Justificación
Subprograma I - Planificación energética	
1. Balances regionales físicos y económicos del sector energía, históricos y proyectados Olade tiene metodologia y va a realizar Seminarios	El análisis de conjunto permite visualizar soluciones alternativas regionales y subregionales posibles por mayores magnitudes con las consiguientes economías de escala
2. Evaluación global de las múltiples alternativas para el desarrollo óptimo del sector con miras a definir criterios de regionalización y priorización	En vista de que las necesidades de estudios rebasan los fondos disponibles para su realización, se requiere adoptar medidas para el uso óptimo de éstos últimos
3. Apoyo técnico-financiero a la Comisión Centroamericana de Energía (CCMMER)	Facilitaría el desarrollo más eficiente del organismo regional establecido para la planificación del sector
Subprograma II - Hidrocarburos y otras fuentes no renovables de energía	
1. Análisis de la situación regional en materia de aprovechamiento de los hidrocarburos y otras fuentes no renovables de energía	Información útil para la planificación general y la proyección a largo plazo de los balances energéticos y la planificación
Subprograma III - Desarrollo geotérmico	
1. Evaluación regional de las posibilidades de contar con una estimación confiable del potencial geotermoeléctrico	Información útil para proyección de balances energéticos y actualización de estudios regionales y subregionales de interconexión eléctrica
2. Evaluación regional de los usos alternos (agrícola-industrial) de energía geotérmica de menor contenido calórico (baja entalpia)	El potencial de uso de esta fuente se tiene entendido que es de gran magnitud, y que tendría aplicaciones prácticas en la región

1/ Referencia, documento preliminar sobre la Fase de consolidación del Programa Energético del Istmo Centroamericano (PEIC).

Descripción	Justificación
Subprograma IV - Intercambios de energía	
1. Transferencia de la metodología utilizada en el Estudio Regional de Interconexión Eléctrica del Istmo Centroamericano 2/	Base para la adopción de una metodología uniforme de planificación eléctrica
2. Apoyo técnico-financiero al Consejo Eléctrico de América Central (CEA) y a las gestiones para concretar la interconexión regional y subregional en su caso a la brevedad posible 2/	Facilitaría la operación del organismo idóneo para impulsar la integración del sector eléctrico a nivel regional y subregional. Aseguraría los beneficios de la integración regional del sector eléctrico
3. Estudio de factibilidad de la interconexión eléctrica entre Honduras y El Salvador, incluyendo el desarrollo del proyecto hidroeléctrico El Tigre	Eslabón básico para la interconexión regional. Posibilidad ahora viable con la firma del Tratado de Paz entre Honduras y El Salvador
4. Estudio de interconexión eléctrica entre Panamá y Costa Rica	Eslabón básico en la interconexión regional, dada la magnitud considerable del mercado panameño
5. Evaluación preliminar de las posibilidades regionales de mejorar el suministro de hidrocarburos, incluye alternativas de refinación y transporte de hidrocarburos a nivel regional y subregional	El manejo conjunto de las demandas de la región permitiría obtener considerables beneficios, incluyendo los de la economía de escala
6. Actualización del Estudio Regional de Interconexión Eléctrica del Istmo Centroamericano (ERICA), incluyendo la consideración de escenarios alternos y análisis de sensibilidad	La situación cambiante en materia de demanda y oferta de electricidad requiere una actualización periódica del ERICA como base para que las decisiones sobre integración eléctrica cuenten con información idónea

2/ Actividades de seguimiento del ERICA recomendadas en la Octava Reunión del Grupo Regional de Interconexión Eléctrica (GRIE), celebrada en Managua, Nicaragua del 9 al 11 de julio de 1990.

Descripción	Justificación
Subprograma V - Fuentes renovables de energía convencionales y no convencionales	
1. Evaluación regional de las posibilidades y beneficios probables tangibles de implementar programas regionales, subregionales y nacionales para el usufructo de este tipo de energéticos. Se deberán considerar en su caso los adelantos obtenidos en otras regiones con condiciones similares	La diversidad de fuentes energéticas y la realización de estudios sobre su utilización por varias agencias (OLADE, ROCAP, ICAITI, CATIE) y por países con mayores recursos ameritan una evaluación especial sobre el enfoque más adecuado de este problema
Subprograma VI - Uso racional y almacenamiento de energía	
1. Evaluación regional de las posibilidades y beneficios probables tangibles de implementar programas regionales, subregionales y nacionales en este campo. Se daría énfasis especial a los temas de:	La alta prioridad de este tema requiere contar con suficientes elementos de juicio para asegurar resultados óptimos. De acuerdo con la información disponible la situación energética del Istmo se mejorará en la medida en que se puedan:
a) Desplazamiento de los hidrocarburos en los sectores de transporte (alcohol y electrificación) e industrial y agrícola	a) Desplazar los hidrocarburos en los sectores de transporte e industrial
b) Uso intensivo de energía eléctrica generada con recursos nacionales en los sectores de transporte, industrial y doméstico	b) Optimizar el uso de electricidad generada con recursos propios en los transportes, industrias y sector doméstico
c) Uso más eficiente (cantidad y costos) de energéticos disponibles	c) Adoptar medidas efectivas de conservación de energéticos

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