

PD-AAU-003

46414

ENERCON TECHNICAL ASSISTANCE PROJECT

FIRST QUARTERLY REPORT -- 1986  
(01/05/86 - 03-31/86)

Contract No. 391-0478-C-00-5065-00

Prepared for:  
U.S. Agency for International Development  
Mission to Pakistan  
Islamabad, Pakistan

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## SUMMARY

The ENERCON Technical Assistance Project began in January 1986. The objective of the project is to assist the Government of Pakistan to develop and effectively implement a national energy conservation program that will reduce waste and improve the efficiency of energy use. Assistance will be provided through the GOP's newly-formed Energy Conservation Center (ENERCON)

This 4 1/2-year technical assistance contract was awarded to Hagler, Bailly & Company with an effective start date of January 8, 1986.

### Activities

Management and planning, along with preparations for the first energy audit training course, were the primary areas of project activity in the January - March 1986 period. Activities in the first two months of the quarter (January-February) were heavily concentrated on final contract negotiations and start-up planning and management activities in the U.S. and Pakistan. A major Field Office startup activity was the preparation of four position descriptions for local support staff and the hiring of three Pakistani support staff.

While startup activities continued in March, the main emphasis of the Field Office staff shifted to preparations for the first energy audit training course, which began on March 30 in Karachi, and initial visits to identify industrial plants for future audits and feasibility studies.

Although the official beginning date of the contract was January 8, 1986, final contract execution was delayed until February 5. Consequently the level of January activities was relatively low owing to the additional contract negotiations and delays in final contract approval.

Project startup activities included a variety of logistical, planning, and organizational tasks in both the Field and Home Offices. Logistical tasks included arranging travel and making housing arrangements for long-term staff, recruiting and hiring Pakistani support staff, acquiring office space and office equipment, procuring energy audit instruments through the Home Office, and identifying future commodity procurements.

Planning and organizational tasks focused on discussions with subcontractors, the development of draft subcontract documents for the proposed U.S. and Pakistani subcontractors, and creation of internal Hagler, Bailly communications and financial management/reporting systems. At the end of March, John Armstrong returned to the U.S. for two weeks for project review and planning, and to complete the relocation of his family.

In non-management areas, the main effort centered on preparations for the first six-week energy auditing course to be given in Karachi between March 30th and May 9th. Among the preliminary tasks required were securing local sponsors, preparation of course materials, arranging a venue, identifying plants for class on-site audits, course publicity, and inviting and selecting participants. Some activities were also carried out in identifying plants for future audits and feasibility studies and making contacts with private organizations to inform them of the ENERCON project and increase their awareness of the value of energy conservation.

Expenditures

Total first quarter 1986 expenditures were \$147,497 (see Exhibit 1).<sup>1</sup> The largest cost category was labor (including fringe and overhead) with 67.4 percent of total outlays, followed by travel, transportation, and per diem (12.4 percent), commodities (8.3 percent), other direct costs (7.4 percent)<sup>2</sup>, and fees (4.5 percent). Figure A shows the distribution of these cost categories for January/February and March. No subcontractor and consultant costs were incurred in the first quarter.

The first quarter 1986 expenditures represent 1.6 percent of total contract funds and 14.9 percent of currently obligated funds. The relative expenditure shares for each cost category are shown in Exhibit 1 and Figure B for both the total contract budget and the pro rata share of obligated funds.

<sup>1</sup> Due to occasional delays in invoicing, some costs actually incurred in the first quarter will not appear as expenditures until the next quarter. However, all activities that took place in the first quarter are included in this report.

<sup>2</sup> Includes allowances

ENERCON TECHNICAL ASSISTANCE PROJECT: QUARTERLY EXPENDITURES

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First Quarter: January - March 1986

Contract Budget Amount:

Amount Obligated to Date: \$ 992400

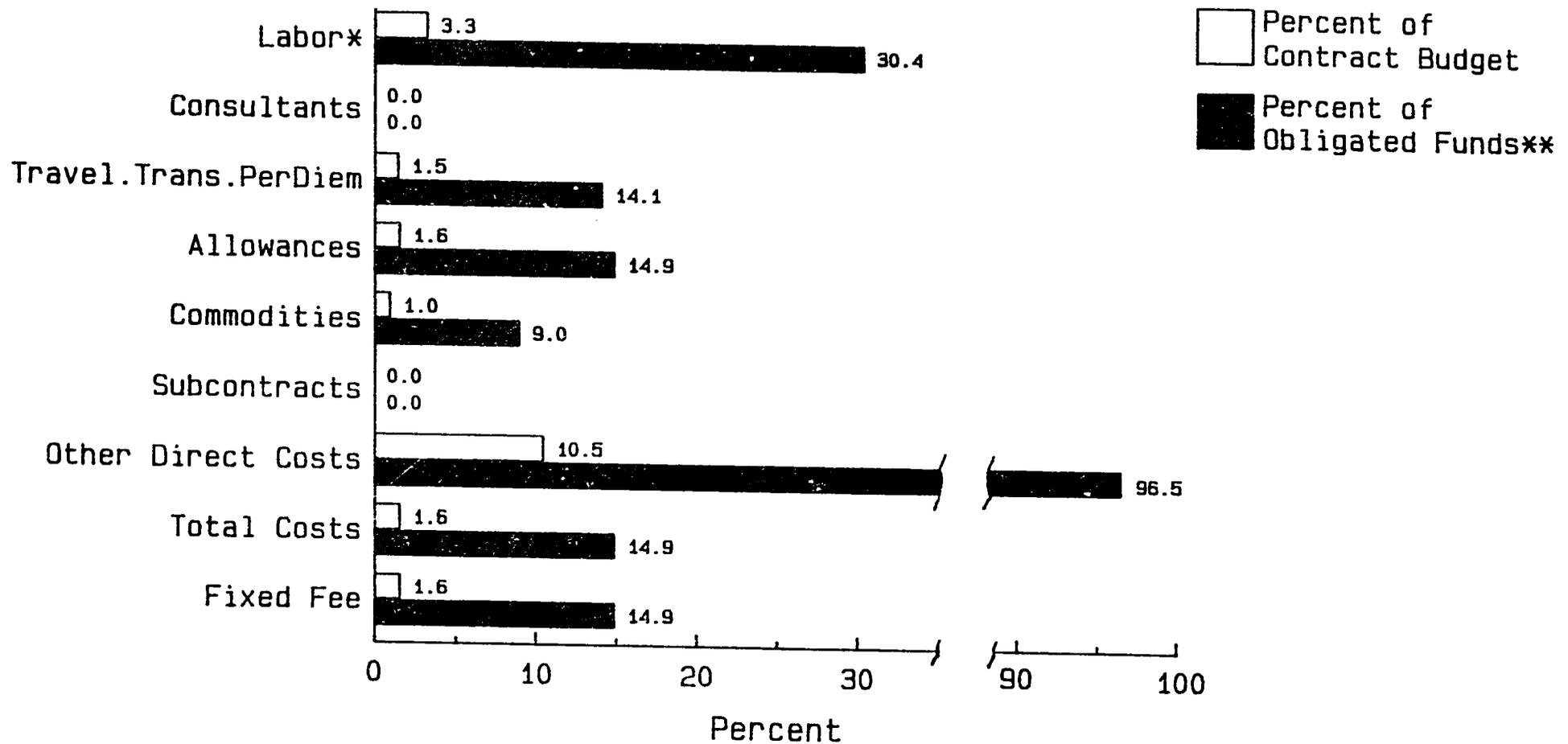
Cost \$ 8702084  
 Fixed Fee \$ 414247  
 Total \$ 9116331

Cost Category	Amount this Period	Cumulative to Date	Budget Amount	First Quarter Expenditures	
				Percent of Contract Budget	Percent of Obligated Funds*
1. SALARIES AND WAGES	42333.79	42333.79	1461468.00	2.90	26.61
U.S./Home Office	24920.23	24920.23			
Field Office	17413.56	17413.56			
2. FRINGE BENEFITS	13588.13	13588.13	422130.00	3.22	29.57
U.S./Home Office	7372.22	7372.22			
Field Office	6215.91	6215.91			
3. OVERHEAD	43535.57	43535.57	1144770.00	3.80	34.93
U.S./Home Office	30348.97	30348.97			
Field Office	13186.60	13186.60			
4. CONSULTANTS	0.00	0.00	27000.00	0.00	0.00
5. TRAVEL, TRANSPORTATION & PER DIEM	18211.72	18211.72	1185287.00	1.54	14.11
6. ALLOWANCES	3234.71	3234.71	198958.00	1.63	14.94
7. COMMODITIES	12166.85	12166.85	1235000.00	0.99	9.05
8. SUBCONTRACT(S)	0.00	0.00	2953940.00	0.00	0.00
9. OTHER DIRECT COSTS	7724.91	7724.91	73531.00	10.51	96.51
TOTAL COSTS	140795.67	140795.67	8702084.00	1.62	14.86
FIXED FEE @ 4.76 %	6701.88	6701.88	414247.00	1.62	14.86
TOTAL COSTS & FIXED FEE	\$ 147497.55	\$ 147497.55	\$ 9116331.00	1.62	14.86

\* Obligated funds (\$992400) distributed by cost category according to contract budget cost distribution

Figure A

# First Quarter 1986: Expenditures vs Budget and Obligated Funds

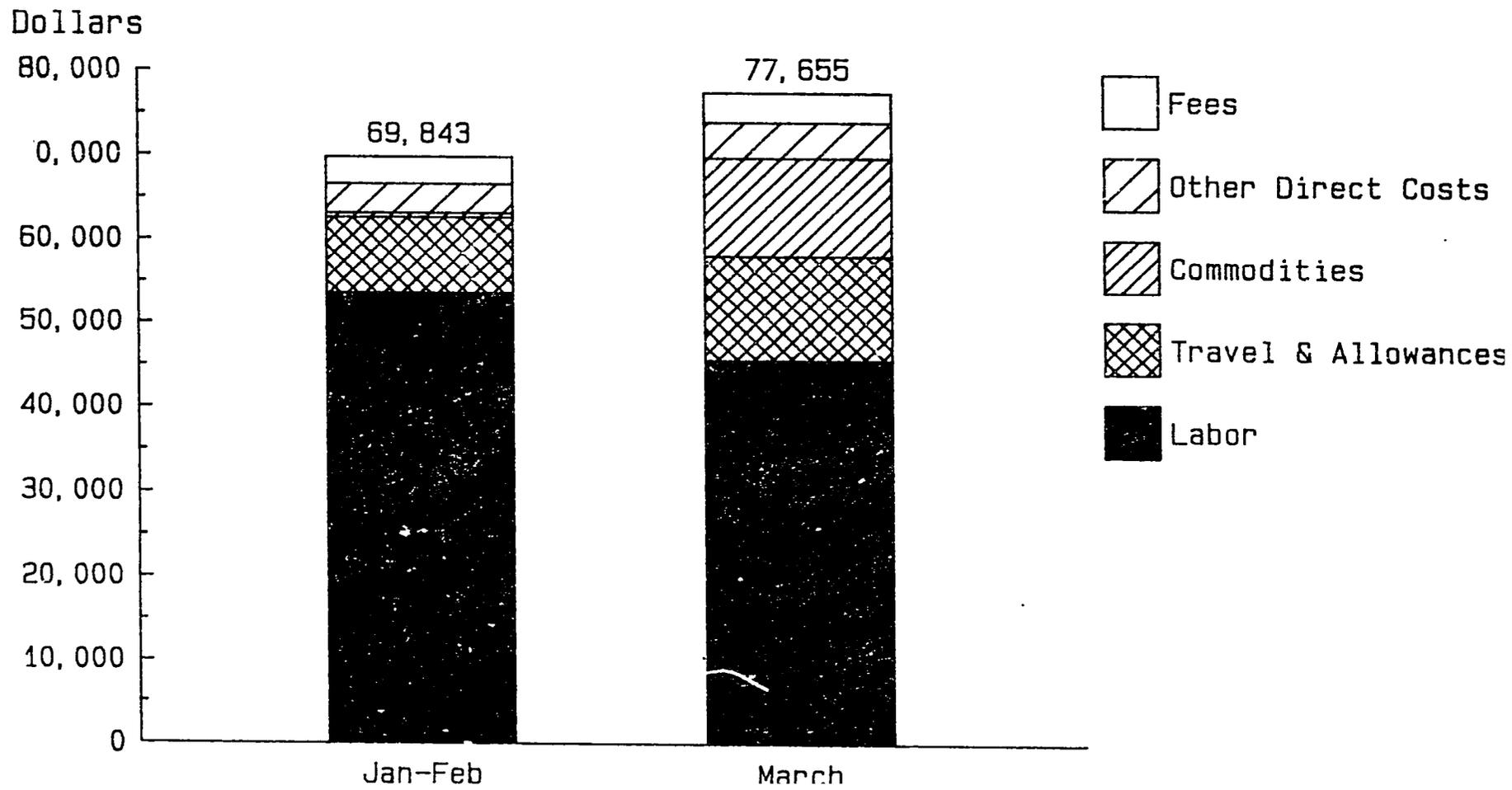


\* Includes salary, fringe, and overhead.  
\*\* Distributed according to contract budget share.

Figure B

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### First Quarter 1986: Monthly\* Expenditures for Major Categories



\* Due to delayed contract signature, expenses for the first two months are combined.

## FUNCTIONAL AREA ACTIVITY REPORTS

First Quarter 1986

### Management

The Field Office and Home Office project team carried out several major management activities in the first quarter.

#### Specific Accomplishments

- o Negotiated final contract during January 1986, with contract signature on February 5, 1986.
- o Prepared draft subcontract for Techno-Consult, EM Consultants, Zelin, INTRAG US, INTRAG Pakistan, Stone & Webster Engineering Corp., E/DI Inc., and deLucia & Associates. Obtained final USAID approval of INTRAG US subcontract.
- o Established three long-term technical advisors in Islamabad, which involved obtaining USAID approval and arranging relocation and establishment in Pakistan. Also established short term advisor Bruce Appelbaum.
- o Developed position descriptions for support staff and began recruitment and interviewing for support staff positions. Hired three support staff: an office administrator, a secretary to the Chief of Party, and a clerk typist.
- o Held extensive discussions in the U.S. and in Pakistan with proposed subcontractors to discuss overall project management, subcontract terms and conditions, scope of work and staffing requirements, and proposed task orders for the first eighteen months of the project.

### Planning

Planning activities in the first quarter were concentrated on revising the Detailed Work Plan and surveying relevant energy conservation legislation in other countries.

#### Specific Accomplishments

- o Participated in extensive discussions of Detailed Work Plan and made appropriate revisions to proposed plan.

Hagler, Bailly met its contractual obligation of submitting a revised Detailed Work Plan within 60 days of the arrival of the Chief of Party.

- o Established functional responsibilities for each subcontractor and proposed sequence of task orders.
- o Conducted survey of relevant energy conservation legislation in other countries in preparation for drafting Pakistan energy conservation law (consultant Stephen Sawyer). Began drafting enabling legislation for ENERCON.

#### Data Base Development

No significant activities in the first quarter.

#### Energy Audit/Technical Support/Applied Research

Only a few tasks were conducted in this area in the first quarter.

##### Specific Accomplishments

- o Began an energy audit of the Aga Khan Hospital in Karachi. The hospital will be part of the demonstration program planned for the buildings sector.
- o Procured two sets of portable energy measurement instruments for use in the training course and for conducting subsequent energy audits. Obtained approval for procurement of an additional ten sets of audit instruments.

#### Training and Curriculum Development

The main activity in this area was preparing for the first energy audit training course that began in Karachi on March 30th.

##### Specific Accomplishments

- o Prepared for the energy audit training course. Three of the long-term technical consultants spent most of their time in March on preparations for the first energy audit training course. Preparatory activities included revising and producing the course training materials, locating plants for conducting training course energy audits, arranging a location in Karachi,

preparing public announcements, contacting potential participants, and arranging for special speakers and events.

### Outreach and Information

In the first quarter, initial contacts were made with several Pakistani private sector organizations to inform them of the creation of ENERCON and the services it would be providing.

#### Specific Accomplishments

- o Met with the Federation of Chambers of Commerce and Industry and the Karachi Chambers of Commerce and Industry regarding general support of the ENERCON Technical Assistance Project and specifically their sponsorship of the first energy audit training course to be held in Karachi.
- o Met with the Lahore Chamber of Commerce and Industry regarding general support to the ENERCON Technical Assistance Project and their possible sponsorship of the second energy audit training course.
- o Made presentation to the Energy Conservation Seminar held by the Institute of Electrical Engineers in Lahore in February.
- o Made an initial selection of necessary technical information materials for the ENERCON Technical Information Center and requested USAID approval to begin procurement of the selected books and materials.

### Investment Promotion

No significant activities in the first quarter.

### Monitoring/Evaluation/Reporting

Several memoranda were prepared for USAID and ENERPLAN reporting on various activities undertaken in the first quarter. One Home Office report for the period January-February was prepared and submitted.

## Problems Encountered and Recommended Solutions

As might be expected, a number of problems were encountered during the first three months of the project. Some of these were physical, such as the lack of office space, telephones and other office support equipment. Others were administrative, such as delays in approving subcontracts. The most salient problems encountered are highlighted below.

1. Lack of physical support - A separate office for ENERCON was not available until March 19. The lack of office support was solved by working out of the ENERPLAN office, as well as the project staff's hotel rooms and houses.
2. Lack of ENERCON counterpart staff - The absence of counterpart staff meant, most importantly, that no training or "institutionalization" was taking place. It also made it necessary for the Hagler, Bailly staff to do many of the interface and logistical work themselves, thus slowing the project. This was solved in part by the GOP assigning two of its ENERPLAN staff to work on ENERCON. It was recommended to USAID and the GOP that counterpart staff be hired as quickly as possible.
3. Delay in approval of subcontracts - Although draft subcontracts were submitted to the Contracts Office on Feb. 10, an official response was not received until April 11. This delay caused a significant delay in approval of the other subcontracts. In order to keep the project on schedule, subcontractors agreed to work without a contract at their own financial risk.
4. Lengthy decision-making - Approvals required for various aspects of the project took longer than might be expected. This occurred for several reasons. Both USAID and the GOP were hiring people new to the project. Each new person hired was brought into the decision loop, making it longer, in addition to being unfamiliar with the project. Second, a clear approval process and chain-of-command was not established within USAID. These problems were discussed with USAID and some improvements were made to expedite decisions.

## Planned Activities: 2nd Quarter 1986

In keeping with the accelerated project activity schedule contained in the final Draft Work Plan, a high level of activities in almost all of the eight functional areas will be carried out in the 2nd quarter (see Exhibit 2). Building on the planning, management, and other project start-up activities emphasized in the first quarter, the second quarter

will focus on identifying and selecting industrial plants for demonstration projects; conducting energy audits and feasibility studies in several facilities; completing proposed energy conservation legislation and the National Energy Conservation Plan; and planning and organizing a number of training activities.

Several important activities and project deliverables will be completed in the 2nd quarter, including the National Energy Conservation Plan, draft energy conservation legislation, a multi-year plan for special studies, a review of conservation data capabilities and requirements, the first energy management training course, procurement of all energy audit equipment, the revised industrial energy audit manual, and a proposed plan of action and draft task orders for the investment promotion area. All subcontracts will also be completed and approved in this quarter, except the subcontract for an advertising firm.

Activities that will begin or continue in the second quarter include liaison with Energy Conservation Cells; identifying sites for industrial demonstration projects and energy audits; starting demonstration feasibility studies; conducting preliminary energy audits; identification of potential cogeneration opportunities; planning for the second energy management training course and hands-on workshops; developing Total Energy Management materials for industry; establishing liaisons with the financial community; and developing a list of expected publications from the project.