PD-AAY-758 59387

FIXED PRICE TECHNICAL SERVICES CONTRACT ORIGINAL

AGENCY FOR INTERNATIONAL DEVELOPMENT — CONTRACT NO. AID/[illegible]

NEGOTIATED PURSUANT TO THE FOREIGN ASSISTANCE ACT OF 1961, AS AMENDED, AND EXECUTIVE ORDER 11223 — FIXED PRICE $25,000

CONTRACT FOR: Project No. [illegible]

Overview of Alternative Energy Sources for LDCs

CONTRACTING OFFICE (Name and Address)	CONTRACTOR (Name and Address)
Central Operations Division Office of Contract Management Agency for International Development Washington, D.C. 20523	Arthur D. Little, Inc. NAME Acorn Park STREET ADDRESS Cambridge, Mass. 02140 CITY, STATE AND ZIP CODE
TECHNICAL OFFICE (TA/OST) Office of Science & Technology	EFFECTIVE DATE: COMPLETION DATE:
MAIL VOUCHERS (Original and 3 copies) TO: Office of Financial Management Agency for International Development Washington, D.C. 20523	ACCOUNTING AND APPROPRIATION DATA Amount Obligated: PIO T NO. 931-17-995-[illegible] APPROPRIATION NO. 72-11-[illegible] ALLOTMENT NO. [illegible]

TYPES OF BUSINESS (CHECK APPROPRIATE BOXES)

	SOLE PROPRIETORSHIP		SMALL BUSINESS
	PARTNERSHIP		LABOR SURPLUS AREA
	JOINT VENTURE		
X	CORPORATION INCORPORATED IN THE STATE OF MASSACHUSETTS		

The United States of America, hereinafter called the Government, represented by the Contracting Officer executing this contract, and the Contractor agree that the Contractor shall perform all the services set forth in the attached Schedule, for the consideration stated therein. The rights and obligations of the parties to this contract shall be subject to and governed by the Schedule and the General Provisions. To the extent of any inconsistency between the Schedule or the General Provisions and any specifications or other provisions which are made a part of this contract, by reference or otherwise, the Schedule and the General Provisions shall control. To the extent of any inconsistency between the Schedule and the General Provisions, the Schedule shall control.

This Contract consists of this Cover Page, the Schedule of ____ Pages, including the Table of Contents and the General Provisions (form AID 1420-42C, dated 11-[illegible]

NAME OF CONTRACTOR	UNITED STATES OF AMERICA AGENCY FOR INTERNATIONAL DEVELOPMENT
Arthur D. Little, Inc.	
BY (Signature of authorized individual)	BY (Signature of Contracting Officer)
TYPED OR PRINTED NAME Todd C. Dollinger	TYPED OR PRINTED NAME V. C. Porelli
TITLE Director, Government Contracting	CONTRACTING OFFICER
DATE APR [illegible] 1974	DATE APR [illegible]

FUNDS CHECKED

Approp. No. [illegible]
Allot. No. 426.31-69-[illegible] 32-41
Obl. No. 3147904 [illegible] 259
Amount $ 30,000.00
Proj. No. 931-17-995-[illegible]

By [illegible] 4/18/74

ORIGINAL

AID 1420-42A (7-72)

Best Available Document

SCHEDULE

FIXED PRICE TECHNICAL SERVICES CONTRACT

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GENERAL PROVISIONS

The General Provisions applicable to this Contract consist of form AID 1420-42C entitled "General Provisions - Fixed Price Technical Services Contract," dated November 1972 which includes provisions 1 through [illegible].

ARTICLE I - STATEMENT OF WORK

A. Objectives - The objective of this contract is to obtain an overview of energy needs and alternative energy sources for LDCs presented in a final report. (LDC - Lesser Developed Countries.)

B. Description - The contractor shall perform a study of energy needs and alternative energy sources for LDCs to improve LDC technological choice in adjusting to higher costs of petroleum products.

The study shall consist of performance of six tasks, which are:

Task 1. Summarize current knowledge of technical performance and cost of alternative energy sources. The contractor shall identify relevant performance and cost data for both conventional and non-conventional energy sources. Non-conventional sources shall include nuclear, solar, wind, tidal, geothermal, coal gasification, methane generation from waste, and methanol formation. Conventional sources shall include pertroleum, natural gas, coal, wood, and hydro-electricity.

Task 2. Estimate technical/economic trends. For each source identified above, the contractor shall describe the technological maturity for its utilization, factors affecting adaptability to various forms of utilization, and relevant technological and cost trends. Emphasis shall be given to mid-range (5-10 years) utilization, with some attention to short and longer range potential.

Task 3. Identify needs and techno-economic alternatives. The contractor shall--to the extent readily available data permit--identify present and projected energy needs of 15 selected LDCs and relate these to technical-

economic alternatives which seem appropriate to meeting them. In establishing these relationships consideration shall be given to petroleum import dependence, local energy needs and potential, insolarity, interchangeability among energy forms, assimilative capacity, and capital generation capabilities.

Task 4. Assess impact of higher energy cost on LDC economic sectors. The contractor shall assess the impact of energy cost among LDCs and economic sectors or sectoral groups in LDCs. The contractor shall also identify the degree of interchangeability among alternative energy sources for particular applications.

Task 5. Identify pilot projects. The contractor shall identify and analyze at least four pilot development assistance projects designed to assist specific countries or regions in selecting appropriate energy technologies and adjusting to higher costs of petroleum products.

Task 6. Identify LDC energy research needs. The contractor shall identify the nature, scope, and relative priority (including potential payoff) of additional research required that would be specific to LDC needs or to the adaptation of U.S. research results in Project Independence to these needs.

ARTICLE II - KEY PERSONNEL

A. The key personnel which the Contractor shall furnish for the performance of this contract are as follows:

Dr. William A. W. Krebs - Project Director
Stanley E. Dale - Engineer
Dr. William Reinfeld - Economist
Dr. Bruce S. Old - Senior Reviewer

B. The personnel specified above are considered to be essential to the work being performed hereunder. Prior to diverting any of the specified individuals to other programs, the Contractor shall notify the Contracting Officer reasonably in advance and shall submit justification (including proposed substitutions) in sufficient detail to permit evaluation of the impact on the program. No diversion shall be made by the Contractor without the written consent of the Contracting Officer; provided, that the Contracting Officer may ratify in writing such diversion and such ratification shall constitute the consent of the Contracting Officer required by this clause. The listing of key personnel may, with the consent of the contracting parties, be amended from time to time during the course of the contract to either add or delete personnel, as appropriate.

ARTICLE III - REPORTS

A. The ADL project manager will communicate by phone at least biweekly with the AID project monitor for the duration of this contract regarding progress of the work undertaken.

B. Draft reports on individual tasks will be submitted to TA/OST for review as they are completed.

C. The contractor shall provide 200 copies, in English, of a final report of this study to TA/OST within 15 weeks of the effective date of this contract. The format for the final report shall conform to COSATI Guidelines to Format Standards for Scientific and Technical Reports Prepared by or for the Federal Government. The guidelines are available from the National Technical Information Service: PB 180 600.

ARTICLE IV - PERIOD OF CONTRACT

The effective date of this contract shall be the date of the Contracting Officer's signature. All work and services required hereunder shall be completed within 15 weeks from the effective date.

ARTICLE V - FIXED PRICE AND METHOD OF PAYMENT

A. Upon the satisfactory completion of all work and services and the Contracting Officer's written acceptance of the item(s) specified to be delivered hereunder, the Contractor shall be paid the fixed price of $25,000.

B. To obtain payment (U.S. dollars only), the Contractor shall submit the documentation required by the clause entitled "Documentation for Payment" of the General Provisions, to the paying office indicated on the Cover Page of this contract.

ARTICLE VI - ALTERATIONS IN CONTRACT

The following alternations have been made in the provisions of this contract:

A. General Provision No. 19 - Utilization of Small Business Concerns (Feb. 1971)

Subparagraph (c) - Delete the reference to "Office of Small Business" wherever it appears and substitute in lieu thereof "Small Business Office".

B. General Provision No. 29 - Utilization of Minority Business Enterprises - Delete in its entirety and in lieu thereof substitute the following:

"29. Utilization of Minority Business Enterprises (Aug. 1971)

(a) It is the policy of the Government that minority business enterprises shall have the maximum practicable opportunity to participate in the performance of Government contracts.

(b) The Contractor agrees to use his best efforts to carry out this policy in the award of his subcontracts to the fullest extent consistent with the efficient performance of this contract. As used in this contract, the term 'minority business enterprise' means a business, at least 50 percent of which is owned by minority group members or, in case of publicly owned buisness, at least 51 percent of the stock of which is owned by minority group members. For the purposes of this definition, minority group members are Negroes, Spanish-speaking American persons, American-Orientals, American-Indians, American-Eskimos, and American-Aleuts. Contractors may rely on written representations by subcontractors regarding their status as minority business enterprises in lieu of an independent investigation."

C. General Provision No. 30 - Listing of Employment Openings (Feb. 72) - Delete in its entirety and substitute in lieu thereof the attached revision entitled "Listing of Employment Openings (April 1973)".

D. General Provision No. 33 - Payment of Interest on Contractor's Claims - Delete in its entirety and substitute in lieu thereof the following:

"33. PAYMENT OF INTEREST ON CONTRACTOR'S CLAIMS

(a) If an appeal is filed by the contractor from a final decision of the Contracting Officer under the Disputes clause of this Contract, denying a claim arising under the contract, simple interest on the amount of the claim finally determined owed by the Government shall be payable to the Contractor. Such interest shall be at the rate determined by the Secretary of the Treasury pursuant to Public Law 92-41, 85 Stat. 97, from the date the Contractor furnishes to the Contracting Officer his written appeal under the Disputes clause of this contract, to the date of (1) a final judgement by a court of competent jurisdiction, or (2) mailing to the Contractor of a supplemental agreement for execution either confirming completed negotiations between the parties or carrying out a dicision of a board of Contract appeals.

(b) Notwithstanding (a) above, (1) interest shall be applied only from the date payment was due, if such date is later than the filing of appeal, and (2) interest shall not be paid for any period of time that the Contracting Officer determines the Contractor has unduly delayed in pursuing his remedies before a board of Contract appeals or a court of competent jurisdiction."

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