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DEPARTMENT OF STATE  
AGENCY FOR INTERNATIONAL DEVELOPMENT  
Washington, D.C. 20523

CAPITAL ASSISTANCE PAPER

Proposal and Recommendations  
For the Review of the  
Development Loan Committee

AFGHANISTAN - Kajakai Hydroelectric Plant  
(Amendment II)

AID-DLC/P-546/6

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April 24, 1974

MEMORANDUM FOR THE DEVELOPMENT LOAN COMMITTEE

SUBJECT: Dollar Development Loan  
Afghanistan - Kajakai Hydroelectric Plant  
- (Amendment II)

Attached for your review are the recommendations for authorization of a second amendment to Loan Number 306-H-013 to the Republic of Afghanistan (previously authorized by the Administrator in the amount of \$12,000,000 and subsequently amended to add \$3,000,000) to add an amount not to exceed \$7,500,000 to assist in financing the foreign exchange cost of goods and services required to construct certain transmission facilities required for the 33 megawatt two-unit hydroelectric generating plant now under construction at Kajakai Dam being financed by the total \$15,000,000 previously authorized.

This loan proposal is scheduled for consideration by the Development Loan Staff Committee on Thursday, May 2, 1974. Also, please note your concurrence or objection is due by close of business May 7, 1974. If you are a voting member a poll sheet has been enclosed for your response.

Development Loan Committee  
Office of Development  
Program Review

Attachments:  
Summary and Recommendations  
Project Analysis  
Annexes A - G

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- G. Statutory Checklist

AFGHANISTAN

KAJAKAI HYDROELECTRIC POWER PLANT

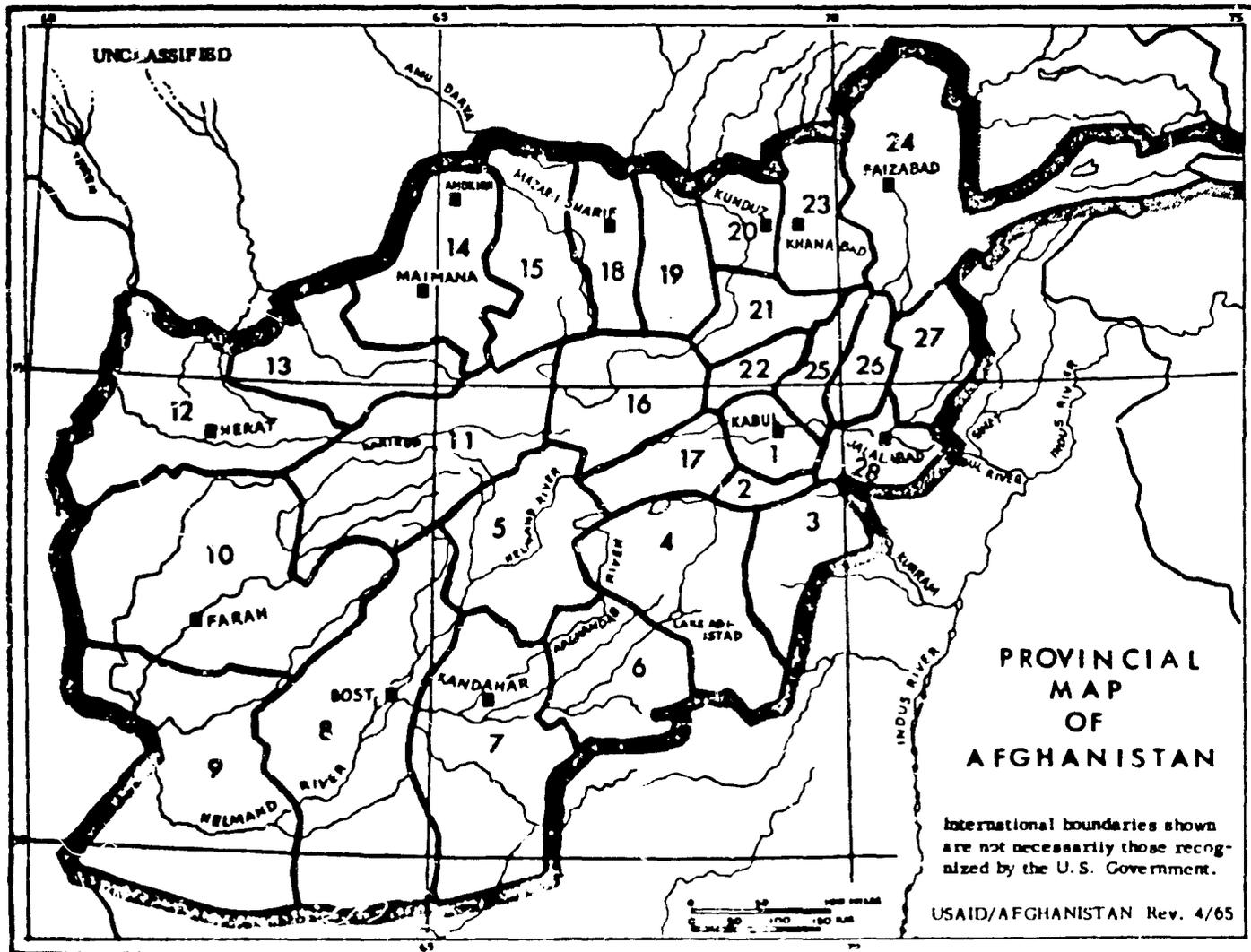
Amendment II  
Summary and Recommendations

1. Borrower: The Government of Afghanistan, with Da Afghanistan Breshna Moassessa (ABM), the Afghanistan Electric Power Authority, as the ultimate recipient.
2. Amount: \$7.5 million, increasing Loan Nos. 306-H-013 and 013A from \$15.0 million to \$22.5 million.
3. Purpose of Amendment: To finance the dollar cost of constructing 123 miles of 110 KV and 16 miles of 44 KV transmission lines, and three substations.
4. Purpose of Project: To finance the foreign exchange costs of increasing and improving electric power supply to the Kandahar - Girishk area in the Helmand-Arghandab Valley, Afghanistan.
5. Project Description: The project consists of (1) generating plant; (2) transmission lines; (3) substations; and (4) a training program. The system, into which the project will be incorporated, now consists of small hydro and diesel generating stations with a total capacity of six megawatts (MW). When the project commences operation, 33 MW of additional power will be available to the system.
6. Background Activity: An A.I.D.-financed survey of the electric power requirements of the Helmand-Arghandab Valley was made by a U.S. engineering firm in 1965 and up-dated in 1967. It is upon the recommendations in that study that the project was undertaken.
7. Export-Import Bank Interest: The Export-Import Bank has indicated that it is not interested in considering the subject project for financing.

8. Mission Views: The Mission endorses the proposed loan.
9. Statutory Criteria: Satisfied. See Annex G.
10. Issues: None.
11. Recommendation: That an amendment to Loan No. 306-H-013 and 013A be authorized to provide an additional \$7.5 million, this additional loan to be subject to the following terms and conditions:
- (a) Forty (40) year maturity, including a ten (10) year grace period on principal repayments.
  - (b) Two percent (2%) per annum interest during the grace period and three percent (3%) per annum interest thereafter. Interest payable, and principal repayable, in U.S. dollars only.
  - (c) Borrower to assure A.I.D. that any other currencies required for the project will be made available.
  - (d) Procurement of construction services to be from the United States (Code 000) only; equipment and materials may be procured from Code 941 countries.
  - (e) Such other terms and conditions as A.I.D. may deem advisable.

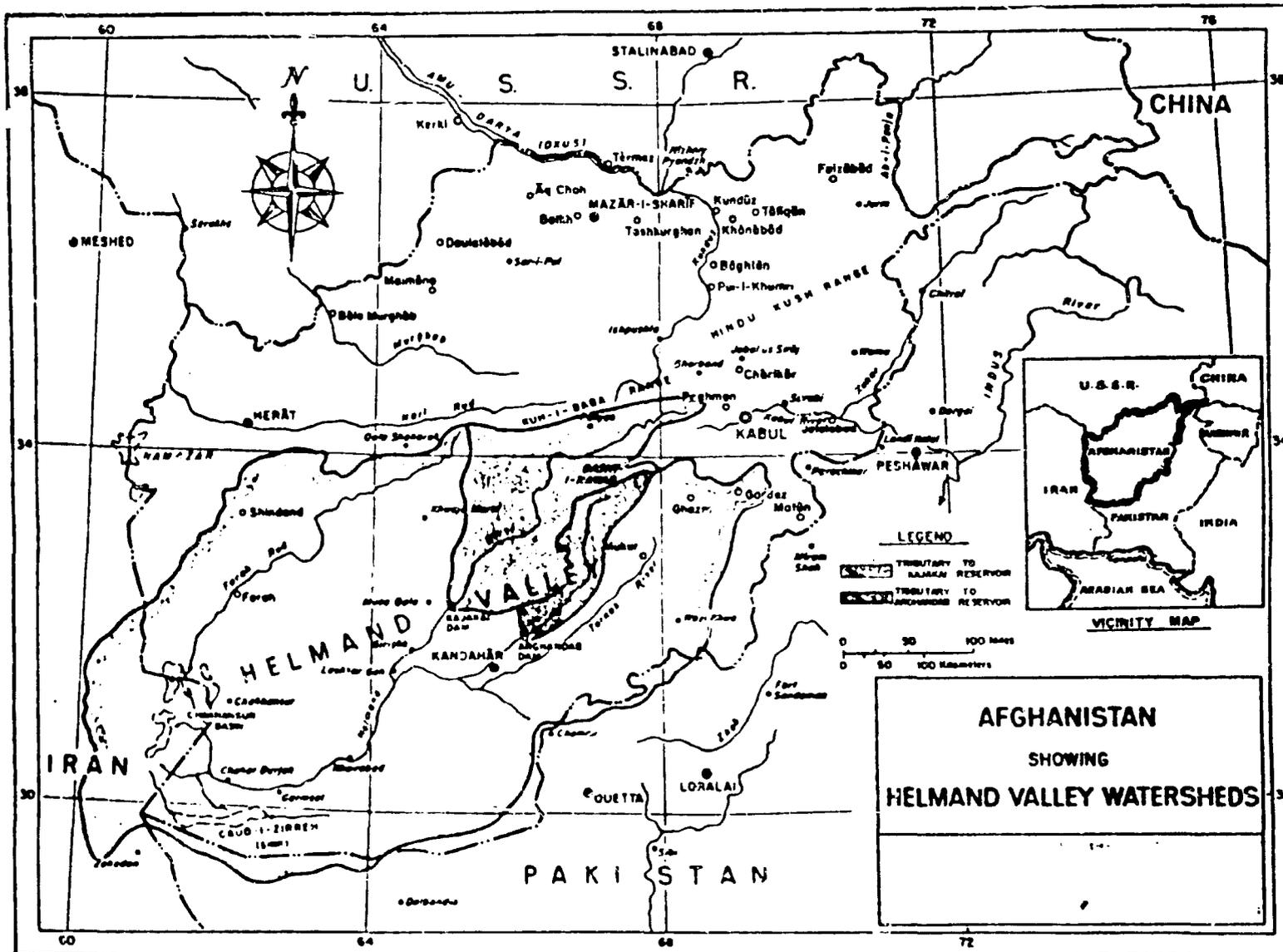
Capital Assistance Committee

Loan Officer: Ted G. Lee (Chairman)  
Engineer: Ray P. Stokely  
Lawyer: Michael G. Kitay/Jay A. Burgess  
Desk: Gladys Frazier/Michael L. Dilegge



### PROVINCES

- 1 KABUL
- 2 LOGAR
- 3 PAKTIA
- 4 GHAZNI
- 5 RUZGAN
- 6 ZABUL
- 7 KANDAHAR
- 8 HELMAND
- 9 CHAKHANSUR
- 10 FARAH
- 11 GHOR
- 12 HERAT
- 13 BADGHIS
- 14 FARYAB
- 15 JOWZJAN
- 16 BAMIAN
- 17 WARDAK
- 18 BALKH
- 19 SAMANGAN
- 20 KUNDUZ
- 21 BAGHLAN
- 22 PARWAN
- 23 TAKHAR
- 24 BADAKHSHAN
- 25 KAPISSA
- 26 LAGHMAN
- 27 KUNAR
- 28 NANGAHAR



## I. Introduction

### A. Project History

Capital Assistance Paper (CAP) No. AID-DLC/P-546, dated April 25, 1967 (the original CAP), and CAP No. AID-DLC/P-546/2, dated June 16, 1972 (CAP Amendment I) describe fully the development of the Kajakai Hydroelectric Project and the elements which comprise it.

The original \$12.0 million loan (No. 306-H-013) was made to finance a 33-megawatt (MW) hydroelectric generating plant with associated transmission facilities to the two principal load centers in the Helmand Valley. The loan was authorized June 21, 1967; the Loan Agreement was signed May 13, 1968; and the conditions precedent to initial disbursement -- the chief condition being the signing of a contract with a consulting engineering firm -- were met September 20, 1969.

Since the Fall of 1969, the consulting engineer, International Engineering Company (IECO) of San Francisco, California, has been engaged in designing the power plant and transmission facilities, in the procurement of equipment and construction services, in providing construction management at the site, and in the development of a training program for Afghan personnel who will operate the completed project. In February 1972, the bids for construction of the power plant were opened and all were found to exceed greatly both IECO's estimate and the funds available under the loan.

It was under these circumstances, set forth in detail in CAP Amendment I, that (a) the loan amount was increased by \$3.0 million (Loan No. 306-H-013A) to a new total of \$15.0 million, and (b) the transmission system was deleted from the A.I.D.-assisted portion of the project--the latter upon Government of Afghanistan (GOA) assurance, in the form of a guarantee from the State Bank of Afghanistan, that it would provide the foreign exchange needed to complete the transmission system.

Loan No. 306-H-013A was authorized June 27, 1972; the Loan Agreement amendment was signed November 11, 1972; and the conditions precedent to disbursement were met October 31, 1973. In June 1972, the GOA entered into a contract with Fishbach-Oman International (FOI), a joint venture, for construction of the power plant. FOI began work immediately and initial contract dollar costs were met from the original loan; when those funds were exhausted in October 1973, disbursements from Loan 306-H-013A began.

There are presently sufficient funds under Loans 306-H-013 and 013A to complete the project as originally designed with the exception of the transmission system, i.e., line conductor, insulators, poles, substations, and related construction services.

## B. Purpose of this CAP Amendment II

During the past 18 months the GOA has experienced difficulty in obtaining non-A.I.D. financing for the transmission system. The Asian Development Bank (ADB) declined involvement in the project, the International Bank for Reconstruction and Development (IBRD) showed no interest, and the Federal Republic of Germany (FRG) declined to expand its electric power financing activities beyond Kabul and North Afghanistan. Reluctant to utilize its limited free foreign exchange, in October 1972 the GOA through the Minister of Planning, made a personal appeal to the A.I.D. Administrator for A.I.D. to again include the transmission system for U.S. financing under the Kajakai Hydroelectric Project.

After careful study of the alternatives, we have concluded that the only practical way to shorten an otherwise extended hiatus between completion of the power plant and the transmission system is to undertake the latter as an A.I.D. project. This second supplement, adding \$7.5 million to the loan, is for the purpose of constructing the transmission system thereby bringing the project into beneficial operation with as little delay as possible.

This decision to finance the transmission system is the result of many months of negotiation with the GOA regarding construction procedures and line structure configuration. Final agreement on major details was reached in Kabul in February 1974.

## C. Cost Information

The original \$12.0 million loan for the Kajakai Hydroelectric Power Plant project was based on a 1967 study prepared by R.W. Beck and Associates. As described in CAP Amendment I, by 1972 cost escalation had greatly outdistanced Beck's earlier estimates; power plant costs alone had risen to \$12.0 million, and engineering and training costs stood at \$3.0 million. Thus the total amount of the loan, as increased by amendment in 1972 to a new total of \$15.0 million, did not include transmission system costs.

The cost of goods and services required to construct the transmission system now is estimated at \$7.5 million; provision of this \$7.5 million will increase the total loan amount to \$22.5 million. This estimate (foreign exchange requirements only) is based on existing conditions and includes actual contract figures for equipment and construction costs associated with the power generating plant.

An element of cost unforeseen by R.W. Beck and Associates but which all bidders for the power plant construction contract factored into their bids (prepared in 1971-72) was high exposure to loss through untoward political events associated with the tensions which had developed in countries contiguous to Afghanistan. There is no doubt that the price for undertaking a major construction project in an isolated and inaccessible area such as central Afghanistan was highly influenced by the disturbances and generally unsettled conditions in South Asia.

The situation in South Asia is now considerably more settled than was the case in 1971-72; however, in July 1973 the Afghan monarchy was overthrown in a coup d'etat, and the Republic of Afghanistan was established. After an initial period of some uncertainty, the new government now appears to have consolidated its position. Nevertheless, projected costs for the transmission system take into account the difficulties of predicting the political situation, in addition to the very high rates of cost escalation for U.S.-manufactured equipment during the past 12 months.

## II. The Project

### A. Project Area

The Helmand-Arghandab Valley with its numerous tributaries, located in the southwestern portion of Afghanistan, is one of the major developing regions of the country and it is in this region that the Kajakai Hydroelectric Project is located. (See map of Afghanistan showing Helmand Valley Watersheds on page iv.)

The Valley is in the temperate zone between latitudes 30 degrees and 34 degrees north. Land elevations vary from about 1,500 feet above sea level in the Seistan Basin to about 3,000 feet at the base of the mountains surrounding the upper part of the Valley. Little vegetation is to be found except in bottom lands along the river where irrigation is practiced or winter flooding occurs. Much of the area is desert, with the scant ground cover fully utilized by grazing livestock.

A detailed description of the geography and historical background of the Helmand Valley is contained in the original Capital Assistance Paper.

### B. Description of the Kajakai Hydroelectric Project

The Kajakai Project comprises the following elements:

- Power Plant consisting of two 16.5 MW hydroelectric generating units and step-up substation installed at the base of the existing Kajakai Dam.
- Transmission Lines consisting of 123 miles of 110 KV line and 16 miles of 44 KV line.
- Substations at Kandahar, Midway and Lashkar Bah to step down the voltage to 13.8 KV, 44 KV, and 3.3 KV respectively.

Costs, including contingencies, are estimated as follows:

	<u>Foreign Exchange</u> £'s	<u>Local Currency</u> \$'s Equiv.
Power Plant	\$12,000,000	\$2,300,000
Transmission System, including substations	7,000,000	2,000,000
Engineering & Training	3,500,000	700,000
Total	<u>\$22,500,000</u>	<u>\$5,000,000</u>
 Grand Total		 <u><u>\$27,500,000</u></u>

Foreign exchange financing required for the Project is as follows:

A.I.D. Loan No. 306-H-013	\$12,000,000
A.I.D. Loan No. 306-H-013A	3,000,000
This supplement	<u>7,500,000</u>
Total	<u>\$22,500,000</u>

All local currency financing is being provided by the Government of Afghanistan.

See Annex A for details of project and cost estimates.

C. Status of the Kajakai Hydroelectric Power Plant

On August 20, 1969, the Afghanistan Electric Power Authority (ABM) entered into a contract for design, construction supervision and training services with the International Engineering Company (IECO) of San Francisco. IECO designed the power plant and then prepared invitations-for-bids (IFB) for major items of equipment and for power plant construction. The status of contracting to date is as follows:

<u>Contractor</u>	<u>Contract for Supply of</u>	<u>Contract Date</u>
Allis-Chalmers	Turbines	9-16-71
Star Iron & Steel Co.	Intake Gates	9-22-71
Westinghouse	Generators	6-13-72
Westinghouse	Transformers	6-20-72
Golden Gate	Switchgear	6-20-72
Fischbach-Oman International	Construction & Balance of Equip.	6-19-72

The above seven contracts cover all the engineering, equipment and construction services required for the power plant at an aggregate price of \$12 million. Procurement of the first five items of equipment enumerated above was initiated prior to award of the construction contract due to the long lead time required for their manufacture and delivery. From the Port of Khorramshahr, Iran, the construction contractor, Fischbach-Oman International (FOI), a joint venture of Fischbach & Moore and Oman Construction Company, has responsibility for inland shipment and installation. FOI has been working at the site since mid-1972 and construction is well advanced. The power plant is scheduled for completion in May 1975; construction progress to date indicates that this schedule will be met.

D. Status of the Kajakai Transmission System

The consulting engineer, IECO, has completed the design of the transmission system, prepared plan and profile sheets, and commenced

staking of transmission line structures. In addition, IECO has prepared technical specifications for major items of equipment and materials, and is now preparing the invitations-for-bids for the equipment and construction services required to construct the entire transmission system.

To insure that the transmission system will be constructed soundly and in the least possible time, bidding on the construction contract will be restricted to U.S. firms only. Equipment and materials imported for this portion of the project may, however, be of Code 941 source and origin.

Concrete poles for the transmission line will be provided by the contractor from a pole plant owned and operated by him. The contractor will import and erect the pole plant at a point of his own choosing; transportation of poles to the transmission line site will be his responsibility. Upon completion of transmission system construction, ownership of the pole plant will be transferred to ABM.

In the event that a pole plant of economical size and with satisfactory delivery is proven to be unavailable from the U.S. or other Code 941 sources, it may be necessary to authorize procurement from Code 899 sources. In that case, the necessary source waiver will be processed.

E. Status of the Training Program

A contract has been entered into between ABM and IECO under which IECO (among its other engineering services) is required to:

1. Prepare a detailed training program,
2. Assist ABM in the selection of candidates for the various positions and phases of training,
3. Supervise the trainees and evaluate their performance,
4. Familiarize ABM's key operating personnel with the basic project designs and specifications in IECO's home office,
5. Arrange with manufacturers of plant equipment for training of selected personnel in their factories during the manufacturing, assembly and shop testing, and
6. Train ABM's selected personnel in field during construction, installation, testing and commissioning and during initial operation of the plant.

IECO has developed a plan and time schedule for training of managerial and operational personnel. The plan and time table are now under review by ABM, and, as a step towards implementation of the program, ABM has assigned a senior administrative engineer with previous experience in the Morrison-Knudsen-Afghanistan organization as Training Coordinator. The plan contemplates 1,256 man-months of training in Afghanistan, Iran and the U.S., in the various aspects of power plant operation and maintenance, and power distribution. Details of the training program are contained in CAP Amendment I, particularly Annex F thereto. A training program status report as of March 18, 1974, prepared by IECO, is included herewith as Annex B.

F. Status of Facilities Ancillary to the Project

1. Distribution System

Distribution systems in the load centers of Kandahar and Lashkar Gah are not a part of the Kajakai Project as defined in this loan paper. However, as an adequate distribution system is essential to the success of the project, it will be addressed here.

The U.S. firm of Harza Engineering Company under contract to A.I.D. was retained to analyze the distribution requirements of the area and to expand and rehabilitate them. This work was completed in 1970. Harza provided a well balanced distribution system, including transformation, primary and secondary rehabilitation and improvement. Transformer capacity was added, amounting to 9,310 KVA. This, with the existing 4,055 KVA provided a total of 13,365 KVA of transformer capacity. Offsetting power factor and losses by load diversity, this would give sufficient transformer capacity for the planned first three years of the operation of the Kajakai Project -- that is, through the end of 1981. Additional distribution improvement and expansion will be needed, starting in 1981. This is not to say that some distribution additions will not be made in the earlier years, as ABM's priorities for new connections may require some such expansion. However, for the first three years of project operation the distribution system will be capable of handling the requirements of the customers in the area which were used as a basis for justifying and designing the Kajakai Project.

2. The following descriptions include only those facilities which can be considered as a source of power supply by the time the Kajakai Project is completed. Omitted are small canal drop hydro plants and old diesel plants which, through inefficiency and age, will serve no useful purpose once Kajakai power is available. The three installations discussed below (a, b, and c) are not now electrically connected.

a. Kajakai Dam on the Helmand River, and site of power plant construction described in paragraphs II.B. and C. above, is a rockfill dam with ungated spillway impounding a reservoir of 1,495,000 acre feet of gross storage. The dam is 270 meters long, 10 meters wide at the top and extends 87 meters above original streambed. The maximum operating head for power generation is 71 meters; the minimum recommended operating head is 49.2 meters. The dam was completed in 1953 by Morrison-Knudsen Afghanistan Inc. at a cost of \$12,545,000 with Export-Import Bank financing. Installing a gated spillway (under investigation by the ADB) would increase the storage to 2,300,000 acre feet and the maximum head to 82.5 meters.

b. Girishk Power System consists of a canal drop hydro-electric plant (2-1500 KW units), 44 KV transmission lines and a 330 volt distribution system. The basic system was completed by Morrison-Knudsen Afghanistan Inc. in 1960 with Export-Import Bank financing. The present value of the system is estimated at \$1,900,000 for generation and \$1,000,000 for transmission and distribution.

c. Kandahar Power System consists of a diesel electric generating plant together with 11,000 and 3,300 volt distribution system. The basic system was completed in 1960 by Morrison-Knudsen Afghanistan Inc. with Export-Import Bank financing. In 1971, two 1500 KW diesels were installed with A.I.D. financing (A.I.D. Loan 306-H-009). Present value of the system is estimated at \$734,000 for generation and \$1,500,000 for distribution.

### III. Economic Aspects

#### A. General

Afghanistan, with a per capita annual income under \$100, a literacy rate not higher than 10% and an average life expectancy of 40 years, is among the least developed countries of the world. Poverty, disease and underemployment are ever present facts of life for the majority of the people. Economic development in recent years has been slow and sporadic.

In July 1973, the monarchy was overthrown and replaced by a Republic. This change in government resulted in some disruption in the economy and in development programs. The economy is now regaining strength in part due to higher world prices for exports of fruit to India and the Persian Gulf States, and karakul and cotton to Europe. The new government has begun to declare its position on major development activities, including the need for widespread participation by the people of Afghanistan in the benefits of development.

Agriculture is the dominant sector of the Afghan economy in terms of employment, production, foreign exchange earnings and sources of raw material for industry. Over 80% of the population derives its income from agriculture. Industry is small and consists primarily of processing agricultural raw materials.

The production and transmission of electric power under this loan will contribute to national development efforts in Afghanistan in general, and to the people in the Helmand-Arghandab Valley in particular. It will provide more reliable and less costly power to the present load-centers at Lashkar Gah and Kandahar. This will result in an improvement in the overall quality of life of the people and promote development of agri-industries in the area.

#### B. Project Analysis

Planning for electrification facilities in the Helmand Valley started seriously in 1956 with a report prepared by the Tudor Engineering Company under an A.I.D. grant. There followed a detailed study prepared by F. W. Beck & Associates in 1965 and again in 1967, also under an A.I.D. grant. The Beck studies formed the basis for A.I.D. Loans 306-H-009 and 306-H-013: the former to finance the installation of two 1500 KW diesels at Kandahar, as an interim solution to that area's power needs, and the latter to finance construction of a 33 MW hydroelectric power plant at Kajakai Dam. The hydroelectric plant will be connected by 110 KV transmission lines to the load centers of Kandahar and Lashkar Gah. These hydro and transmission installations are referred to as the Kajakai Project. Various alternatives for meeting the power demand were investigated, i.e., a hydro plant at Arghandab Dam, central thermal power generation, and

additional diesel generator sets at the above two load-centers. The Arghandab Dam was found to be not feasible as a power source as no firm power would be available during adverse water years. The central thermal power station was the least economic of the technically feasible plans. The final choice was between the Kajakai Hydroelectric Project and a combination of load-center diesel generators and delayed construction of hydro facilities at Kajakai Dam.

As demonstrated in the original loan paper, the Kajakai Project was more economical than both the load-center diesel generator project and the Kajakai Delayed Project (delaying the Kajakai Project for some years while the demand rose, and, in the interim, relying on diesel generators). A comprehensive discussion of the economics of the project is contained in CAP Amendment I.

In considering the economics of this project, due consideration must be given to the extensive investment already in place in the dam and powerhouse in the way of sunk costs. Although internal rate of return calculations develop a relatively low return, with other components already in place the question is focused more on whether or not power will be delivered than on the economic merits of the investment. It is apparent that, in any event, power delivered by this system will have to be government-subsidized for the indefinite future.

The Kajakai Project, scheduled for operation in 1977, together with the existing Girishk Hydro and Kandahar Diesel Power Plants, will serve the electric power needs of the Valley through 1981. A third 16.5 MW hydro unit will be required in 1982 at which time the Kandahar Diesel Generators may be retired. Investment costs for the third unit are estimated at \$4.0 million; in addition, distribution system improvements estimated at \$2.0 million will be needed. The electrical system should then be adequate through 1986. Although the Kajakai reservoir might supply the energy to generate an additional 100 MW of power, plans cannot be laid for such an expansion pending further studies of siltation, reservoir operation for irrigation and flood control, other future energy sources, and the amount and location of demand. No such expansion of the Kajakai Project is considered herein.

#### IV. The Borrower and Implementing Agency

The Borrower will be the Government of Afghanistan (GOA) and the ultimate recipient of the loan funds will be the Da Afghanistan Breshna Moassessa (ABM), Afghanistan Electric Power Authority, an agency reporting to the Ministry of Mines and Industry.

ABM's responsibilities include the operation of existing GOA power facilities and the establishment of new ones. In this capacity, ABM is responsible for the construction and operation of the Kajakai project. Annex C shows the organization chart for operating the Kajakai Power Plant and Annex D shows the organization chart for the Power Distribution Agency. The organization for both the Kajakai Power Plant operation and the Power Distribution Agency (PDA) was developed by IECO in consultation with ABM. Detailed discussions of ABM and PDA are contained in the original CAP and CAP Amendment I.

#### V. Financial Aspects

The electric power sector is highly subsidized by the Government of Afghanistan. The rates charged for electricity are extremely low and have little relation to the cost of providing services. A.I.D. has been urging the GOA to make a beginning toward the establishment of a rational rate structure and service rules.

Early in 1972, as an outgrowth of a covenant in A.I.D. Loan 306-H-013, ABM submitted for A.I.D. review the draft of a proposed rate structure and service rules and regulations. A.I.D. made certain recommendations and the proposal is now in the hands of interested agencies of the GOA. The measures proposed will, if adopted, represent a giant step forward for the GOA. The ultimate objective is, of course, a financially viable utility system which treats all consumers equitably.

Basic data is not available from ABM for preparation of a meaningful profit and loss statement and/or a balance sheet. Alternatively, a revenue-expense analysis has been prepared for a selected year. Application of the rate proposal to the load profile in the Helmand Valley shows that revenue would average 2¢ per KWH when usage reaches the 1987 estimate. The year 1987 is selected for the analysis as it represents the year in which all three Kajakai generating units (the two now being installed plus the one planned for future expansion) are loaded to firm capacity. The analysis shows that using a 12% interest rate, a charge of 6.91¢ per KWH would be required to break even. At 10%, the break-even figure is 5.99¢ per KWH. (Details of these calculations are shown in Annex E.)

## VI. Implementation

### A. Kajakai Hydroelectric Power Plant

As stated in Section II. C., the power plant is under construction. The contractor, Fishbach-Oman International (FOI), is providing general construction services, related materials and equipment, and is installing the major power plant equipment purchased by ABM, as listed in the aforementioned Section.

The consulting engineer, IECO, is responsible for the design of the plant and for inspection and supervision of its construction, together with training of future plant managers and operators.

Completion of the power plant is scheduled in May 1975, a date that appears realistic since the construction work is currently on schedule.

### B. Kajakai Transmission System

As stated in Section II. D., the transmission system will be constructed by a U. S. contractor selected through normal competitive bidding. The contract will be a labor and material contract, with the contractor responsible for purchasing, shipping, and installing all materials. The contractor will use concrete poles manufactured by himself at a pole plant he will purchase and erect at a site of his choosing. The contractor will also be responsible for transport of the poles from the plant to the point of installation in the transmission line. The pole plant will be turned over to ABM upon completion of construction. Bids for construction of the transmission system are expected to be taken in October 1974. Award of the transmission line contract should be made by November 1974. This would permit the contractor to commence construction early in 1975 with completion scheduled for mid-1977.

### C. Training Program

Some training has proceeded during the past 18 months. IECO arranged for four Afghans to be trained in the U. S. by the manufacturers of the major equipment and provided training in its U. S. office for these same four people. The balance of the training program will be carried out as construction proceeds and the need for operators of the power plant and transmission system approaches.

IECO will provide operations assistance for ten months after completion of the project with an option in the contract to provide up to a maximum of two additional years assistance, if required.

D. Rate Reform

Early in 1972, as an outgrowth of a covenant in A.I.D. loan 306-H-013, ABM submitted for A.I.D. review a draft of proposed rates, rate structures, and service rules and regulations. A.I.D. made certain recommendations and the Cabinet considered the proposal but deferred any action. (The proposed rate structure was included as Annex G in CAP Amendment I.) The new government, in power since the coup d'etat of July 1973, has thus far made no move toward revision of the rate structure.

During the course of continuing contacts, we shall urge the GOA to take at least the first step in rate reform by implementing the A.I.D. proposal, or one similar to it. We shall also urge that the GOA give consideration to further rate reforms which will be needed to insure the ultimate financial viability of the electric power systems in the country, particularly in the Helmand-Arghandab Valley, the area of immediate concern to the Kajakai Project.

VII. Impact of Loan on U. S. Economy

All of the equipment, components, spare parts and materials to be financed from the proceeds of the proposed loan will have their source and origin in countries listed in A.I.D. Geographic Code 941; however, only U. S. firms will be eligible to bid on the construction services contract. It is thus anticipated that the effect on the U. S. balance of payments will be favorable during the construction phase. When completed, this infrastructure project will have no adverse effect on the U. S. economy, which will in fact derive some benefit from a continuing, though modest, need for U. S. spare parts.

### VIII. Repayment Prospects

The GOA's foreign debt totalled \$680 million as of March 1973. Total debt servicing, including principal and interest, during 1974 is \$42 million; in 1975, \$47 million its expected peak. The expected debt service ratio in 1974 is a relatively high 23%, but 75% of the debt is owed the USSR which in the past has shown no reluctance to reschedule even with no participation by Western creditors. Also, Afghanistan's export earnings are rising rapidly, at better than a 20% per annum rate.

Foreign exchange reserves are rising and are expected to rise in 1974. Foreign exchange reserves, now about \$68 million and expected to increase \$10-15 million this year, are sufficient to cover 6-1/2 months of projected 1974 commercial imports. The Fourth Five-Year Plan calls for an active export promotion policy in cotton, karakul, and fresh produce, and last year's wheat surpluses might also add to the total exports. The Plan also calls for an active program in import substitutions. This should reduce pressure on the GOA foreign exchange reserves. Moreover, tourism receipts have grown sharply in recent years. This recent trend should continue over the long run.

Afghanistan's debt to the U. S. as of FY 73 is \$70.5 million. Debt service to the U. S. in 1974 is \$5 million and is expected to decline somewhat over the next 10 to 15 years. Principal and interest payments on U. S. development and Export-Import Bank loans have never been in default, and prospects for repayment of the proposed \$7.5 million supplemental loan are considered reasonable.

IX. Environmental Impact

No negative environmental factors are anticipated in construction and operation of the transmission lines. The proposed transmission line passes for the greater portion of its length over government-owned land; only about 35 miles is routed over private property--some intermittently cultivated. For the most part, the line parallels the main national highway, allowing for easy and unhindered access for future maintenance operations with a minimum of disturbance.

Throughout its length, the transmission line will pass through a sparsely populated area. Visually, the line will tend to blend with the background as it will be supported on concrete poles. From a safety standpoint, the energized line will be some 40 feet above ground level, and the smooth concrete poles will be difficult for the adventurous to climb.

Detailed Description of Kajakai Project and Cost Estimates:1. Power Plant

The power plant consists of two 16.5 megawatt (MW) hydro-electric generating units and necessary appurtenances. Maximum unit output during low water years is 11 MW (expected at least once every ten years). Major components are as follows:

a. Two Francis-type hydraulic turbines; 23,000 horsepower at 215 ft. net head (65.5 meters); 300 rpm. Governors, pressure regulators and turbine shutoff valves.

Contractor: Allis Chalmers.

Estimated cost: \$1,867,000 FX.

b. Two generators, salient pole, 20,625 KVA; 0.80 pf at 60°C, 13.8 KV wye, 300 rpm, 50 Hz. Vertical shaft, upper thrust and guide bearing, lower guide bearing, direct connected exciter, 15% overload capability 80°C. Contractor: Westinghouse. Estimated cost: \$1,520,000 FX.

c. One 91-ton capacity hoist, and one fixed wheel gate 4.2 meters wide and 9.5 meters high. Contractor: Star Iron and Steel Co. Estimated cost: \$213,000 FX.

d. Three single-phase step-up power transformers OA/FA convertible to OA/FA/FA or AO/FA/FAO. Initial rating 13.0/17/3 MVA; ultimate rating 13.0/17.3/21.7 MVA. Low voltage 13.8 KV; high voltage 110/63.5 KV; 50 Hz. Contractor: Westinghouse. Estimated cost: \$214,000.

e. One set of switchgear in powerhouse.

Contractor: Golden Gate Switchgear Co. Estimated cost: \$226,000 FX.

f. Construction of power house, in-take structure, penstocks, and step-up substation, including material and equipment not included above. Contractor: Fishbach-Oman International, a joint venture. Estimated cost: \$7,960,000 FX and \$2,300,000 LC equivalent.

g. Total cost estimate based on using a U.S. contractor and U.S. material and equipment is \$12.0 million FX and \$2.3 million LC equivalent.

2. Transmission System:

a. 110 KV single circuit from Kajakai to Midway (towards Lashkar Gah) and thence east to Kandahar, 123 miles. The first 13 miles from Kajakai, two river crossings, and certain short sections where right-of-way is a problem will be steel towers; the balance, prestressed steel reinforced concrete poles. Conductor will be Aluminum 397.5/MCM for the

concrete pole section and 397.5, ACSR for the steel tower section.

b. 44 KV single circuit from Midway to Lashkar Gah 16 miles. Prestressed-steel reinforced concrete poles. Conductor will be 266.8 MCM Aluminum.

c. Carrier communication equipment.

d. Substations (Steel structures, 50 Hz.) as follows:

KANDAHAR - 3 single-phase, 9/12 MVA, OA/FA, 110/20-13.2 KV Transformers  
 -1-110 KV oil circuit breaker, 5000 MVA, 1200 Amp.  
 -1-13.8 KV oil circuit breaker, 250 MVA, 600 Amp.  
 -2-20 KV oil circuit breakers, 250 MVA, 600 Amp.  
 1 three-phase, 2500 KVA, 13.8 24/2.4 KV Transformer.

MIDWAY - 3 single-phase, 3.3/4.2 MVA, OA/FA, 110/44 KV transformers,  
 -1-110 KV oil circuit breaker, 5000 MVA, 1200 Amp.  
 -1-44 KV oil circuit breaker, 1500 MVA, 1200 Amp.  
 -1-44 KV 500 KVA grounding transformer, 250 Amp.

LASHKAR GAH - 1-three-phase, 5000 KVA, 44/3.3 KV  
 -1-44-KV oil circuit breaker, 1500 MVA, 1200 Amp.

e. Total cost estimate based on using a U.S. contractor and U.S. material and equipment is \$7.0 million FX and \$2.0 million LC equivalent.

3. Engineering and Training

These items are included in the International Engineering Company (IECO) contract and include services for the powerhouse, transmission, and substation components. Estimated costs are \$3.5 million FX and \$700,000 LC.

4. Total Kajakai Project Cost Estimates:

	<u>Foreign Exchange</u>	<u>Local Currency</u>
Power House	\$12,000,000	\$2,300,000
Transmission System	7,000,000	2,000,000
Engineering and Training	<u>3,500,000</u>	<u>700,000</u>
Total	<u>\$22,500,000</u>	<u>\$5,000,000</u> equiv.

**KAJAKAI TRAINING PROGRAM  
STATUS - MARCH 18, 1974**

The training program has been proceeding in accordance with Amendment #1 dated May 18, 1971 of the Kajakai Agreement between IECO and ABM. The future program will be greatly affected by the delay in construction of the transmission line. The effect on training should be beneficial if advantage is taken of the training opportunity presented by the idle Kajakai plant.

In accordance with the Agreement, the Training Coordinator made a trip to Afghanistan and Iran during the period July to October, 1971. He made arrangements for training facilities in both countries, interviewed prospective trainees, gave ABM a report recommending implementing action with selection of trainees, arrangements for U.S., Afghan, and Iranian training.

ABM has selected men for the following five positions:

- Pos. 1. Plant Manager, Engr. Faqiri, A. Baqi
- Pos. 2. Chief Maintenance Engr., Engr. Abdul Mohammed Faqiri
- Pos. 4. Electrical Maintenance Engineer, Engr. Mohammed Gul Mohabbat
- Pos. 5. Mechanical Maintenance Engineer, Engr. Mohammed Aslam Yaqubi
- Pos. 7. Transmission Maintenance Engineer, Engr. Mohammed Ali Saadat

Mr. Baqi has received previous U.S. training and has not received any additional U.S. training on this program. The other four came to the U.S. on this program and received a total of 32 man-months training during period November 1972 to November 1973. This training included visits and work at a number of facilities. These included factories manufacturing components for the Kajakai plant, various utilities and hydroplants. Familiarization with equipment and operation and maintenance methods were the principal goals of this training. These five men are presently at the Kajakai site handling liaison between ABM and other parties and assisting in construction inspection.

ABM recently received 15 graduates of the Afghan Institute of Technology for assignment to Kajakai. Training in conversational English is now beginning under Peace Corps instruction. These trainees will be moved to Kajakai and the English training will be extended to include technical jargon.

IECO's Training Coordinator will leave for Afghanistan on March 21, 1974 to plan out the remaining program with ABM.

The delay in construction of the transmission line will leave the Kajakai hydroplant idle for about 21 months. If the previously planned routine in training were followed, there would be delays and long periods of idleness for the trainees. The result would be harmful to the ultimate project operation.

A new hopeful program can be followed by utilizing the Kajakai plant for training. Acceptance tests of the Kajakai generators require loading with a water rheostat. This rheostat could be used as a simulated load for operating the plant for training in operation and maintenance. The plant would be operated as though it were feeding normally into a load, but it would be available for simulation of various operating problems and for thorough study of all component equipment. The continuous development of an operating team is a big advantage in this approach.

The Agreement calls for initial operation for 10 months with 3 U.S. operators. The period of simulated load operation may be about 21 months. This operation can be handled by one U. S. operator operating one shift but utilizing the full crew.

The Agreement calls for the Advisor on Operation and Maintenance to arrive at the end of initial operation and remain for a total of 24 months. With the revised operation, it would be desirable to have the Advisor arrive just before the transmission line and substations are commissioned. A transmission line operator would be available during the first four months of transmission line operation, also, the plant operator would leave after one to two months of full operation.

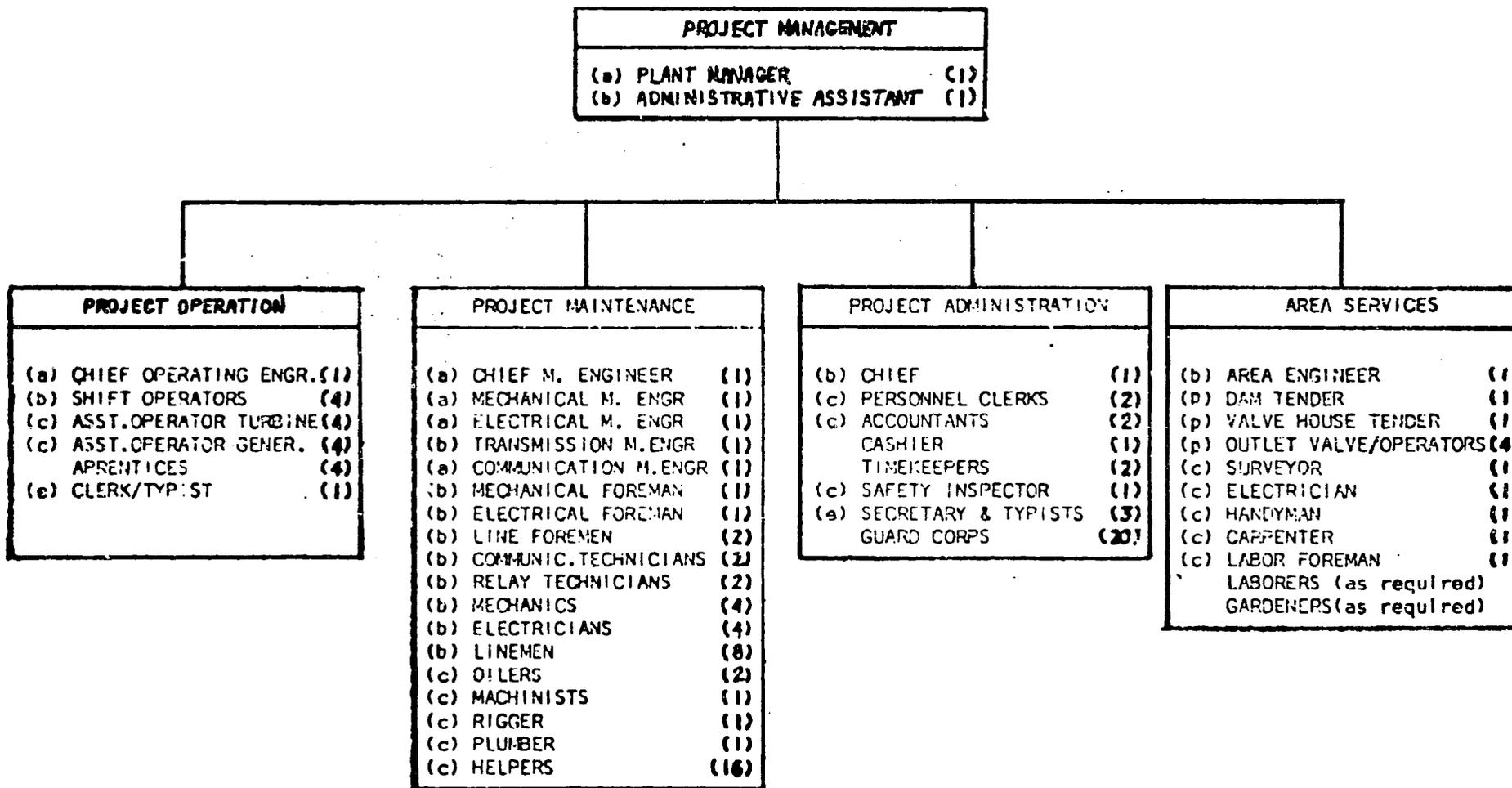
The trainee man-months on the original contract included the ten-month initial operation period. With the new plan the man-months are almost the same up to the time of transmission line operation. The ten-month initial operation period would be eliminated as the simulated operation will create a better trained operating team than the total original plan.

Some positions should still receive additional training. Communication technicians should be trained at the Tele-Communications School in Kabul. The relay and instrument technicians should be trained in Iran. Kajakai and Breshna Administration should receive training in Iran. If Iranian training arrangements are not practical, additional U.S. training might be available by use of funds remaining under the agreement.

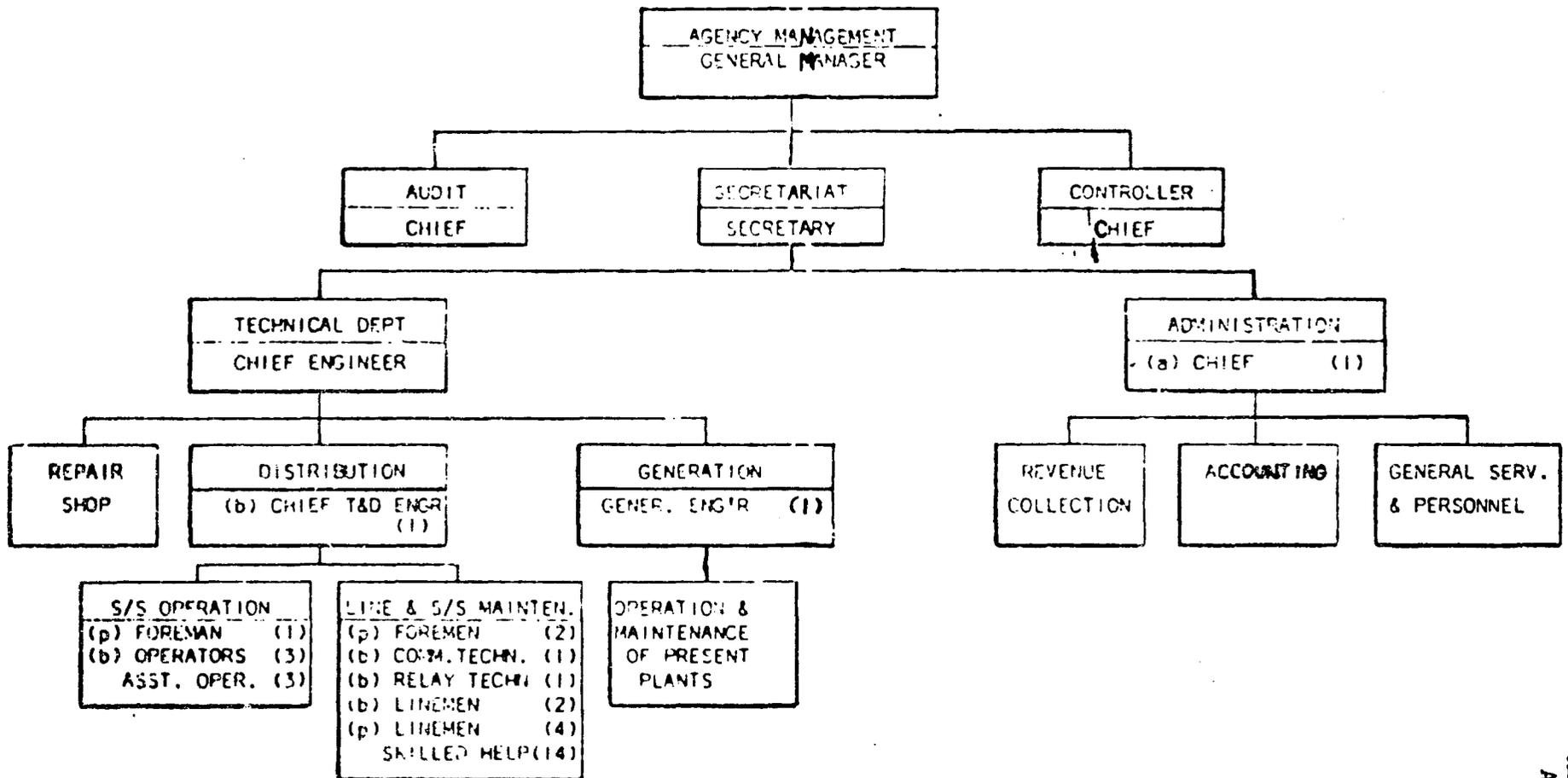
ABM should make decisions on several items soon. The Kajakai Project Office Organization should be clearly defined and plans for change to an Initial Operating Organization and then finally into a Kandahar/Kajakai Organization. Locations for the final organization central office, maintenance and warehousing facilities should be selected.

The intent of the present trip of the Training Coordinator is to get agreement in principle for the continuing program as outlined above and to present ideas for formulating the operating organizations. The report on this trip will include the results of plan discussions, an evaluation of the U.S. training and an evaluation of the 15 AIT graduates, and if possible at this time, recommendation of additional men from the contractor's crew.

The third and final trip of the Training Coordinator under the Agreement will be made at the beginning of full operation to evaluate the total training program. Observations on this trip will provide a base for recommendations for additional training taking into account future development of the system.



KAJAKAI POWER PROJECT ORGANIZATION CHART



DISTRIBUTING AGENCY ORGANIZATION CHART

REVENUE-EXPENSE ANALYSIS  
Selected Year 1987

A. INVESTMENT

Generation and Transmission:

Girishk Hydro	\$ 1,900,000
Kajakai 3-Unit Project	<u>31,500,000</u>
Sub-Total	\$33,400,000

Distribution and Sub-Transmission:

Girishk	\$ 1,500,000
Kandahar	<u>3,000,000</u>
Sub-Total	\$ 4,500,000

Total Investment: \$37,900,000

Assumed Composite Life 35 years

Debt Service Factor 12% .12232

Debt Service Factor 10% .10369

Amortization -- Annual at 12% \$ 4,636,000

Amortization -- Annual at 10% \$ 3,930,000

B. OPERATING EXPENSES -- ANNUAL

Generation and Transmission:

Girishk hydro	\$ 25,000
Kajakai 3 Unit Project	<u>370,000</u>
Sub-Total	\$ 395,000



DEPARTMENT OF STATE  
AGENCY FOR INTERNATIONAL DEVELOPMENT  
WASHINGTON, D.C. 20523

A.I.D. Loan No. 306-H-013  
CAP No.

AMENDED CAPITAL ASSISTANCE LOAN AUTHORIZATION  
Provided from: Development Loan Funds  
(Afghanistan - Kajakai Hydroelectric Power Plant)

Pursuant to the authority vested in the Assistant Administrator, Bureau for Asia, of the Agency for International Development ("A.I.D.") by the Foreign Assistance Act of 1961, as amended, and delegations of authority issued thereunder, I hereby authorize a second amendment to A.I.D. Loan Number 306-H-013 to the Republic of Afghanistan ("Borrower") (previously authorized by the Administrator in the amount of \$12,000,000 and subsequently amended to add \$3,000,000) to add an amount not to exceed \$7,500,000 pursuant to Part I, Chapter I, Section 106-Selected Development Problems and Part I, Chapter II, Title I, the Development Loan Fund to be made available to the Republic of Afghanistan to assist in financing the foreign exchange cost of goods and services required to construct certain transmission facilities required for the 33 megawatt two-unit hydroelectric generating plant now under construction at Kajakai Dam being financed by the total \$15,000,000 previously authorized.

This increase in the Loan is subject to the following conditions:

1. Interest Rate and Terms of Payment

This increase in the Loan shall be repaid by the Republic of Afghanistan within forty (40) years after the date of the first disbursement under this increase, including a grace period of not to exceed ten (10) years from the date of such first disbursement. The interest on the disbursed balance of the increase in the Loan and on any due and unpaid interest shall be at the rate of two percent (2%) per annum during the ten (10) years grace period and at the rate of three percent (3%) per annum thereafter.

2. Currency of Repayment

Repayment of the increase in the loan and payment of interest shall be in United States Dollars.

3. Other Terms and Conditions

a. Borrower shall assure A.I.D. that any other currencies required for the project will be made available.

b. Unless A.I.D. otherwise approves in writing, procurement of construction services shall be from the United States (Code 000), and procurement of goods and related services shall be from Code 941 countries.

c. This increase in the Loan shall be subject to such other terms and conditions as A.I.D. may deem advisable.

Date: \_\_\_\_\_

\_\_\_\_\_  
Assistant Administrator  
Bureau for Asia

Clearances:

ASIA/CD: RBPerry \_\_\_\_\_  
ASIA/CD: JES Stephenson \_\_\_\_\_  
ASIA/NE: LCStamberg \_\_\_\_\_  
SER/ENGR: RStokey \_\_\_\_\_  
GC/ASIA: WBGair \_\_\_\_\_  
ASIA/DP: FDCorrel \_\_\_\_\_  
SER/FM: SLBrown \_\_\_\_\_  
PPC/DPR: FBKimball \_\_\_\_\_

Drafted by: GC/ASIA: Jay A. Burgess  
ASIA/CD: Ted G. Lee: 4/12/74

STATUTORY CHECKLIST

KAJAKAI HYDROELECTRIC POWER II

I. FULFILLMENT OF STATUTORY OBJECTIVES

A. Needs Which the Loan is Addressing

1. FAA Section 103. Discuss the extent to which the loan will alleviate starvation, hunger and malnutrition, and will provide basic services to poor people enhancing their capacity for self-help.

1. Not applicable.

2. FAA Section 104. Discuss the extent to which the loan will increase the opportunities and motivation for family planning; will reduce the rate of population growth; will prevent and combat disease; and will help provide health services for the great majority of the population.

2. Not applicable.

3. FAA Section 105. Discuss the extent to which the loan will reduce illiteracy, extend basic education, and increase manpower training in skills related to development.

3. Not applicable.

4. FAA Section 106. Discuss the extent to which the loan will help solve economic and social development problems in fields such as transportation, power, industry, urban development, and export development.

4. The Helmand-Arghandab Valley - the region to be served by this project - is one of the major developing areas of the country. For some years with U.S. Assistance a program has been underway to increase productivity and income in the valley through creation of the necessary institutional, irrigation, and agricultural infrastructure as well as trained manpower. This project will help meet the growing need for power related to this long-term regional development effort. It will afford increased and more reliable electric power to the load centers of the Valley.

5. FAA Section 107. Discuss the extent to which the loan will support the general economy of the recipient country: or will support development programs conducted by private or international organizations.

5. Not applicable

B. Use of Loan Funds

1. FAA Section 110. What assurances have been or will be made that the recipient country will provide at least 25% of the costs of the entire program, project or activity with respect to which such assistance is to be furnished under Sections 103-107 of the FAA?

1. The GOA will give its assurance by signing a loan agreement amendment with a provision therein. For this amendment to the loan GOA will be contributing the equivalent of \$2,000,000 towards the transmission system and \$600,000 towards engineering and training which constitutes more than 25% of the total of \$10,000,000 related to this amendment.

2. FAA Section 111. Discuss the extent to which the loan will strengthen the participation of the urban and rural poor in their country's development, and will assist in the development of cooperatives which will enable and encourage greater numbers of poor people to help themselves toward a better life.

2. Electrification in the project area is an important component of the overall development of the Helmand Valley - a major effort aimed at substantially improving the life of the urban and rural poor in that part of the country. This effort, although not aimed at the establishment of cooperatives, is intended to provide both increased incentive and opportunity for participation by the poor in their country's development.

3. FAA Section 112. Will any part of the loan be used to conduct any police training or related program (other than assistance rendered under Section 515(c) of the Omnibus Crime Control and Safe Streets Act of 1968 or with respect to any authority of the Drug Enforcement Administration of the FBI) in a foreign country?

3. No.

4. FAA Section 113. Describe the extent to which the programs, projects or activities to be financed under the loan give particular attention to the integration of women into the national economy of the recipient country.

4. This project is not directed specifically to this objective.

5. FAA Section 114. Will any part of the loan be used to pay for the performance of abortions as a method of family planning or to motivate or coerce any person to practice abortions?

5. No

## II. COUNTRY PERFORMANCE

### A. Progress Towards Country Goals

1. FAA §§201(b)(5), 201(b)(7), 201(b)(8), 203. Discuss the extent to which the country is:

(a) Making appropriate efforts to increase food production and improve means for food storage and distribution.

(b) Creating a favorable climate for foreign and domestic private enterprise and investment:

(a) Rapid increase in agricultural production is a top priority of the Afghan Government. This includes the introduction extension and production of improved varieties of wheat and fertilizers in an effort to make the country self-sufficient in food grains. These efforts, coupled with favorable weather, led to a substantial increase in wheat production in 1973 after two years of serious shortage. With U.S. assistance, the GOA has been seeking to improve its fertilizer distribution system and fertilizer usage has steadily increased. The GOA has also utilized assistance of the U.S., the FRG and other donors in analyzing methods for supporting wheat stabilization programs and in increasing and improving food storage and distribution.

(b) Since the mid-1960's the development policy of Afghanistan has envisioned a mixed guided economy. Within this framework, the GOA has indicated that it allocates a significant role to private investment, particularly for small and medium enterprises. A Foreign and Domestic Private Investment Law, promulgated in 1967, has provided incentives to private investment and led to approval of over 165 small industries and the start-up of over 70 manufacturing operations in the past five years. A revised Investment Law, currently under consideration, is expected to be promulgated in the near future.

(c) Increasing the people's role in the developmental process;

(c) The GOA has accorded high priority to the implementation of rural development programs designed to maximize benefits to the poorest segments of society and to utilize self-help efforts at the local level to the greatest possible extent. Many small rural works projects, including feeder roads, bridges and irrigation ditches were constructed over the past few years through such programs, particularly during the period of drought. Broad popular participation in development has been enunciated as a basic goal.

(d) Allocating expenditures to development rather than to unnecessary military purposes or intervention in other free countries' affairs.

(d) Afghan arms acquisition is motivated by desire for defensive capability and internal security. The Government professes no offensive intentions.

(e) Willing to contribute funds to the project or program:

(e) Afghanistan will provide the local currency resources required for implementation of the loan.

(f) Making economic, social and political reforms such as tax collection improvements and changes in land tenure arrangement; and making progress toward respect for the rule of law, freedom of expression and of the press, and recognizing the importance of individual freedom, initiative, and private enterprise;

(f) The creation of a Cadastral Survey Organization with earlier USAID assistance was designed to create the base for an agricultural tax. Concentration of land ownership and an extensive sharecropping pattern suggest that some form of land reform is desirable but there is no indication that such reform is presently contemplated by the Government. USAID is assisting in the improvement, standardization and rationalization of the tax collection system. Press freedom at present is somewhat limited. As noted in paragraph (b) above, GOA policy envisions a significant role for private enterprise.

(g) Responding to the vital economic, political and social concerns of its people, and demonstrating a clear determination to take effective self-help measures.

(g) See Section III of Loan Paper.

B. Relations with the United States

1. FAA Sec. 620(c). If assistance is to a government, is the government indebted to any U.S. citizen for goods or services furnished or ordered where: (a) such citizen has exhausted available legal remedies, including arbitration, or (b) the debt is not denied or contested by the government, or (c) the indebtedness arises under such government's or a predecessor's unconditional guarantee?

1. Afghanistan is not known to be in violation of this section.

2. FAA Sec. 620(d). If the loan is intended for construction or operation of any productive enterprise that will compete with U.S. enterprise, has the country agreed that it will establish appropriate procedures to prevent export to the U.S. of more than 20% of its enterprises annual production during the life of the loan?

2. Not applicable.

3. FAA Sec. 620(e)(1). If assistance is to a government, has the country's government, or any agency or subdivision thereof, (a) nationalized or expropriated property owned by U.S. citizens or by any business entity not less than 50% beneficially owned by U.S. citizens, (b) taken steps to renudiate, or nullify existing contracts or agreements with such citizens or entity, or (c) imposed or enforced discriminatory taxes or other exactions, or restrictive maintenance or operation conditions? If so, and more than six months has elapsed since such occurrence, identify the document indicating that the government, or appropriate agency or subdivision thereof, has taken appropriate steps to discharge its obligations under international law toward such citizen or entity? If less than six months has elapsed, what steps, if any, has it taken to discharge its obligations?

3. Afghanistan is not known to be in violation of any provision of this section.

4. FAA Sec. 620(j). Has the country permitted, or failed to take adequate measures to prevent, the damage or destruction by mob action of U.S. property, and failed to take appropriate measures to prevent a recurrence and to provide adequate compensation for such damage or destruction? 4. No

5. FAA Sec. 620(1). Has the government instituted an investment guaranty program under FAA Sec. 221(b)(1) 234(a)(1) for the specific risks of inconvertibility and expropriation or confiscation? 5. Yes

6. FAA B620(o). Fisherman's Protective Act of 1954, as amended, Section 5. Has the country seized, or imposed any penalty or sanction against, any U.S. fishing activities in international waters? If, as a result of a seizure, the U.S.G. has made reimbursement under the provisions of the Fisherman's Protective Act and such amount has not been paid in full by the seizing country, identify the documentation which describes how the withholding of assistance under the FAA has been or will be accomplished. 6. No

7. FAA Sec. 620(a). Has the country been in default, during a period in excess of six months, in payment to the U.S. on any FAA loan? 7. No

8. FAA Sec. 620(t). Have diplomatic relations between the country and the U.S. been severed? If so, have they been renewed? 8. Afghanistan has not severed diplomatic relations with the United States.

**C. Relations with Other Nations and the U.N.**

1. FAA Sec. 620(i). Has the country been officially represented at any international conference when that representation included planning activities involving insurrection or subversion directed against the U.S. or countries receiving U.S. assistance? 1. No

2. FAA Secs. 620(a), 620(n). Has the country sold, furnished, or permitted ships or aircraft under its registry to carry to Cuba or North Vietnam, items of economic, military or other assistance? 2. No

3. FAA Sec. 620(u); App. Sec. 107. What is the status of the country's U.N. dues, assessments or other obligations? Does the loan agreement bar any use of funds to pay U.N. assessments, dues or arrearages? 3. Afghanistan is not delinquent in any obligations to the United Nations. Use of loan funds for any purpose unrelated to the project will not be permitted under the loan agreement.

**D. Military Situation**

1. FAA Sec. 620(i). Has the country engaged in or prepared for aggressive military efforts directed against the U.S. or countries receiving U.S. assistance? 1. Afghanistan is not known to be in violation of this section.

2. FAA Sec. 620(s)(1) What is (a) the percentage of the country's budget devoted to military purposes, and (b) the amount of the country's foreign exchange resources used to acquire military equipment, and (c) has the country spent money for sophisticated weapons systems purchased since the statutory limitation became effective? 2. (1) (a) Afghanistan's military budget appears to be about 30% of the total budget. (b) The Soviet Union and other Eastern bloc countries are the principal suppliers of military equipment for the Afghan armed forces. This equipment is purchased on long-term credits at below "market prices". (c) Some surface-to-air missiles, Mid 60's fighter bombers and guided anti-tank missiles are considered the

sophisticated components of the Afghan military system. These weapons are available in limited quantities.

- 2. (2) Is the country diverting U.S. development assistance or PL 480 sales to military expenditures?
- 2. (3) Is the country diverting its own resources to unnecessary military expenditures? (Findings on these questions are to be made for each country at least once each fiscal year and, in addition, as often as may be required by a material change in relevant information.)

- 2.(2) Afghanistan is not known to be diverting development assistance to military expenditures
- 2.(3) The Afghan military, both air force and army, totals 20,000 men on active duty. The size of this force and its equipment are considered consistent with the country's defense and internal security needs.

III. CONDITION OF THE LOAN

A. General Soundness

Interest and Repayment

1. FAA §§201(d), 201(b)(2). Is the rate of interest excessive or unreasonable for the borrower? Are there reasonable prospects for repayment? What is the grace period interest rate; the following period interest rate? Is the rate of interest higher than the country's applicable legal rate of interest.

1. The rate of interest is considered reasonable, and repayment of the loan with interest is within the financial capability of the borrower. Interest through the grace period will be at the rate of 2% per annum, and 3% thereafter. This rate is not higher than the applicable local rate of interest in Afghanistan.

Financing

1. FAA §201(b)(1). To what extent can financing on reasonable terms be obtained from other free-world sources, including private sources within the U.S.?

1. No other free-world sources, including private sources within the U.S., have indicated an interest in financing the loan.

Economic and Technical Soundness

1. FAA §§201(b)(2), 201(c). The activity's economic and technical soundness to undertake loan; does the loan application, together with information and assurances, indicate that funds will be used in an economically and technically sound manner?

1. The project is economically and technically sound. See Sections I & II of the CAP.

2. FAA §611(a)(1). Have engineering, financial, and other plans necessary to carry out assistance, and a reasonable firm estimate of the cost of assistance to the U.S., been completed?

2. Yes.

3. FAA §611(b); App. B101. If the loan or grant is for a water or related land-resources construction project or program, do plans include a cost-benefit computation? Does the project or program meet the relevant U.S. construction standards and criteria used in determining feasibility?

3. The transmission system is not a water or related land-resources project. It has met such standards and criteria. (See Section III of the CAP.)

4. FAA §611(c). If this is a Capital Assistance Project with U.S. financing in excess of \$1 million, has the principal A.I.D. officer in the country certified as to the country's capability effectively to maintain and utilize the project?

4. Yes.

B. Relation to Achievement of Country and Regional Goals

Country Goals

1. FAA §§207, 291(a). What is this loan's relation to:

(a) Institutions needed for a democratic society and to assure maximum participation on the part of the people in the task of economic development?

(a) This loan will finance construction services and equipment and is intended to increase the availability of electric power as a prerequisite to economic and social development.

(b) Enabling the country to meet its food needs both from its own resources and through development, with U.S. help, of infrastructure to support increased agricultural productivity?

(b) The loan, by developing electric power resources, will permit the growth of enterprises which can assist in the development of the agricultural sector.

(c) Meeting increasing need for trained manpower?

(c) The loan provides for training of administrative and operational personnel.

(d) Developing programs to meet public health needs?

(d) This loan is not directly related to public health.

(e) Assisting other important economic, political, and social development activities, including industrial development, growth of free labor unions; cooperatives and voluntary agencies; improvement of transportation and communication systems; capabilities for planning and public administration; urban development; and modernization of existing laws?

(e) By developing adequate supplies of reliable power, the loan will directly contribute to industrial development and provide a basis for growth of a free labor movement.

2. FAA §201(b)(4). Describe the activity's consistency with and relationship to other development activities, and its contribution to reliable long-range objectives.

2. The proposed loan would contribute to the development of the Helmand-Arghandab Valley region and to the attainment of the economic development objectives of Afghanistan. It closely coordinates other developmental efforts underway in the Valley with U.S. and other donor assistance.

3. FAA §201(b)(9). How will the activity to be financed contribute to the achievement of self-sustaining growth?

3. By providing adequate, reliable power for industrial growth.

4. FAA §201(e). If this is a project loan, describe how such project will promote the country's economic development, taking into account the country's human and material resource requirements and the relationship between ultimate objectives of the project and overall economic development.

4. Electric power is essential to most development activities. The power made available by this project will be used by commercial, industrial, and agricultural interests to further the development of the Helmand Valley and improve the quality of life of the populace.

5. FAA §201(b)(3). In what ways does the activity give reasonable promise of contributing to the development of economic resources, or to the increase of productive capacities?

5. The project is designed to contribute to the maximum extent to the long-range economic development, and industrialization, of the region to be served.

6. FAA §281(b). How does the program under which assistance is provided recognize the particular needs, desires, and capacities of the country's people; utilize the country's intellectual resources to encourage institutional development; and support civic education and training in skills required for effective participation in political processes.

7. FAA §601(a). How will this loan encourage the country's efforts to:  
(a) increase the flow of international trade; (b) foster private initiative and competition; (c) encourage development and use of cooperatives, credit unions, and savings and loan associations; (d) discourage monopolistic practices; (e) improve technical efficiency of industry, agriculture, and commerce; and (f) strengthen free labor unions?

6. The Loan contains a training element which will utilize the country's manpower resources to encourage institutional development. The Loan is not directly related to civic education or training for participation in the political process.

7. (a) In the first instance, trade would take place between the U.S. and Afghanistan since most purchases financed from the loan would have their source and origin in the U.S. In the longer term, the project may facilitate international trade by encouraging the import of commodities utilizing electricity and encouraging the manufacture of exportable items by providing a source of power.

(b) Increased private enterprise activity will be directly encouraged.

(c) The Loan will have no direct effect on the development and use of cooperatives, credit unions and savings and loan associations.

(d) The Loan would have no measureable effect on monopolistic practices.

(e) Technical efficiency will be greatly improved through the existence of a reliable source of electric power.

(f) The Loan will have no direct effect on the strengthening of free labor unions.

8. FAA §202(a). Indicate the amount of money under the loan which is: going directly to private enterprise; going to intermediate credit institutions or other borrowers for use by private enterprise; being used to finance imports from private sources; or otherwise being used to finance procurements from private sources.

9. FAA §611(a)(2). What legislative action is required within the recipient country? What is the basis for a reasonable anticipation that such action will be completed in time to permit orderly accomplishment of purposes of loan?

3. Loan proceeds are designated for procurement of commodities and services furnished by private sector sources.

9. None.

Regional Goals

1. FAA §619. If this loan is assisting a newly independent country, to what extent do the circumstances permit such assistance to be furnished through multilateral organizations or plans?

1. Not applicable.

2. FAA §209. If this loan is directed at a problem or an opportunity that is regional in nature, how does assistance under this loan encourage a regional development program? What multilateral assistance is presently being furnished to the country?

2. The Loan is not directed at a regional problem. The U.S. is only one among a number of donors. The Soviet Union, Germany, France, Peoples Republic of China, England, the United Nations, the World Bank and various voluntary agencies are important foreign assistance donors to Afghanistan.

C. Relation to U.S. Economy

Employment, Balance of Payments,  
Private Enterprise.

1. FAA §§201(b)(6); 102. What are the possible effects of this loan on U.S. economy, with special reference to areas of substantial labor surplus? Describe the extent to which assistance is constituted of U.S. commodities and services, furnished in a manner consistent with improving the U.S. balance of payments position.

2. FAA §§612(b); 636(h). What steps have been taken to assure that, to the maximum extent possible, foreign currencies owned by the U.S. and local currencies contributed by the country are utilized to meet the cost of contractual and other services, and that U.S. foreign owned currencies are utilized in lieu of dollars?

3. FAA §601(d); App. 510B. If this loan is for a capital project, to what extent has the Agency encouraged utilization of engineering and professional services of U.S. firms and their affiliates? If the loan is to be used to finance direct costs for construction, will any of the contractors be persons other than qualified nationals of the country or qualified citizens of the U.S.? If so, has the required waiver been obtained?

1. Bidding on the construction services contract will be restricted to U.S. firms only; equipment will be purchased in the U.S. or other Code 941 countries. Little, if any adverse effect on the U.S. balance of payments is anticipated. No particular benefit to areas of labor surplus is anticipated.

2. The GOA will pay for all local currency expenses of the project. All of the loan proceeds will be expended on foreign exchange procurement. Afghanistan is not an excess currency country.

3. All project engineering and construction services are, or will be, with U.S. firms. The transmission system construction contractor will employ U.S. citizens and qualified Afghan nationals.

4. FAA §608(a). Provide information measures to be taken to utilize U.S. Government excess personal property in lieu of the procurement of new items.

4. It is not anticipated that commodities scheduled for financing under this loan will be available from U.S. excess property.

5. FAA §602. What efforts have been made to assist U.S. small business to participate equitably in the furnishing of commodities and services financed by this loan?

5. Procurement procedures to be utilized under the loan will permit equitable participation of U.S. small business.

6. FAA §621. If the loan provides technical assistance, how is private enterprise on a contract basis utilized? If the facilities of other Federal agencies will be utilized, in what ways are they particularly suitable; are they competitive with private enterprise (if so, explain); and how can they be made available without undue interference with domestic programs?

6. Technical assistance will not be provided under this loan nor will the facilities of other Federal agencies be utilized.

7. FAA §611(c). If this loan involves a contract for construction that obligates in excess of \$100,000, will it be on a competitive basis? If not, are there factors which make it impracticable?

7. Yes

8. FAA §601(b). Describe the efforts made in connection with this loan to encourage and facilitate participation of private enterprise in achieving the purposes of the Act.

8. All construction services will be furnished by U.S. private enterprise. The loan will make private investment in Afghanistan more attractive and feasible in the future.

#### Procurement

1. FAA §604(a). Will commodity procurement be restricted to U.S. except as otherwise determined by the President?

1. Yes.

2. FAA §604(b). Will any part of this loan be used for bulk commodity procurement at adjusted prices higher than the market price prevailing in the U.S. at time of purchase?

2. No.

3. FAA §604(e). Will any part of this loan be used for procurement of any agricultural commodity or product thereof outside the U.S. when the domestic price of such commodity is less than parity?

3. No.

4. FAA §604(f). Will the agency receive the necessary pre-payment certification from suppliers under a commodity import program agreement as to description and condition of commodities, and on the basis of such, determine eligibility and suitability for financing?

4. Not applicable.

D. Other Requirements

1. FAA §201(b). Is the country among the 20 countries in which development loan funds may be used to make loans in this fiscal year?

1. Yes.

2. App. §105. Does the loan agreement provide, with respect to capital projects, for U.S. approval of contract terms and times?

2. Yes.

3. FAA §620(k). If the loan is for construction of a production enterprise, with respect to which the aggregate value of assistance to be furnished will exceed \$100 million, what preparation has been made to obtain the express approval of the congress?

3. Not applicable.

4. FAA §620(b) 620(f):  
Has the President determined that the country is not dominated or controlled by the international Communist movement? If the country is a Communist country (including, but not limited to, the countries listed in FAA §620(f)) and the loan is intended for economic assistance, have the findings required by FAA §620(f) and App. §109(b) been made and reported to the Congress?

4. Afghanistan is not dominated or controlled by the international Communist movement.

5. FAA §620(h). What steps have been taken to insure that the loan will not be used in a manner which, contrary to the best interest of the United States, promotes or assists the foreign aid projects of the Communist-bloc countries?

5. Appropriate provision will be included in the loan agreement.

6. App. §109. Will any funds be used to finance procurement of iron and steel products for use in Vietnam, other than as contemplated by Sec. 109?

6. Not Applicable

7. FAA §636(i). Will any part of this loan be used in financing non-U.S.-manufactured automobiles? If so, has the required waiver been obtained?

7. No such use is contemplated; if one develops, a waiver will be obtained.

8. FAA §§620(a)(1) and (2), 620 (p). Will any assistance be furnished or funds made available to the government of Cuba or the United Arab Republic?

8. No.

9. FAA §620(g). Will any part of this loan be used to compensate owners for expropriated or nationalized property? If any assistance has been used for such purpose in the past, has appropriate reimbursement been made to the U.S. for sums diverted?

9. Neither this loan nor any previous assistance has been, or will be, used in this manner.

10. FAA §201(f). If this is a project loan, what provisions have been made for appropriate participation by the recipient country's private enterprise?

10. Afghan private enterprise will be eligible to furnish goods and services procured with local currency.

11. App. §103. Will any funds under the loan be used to pay pensions, etc., for persons who are serving or who have served in the recipient country's armed forces?

11. No.

12. MAA §901.b. Does the loan agreement provide for compliance with U.S. shipping requirements, that at least 50% of the gross tonnage of all commodities financed with funds made available under this loan (computed separately by geographic area for dry bulk carriers, dry cargo liners, and tankers) be transported on privately owned U.S. flag commercial vessels to the extent such

12. Yes.

vessels are available at fair and reasonable rates for U.S. flag vessels and that at least 50% of the gross freight revenue generated by all shipments financed with funds made available under this loan and transported on dry cargo liners be paid to or for the benefit of privately owned U.S. flag commercial vessels?

13. FAA §481. Has the President determined that the recipient country has failed to take adequate steps to prevent narcotic drugs produced or procured in, or transported through, such country from being sold illegally within the jurisdiction of such country to U. S. Government personnel or their dependents or from entering the United States unlawfully? 13. No.
14. App. §110. Is the loan being used to transfer funds to world lending institutions under FAA §209(d) and §251(h)? 14. No.
15. App. §601. Are any of these funds being used for publicity or propaganda within the United States? 15. No.
16. FAA §612(d) and Section 40 of PL 93 - 189 (FAA of 1973). Does the United States own host country excess foreign currency and, if so, what arrangements have been made for its release in compliance with Section 40 (FAA of 1973)? 16. No.
17. FAA §604(d). Will provisions be made for placing marine insurance in the U.S. if the recipient country discriminates against any marine insurance company authorized to do business in the U.S.? 17. Yes; the loan agreement will cover this requirement.
18. Section 29 of PL 93 - 189 (FAA of 1973). Is there a military base located in the recipient country which base was constructed or is being maintained or operated with funds furnished by the U.S., and in which U.S. personnel carry out military operations? If so, has a determination been made that the government of such recipient country has, consistent with security, authorized access, on a regular basis to bona fide news media correspondents of the U.S. to such military base? 18. No.

19. Section 30 and 31 of PL 93 - 189 (FAA of 1973). Will any part of the loan be used to finance directly or indirectly military or paramilitary operations by the U.S. or by foreign forces in or over Laos, Cambodia, North Vietnam, South Vietnam, or Thailand? 19. No
20. Section 32 of PL 93-189(FAA of 1973). With respect to the internment or imprisonment of the recipient country's citizens for political purposes, does the recipient country adhere to the United Nations Universal Declaration on Human Rights? 20. Yes.
21. Section 37 of PL 93 - 189 (FAA of 1973); App. §111. Will any part of this loan be used to aid or assist generally or in the reconstruction of North Vietnam? 21. No.
22. FAA Section 640(c). Will a grant be made to the recipient country to pay all or part of such shipping differential as is determined by the Secretary of Commerce to exist between U.S. foreign flag vessel charter or freight rates? 22. Not Contemplated.
23. App. §112. Will any of the funds appropriated or local currencies generated as a result of AID assistance be used for support of police or prison construction and administration in South Vietnam or for support of police training of South Vietnamese? 23. Not applicable.
24. Will any of loan funds be used to acquire currency of recipient country from non-U.S. Treasury sources when excess currency of that country is on deposit in U.S. Treasury? 24. No.
25. App. §114. Have the House and Senate Committees on Appropriations been notified five days in advance of the availability of funds for the purposes of this project? 25. Yes.
26. App. §604. Will any of the funds appropriated for this project be used to furnish petroleum fuels produced in the continental United States to Southeast Asia for use by non-U.S. nationals. 26. No.

OFFICIAL FILE OF THE UNITED STATES

DEPARTMENT OF STATE  
AGENCY FOR INTERNATIONAL DEVELOPMENT  
WASHINGTON, D.C. 20547

Proposal and Recommendations  
For the Review of the  
Development Loan Committee

AFGHANISTAN - KAJAKAI HYDRO-ELECTRIC PLANT

Amendment III

AID-DLG/P-546/8

UNCLASSIFIED

DEPARTMENT OF STATE  
AGENCY FOR INTERNATIONAL DEVELOPMENT  
WASHINGTON, D.C. 20523

UNCLASSIFIED

AID-DLC/P-546/8

November 27, 1974

MEMORANDUM FOR THE DEVELOPMENT LOAN COMMITTEE

SUBJECT: Afghanistan: Kajakai Hydroelectric Power Plant  
Amendment III

Attached for your review are recommendations for authorization of a loan to the Government of the Republic of Afghanistan (previously authorized by the Administrator in the amount of \$12,000,000 and subsequently amended twice to add \$3,000,000 and \$7,500,000) to add an amount not to exceed \$2,000,000 to be made available to assist in financing the foreign exchange cost of goods and services required to construct certain transmission facilities required for the 33 megawatt two-unit hydroelectric generating plant now under construction at Kajakai Dam being financed by the total \$22,500,000 previously authorized.

No meeting is scheduled for this loan proposal. However, please advise us of your concurrence or objections as early as possible, but in no event later than close of business on Friday, December 6, 1974. If you are a voting member, a poll sheet has been enclosed for your response.

Development Loan Committee  
Office of Development  
Program Review

Attachments:

Summary and Recommendations  
Project Analysis  
ANNEXES A-B

UNCLASSIFIED

Kajakai Hydroelectric Plant

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AFGHANISTAN

KAJAKAI HYDROELECTRIC POWER PLANT

Amendment III

Summary and Recommendations

1. Borrower: The Government of Afghanistan, with Da Afghanistan Breshna Moassessa (ABM), the Afghanistan Electric Power Authority, as the ultimate recipient.
2. Amount: \$2.0 million, increasing Loan No. 306-W-018 from \$7.5 million to \$9.5 million.
3. Purpose of Amendment: To finance the increased dollar cost of constructing 133 miles of 110 KV transmission lines and three substations.
4. Purpose of Project: To finance the foreign exchange costs of increasing and improving electric power supply to the Kandahar-Girishk area in the Helmand-Arghandab Valley, Afghanistan.
5. Project Description: The project consists of (1) generating plant; (2) transmission lines; (3) substations; and (4) a training program. Loan -018 is for the transmission line portion of the project; the other parts of the project are financed under Loan 306-H-013 as amended. The system, into which the project will be incorporated, now consists of small hydro and diesel generating stations with a total capacity of six megawatts (MW). When the project commences operation, 33 MW of additional power will be available to the system.
6. Background Activity: An A. I. D. -financed survey of the electric power requirements of the Helmand-Arghandab Valley was made by a U. S. engineering firm in 1965 and updated in 1967. It is upon the recommendations in that study that the project was undertaken.

7. **Export-Import Bank Interest:** The Export-Import Bank has indicated that it is not interested in considering the subject project for financing.
8. **Mission Views:** The Mission endorses the proposed loan.
9. **Statutory Criteria:** Satisfied. See Annex B.
10. **Issues:** None.
11. **Recommendation:** That an increase in Loan No. 306-W-018 be authorized to provide an additional \$2.0 million, this additional loan to be subject to the same terms and conditions as follows:
- (a) Forty (40) year maturity, including a ten (10) year grace period on principal repayments.
- (b) Two percent (2%) per annum interest during the grace period and three percent (3%) per annum interest thereafter. Interest payable, and principal repayable, in U. S. dollars only.
- (c) Borrower to assure A. I. D. that any other currencies required for the project will be made available.
- (d) Procurement of construction services to be from the United States (Code 000) only; equipment and materials may be procured from Code 941 countries.
- (e) Such other terms and conditions as A. I. D. may deem advisable.

Capital Assistance Committee

Loan Officer:	Ted G. Lee (Chairman)
Engineer:	Ray P. Stokely
Lawyer:	Jay A. Burgess
Contract Spec.:	Barry Knauf
Desk:	Gladys Frazier

I. Introduction

A. Project History

Capital Assistance Paper (CAP) No. AID-DLC/P-546, dated April 25, 1967 (the original CAP), CAP No. AID-DLC/P-546/2, dated June 16, 1972 (CAP Amendment I), and CAP No. AID-DLC/P-546/6, dated April 24, 1974 (CAP Amendment II) describe fully the development of the Kajakai Hydroelectric Project and the elements which comprise it. Briefly, the original \$12.0 million loan (No. 306-H-013) and the \$3.0 million Amendment I (Loan No. 306-H-013A) are being used to finance a 33-megawatt (MW) hydroelectric generating plant at the existing Kajakai Dam on the Helmand River in Southern Afghanistan, while the \$7.5 million Amendment II (Loan No. 306-W-018) was made for construction of the transmission system to connect the power plant to the two primary load centers from which power is distributed to users.

There are sufficient funds under Loans 306-H-013 and 013A to complete the power plant, with completion expected by midsummer 1975.

B. Purpose of this CAP Amendment III

Loan No. 306-W-018 was authorized May 10, 1974 in the amount of \$7.5 million to finance the foreign exchange costs of goods and services to construct 133 miles of transmission line with associated substations from the generating plant at Kajakai to the load centers of Kandahar and Lashkar Gah. Of that amount, \$500,000 was allocated for engineering and training services, leaving \$7,000,000 available for construction.

On September 30, 1974, bids to construct the transmission facilities were received from U.S. contractors. The dollar portion of the lower of the two bids received was \$2.8 million over the project consultant's May 1974 estimate which was the basis for the amount of the transmission system loan. The project consultant, International Engineering Company, Inc. (IECO), recommended to the Borrower's representative, the General President of Da Afghanistan Breshna Moassessa (ABM), the Afghan Electric Authority, that the bids be rejected as unreasonably high and cost savings be sought through a negotiated contract. With the concurrence of AID, the bids were rejected and discussions were initiated with the prospective contractors October 14 and concluded November 14, 1974.

These negotiations resulted in foreign exchange savings of U. S. \$1,736,848 compared to the initial low bid. To fund the dollar portion of the negotiated contract amount, \$1.14 million in excess of currently available loan funds is required; in addition, \$1.76 million of foreign exchange is estimated to be required over the life of the contract to cover escalation and contingencies.

The purpose of this CAP Amendment III is to secure the additional funds (\$1.14 million) needed to enable ABM to sign the contract and to provide a reasonable contingency (\$0.86 million) for unforeseen events; the additional requirements for escalation under the contract, estimated at \$860,000, will be for the account of the ABM. Any contingencies not covered by the AID loan will also be for the account of ABM.

An obvious question which arises is why the added cost of the transmission system is not assumed by the Government of Afghanistan in accord with the standard provision in Loan Agreement No. 306-W-018 which places the responsibility on the Borrower for providing additional funds as needed to complete the project. In addition to the GOA's foreign exchange budget constraints, we are faced with a problem of timing: If negotiated contract prices are to be held, financing arrangements must be firm and the construction contract signed not later than November 30, 1974. This date is crucial in that it represents the expiry of vendors' price obligations to the contractor. Failing execution of a contract now will assuredly lead to even higher costs in a subsequent bidding or negotiating round and further delay in completion of an operable system would be inevitable. The GOA has demonstrated time and again its inability to react effectively to unanticipated financing needs. The conclusion is therefore inescapable that if the Kajakai Hydroelectric Project is to be brought to beneficial operation without inordinate delay and further cost increases, Loan No. 306-W-018 must be supplemented by an amount which will permit signing of the transmission system construction contract by November 30, 1974. At the same time, we will have a clear understanding with the GOA that escalation during the performance of the contract will be for the account of the Borrower and suitable provisions must be made in the GOA budgeting process. That understanding will be included in detail in the amended Loan Agreement covering the additional \$2,000,000.

## II. The Project

### A. Project Area

A detailed description of the Project Area, its geography and historical background is contained in the original CAP and the prior two Amendments.

### B. Description of the Kajakai Hydroelectric Project

- A Power Plant now under construction which consists of two 16.5 MW hydroelectric generating units and step-up substation installed at the base of the existing Kajakai Dam. The contractor, Fischbach-Oman International (FOI), is providing general construction services, related materials and equipment, and is installing the major power plant equipment purchased by ABM. Completion of the plant is expected by midsummer 1975, a date that appears realistic since the construction work is going well-- the plant is 85% complete, only three months behind the original schedule.
  
- A Transmission System yet to be constructed which will consist of 133 miles of 110 KV transmission lines together with a substation at Kandahar and two at Lashkar Gah to step down the voltage to 13.2 KV, 44 KV and 3.3 KV, respectively. During final design and contract negotiations certain minor changes were made in the transmission system from that described in CAP Amendment II. The total transmission line mileage was reduced slightly, the 16 miles of 44 KV line were upgraded in capacity to 110 KV, and the substation at Midway was relocated at Lasnkar Gah. These changes will simplify system control, communications, repairs and spare parts handling at no significant additional cost.

The transmission system will be constructed by the U. S. firm of Fischbach & Moore International (FMI), who will be responsible for purchasing, shipping and installing all materials. For carrying the power lines, the contractor will use concrete poles manufactured at a plant he will provide in Afghanistan. The pole plant will be turned over to ABM in operating condition upon completion of construction.

Further engineering and other details are covered in the original CAP and the two previous CAP Amendments.

C. Status of the Kajakai Transmission System

The consulting engineer, IECO, has completed the design of the transmission system, prepared plan and profile sheets, and commenced staking of transmission line structure locations. IECO prepared technical specifications and bidding documents for the equipment and construction services required to construct the entire transmission system and it was these documents, plus the tenders received September 30, 1974 from each respective bidder, that formed the basis for the contract negotiations initiated October 14, 1974. In accordance with the terms of the negotiated contract, the construction contractor will begin work on the project not later than January 1975; it is anticipated that the project will be completed in June 1977.

The results of the contract negotiations are discussed in subparagraph D below.

D. Transmission System Cost Estimates

The contract amount as finally negotiated with Fischbach & Moore International (FMI) is as follows:

<u>Foreign Exchange</u> \$	<u>Local Currency Equiv.</u> (Afghanis 65 = U. S. \$1)	<u>Total</u>
\$8,140,000	\$2,700,000	\$10,840,000

The contract contains an escalation provision which basically calls for the contractor to absorb the first 6% of escalation with ABM absorbing the balance. The formula is keyed to the Bureau of Labor Statistics (BLS) Metals and Metal Products Index, the value of which was 187 as of October 1974. Projecting the Index through the completion of construction at two points per month increase and utilizing the escalation provision in the contract, the total contract amount, including escalation, would be as follows:

<u>Foreign Exchange</u> \$	<u>Local Currency Equiv.</u> (Afghanis 65 = U. S. \$1)	<u>Total</u>
\$9,000,000	\$3,000,000	\$12,000,000

Allowing 10% for contingencies, total contract costs on completion of the project are estimated to be as follows:

<u>Foreign Exchange</u> \$	<u>Local Currency Equiv.</u> (Afghanis 65 = U. S. \$1)	<u>Total</u>
\$9,900,000	\$3,300,000	\$13,200,000

Thus, the total estimated foreign exchange requirement of \$9,900,000 is \$900,000 over the amounts made available for the contract by Loan -018 (\$7,000,000)<sup>1/</sup> and this proposed increase (\$2,000,000). That amount of \$900,000 will be provided by the GOA.

With reference to the requirement under FAA Section 110 that the recipient country provide at least 25% of the costs of the project, the effect of the loan amendment is as follows:

This Amendment--

	<u>In U. S. Dollar Equivalent</u>		
	<u>Foreign Exchange</u>	<u>Local Currency</u>	<u>Total</u>
<u>AID Contribution</u>	2,000,000	-0-	2,000,000
<u>GOA Contribution</u>	900,000	1,300,000	2,200,000
Total			4,200,000

GOA Percent of Total: 52.4%

Total Transmission Line Project--

(Loan -018 as amended)<sup>2/</sup>

<u>AID Contribution</u>			
Transmission	9,000,000)	-0-	9,500,000
Engineering & Training	500,000)	-0-	
<u>GOA Contribution</u>			
Transmission	900,000	3,300,000)	4,800,000
Engineering & Training	-0-	600,000)	
Total			14,300,000

GOA Percent of Total: 33.6%

<sup>1/</sup> Excluding \$500,000 for engineering and training.

<sup>2/</sup> For statement concerning the GOA contributions for purposes of satisfying FAA Section 110 for original Loan -018, refer to CAP Amendment II, Statutory Checklist, Page 2.

E. Status of Facilities and Services Ancillary to the Project

1. Distribution System

Distribution systems in the load centers of Kandahar and Lashkar Gah are not a part of the AID-financed Kajakai Project. However, as an adequate distribution system is essential to the success of the project, it was discussed in detail in the original CAP and the two previous CAP Amendments. In summary, we expect that during the first three years of project operation, the distribution system will be capable of handling the requirements of the customers in the service area for which the Kajakai Project was designed. Thereafter, expansion of distribution facilities will probably be required.

2. Kajakai Dam

The Kajakai Dam on the Helmand River, and site of power plant construction described above, is a rockfill dam with ungated spillway impounding a reservoir of 1,495,000 acre feet of gross storage. The dam was completed in 1953 by Morrison-Knudsen Afghanistan, Inc., at a cost of \$12,545,000 with Export-Import Bank financing. Further details are given in the original CAP and the two previous CAP Amendments.

3. Other Generating Capacity

There are two small power plants which will be useful when the project is completed. One is the Girischk canal drop hydroelectric plant (2-1500 kW units) completed in 1960 by Morrison-Knudsen with Export-Import Bank financing. The other is the Kandahar diesel plant (2-1500 KW units) completed in 1971 by the supplier, Colt Industries, with AID financing (Loan No. 306-H-009).

Further details of these ancillary facilities are included in the original CAP and the two previous CAP Amendments.

4. Engineering Services and Training

These are being provided by the consulting engineer, IECO, under a contract dated August 20, 1969 and amended May 18, 1971. Details are provided in the original CAP and the two previous CAP Amendments.

### III. The Borrower and Implementing Agency

The Borrower will be the Government of Afghanistan (GOA) and the ultimate recipient of the loan funds will be Da Afghanistan Breshna Moassessa (ABM), an agency reporting to the Ministry of Mines and Industry. Further details are contained in the original CAP and the two previous CAP Amendments.

### IV. Economic Aspects

The general economics of Afghanistan, the basis for the project, and its place in Afghanistan development were described in the original CAP and the two previous CAP Amendments. In short, in considering the economics of this project, due consideration must be given to the extensive investment already in place in the dam and powerhouse. Although internal rate of return calculations develop a relatively low return, with other components already in place the question is focused more on whether or not power will be delivered than on the economic merits of the investment.

The electric power sector is highly subsidized by the GOA. The rates for electricity are extremely low and have little relation to the cost of service. This is more fully described in the original CAP and Amendments I and II. For example, in CAP Amendment II, using a 10% interest rate, it was shown that a retail rate of 5.99¢ per KWH would need to be charged to break even. This would rise to about 6.5¢ per KWH due to the increased costs which this CAP Amendment III addresses. It is unlikely, however, that ABM can charge users more than an average 2¢ per KWH for some time to come. Thus, there is no doubt that electric power will continue to be government-subsidized for the foreseeable future.

### V. Impact of Loan on U. S. Economy

The construction contractor is a U. S. firm. All equipment and material for the project is eligible for financing from countries listed in AID Geographic Code 941. However, it is expected that the major portion of equipment and materials will be purchased in the U. S., except for the concrete pole plant and certain steel items in short supply for which source/origin waivers have been issued in the amount of \$1,350,000 to permit purchase from AID Geographic Code 899 countries.

VI. Repayment Prospects

The increase of \$2,000,000 in the loan will have no material effect on the conclusions reached in CAP Amendment II.

VII. Environmental Impact

No change from CAP Amendment II.

DEPARTMENT OF STATE  
AGENCY FOR INTERNATIONAL DEVELOPMENT  
WASHINGTON, D.C. 20523

ANNEX A  
Page 1 of 2

AID-DLC/P-546/8/A/Draft  
November 27, 1974

A.I.D. Loan No.  
(Amendment No. 3 to A.I.D.  
Loan No. 306-H-013)

CAPITAL ASSISTANCE LOAN AUTHORIZATION AMENDMENT  
Provided from: FAA Sec. 106 ("Selected Development Problems")  
(Afghanistan: Kajakai Hydroelectric Power Plant)

Pursuant to the authority vested in the Assistant Administrator, Bureau for Near East and South Asia, of the Agency for International Development ("A.I.D.") by the Foreign Assistance Act of 1961, as amended, and delegations of authority issued thereunder, I hereby authorize, pursuant to Part I, Chapter I, Section 106 - Selected Development Problems and Part I, Chapter II, Title I, the Development Loan Fund, a third amendment to A.I.D. Loan No. 306-H-013 to the Republic of Afghanistan ("Borrower") (previously authorized by the Administrator in the amount of \$12,000,000 and subsequently amended twice to add \$3,000,000 and \$7,500,000) to add an amount not to exceed \$2,000,000 to be made available to the Republic of Afghanistan to assist in financing the foreign exchange cost of goods and services required to construct certain transmission facilities ("Project") required for the 33 megawatt two-unit hydroelectric generating plant now under construction at Kajakai Dam being financed by the total \$22,500,000 previously authorized.

This increase in the Loan is subject to the following conditions:

1. Interest Rate and Terms of Payment

This increase in the Loan shall be repaid by the Republic of Afghanistan within forty (40) years after the date of the first disbursement under the loan increase authorized by this Amendment, including a grace period of not to exceed ten (10) years from the date of such first disbursement. The interest on the outstanding balance of the disbursements under such increase and on any due and unpaid interest shall be at the rate of two percent (2%) per annum during the ten (10) years grace period and at the rate of three percent (3%) per annum thereafter.

2. Currency of Repayment

Repayment of the funds due under the increased loan and payment of interest thereon shall be in United States Dollars.

3. Other Terms and Conditions

a. Borrower shall assure A.I.D. that any other currencies required for the Project will be made available.

b. Unless A.I.D. otherwise approves in writing, procurement of construction services shall be from the United States (Code 000), and procurement of goods and related services shall be from Code 941 countries.

c. The increase in the Loan authorized hereby shall be subject to such other terms and conditions as A.I.D. may deem advisable.

Date: \_\_\_\_\_

\_\_\_\_\_  
Assistant Administrator  
Bureau for Near East and South Asia

UNITED STATES GOVERNMENT

# Memorandum

ANNEX B

AID-DLC/P-546/8  
November 27, 1974

TO : THE FILES

DATE: November 21, 1974

FROM : GC/NESA, Jay A. <sup>yib</sup>Burgess

SUBJECT: Afghanistan - Kajakai Hydroelectric Plant, Amendment to  
Loan No. 306-W-018

I believe there is no need to prepare a new, separate, statutory checklist for the mini-CAP on account of the proposed amendment mentioned above. Subject to the additional information given below, the conclusions of the most recent checklist are still effective. My signature on the authorization for the amendment will, among other things, evidence my opinion that statutory criteria have been met.

With reference to FAA Section 110, whose requirement is that the recipient country provide at least 25% of the costs of the project, the Government of Afghanistan (GOA) will give its assurance by signing a loan agreement amendment with such a provision therein. For this amendment the GOA will be contributing \$900,000 in foreign exchange and \$1,300,000 in local currency equivalent towards the transmission system, which constitutes more than 25% of the total project cost of \$4,200,000 related to this amendment, \$2,000,000 of which is A. I. D. 's contribution.

With reference to Foreign Assistance and Related Programs Appropriation Act Section 114, which requires notification of project activity to Congress at least five days in advance of availability of funds for obligation, notification of an increase of funds for this project will be made pursuant to the directions spelled out in AA/PPC, Alexander Shakow's memo of July 1, 1974 on Implementation Instructions for Section 114 - Prior Notification. Copies of this notification will be sent to the Senate and House Appropriation Committees through LEG/LPCS.

My opinion as to the satisfaction of statutory criteria is based on my review of the most recent checklist done for this project (i. e., CAP Amendment II) and representations made by NESA/NE/NA, Gladys Frazier and NESA/CD, Ted G. Lee concerning matters involving Afghanistan.



306010100 1001

AID 1020-25 (7-68)		SECURITY CLASSIFICATION		001 PROJECT NUMBER	
PROJECT APPRAISAL REPORT (PAR)		UNCLASSIFIED		306-22-120-101	
(U-446) See M.O. 1026.1				Loan Number 306-H-013	
002 PAR		003 U.S. OBLIGATION SPAN		004 PROJECT TITLE	
AS OF: MO. DAY YR.		FY Thru FY		Kajakai Hydro-Electric Power	
05 04 70		68 68			
008 COOPERATING COUNTRY - REGION - AID/W OFFICE					
AFGHANISTAN					

**006 FUNDING TABLE**

AID DOLLAR FINANCING-OBLIGATIONS (\$000)	TOTAL	CONTRACT (NON-ADD)	PERSONNEL SERVICES			PARTICIPANTS		COMMODITIES		OTHER COSTS	
			AID	PASA	CONTRACT	DIR. PASA	CONTRACT	DIR. PASA	CONTRACT	DIR. PASA	CONTRACT
CUMULATIVE NET THRU ACTUAL YEAR (FY 1979)	12,000	-	-	-	-	-	-	-	-	-	-
PROPOSED OPERATIONAL YEAR (FY 1977)	-	-	-	-	-	-	-	-	-	-	-

CCC VALUE OF P.L. 480 COMMODITIES (\$000) → Thru Actual Year : None Operational Year Program : None

**007 IMPLEMENTING AGENCY TABLE**

If contractors or participating agencies are employed, enter the name and contract or PASA number of each in appropriate spaces below; in the case of voluntary agencies, enter name and registration number from M.O. 1551.1, Attachment A. Enter the appropriate descriptive code in columns b and c, using the coding guide provided below.

TYPE CODE b	TYPE CODE c	a. IMPLEMENTING AGENCY	TYPE CODE		d. CONTRACT/PASA/VOLAG NO.	e. LEAVE BLANK FOR AID/W USE
			b.	c.		
1. U.S. CONTRACTOR	0. PARTICIPATING AGENCY					
2. LOCAL CONTRACTOR	1. UNIVERSITY					
3. THIRD COUNTRY CONTRACTOR	2. NON-PROFIT INSTITUTION	1. I.V.C.O.	1	3		
4. PARTICIPATING AGENCY	3. ARCHITECTURAL & ENGINEERING	2. H.A.C.M.	2	4		
5. VOLUNTARY AGENCY	4. CONSTRUCTION					
6. OTHER:	5. OTHER COMMERCIAL					
	6. INDIVIDUAL					
	7. OTHER:					

**PART I - PROJECT IMPACT**

**I-A. GENERAL NARRATIVE STATEMENT ON PROJECT EFFECTIVENESS, SIGNIFICANCE & EFFICIENCY.**

This summary narrative should begin with a brief (one or two paragraph) statement of the principal events in the history of the project since the last PAR. Following this should come a concise narrative statement which evaluates the overall efficiency, effectiveness and significance of the project from the standpoint of:

- (1) overall performance and effectiveness of project implementation in achieving stated project targets;
- (2) the contribution to achievement of sector and goal plans;
- (3) anticipated results compared to costs, i.e., efficiency in resource utilization;
- (4) the continued relevance, importance and significance of the project to country development and/or the furtherance of U.S. objectives.

Include in the above outline, as necessary and appropriate, significant remedial actions undertaken or planned. The narrative can best be done after the rest of PART I is completed. It should integrate the partial analyses in I-B and I-C into an overall balanced appraisal of the project's impact. The narrative can refer to other sections of the PAR which are pertinent. If the evaluation in the previous PAR has not significantly changed, or if the project is too new to have achieved significant results, this Part should so state.

008 NARRATIVE FOR PART I-A (Continue on form AID 1020-25 I as necessary):

**Project Description:** This project consists of design and construction of a 33 MW hydro-electric generating plant at the existing Kajakai Dam with transmission line facilities to connect the plant to the Kandahar and Girishk distribution systems. The project includes the furnishing of technical, supervisory and training services for the plant and related Afghan Electric Authorities. A \$12 million US Loan #306-H-013 was authorized to finance the foreign exchange costs of the project. (Cont

MISSION DIRECTOR APPROVAL →	SIGNATURE	DATE
	<i>[Signature]</i>	<i>[Date]</i>

UNCLASSIFIED  
SECURITY CLASSIFICATION

SECURITY CLASSIFICATION

UNCLASSIFIED

PROJECT NUMBER

306-22-120-101.0

## PAR CONTINUATION SHEET

This sheet is to be used for any Narrative Sections for which sufficient space has not been provided on the form. Identify each narrative by its Part and Section Designation.

008 - Contd

The RGA has allocated \$3.4 million equivalent to cover local costs of the project.

Progress to date: An engineering services contract was signed August 20, 1969 with International Engineering Company (IECO) of San Francisco, California covering design, construction supervision, start-up and test, initial operation for 10 months and a plan for a training program.

Notice to Proceed to IECO was issued 15 November, 1969 and field engineers arrived in Afghanistan on 4 January, 1970 to commence work on preliminary engineering, cost estimating, and training program plan. Preliminary design, including cost estimate, is to be submitted by IECO for AID/RGA approval by May 15, 1970.

Construction is scheduled to commence in June 1971 and be completed in December, 1973.

On-the-job training has commenced with the arrival of the IECO engineers for preliminary design and training will continue through the life of the project.

Background Information: In November 1964 R.W. Beck & Associates, consultant engineers contract No. AID/nesa-96, under project No. 306-12-220-041 "Helmand-Arghandab Valley Electric Power", submitted their report entitled "Electric Power Survey Report for Helmand and Arghandab/ Volumes 1 and 2".

Valley

One purpose of the survey was to determine by which methods the Helmand-Arghandab Valley Region, located in south-western Afghanistan, could be best assured of an adequate supply of electricity. It was believed that an adequate supply of electricity would be an important factor in fostering the general industrial development of the region. According to the Beck Report the most practical method would be to install hydro-electric generating facilities at Kajakai Dam and at the same time construct electrical transmission facilities to distribute this power to and within the region.

In January 1967 under contract No. AID/nesa-287 project No. 306-11-999-000 "Technical Support", R.W. Beck submitted a "Loan Study Report" which reviewed in detail the necessary steps to be taken should a loan be negotiated between the Royal Government of Afghanistan (RGA) and the Agency for International Development (AID) for the installation of hydro-electric generating facilities at Kajakai Dam.

In February 1967 the Minister of Planning of the RGA formally applied to AID for a loan to pay the foreign exchange costs of construction of generating and transmission facilities at Kajakai Dam, and costs of training programs to enable Afghans to operate and maintain such a facility.

AID/W prepared a Capital Assistance Paper dated April 25, 1967 which recommended approval of a \$12,000,000 loan for the project. The Capital Assistance Loan Authorization was signed by the AID Administrator on June 21, 1967. After eleven months of negotiations, AID and the RGA signed the Loan Agreement on May 13, 1968 for an amount not to exceed \$12,000,000 to be used exclusively to finance the U.S. dollar costs of goods and service required for the project.

UNCLASSIFIED

SECURITY CLASSIFICATION	UNCLASSIFIED	PROJECT NUMBER	306-22-120-101.0
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## PAR CONTINUATION SHEET

This sheet is to be used for any Narrative Sections for which sufficient space has not been provided on the form. Identify each narrative by its Part and Section Designation.

008 - Contd

The loan is to be repaid within forty years from the initial disbursement date. The interest rate is one percent per annum for the first ten years and two and one half percent per annum for the remaining thirty years. There is a ten year grace period before any principal payments have to be made.

One major stipulation of the Loan Agreement is that no less than a proximately \$1,500,000 shall be reserved to finance the costs of the programs to train the RGA (Afghan personnel) to operate and maintain the Kajakai Hydro-electric System.

Effectiveness: The project should be effective in achieving project targets. Upon completion the Valley will have adequate, reliable and low cost hydro-electric power to satisfy projected loads until 1980. The project when completed is suitable for future expansion to meet projected power needs for the next 30 to 40 years.

This project is significant to other activity in the Helmand Valley since adequate low cost electric power is a significant factor in agriculture and industrial development. It is recommended that the project be continued until completion.

Problems: The project is now progressing satisfactorily and no unusual engineering or technical problems are contemplated at this time. There has been some difficulty in the RGA meeting the main Condition Precedent to initial funding (see 106 - page 8).

A funding problem is anticipated since cost estimates are based on the 1967 Beck Study. No allowance has been made for escalation due to cost increase in U.S. commodities from the period 1967 to bid date 1971. This problem has been discussed with AID/W and the RGA. Definite action will be taken after LCO's cost estimate is received in May 1970 when it will be established if additional money is needed and the amount required.

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## PART I-B - PROJECT EFFECTIVENESS

009

I-B-1 - OUTPUT REPORT AND FORECAST - (See detailed instructions)

1. CODE NO. AID/W USE ONLY	2. This section is designed to record progress toward the achievement of each project output target which was scheduled in the PIP, Part I: Where progress toward a target is significantly greater or less than scheduled, describe reasons beneath the target.	ACTUAL AND PLANNED OUTPUTS (ALL DATA CUMULATIVE)				
		3. ACTUAL CUM. TO DATE 5/4/70	4. AS OF PRIOR JUNE 30 D. PLANNED E. ACTUAL		5. PLANNED BY NEXT JUNE 30 1970	6. PROJECTED TOTAL FOR PROJECT LIFE
	1. Conditions Precedent for Initial Disbursement	100%	100%	95%	100%	100%
	2. Conditions Precedent for Training Program*	0%	0%	0%	30%	100%
	3. Conditions Precedent for Construction Contract*	0%	0%	0%	25%	100%
	4. Letter of Commitment for Engineering Services	100%	100%	90%	100%	100%
	5. Letter of Commitment for Consulting Services Training Program*	10%	0%	0%	25%	100%
	6. Letter of Commitment for Construction Contracts*	0%	0%	0%	20%	100%
	<u>Construction:</u>					
	7. Add 33 MW Hydro-electric capacity to Helmand Valley Power Systems	0%	0%	0%	0%	100%
	8. Install approx 120 miles of Transmission Lines	0%	0%	0%	0%	100%
	9. Install Sub-Station at Kandahar	0%	0%	0%	0%	100%
	10. Install Sub-Station at Girishk	0%	0%	0%	0%	100%
	<u>Training Program:</u>					
	11. Train RGA personnel in management, operation and maintenance*	*0%	0%	0%	5%	100%

\*Progress is being made to meet these conditions precedent.

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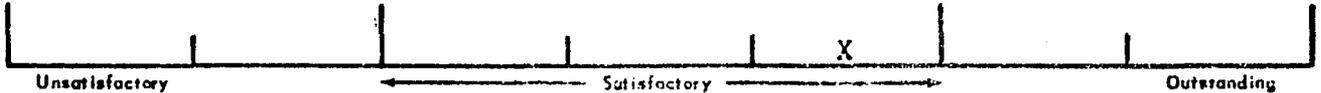
SECURITY CLASSIFICATION

SECURITY CLASSIFICATION <b>UNCLASSIFIED</b>	PROJECT NUMBER 306-22-120-101, 0
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**PART I-B - Continued**

**010 B.2 - OVERALL ACHIEVEMENT OF PROJECT TARGETS**

Place an "X" within the bracket on the following seven-point scale that represents your judgment of the overall progress towards project targets:



**PART I-C - PROJECT SIGNIFICANCE**

**011 C.1 - RELATION TO SECTOR AND PROGRAM GOALS (See detailed instructions M.O. 1026.1)**

This section is designed to indicate the potential and actual impact of the project on relevant sector and program goals. List the goals in col. b and rate potential and actual project impact in cols. c and d.

a. CODE NO. (AID/W USE ONLY)	SCALE FOR COLUMN c: 3= Very Important; 2= Important; 1= Secondary Importance SCALE FOR COLUMN d: 3= Superior/Outstanding; 2= Adequate/Satisfactory/Good; 1= Unsatisfactory/Marginal	c. POTENTIAL IMPACT ON EACH GOAL IF PROJECT ACHIEVES TARGETS	d. ACTUAL IMPACT ON GOAL TO DATE RELATIVE TO PROGRESS EXPECTED AT THIS STAGE
b. SECTOR AND PROGRAM GOALS (LIST ONLY THOSE ON WHICH THE PROJECT HAS A SIGNIFICANT EFFECT)			
	(1) Through cooperative effort with the RGA to complete the physical facilities of the Helmand-Arghandab Valley Region which are essential to expanding production and to support research, technical and institutional development required for steadily expanding agricultural and industrial growth.	3	2
	(2) To facilitate and encourage the mobilization of public and private development resources directed toward the achievement of an increasing rate of economic growth in the 70's.	2	2
	(4)		

For goals where column c. is rated 3 or 2 and column d. is rated 1, explain in the space for narrative. The narrative should also indicate the extent to which the potential impacts rated 3 or 2 in column c. are dependent on factors external to the achievement of the project targets, i.e., is there a substantial risk of the anticipated impact being forestalled by factors not involved in the achievement of project targets. If possible and relevant, it also would be useful to mention in the narrative your reading of any current indicators that longer-term purposes, beyond scheduled project targets, are likely or unlikely to be achieved. Each explanatory note must be identified by the number of the entry (col. b) to which it pertains.

012 NARRATIVE FOR PART I-C.1 (Continue on form AID 1020-25 I).

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PROJECT NUMBER

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## PART I-C - Continued

## C.2 - GENERAL QUESTIONS

These questions concern developments since the prior PAR. For each question place "Y" for Yes, "N" for No, or "NA" for Not Applicable in the right hand column. For each question where "Y" is entered, explain briefly in the space below the table.	MARK IN THIS COL.
013 Have there been any significant, unusual or unanticipated results not covered so far in this PAR?	N
014 Have means, conditions or activities other than project measures had a substantial effect on project output or accomplishments?	N
015 Have any problems arisen as the result of advice or action or major contributions to the project by another donor?	N
016 If the answer to 014 or 015 is yes, or for any other reason, is the project now less necessary, unnecessary or subject to modification or earlier termination?	N
017 Have any important lessons, positive or negative, emerged which might have broad applicability?	N
018 Has this project revealed any requirement for research or new technical aids on which AID/W should take the initiative?	N
019 Do any aspects of the project lend themselves to publicity in newspapers, magazines, television or films in the United States?	Y
020 Has there been a lack of effective cooperating country media coverage? (Make sure AID/W has copies of existing coverage.)	N
021 <u>NARRATIVE FOR PART I-C.2</u> Identify each explanatory note by the number of the entry to which it pertains. (Continue on form AID 1020-25 I as necessary):	

019 IECCO (Morrison-Knudsen), the consulting engineer, should consider placing an article in the company magazine later in the program.

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## PART II - IMPLEMENTATION REPORT

## II-A - STATUS OF SCHEDULE

022 A-1 - INDIVIDUAL ACTIONS (See detailed instructions M.O. 1026.1). This is a listing of major actions or steps which were scheduled for physical start or continuing implementation in the reporting period as reflected in the Project Implementation Plan, Part I.

(a)		(b) STATUS - PLACE AN "X" IN ONE COLUMN		
PIP ITEM NO.	MAJOR ACTIONS OR STEPS; CAUSES AND RESULTS OF DELAYS; REMEDIAL STEPS	(1)	(2)	(3)
		BEHIND SCHEDULE	ON SCHEDULE	AHEAD OF SCHEDULE
1.	Loan Authorized	X	(Completed 6/21/67)	
2.	Loan Agreement signed	X	(Completed 5/13/68)	
3.	Design Contract executed	X	(Completed 8/20/69)	
4.	Submit preliminary design and cost estimate for ABM-USAID approval		X	
5.	Award Purchase Contract for turbines and generators transformers		X	
6.	Award Purchase Contract for gates and trashracks		X	
7.	Award contract for training program		X	
8.	Award Construction contract power house and general construction		X	
9.	Award Contract Construction of transmission line and sub-stations		X	
10.	Construct transmission line and sub-stations		X	
11.	Install Start-up Test Units #1 and #2 - turbines and generators		X	
12.	Complete construction		X	
13.	Complete IECCO contract - (10 months operation included).		X	
	<p><u>Note:</u> (See 106 Narrative page 8 for reasons items 1-2-3 were completed behind schedule)</p>			

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SECURITY CLASSIFICATION

PART II - Continued

023

II-A.2 - OVERALL TIMELINESS

In general, project implementation is (place an "X" in one block):

(a) On schedule	X
(b) Ahead of schedule	
(c) Behind schedule	
(1) AID/W Program Approval	
(2) Implementing Agency (Contractor/Participating Agency/Voluntary Agency)	
(3) Technicians	
(4) Participants	
(5) Commodities (non-FFF)	
(6) Cooperating Country	
(7) Commodities (FFF)	
(8) Other (specify):	

BLOCK (c): If marked, place an "X" in any of the blocks one thru eight that apply. This is limited to key aspects of implementation, e.g., timely delivery of commodities, return of participants to assume their project responsibilities, cooperating country funding, arrival of technicians.

II-B - RESOURCE INPUTS

This section appraises the effectiveness of U.S. resource inputs. There follow illustrative lists of factors, grouped under Implementing Agency, Participant Training and Commodities, that might influence the effectiveness of each of these types of project resources. In the blocks after only those factors which significantly affect project accomplishments, write the letter P if effect is positive or satisfactory or the letter N if effect is negative or less than satisfactory.

1. FACTORS-IMPLEMENTING AGENCY (Contract/Participating Agency/Voluntary Agency)

024 IF NO IMPLEMENTING AGENCY IN THIS PROJECT. PLACE AN "X" IN THIS BLOCK:		032 Quality, comprehensiveness and candor of required reports	P
		033 Promptness of required reports	P
025 Adequacy of technical knowledge	P	034 Adherence to work schedule	P
026 Understanding of project purposes	P	035 Working relations with Americans	P
027 Project planning and management	P	036 Working relations with cooperating country nationals	P
028 Ability to adapt technical knowledge to local situation	P	037 Adaptation to local working and living environment	
029 Effective use of participant training element		038 Home office backstopping and substantive interest	P
030 Ability to train and utilize local staff	P	039 Timely recruiting of qualified technicians	P
031 Adherence to AID administrative and other requirements	P	040 Other (describe):	

2. FACTORS-PARTICIPANT TRAINING

041 IF NO PARTICIPANT ELEMENT IN PROJECT. PLACE AN "X" IN THIS BLOCK:	X	TRAINING UTILIZATION AND FOLLOW UP	
PREDEPARTURE		052 Appropriateness or original selection	
042 English language ability		053 Relevance of training for present project purposes	
043 Availability of host country funding		054 Appropriateness of post-training placement	
044 Host country operational considerations (e.g., selection procedures)		055 Utility of training regardless of changes in project	
045 Technical/professional qualifications		056 Ability to get meritorious ideas accepted by supervisors	
046 Quality of technical orientation		057 Adequacy of performance	
047 Quality of general orientation		058 Continuance on project	
048 Participants' collaboration in planning content of program		059 Availability of necessary facilities and equipment	
049 Collaboration by participants' supervisors in planning training		060 Mission or contractor follow-up activity	
050 Participants' availability for training		061 Other (describe):	
051 Other (describe):			

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## PART II-B - Continued

## 3. FACTORS-COMMODITIES

PLACE AN "X" IN APPROPRIATE BLOCK:	062 FFF	063 NON-FFF	X	064 NO COMMODITY ELEMENT	072 Control measures against damage and deterioration in shipment
065 Timeliness of AID/W program approval (i.e., PIO/C, Transfer Authorization).					073 Control measures against deterioration in storage.
066 Quality of commodities, adherence to specifications, marking.					074 Readiness and availability of facilities.
067 Timeliness in procurement or reconditioning.					075 Appropriateness of use of commodities.
068 Timeliness of shipment to port of entry.					076 Maintenance and spares support.
069 Adequacy of port and inland storage facilities.					077 Adequacy of property records, accounting and controls.
070 Timeliness of shipment from port to site.					078 Other (Describe):
071 Control measures against loss and theft.					

Indicate in a concise narrative statement (under the heading a. Overall Implementation Performance, below) your summary appraisal of the status of project implementation, covering both significant achievements and problem areas. This should include any comments about the adequacy of provision of direct hire technicians as well as an overall appraisal of the comments provided under the three headings (b, c & d) which follow. For projects which include a dollar input for generation of local currency to meet local cost requirements, indicate the status of that input (see Detailed Instructions).

Discuss separately (under separate headings b, c & d) the status of Implementing Agency Actions, Participants and Commodities. Where above listed factors are causing significant problems (marked N), describe briefly in the appropriate narrative section: (1) the cause and source of the problem, (2) the consequences of not correcting it, and (3) what corrective action has been taken, called for, or planned by the Mission. Identify each factor discussed by its number.

079 NARRATIVE FOR PART II-B: (After narrative section a. Overall Implementation Performance, below, follow, on form AID 1020-25 I as needed, with the following narrative section headings: b. Implementing Agency, c. Participants, d. Commodities. List all narrative section headings in order. For any headings which are not applicable, mark them as such and follow immediately below with the next narrative section heading.)

a. Overall Implementation Performance. This project is progressing satisfactorily and on schedule. The Loan Agreement was signed on 5/13/68 and the design contract signed on 8/20/69. (See Part III for details of performance during this period). Preliminary design is on schedule. Design engineering and cost estimates are due in May, 1970. (See Part I for anticipated funding problems). The adequacy of direct hire technicians is satisfactory. Adequacy of local currency to meet local cost requirements has been satisfactory to date.

(b) Implementing Agency: The design contractor, International Engineering Company Inc., performance has been satisfactory and on schedule. 1000 engineers assigned to this project are well qualified and preliminary field surveys are being conducted in accordance with contract requirements.

(c) Participants: There is no participant element in the project. Preliminary training has begun with the arrival of 1000 engineers for initial design work. Extensive training in management, operation and maintenance will be performed with local funds and will be reported on in subsequent PARS. Participants trained under a previous power project (041) are being assigned by A.M. to work on this project.

(d) Commodities: Commodity procurement is scheduled to commence in late 1970 in accordance with contract terms and requirements of the engineering critical path (CPM) schedule.

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## PART III - ROLE OF THE COOPERATING COUNTRY

The following list of illustrative items are to be considered by the evaluator. In the block after only those items which significantly affect project effectiveness, write the letter P if the effect of the item is positive or satisfactory, or the letter N if the effect of the item is negative or less than satisfactory.

SPECIFIC OPERATIONAL FACTORS:	
080 Coordination and cooperation within and between ministries.	P
081 Coordination and cooperation of LDC gov't. with public and private institutions and private enterprise.	-
082 Availability of reliable data for project planning, control and evaluation.	P
083 Competence and/or continuity in executive leadership of project.	P
084 Host country project funding.	P
085 Legislative changes relevant to project purposes.	N
086 Existence and adequacy of a project-related LDC organization.	P
087 Resolution of procedural and bureaucratic problems.	-
088 Availability of LDC physical resource inputs and/or supporting services and facilities.	P
089 Maintenance of facilities and equipment.	-
090 Resolution of tribal, class or caste problems.	-
091 Receptivity to change and innovation.	P
092 Political conditions specific to project.	P
093 Capacity to transform ideas into actions, i.e., ability to implement project plans.	P
094 Intent and/or capacity to sustain and expand the impact of the project after U.S. inputs are terminated.	P
095 Extent of LDC efforts to widen the dissemination of project benefits and services.	P
096 Utilization of trained manpower (e.g., participants, counterpart technicians) in project operations.	P
097 Enforcement of relevant procedures (e.g., newly established tax collection and audit system).	-
098 Other:	N
HOST COUNTRY COUNTERPART TECHNICIAN FACTORS:	
099 Level of technical education and/or technical experience.	P
100 Planning and management skills.	N
101 Amount of technician man years available.	P
102 Continuity of staff.	P
103 Willingness to work in rural areas.	P
104 Pay and allowances.	N
105 Other:	

In the space below for narrative provide a succinct discussion and overall appraisal of the quality of country performance related to this project, particularly over the past year. Consider important trends and prospects. See Detailed Instructions for an illustrative list of considerations to be covered.

For only those items marked N include brief statements covering the nature of the problem, its impact on the achievement of project targets (i.e., its importance) and the nature and cost of corrective action taken or planned. Identify each explanatory note.

106 NARRATIVE FOR PART III (Continue on form AID 1020-25 11)

Country performance has been satisfactory. However, the RGA has been generally slow in meeting the main Condition Precedent prior to initial funding. The Loan Agreement with the RGA was signed May 13, 1968 and it was 15 months later, August 20, 1969, that the engineering services contract was signed with IECO. This delay was due to a number of factors: a Cabinet decision was necessary to determine the responsible RGA agency and Cabinet approval was required for the IECO contract. The Minister of Mines & Industries was removed for cause and during this period two different acting ministers were in office; a decision and minister support was difficult to obtain. A new minister was placed in office after November, 1969 election.

085 & 098 Other: The present electric power rate structure is not adequate to finance the Power Authority (ABM). Although ABM has requested an increase in rates in Kabul no action has been taken. Parliamentary approval is necessary to change power rates.

(Contd)

UNCLASSIFIED

SECURITY CLASSIFICATION

SECURITY CLASSIFICATION

UNCLASSIFIED

PROJECT NUMBER

306-22-120-101, 0

## PAR CONTINUATION SHEET

This sheet is to be used for any Narrative Sections for which sufficient space has not been provided on the form. Identify each narrative by its Part and Section Designation.

## PART III - Role of the Cooperating Country (Contd)

100 - Planning and Management Skills: ABM is lacking in planning and management skills. Top management is excellent but middle management is practically non-existent. In this program ABM will receive extensive managerial and technical assistance.

104 - Pay and Allowances: Government pay and allowances are extremely low.

UNCLASSIFIED

**PART IV - PROGRAMMING IMPLICATIONS**  
**IV-A - EFFECT ON PURPOSE AND DESIGN**

Indicate in a brief narrative whether the Mission experience to date with this project and/or changing country circumstances call for some adjustment in project purposes or design, and why, and the approximate cost implications. Cover any of the following considerations or others that may be relevant. (See Detailed Instructions for additional illustrative considerations.) Relevant experience or country situations that were described earlier can simply be referenced. The spelling out of specific changes should be left to the appropriate programming documents, but a brief indication of the type of change contemplated should be given here to clarify the need for change.

For example, changes might be indicated if they would:

1. better achieve program/project purposes;
2. address more critical or higher priority purposes within a goal plan;
3. produce desired results at less cost;
4. give more assurance of lasting institutional development upon U.S. withdrawal.

107 NARRATIVE FOR PART IV-A (Continue on form AID 1020-25 I):

This is a well planned and engineered hydro-electric project for the Helmand-Arghandab Valley including the second largest city, Kandahar, in Afghanistan. There is a critical power shortage in the area and the hydro plant will furnish low cost power. Mission experience to date calls for no change or adjustment in this project.

**IV-B - PROPOSED ACTION**

108 This project should be (Place an "X" in appropriate block(s)):	-X
1. Continued as presently scheduled in PIP.	<input checked="" type="checkbox"/>
2. Continued with minor changes in the PIP, made at Mission level (not requiring submission of an amended PIP to AID/W).	<input type="checkbox"/>
3. Continued with significant changes in the PIP (but not sufficient to require a revised PROP). A formally revised PIP will follow.	<input type="checkbox"/>
4. Extended beyond its present schedule to (Date): Mo. ___ Day ___ Yr. ___. Explain in narrative, PROP will follow.	<input type="checkbox"/>
5. Substantively revised. PROP will follow.	<input type="checkbox"/>
6. Evaluated in depth to determine its effectiveness, future scope, and duration.	<input type="checkbox"/>
7. Discontinued earlier than presently scheduled. Date recommended for termination: Mo. ___ Day ___ Yr. ___	<input type="checkbox"/>
8. Other. Explain in narrative.	<input type="checkbox"/>

109 NARRATIVE FOR PART IV-B: