1' PD-ABU-430 presented to ABM 10/5/71

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San Francisco, California
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MEMORANDUM

TO: Mr. Hamidullah Hamid, General President
Da Afghanistan Breshna Moassessa
Kabul, Afghanistan

FROM: Mr. Michael Long, Training Coordinator
Kabul, Afghanistan

DATE: September 29, 1971

SUBJECT: Kajakai Hydroelectric Project Training Program

Dear Mr. Hamid:

As a conclusion to my trip, I respectfully submit this partial report and set of recommendations. The following is the result of numerous discussions with ABM and a multitude of agencies and individuals. It has been carefully thought out but is not, of course, the final answer. In the year to follow many changes may occur which can affect the final outcome of the training program for Kajakai. It is my hope, however, that the recommendations herein stated will be followed vigorously, particularly, the sending of the four letters which are included in the Appendix. By the time of my scheduled return trip, approximately in one year, it is my hope that we can report progress on the prepatory training of the positions recommended and that we will have a sound basis for the continued development of the detailed program to follow.

A. PURPOSE

1. With the discussion and presentation by ABM of the available candidates for the positions of operating personnel for the Kajakai Hydroelectric Project, it is now possible to make an evaluation of the Training Program as proposed in the "Revised Description of Training Positions" which was presented to ABM in two copies and to USAID ENGINEERING in one copy early on my arrival in Kabul.

This "Revised Description of Training Positions" is an updated version of Chapter No. 9 of the Preliminary Plans for Kajakai Hydroelectric Power Plant. It has been changed to incorporate the manpower revisions as included in the exchanges of correspondence and minutes of meetings. In addition, training position reference members, budget estimates, man-

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month estimates, and schedules had been revised to reflect these changes as well as the latest revision to the CPM/PERT Schedule for the Kajakai Project. This "Revised Description of Training Positions" is therefore, considered a part of this Memorandum although it is not included herein due to its bulk, and all references to training positions etc. are those as described therein.

Sections B and C of this Memorandum include discussions and recommendations of agency organization and the proposed ABM candidates as requested in the ABM meeting of September 22 and 23, 1971, which occured in the offices of ABM. For easy reference, a copy of the "Minutes of Meeting", for that meeting is included in the appendix as EXHIBIT I.

2. Sections D, E and F deal with three important aspects of the Kajakai Training Program which should be acted upon without delay. The recommendations of these sections include specific drafts of four letters which should be sent to establish the advanced planning essential to an effective training program. In the case of the letter to the Ministry of Water and Power in Iran, not only is the letter essential to planning but it establishes a document on which all future detail planning will be dependent and which will provide this cooperating agency a means by which they in turn may plan their requirements well in advance of their program implementation.

B. ORGANIZATIONAL RECOMMENDATIONS

1. It is appropriate that some discussion of organization be included within this report and summary. As ABM has requested a candid recommendation, (see "Minutes of Meeting" of September 22 and 23, 1971, item B. 3 of EXHIBIT I of appendix for easy reference) discussions for both Kajakai and the Distribution Agencies follow below.

2. Kajakai Hydroelectric Project

a. A copy of the "Kajakai Power Project Organization Chart" as was included in Chapter no. 9 of "The Preliminary Plans for Kajakai Hydroelectric Project" is annexed as EXHIBIT II, in the Appendix for easy reference. I have no comment on the organization for plant operation as shown. I recommend that the organization as shown be adhered to during the training period and the ten month initial operating period following plant start-up.

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b. It is my recommendation, however, that the Kajakai Project office be independent during the construction phase, responsible only to ABM. The Kajakai Project office should have the complete control and responsibility of the following, (depending of course on contractual responsibility and limitations):

i. Complete accounting of all monies employed for expenditures in Afs and loan funds in dollars;

ii. Engineering inspection for ABM, civil, mechanical and electrical;

iii. Reporting of construction progress, expenditures, training program progress, procurement progress, etc.;

iv. Customs clearance at the port of entry and material transportation logistics;

v. Arrange and supervise all details of the training program for the Kajakai operating personnel. The Field Training Coordinator should be part of this team; and,

iv. General services of transportation, housing, payroll, filing, local purchasing of materials, etc. for the Afghan personnel of the Kajakai Project Office.

The above responsibilities should be carried by the Kajakai Project Office, until final acceptance and start-up of Kajakai. The operating personnel should have assumed full responsibility by this time and would complete any miscellaneous unfinished details remaining during the ten month initial operating period.

c. After the ten month initial operating period, it is my opinion that the top operating personnel of Kajakai assume more encompassing responsibilities in the Kandahar Breshna as follows:

i. Kajakai Plant Manager, Position One-Depending on the nature of this man and his technical capabilities, I recommend that he assume the position of Chief Operating Engineer of the Power Production and Operation Department of Kandahar Breshna (see discussion of organization of Kandahar Breshna, Section B. 3 below). This man's responsibility to include the operation of the entire system of Kandahar, i. e. O and M of the 110KV transmission line and substations, ~~and~~ all dispatching and bulk metering operations, and O&M of both Kajakai generating units and the existing diesel units.

ii. Chief Maintenance Engineer, Position two-This is the top technical position of Kajakai and, again depending on the ability of the man selected and trained for this position, I recommend that he assume the position of Chief Operating and Maintenance Engineer of the Power Plant Operation Department of Kandahar Breshna. (See discussion of organization of Kandahar Breshna, Section B. 3 below). This new position would increase this mans responsibility to include the

B. 2. c-continued

operation and maintenance (emphasis on maintenance) of the Kandahar diesel units in addition to the entire Kajakai Hydroelectric Plant.

iii. Chief Operating Engineer, Position Three-This is the second highest technical position of Kajakai (positions 11 and 12, Chief of Administration and Area Engineer respectively also of rank equal to position three) and, again depending on the ability of the man selected and trained for this position, I recommend that he assume overall responsibility of the total operation of Kajakai Hydroelectric Plant, remain in residence, and be responsible to the Chief Operations and Maintenance Engineer of the Power Plant Operation, Department of Kandahar Breshna as described in (Section B. 2. c. ii) above.

The above shifts of position, again, are recommended only after the Kajakai ten month initial operating period has been successfully completed, the men are evaluated to be capable of their expanded responsibilities, and work load of the operation of the Kajakai Plant would permit the moves. For the first two cases, the Plant Manager and Chief Maintenance Engineers, their jobs would require travel between the various sites (minimum weekly).

My opinion of the above is based on the fact that few units will be in operation during the initial stages of Kajakai Hydroelectric Project. When the third unit is added and placed into operation the work load will have to be reevaluated. When the future additional four units (making seven operating units) are added, then the plant will have to be completely staffed full time.

For reference purposes, the respective section numbers B. 2. c. i., B. 2. c. ii., and B. 2. c. iii. of the position shifts discussed above are shown on the proposed revised organization chart for Kandahar Breshna, EXHIBIT IV of the Appendix. The numbers appear beneath the respective position blocks.

3. Distribution Agencies Served By Kajakai Hydroelectric Project

a. A copy of the "Distributing Agency Organization Chart" as was included in Chapter No. 9 of "The Preliminary Plans for Kajakai Hydroelectric Project" is annexed as EXHIBIT III, in the Appendix for easy reference.

b. A proposed revised organization chart for Kandahar Breshna Distribution Agency is annexed as EXHIBIT IV, in the appendix for easily reference. From the proposed organization chart a few points are salient:

i. As previously shown on the old organization chart, the technical and administrative duties are separted from each other. The section "New accounts and Marketing" should receive all requests for new accounts and perform whatever the (government regulations require for) credit investigation. From there,

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authorized approval should go no higher in level (preferably lower) than the Director, Administration, who should then see that his technical counterpart, Director, Technical Department, receives the notice for the new installation by an established routine procedure.

ii. For the positions of Chief of Kandahar Breshna, Director of Technical Department and the Director of the Administrative Department, secretaries are shown directly in line with their responsibilities. As is presently being implemented in ABM, Kabul, a secretary should be a receptionist for all parties to screen the matters or individuals trying to obtain an audience with the officer. All too often people are just sitting and conversing informally with the officer robbing him of precious time. The secretary should also intercept all documents to be signed, obtaining the background on the matter, and then having established an order of priority, should present all documents for signature at a predetermined hour, say 2:00 pm. Many of the documents which are routine, the secretary could stamp the copies with a rubber stamp "original signed by ..." with the officers name, and then the officer need only sign the original.

One secretary could serve two officers if the two officers could arrange for a physically common reception area (again a good example is presently being constructed at ABM, Kabul, for Messrs. Attayee and Kamal).

For Kajakai Hydroelectric Project, these above described secretarial functions should be provided by the Administrative Assistant, position 10, for the Plant Manager.

iii. The suggested revision of organizational structure is a key to delegation of responsibility. If properly implemented and followed by all individuals involved, those with decision or policy making functions should be free to work efficiently and effectively within the privacy of their offices.

It should be realized, however, that an organization chart must be adapted to the scope and magnitude of the work of the agency. Some functions may be the combined responsibility of fewer people or of a single person if the amount of work in a particular function is not enough to occupy a person full time. In the case of Boghra Breshna, the same organization chart may be utilized but a reduction in the magnitude of work and the quantity of people would combine groups functions.

B. 3-continued

c. Aside from the reference to Boghra Breshna in the immediately preceding section, I have no other recommendations regarding the internal organization of this distribution agency. I feel the same organizational structure can be adapted, if it has not already a similar structure.

I do feel, however, that attempts to combine the Boghra Breshna under the Kandahar Breshna organizational structure should be avoided. It is my opinion that Boghra Breshna stands with it's 25% "electric loss" record as an example for the country. In addition, from my observation, it is an example for orderly and systematic development and expansion which is engineered, not just "built on" by technicians. Therefore, I feel it would be a mistake to combine the Boghra Breshna with the Kandahar Breshna until such time as Kandahar Breshna can match the level of quality of Boghra Breshna technically and commercially. Boghra Breshna, to be fair began with an orderly system in it's infancy and is much smaller than Kandahar, allowing a more orderly expansion. I feel, however, that I would adhere to my recommendation of separate agency organizations.

C. PERSONNEL RECOMMENDATIONS

1. Based on the candidates presented by ABM (see "Minutes of Meeting" of September 22 and 23, 1971. EXHIBIT I of Appendix for easy reference), personal interviews when possible, and the opinions and recommendations of various individuals, I have presented below candid suggestions and recommendations for the training positions for Kajakai Hydroelectric Project and the Distribution Agencies. As the circulation of this document is limited, the recommendations herein are frank as requested and in some cases include a discussion of a specific candidate in regards to a position outside of the scope of the positions of the Kajakai Training Program.

In order to cover all the positions, which is necessary to evaluate and revise the program realistically, I have discussed each training position in the order of appearance in the "Revised Description of Training Positions". To evaluate the order of priority, a priority number has been assigned to each training position in accordance with the revised schedule. For example, the training positions 1, 2 and 4 are shown on the revised schedule as already participating in the training program; Therefore, they should have priority number one. Next, training positions 5, 7 and 10 are scheduled for beginning training October 1971, so their priority number is two; and so on in chronological order of

C. 1-continued

priority. After evaluating each position, the available candidates or lack of candidates and, the scope of training, I will assign a "revised priority number". Obviously some men will have training and experience and can start their training at a later date if they are definately selected now to fill the position. Where there is no candidate, and not enough candidates have been presented, a maximum priority must be assigned to the position because the position may have to be filled with a new graduate and, therefore, training must start immediately with fundamental training. Estimated man-months given include 10 month initial operation period. Total program estimate for a man beginning mid-October would be 45 man-months.

To make the following recommendations is much easier than implementing the program. The Field Training Coordinator must devote considerable time to each man or group of men for a training position. He must evaluate carefully the abilities and experience of each man in relation to the job and tailor the program around him. Another major consideration for ABM is the replacement of the man or, if necessary, training well in advance a replacement for his present duties.

2. Kajakai Hydroelectric Project

a. Position 1, Plant Manager, Scheduled to begin training past, priority one.

i. Candidate: I have recommended a priority handling of this position and have no more to comment. See the exchange of correspondence (Memorandum, IECO Training Coordinator to ABM, dated August 14, 1971, EXHIBIT V of the Appendix and responding letter, ABM to IECO Training Coordinator, dated August 15, 1971, EXHIBIT VI of the Appendix) regarding this matter.

ii. The scope of training: will depend entirely on the man selected. If the man is of a high level of maturity I would definitately recommend the Management Development course in Iran and perhaps Stateside training. Coupled with the Iranian trip, I would suggest that he tour various power plants in Iran, and study their management. interviewing their respective plant managers. See Section F of this memorandum. In addition, I would suggest that the Kajakai Plant Manager work with the new German Management team which is just beginning a three year contract in the Mahipar Hydroelectric Power Plant. The Plant Manager could start his training immediatily, particularly as with his extensive duties as Field Training Coordinator and contributing to the work of the Kajakai Project Office. he must use all available free time for his own improvement and organization.

C. 2-continued

iii. Priority: Recommend no change in schedule, revised priority number remains one. Estimated revised training period, 45 man-months.

b. Position 2, Chief Maintenance Engineer, scheduled to begin training past priority one.

i. Candidate: From candidates presented by ABM, I would recommend Engineer Mohammed Ashna for this, the top technical position. His background is one of general electrical engineering. His stated preference is hydroelectric power plant oriented work.

ii. Scope of training: Training can begin in Afghanistan with a detailed survey of all hydroelectric power plants for systems of preventive maintenance. Where there is a system but no written procedures, this man can develope the procedures in Dari for use, or future use as the case may be, for Afghans. In the case of the Russian built hydro plant Naghlou, it is my understanding that the Russians do all maintenance routinely but make no attempt to instruct the Afghans. A detailed set of written preventive maintenance procedures in Dari, in this case, could be of great value for future use. For the German built plant of Mahipar, a management team is just beginning a three year contract. One of this team's goals will be the establishment of a detailed, routine set of procedures, complete with a record-keeping method. Ashna could work with this team to develope the procedures and set them down in Dari. This would give Engineer Ashna a good basis in general equipment maintenance and preventive maintenance procedures and record-keeping methods.

Mr. Ashna speaks English well. However, all candidates are to be tested and, if required, given intensive English instruction. See Section D of this memorandum.

As described in the "Revised List of Training Positions", the man for this position should become familiar with the project, specifications, job responsibity, etc. preparation for his U. S. A. training. U. S. A training is programed for seven months.

Iranian training is presently scheduled for three months. I would recommend attendance of the management course, part of the Utility Management Program, expected to be ready by 1973, conducted by the Iranian Ministry of Water and Power Utility Training Center (IMWP/UTC). In addition, as part of OJT in Iran, a survey of preventive maintenance procedures and records keeping could be made. Assuming the management course is about 4 weeks long, I would recommend only two months total time in Iran. See Section

C. 2. ii-continued

F. of this memorandum.

After training abroad, this man would assist in the Kajakai Project Office and work with the construction contractor and engineer with the installation of all equipment to gain further familiarity with the project. With initial operation he would assume his operating position.

iii. Priority: I recommend no change in schedule, revised priority number one. Estimated revised training period, 45 man-months.

c. Position 3, Chief Operating Engineer, scheduled to begin training 4/72, priority four.

i. Candidate: Engineer Aslam (presently Technical Director of Kandahar Breshna) is a graduate engineer and has about four years experience. It is my understanding, two of those years were as a control room operator in the Naghlou Hydroelectric Power Plant with some experience working with the Russian relay technician.

ii. Scope of training: As Engineer, Aslam has background in plant operation (which should be carefully confirmed and working knowledge evaluated), I would recommend that his initial Afghan training begin with short-time OJT in the power plants in which he has no experience, making a survey of their operating procedures. This could be for about one month. In addition, he could spend several weeks observing and working in the dispatching center of Kabul Breshna.

Engineer Aslam should be tested for English and given intensive instruction, if necessary, approximately six months before his U. S. A. training is scheduled to start. See Section D of this memorandum.

I suggest the three month U. S. A. training be utilized by two months OJT in a single hydro location to gain experience in work safety, dispatching, preventive maintenance, and operations regulations and procedures. The remaining month could include visits to other plants to observe variations in operations and to receive instruction at the facilities of equipment suppliers.

Iranian training would include time to review and observe training of the shift operators (positions 8A/D) in the IMWP/UTC during the final phases of their training. If the schedule permits, I would recommend attendance of the utility management course, at management level. The remaining period could be utilized with OJT in one or two Iranian Hydros. See Section F of this memorandum.

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After training abroad, this man would assist in Kajakai Project office and work on the site installation, testing, etc. of the plant control equipment, instruments, transducers, etc.

iii. Priority: As we have a candidate with the anticipated background, I recommend no change in priority, starting date about 4/72, revised priority number two. Estimated training period, no change 39 man-months.

d. Position 4, Mechanical Maintenance Engineer, scheduled to begin training past, priority one.

i. Candidate: No mechanical engineers were proposed by ABM as candidates. A new graduate engineer must be recruited, or perhaps an experienced engineer can be found in one of the other Ministries which are mechanically oriented.

ii. Scope of training: Assuming a new graduate engineer with zero or minimum experience, selection and training should start immediately with OJT in existing Afghan Hydro Plants with their maintenance crews.

This man should be tested for English and given intensive instruction if necessary, about six months before his U. S. A. training is scheduled to start. See Section D of this memorandum.

U. S. A. training is proposed for five months, two-months period with turbine supplier and remaining three months of visit with auxiliary equipment suppliers, various utilities and governmental agencies, and applicable courses, if available. I suggest that the last three months be OJT in a single U. S. A. hydro plant to provide him experience in preventive maintenance, work safety, testing, assembly and repair of hydro plant mechanical systems.

Iranian training, presently programmed for three months, should also be utilized by OJT in one or two (max.) hydro plants in the same basic subjects described above. See Section F of this memorandum.

iii. Priority: I recommend no change in schedule, revised priority number one, estimated revised training period, 45 man-months.

e. Position 5, Electrical Maintenance Engineer, scheduled to begin training 10/71, priority two.

i. Candidate: Of the available candidates presented by ABM, we have Engineer Mohammed Gul. Engineer Gul is a graduate electrical engineer from Kabul University, and was top man in his class. He

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has essentially zero practical experience.

Alternatives to this selection are:

I. Obtaining a new graduate engineer and training him from "scratch" as with Engineer Gul.

II. Obtaining an electrical maintance engineer from the staff of an existing hydroelectric plant, hopefully with experience. Availability of such an engineer is doubtful as technicians usually used, not engineers.

III. Consider placing a technician with electrical maintenance experience in this position. The basic problem with this alternative is that technicians have technical education equivalent to 12th grade, but placed in this position would create objections from graduate engineers which would consider situation unacceptable for reasons of prestige and governmental rank.

Example is Zaqoomi. He is presently plant manager of Girishk Hydroelectric Plant (small plant of 2x1.2MW, vertical hydro units on irrigation canal). He could probably fill this position but has only AIT, technical high school education (some stateside OJT experience). See discussion of Zaqoomi for position 8A below.

IV. Consider EngineerFaqir Baqi as alternate candidate for this position. See discussion of Baqi, Section C. 4. b. ii below.

ii. Scope of training: Assuming Engineer Gul or another new graduate and inexperienced engineer, selection and training should start immediately with OJT in existing Afghan hydro plants in their maintenance group.

Engineer Gul should be tested for English and given intensive instruction if necessary, approximately six months before his U. S. A. training is scheduled to start. See Section D of this memorandum.

U. S. A. training was initially proposed to include visits to various utilities equipment suppliers, governmental agencies, etc. However, if this man is starting with zero experience, I suggest that he have OJT in a single U. S. A. hydro plant for a minimum of 3 months (longer time preferably) to gain experience in work safety, preventive maintenance, details of electrical equipment in hydro plant, testing, etc.

Iranian training, presently programmed for three months, should also

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be utilized by OJT in one or two (max.) hydro plants in the same basic subjects described above. See Section F of this memorandum.

iii. Priority: Recommend that priority be moved up to start immediately due to zero experience of candidate, revised priority number one. Estimated revised training period, 45 man-months (essentially no change as original schedule was 10/71).

f. Position 6, Communication Maintenance Engineer, scheduled to begin training 10/72, priority six.

i. Candidates: No candidate presented by ABM for this position. There are essentially no communications engineers in Afghanistan except for some foreign technicians and possible Kabul University Engineering faculty professors. There are various alternatives which are discussed in Section E of this memorandum, in which we request the assistance of the Ministry of Communications to fill this position.

ii. Scope of training: One of the alternatives for this position is to obtain a graduate electrical engineer with electronic preferences and have him undergo basic instruction in carrier systems and principles along with the communications technicians, positions 13A/D, and telephony who will be his subordinates. This may not work out as this training is considered to be technical high school level and below an engineer's dignity. See Section E of this memorandum. The scope of this man's duties includes responsibities of relays and instruments.

I would recommend that this man, assuming he has no experience with relays and instruments, undergo training in Iran with the relay and instrument technicians, positions 14A/D(14 week course). Again, this may not work out due to the prestige problem. See Section F of this memorandum.

For OJT in Afghanistan, there are carrier links for telephone between each of the power plants of Maihpar, Naghlou, and Sroche to the Kabul dispatching center. The system is Russian built and a single Russian technician maintains the system. Perhaps our engineer could attach himself to this Russian technician for some OJT.

The Russians are said to have a relay technician at Naghlou Power Plant as well. This is another possibility for OJT.

English testing and intensive instruction, if necessary, would be re-

C. 2. f. ii-continued

quired prior to the U. S. A training phase. See section D of this memorandum.

Instruction under the U. S. A carrier equipment supplier is estimated at two months.

OJT with construction contractor during installation, test, check-out and initial operation of equipment.

iii. Priority: Depending on Ministry of Communications response and assuming availability of candidate (if this alternative acceptable) at present, revised priority number one, estimated training period 45 man-months, including 2 man-months U. S. A. and about 3 man-months in Iran.

g. Position 7, Transmission Maintenance Engineer, Scheduled to begin training 10/71, priority two. (this position or for similar positions)

i. Candidates: There are no candidates presented by ABM for 16A and 16B for the distribution agencies. The only men who could qualify are Engineers Kargar and Sadat who are already at Technical Director levels and who would be a rank higher than these training positions and, therefore, their supervisors. See discussions of Section C.4. with reference to Kargar and Sadat. It is my recommendation that operating position 7, be eliminated due to the shortage of candidates and the following:

- A transmission line engineer sitting in residence at a hydro-electric plant, with a simple double terminal transmission line, would not be utilized. The man would be looking elsewhere for challenge.
- The transmission linemen, properly trained, can run periodic line surveys and handle the necessary line and substation maintenance.
- The two transmission and Distribution Engineers, positions 16A and 16B for Baghra and Kandahar Breshnas respectively can be readily available as they both are only 2½ hours from Kajakai.

ii. Scope of training: With position 7 eleminated, I would emphasize increased scope of training for positions 16A, 16B, Transmission and Distribution Engineers; for positions 9C/D, line crew foremen; and, for positions 15R/U, linemen. See their respective Sections below.

iii. Priority: No priority, 45 man-months eliminated.

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h. Positions 8A/D, 4 positions, Shift Operators scheduled to begin training 10/72 priority six.

i. Candidates: For the four positions, three candidates are available with varying amounts of experience:
Position 8A: Mr. Abdul Basir Zaqoomi is presently plant manager for Girishk Power Plant in the Helmand Valley. He is an AIT graduate, and has had Stateside OJT in hydro. Mr. Zaqoomi appears to be the best qualifiedd for this position and has been discussed as an alternative to position 5, electrical maintenance engineer. (See C. 2. e i. III)

Position 8B: Mr. Naqibullah, I understand, is the responsible second shift operator for Girishk Power Plant, is an AIT graduate, and is experienced. Consideration should be given presently for the training of replacements for both Zaqoomi and Naqibullah at the Girshk Plant if placement for Kajakai is acceptable.

Position 8C: Said Abdul Wahid, is an AIT graduate, and has been working in Noghlou Hydroelectric Power Plant. His background and actual experience is not at hand for evaluation.

Position 8D: A forth candidate must be recruited, preferably a man with experience as a shift operator.

ii. Scope of training: The background and abilities of each of the four men should be reviewed, and any man lacking necessary experience should begin immediately with OJT in existing Afghan Hydro Plants.

The present training program allows for some man-months of training in Iran (to be decided later). I recommend that these four operators be sent to the Iranian Ministry of Water and Power-Utility Training Center (IMWP/UTC) for a course specifically set up to train control room operators. This would increase Iranian man-month requirements from 8 man-months to 12 man-months, (to be decided later). However total cost may be less for this phase of training depending on Iranian Government. See Section F of this memorandum.

These men should receive English training, on site, to provide a basic technical "working knowledge in English". See Section D of this memorandum.

These men would assist in the installation, testing and checkout, of the control room equipment, relays, annunciators, instruments, etc. during the final stages of construction and then assume their

C. 2. h. ii-continued

operating positions during the initial operating period

iii. Priority: Assuming all men selected have the anticipated background, recommend no change in starting date, starting date 10/72; revised priority number three. It should be noted however, that the evaluation of the present candidates and the selection of the fourth candidate is of number one priority. If difficulties are encountered or if immediate training is required the revised priority number one. Estimated training period, no change, four men at 33 man-months each, 132 man-months.

j. Positions 9A/D (4 positions), Maintenance Crew Foremen, scheduled to begin training 1/72, priority three.

i. Candidates: The four positions are broken down as follows:

9A-Mechanical Crew Foreman
9B-Electrical Crew Foreman
9C&9D-Line Crew Foremen

Positions 9A and 9B: No candidates have been presented by ABM for these positions. Three alternative sources are suggested for filling these positions:

- Obtain experienced electrical and mechanical crew foremen from the crews of existing hydro plants;
- hire the respective crew foremen from the Kajakai construction contractor's work force and carry them on as operating maintenance crew foremen; or,
- obtain new AIT graduates and train them in existing Afghan hydro plants and OJT with the American contractor.

Each of the above alternatives has pros and cons. I would eliminate the first alternative in hopes of adding to the technical capabilities of the overall ABM system not just shifting men from one needed spot to another. Of the remaining two alternatives, I would prefer to take the foremen from the contractor's work force. By selecting an AIT graduate, you may not obtain the two qualities most prefered in a foreman, namely that he is "not afraid to get his hands dirty" and, secondly, that he can lead a crew of workmen. The foremen from the contractor's work force will have a good construction background which is always desireable but will have to be taught the operating and maintenance features of the electrical and mechanical equipment for which they will be responsible. Hopefully, the foremen will be of a 9th grade technical high school background as well. I recommend, therefore, that positions 9A and 9B be obtained from the Kajakai contractor's work force.

C. 2. j. i-continued

Positions 9C and 9D: Two distribution linemen have been presented as candidates for Kajakai, Messrs. Mohammed Akbar and Mohammed Housain. Messrs. Akbar and Housain are presently with Kandahar and Boghra Breshnas, respectively. Additionally, there is a Mr. Juma presently acting as the line crew foreman for Boghra Breshna who has 44KV transmission line experience.

I would recommend Messrs. Juma and Akbar for these positions 9C (Boghra Breshna) and 9D (Kandahar Breshna), respectively.

ii. Scope of training: For positions 9A and 9B, training would be limited to the final installation phases of Kajakai construction and initial operation period. How free these men would be for training would depend on the progress of construction. If possible, depending on availability and course schedules in Iran, I would recommend sending the mechnical maintenance foreman to IMWP/UTC for a course titled,: "Maintenance Mechanic" in their generation department (12 weeks). See Section F of this memorandum.

For positions 9C and 9D, I would recommend that these two men be sent to the Iranian Ministry of Water and Power-Utility training Center (IMWP/UTC) for two courses: "High Voltage Substation Maintenance" (20 weeks) and "Transmission Linemen" (63KV to 132 KV-22weeks). These courses are ideally suited to our needs. Scheduling will depend on the final course schedules established by IMWP/UTC. See Section F of this memorandum. These men would work with or in the crews of the construction contractor of the transmission lines. After training is completed, I would recommend that these line crew foremen remain with their respective distribution agencies, Boghra and Kandahar Breshna. They would be better utilized by the distribution agencies and yet remain within short traveling distance of Kajakai (2½hours to Kajakai from either Kandahar or Lashkar Gah) and, therefore, even less time to any intermediate point on the transmission line. Procedures and schedules for periodic line monitoring can be worked out between the two agencies. This recommendation applies only after completion of the initial operation period, evaluating the skills of the men and their work load.

For all four positions 9A through 9D, instruction in basic technical English should be worked-in, depending on schedules, construction progress, etc. See Section D of this memorandum.

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iii. Priority: The priorities for these positions vary as the scope of training varies:

Position 9A: Zero to three months OJT with Kajakai Project (depending on construction schedule and progress in 1974); plus 3 months training in Iran, timing dependent on IMWP/UTC course schedule (assume 1973 but perhaps could be put off to 1974). Starting date estimate June 1973 (say for Iranian training), revised priority number five. Estimated training period, say 16 man-months (including 3 man-months in Iran and 13 man-months OJT and initial operation with Kajakai).

Position 9B: Zero to three months OJT with Kajakai Project (depending on construction schedule and progress) plus initial operation period, starting date say 6/74, revised priority number eight. Estimated training period, 13 man-months.

Positions 9C and 9D: With two courses in Iran recommended (44 weeks or about 10 months each) and OJT with transmission line construction crew, early start date say January 1973, revised priority number four. Estimated training period including initial operation each position 31 man-months, including 10 man-months in Iran; or, 62 man-months and 20 man-months Iran total period for the two men.

Summary: Positions 9A/D, earliest start date 1/73, latest start date 6/74; revised priority numbers: four, earliest; eight, latest. Total estimated training period for the four men: 91 man-months, including 23 man-months in Iran.

k. Position 10, Administrative Assistant, scheduled to begin training 10/71, priority two.

i. Candidate: No administrative candidates were proposed by ABM. Suggest that candidate be taken from Kajakai Project office staff after completion of construction or from American contractor's Afghan Office Staff whichever provides the most suitable candidate.

ii. Scope of training: Depends on candidate's background and abilities and in large part preferences of Plant Manager under whom this

C. 2. k. ii-continued

assistant will work. OJT with Kajakai Project office for three months if candidate from American contractor's staff and construction progress permits. Instruction in English to provide basic working knowledge. See Section D of this memorandum.

OJT with Kajakai during 10 month initial operation period.

iii. Priority: Zero to three months OJT with Kajakai (consider worse case of man taken from contractor's work force) plus 10 month initial operation period, starting date say 6/74, revised priority number eight. Estimated training period, 13 man-months.

e. Position 11, Chief of Administration, scheduled to begin training 4/72, priority four.

i. Candidates: No administrative candidates were proposed by ABM Suggest that candidate be taken from Kajakai Project Office staff after completion of construction or from American contractor's Afghan office staff whichever provides the most suitable candidate.

ii. Scope of training: Depends on candidate background and abilities and preferences of Plant Manager. OJT for three months with Kajakai Project office if candidate from American contractor's staff and construction progress permits.

Instruction in English to provide basic working knowledge. See Section D of this memorandum.

OJT with Kajakai during 10 month initial operation period.

iii. Priority: Zero to three months OJT with Kajakai (consider worst case of man taken from contractor's work force) plus 10 month initial operation period, starting date say 6/74, revised priority number. Estimated training period 13 man-month.

m. Position 12, Area Engineer, scheduled to begin training 10/72, priority six.

i. Candidate: Engineer Wali Mohammed is the only graduate civil engineer presented by ABM as a candidate. Engineer Wali comes well recommended. It is my recommendation that Engineer Wali be selected as the Chief Civil Technical Inspector or representative of ABM for the Kajakai Project Office. I would recommend

C. 2. m. i-continued

that when construction is completed that he be offered position 12, Area Engineer.

It is Engineer Wali's wish to be considered for the position of the position of Plant Manager.

ii. Scopes of training: Some of the duties of the area engineer are maintenance of the project area facilities, camp, intake structures, dam, roads, and local utilities which are all within the present capabilities of Engineer Wali. Other duties include the operation of irrigation outlet valves in coordination with power plant schedules and irrigation requirements, which is the field of water management. I would recommend that due to the lack of local available training in this field that U. S. A. or Iran be included in the scope of training for this position. For the present, not knowing the situation for training in this field in Iran, I will assume a three month period in the U. S. A. for [illegible] purposes.

The overseas training should be preceded by testing for English and given intensive instruction, if necessary, three to six months before U. S. A. training is scheduled to start. See Section D of this memorandum.

iii. Priority: With Engineer Wali in the top civil-technical technical position of Kajakai Project office, he will be unavailable for training throughout the duration of construction. To start training for this position before construction would put a gap of over two years between his training and assumption of his job. I recommend, therefore, that his training start when civil construction slows to the point to free him for training. Timing will depend on the progress in the latter phases of construction. For the present, we will assume a starting date 3 months prior to initial operation say, 6/74. Revised priority number eight. Estimated total training period, 13 man-months including 3 man-months in the U. S. A.

n. Positions 13A/B (2 men), Communications Technicians, scheduled to begin training 8/73, priority eight.

i. Candidates: no candidates were presented by ABM for these positions. Communications Technicians are prepared by the Ministry of Communications in the Telecommunications Training Center for Afghan-

C. 2. n. 1-continued

istan and I recommend that ABM petition the Ministry of Communications for the filling (the suggestion of the Ministry of Communications, See Section E of this memorandum). of these positions.

ii. Scope of Training: Due to absence of candidates, communications technicians may have to be trained specifically for ABM at TTC which is a three year technical high school, giving instruction in several media of telecommunication. See Section E of this memorandum.

As with position 6, Communications Maintenance Engineer, possible OJT in Afghanistan might be Russian built carrier links on 110KV transmission line between hydro plants of Kabul Breshna and dispatching center.

Instruction to provide basic working knowledge in technical English. See Section D of this memorandum.

OJT with contractor during installation, test, checkout, and initial operation of equipment.

iii. Priority: The priority level will depend on the response of the Ministry of Communications to ABM's request for trained technicians or training people by them. At present we will assume revised priority number one and full 45 man-month training period for each position. See Section E of this memorandum.

p. Positions 14A/B (two men), Relay and Instrument technicians, scheduled to begin training 8/73, priority eight.

i. Candidates: No candidates were presented by ABM for these positions. I recommend that four AIT graduates with electrical preferences be recruited for these positions. If any technicians can be found within the hydro plants of Afghanistan with relay and instrument experience it would, of course, be desireable to select them, even if only one experienced man were made part of the group (by "group" I am including two other relay and instrument technicians of positions 14C and 14D designated for the distribution agencies and discussed below).

ii. Scope of Training: From my observation, there is no program of systematic preventive maintenance, including testing, calibrating, and setting for relays and instruments within either the power

C. 2. p. ii-continued

systems of Afghanistan or Iran. I understand that a member of the Russian group of technicians operating Naghlou Power Plant is a relay technician and, therefore, might be a source of OJT. Additional OJT in other hydros of Afghanistan may be a possibility depending on the patience of the technicians in operating the plants. OJT without direct instruction in this field would not be very fruitful.

I would recommend that these men be sent to IMWP/UTC for their course titled "Meter Specialist" which is a 14 week course encompassing meters, relays, instruments, and control boards which is idealy suited to our needs. Scheduling will depend on the final course schedules established by IMWP/UTC. See Section F of this memorandum.

Instruction in basic technical English conducted on the site worked-in, dependent on work schedules, etc. See Section D of this memorandum.

OJT with contractor during installation, test, checkout, and initial operation of equipment.

Direct instruction and perhaps formalized classes to be developed and conducted by the Communication Maintenance Engineer (his duties include all instruments and relays), position six, during the initial operation period. Detailed instruction of the relays and instruments to be given with operation and maintenance manuals and manufacturer's instruction as guides.

I recommend that the scope of training for all relay instrument technicians, including the two technicians designated for the distribution agencies, positions 14C and 14D be identical. This would include detailed instruction on relays and instruments for turbines, generators, all related auxiliary power plant equipment, transducers, metering, transmission line and substation protection, water regulation and metering instruments, etc.

iii. Priority: Due to the lack of existing similar job positions within

C. 2. p. iii-continued

the ABM system, OJT with specific instruction in this field is limited. Therefore, assuming that IMWP/UTC will conduct the recommended course mid-1973 or later, I would recommend recruiting, selecting and the starting of training, 6/73 (essentially little change from present start date of 8/73). When course schedules are known, detailed planning of all phases of the training must be developed for the trainees, incorporating the suggested scope of training as described above. Revised priority number five. Estimated total training period, 25 man-months, including 3 man-months in Iran, or for the two men, 50 man-months, including 6 man-months in Iran.

q. Positions 15A/U (20positions), Skilled Craftsmen, scheduled to begin training 10/72, priority six.

i. Candidates: The twenty positions are broken down as follows:
- 15A/D-4 mechanics-Kajakai Project
- 15E/H-4 electricians-Kajakai Project
- 15I/Q-8 linemen-Kajakai Project
- 15R/S-2 linemen-Boghra Distribution Agency
- 15T/U-2 linemen-Kandahar Distribution Agency (position "O" omitted)

For reasons of simplicity of discussion, the training positions 15R/U which should be included in the discussion of training in the distribution agencies below, is included in this section.

No candidates have been proposed by ABM for the above positions, except for Messrs. Akbar and Houssain, linemen of the Kandahar and Boghra Breshnas, respectively. Mr. Akbar has been recommended for training position 9C, lineman foreman of Kandahar Breshna, leaving Mr. Houssain remaining as the lone available candidate for these positions.

Positions 15A/D and 15E/H (4 mechanics and 4 electricians):
Two alternative sources are suggested for filling these positions:
- Obtain experienced mechanics and electricians from crews of existing hydro plants; or,
- hire the men from the contractor's work force.

As in the case of positions 9A/B, crew foremen, I recommend

C. 2. g. 1-continued

the second alternative in hopes of adding to the overall technical capabilities of the ABM system not just shifting men from one needed spot to another. In addition, displacing men and their families from one part of Afghanistan presents problems in themselves. Men from the area or already at work in the area, should not present a relocation problem.

Positions 15I/Q (8linemen-Kajakai): and 15R/U (4 linemen for the distribution agencies): As mentioned above, the only candidate presented by ABM is Mr. Mohammed Housain, presently a lineman with Boghra Breshna.

It is my recommendation that the total of 12 linemen be reduced to eight for the following reasons:

- to find a total of eleven (considering Housain selected) candidates
- to train to be "linemen" would be difficult. Sources are limited to technical high schools (9th grade level-hopefully) and thee transmission line construction contractor;
- there will be insufficient work for eight transmission-line linemen working from the Kajakai end of a simple double terminal transmission line;
- the linemen, properly trained and supervised can monitor the transmission lines and substations periodically from the Lashkar Gah and Kandahar ends of the lines. From these two locations they are each only 2½ hours traveling distance to Kajakai and, therefore, even less time to any intermediate point on the transmission line; and,
- assuming eight trained transmission line linemen, four each at Boghra and Kandahar Breshna they would be best utilized as they can contribute to the distribution agencies work as well.

This recommendation applies only after completion of the initial operation period, evaluating skills of the men and work load.

ii. Scope of training: For positions 15A/D (4 mechanics) and 15E/H (4 electricians), training would be limited to the final installation phases of the Kajakai construction and the initial operation period. How free these men would be for training would depend on the progress of construction. Actual instruction, after leaving contractor's work force would have to come from: their respective crew foremen, positions 9A (mechanical crew foreman) and 9B (electrial crew foreman); and, their respective maintenance engineers, positions 4 (mechanical engineer) and 5 (electrical maintenance engineer).

C. 2. q. ii-continued

For positions I/Q (recommended reduced force of 8 linemen), training would be limited to the final phases of the transmission-line contruction and initial operation period. How free the men would be depend on the progress of construction. Actual instruction, after leaving contractor's work force would have to come from: their respective linemen crew foremen, positions 9C (Boghra Breshna) and 9D (Kandahar Breshna); and, their respective transmission and distribution engineers, positions 16A (Boghra Breshna) and 16B (Kandahar Breshna).

iii. Priority: The priorities for all positions are essentially the same. The men are unavailable for training throughout the duration of construction. It will depend on construction progress to establish a starting date for training. For the present, we will assume a starting date 3 months prior to initial operation say, 6/74. Revised priority number eight. Estimated total training period, 13 man-month each; giving 208 man-month total for 16 men.

3. DISTRIBUTION AGENCIES SERVED BY KAJAKAI HYDROELECTRIC PROJECT

a. Positions 16A/B, Chief Transmission and Distribution Engineers, scheduled to begin training 7/72, priority five.

i. Candidates: There are no candidates presented by ABM for these positions which are:
- 16A-Chief T&D Engineer-Boghra Distribution Agency
- 16B-Chief T&D Engineer-Kandahar Distribution agency

The only men who could qualify are Engineers Kargar and Sadat who are already at Technical Director levels and who would be a rank higher than these training positions and, therefore, their supervisors. See discussions of Section C. 4. with reference to Kargar and Sadat.

It is recommended that graduate engineers be recruited immediately for these positions and that training be started as soon as possible.

ii. Scope of training: It is my recommendation that with the recommended elimination of position 7, Transmission Maintenance Engineer of Kajakai, I would emphasize an increase scope of training be given to positions 16A and 16B. Besides the fact that there just are no [illegible]

C. 3. a. ii-continued

candidates for either positions 7, 16A or 16B, having positions 16A and 16B substitute for position 7 yields better performance due to the fact that there are now two individuals to depend on to cover his duties. See Section C. 2. q. i for a more complete discussion on the elimination of position 7.

To develope a transmission and distribution engineer from essentially little or no experience, I would recommend approximately 18 months OJT in the U. S. A. This training would include 12 months OJT at a single distribution agency (two at most), perhaps a public utility district; and, six months with an agency with 69KV to 132KV class transmission lines. In both cases, I would emphasize operation and maintenance and construction, with some planning and design.

Preparation for this U. S. A. training is to include testing for English and intensive instruction, if necessary, approximately six months before his U. S. A. training is scheduled to begin. See Section D of this memorandum. Local OJT at Kabul Breshna and ABM should begin to familiarize these men with the existing distribution systems, methods, equipment etc.

I would recommend additional training in Iran at the conclusion of their U. S. A. training. This phase could include, depending on course scheduling, a one month observation period of the training of the line crew foremen, positions 9C and 9D at the IMWUP/UTC for about one month. In addition, I would recommend attendance of The Utility Management Program, conducted by IMWUP/UTC. If there is a schedule gap or coordination problem between these two phases then I would recommend arranging OJT in the Iranian transmission line system. If the schedule gap exceeds six weeks, then I would suggest only the IMWP/UTC management course and OJT in the Iranian transmission line system, consecutively. This would amount to two or three months Iranian training, depending on IMWP/UTC schedules. See Section F of this memorandum.

On return to Afghanistan, these men would work withthe transmission line contractor in the final phases of construction. With initial operation, these men would assume the responsibilities of operation and maintenance of the lines and the instruction of all related operating personnel, i. e. line foremen, linemen, substation operators, dispatchers, etc.

2.3.a-continued

iii. Priority: With the increased scope of training for candidates expected to have a minimum of experience, selection and training should start as soon as possible, revised priority number one. Estimated training period 45 man-month for each position, including 18 man-months U.S.A. and 3 man-month Iranian training.

b. Positions 17A/B, Chiefs of Administration, scheduled to begin training 1/73, priority seven.

i. Candidates: No administrative candidates were proposed by ABM. However, it is my observation that administrators are in abundance in Afghanistan requiring only careful selection and testing to find satisfactory candidates and a screening of characteristics prefered by the chief of the particular distributing agency.

ii. Scope of training: Depending on the candidates background and abilities, I would begin with OJT within the particular distribution agency. Perhaps, existing personnel would be preferred for these positions in which case the training should still be adapted to the man. This trial period should be for about two to three months.

I would recommend the attendance of the management course in Iran, (assumed one month duration) part of The Utility Management Program conducted by IMWP/UTC. In addition, I would suggest that two months of OJT or surveys be arranged with one or more Iranian utility distribution agencies with specific emphasis on administrative details of finance, general services, personnel, purchasing, general accounting, revenue collection and accounting, meter reading procedures and methods, new account procedures, marketing, etc. See Section F of this memorandum.

Instruction in English to provide basic working knowledge. See Section D of this memorandum.

The present schedule indicates U.S.A. training for position 17B, Chief of Administration for Kandahar Breshna. I would say that it would be beneficial for all administrators to receive U.S.A. training particularly in areas of management, administration, and work organization and planning. However, in light of the high turn-over or attrition rate of administrators, I recommend that the training abroad be limited to Iran.

C. 3. b. -continued

iii. Priority: Assuming the men filling these positions are new candidates and not existing personnel, I would start training six months in advance of initial operation, say 3/74. This will depend on the IMWP/UTC course schedules. Revised priority number seven. Estimated 16 man-month training period, including 3 man-month Iranian training.

c. Position 18A/F (6 men), Substation Operators, scheduled to begin training 11/73, priority nine.

i. Candidates: There are no candidates presented by ABM for these positions which are:
-18A/C (3 men)-Substation Operators, Boghra Distribution Agency
-18D/F (3 men)-Substation Operators, Kandahar Distribution agency

I recommend that 8th grade technical high school graduates be recuited by ABM for these positions, If possible, select AIT graduates for two of the positions, 18A and 18D.

ii. Scope of training: Assuming that candidates for these positions have little or no experience, I would recommend beginning their training with OJT within the ABM system, namely in the Kabul system where they can become familiar with 110KV equipment and safety precautions. The power plants and the Kabul Breshna main substation and dispatching center could be used for this purpose. It is preferred that guidance and instruction of this group be in the hands of the Chief Transmission and Distabution Engineers, position 16A and 16B.

I would recommend that the groups be observed during this period to select the two most astute or "leader types" for more extensive training in Iran, which we will call positions 18A and 18D. I would recommend that these two salient men be sent to the IMWP/UTC for attendance of their proposed course for "Control Room Operator" which is part of their "Generation" group, but which includes instruction centered about control boards for power plants and substations (12 week course). In addition, I would suggest two months OJT with an Iranian Utility system to obtain practical experience in 110KV substation operation and to become familiar with their dispatching center. See Section F of this memorandum.

C.3.c.ii-continued

Instruction in English to provide basic working knowledge. See Section D of this memorandum.

OJT with transmission line construction contractor on final phase of substation equipment installation. Assumption of operating positions at initial operation.

iii. Priority: Considering all six candidates begin training same time, no change in starting date, starting date 11/73. Revised priority number six. Estimated training period 20 man-months each man; or, 120 man-months., including 10 man-month. (5 man-month each) for the two positions 18A and 18D. in Iran.

d. Positions 13C/D (2 men), Communications Technicians, scheduled to begin training 8/73, priority eight.

i., ii, iii-See discussion for positions 13A/B Section C.2.n. above.

e. Positions 14C/D (2 men), Relay and Instrument Technicians, scheduled to begin training 8/73, priority eight.

i., ii, iii-See discussion for positions 14A/B Section C.2.p. above.

f. Positions 15R/U (4 men), Skilled Craftsmen (linemen), scheduled to begin training 10/72, priority 6.

i., ii, iii-See discussion for position 15A/U, Section C.2.q. above.

C.4. Recommendations for Personnel Not Recommended for Kajakai Positions.

a. Engineer Mohammed Ali Shah Sadat: Engineer Sadat was not recommended for any of the Kajakai positions because:

i. His present position of Chief Technical Director of Boghra Breshna is of a higher rank and position than position 16A, Chief Transmission and Distribution Engineer, the highest technical position we have for Boghra Breshna. Engineer Sadat would be the supervisor of position 16A.

ii. Engineer Sadat is an experienced distribution engineer and is doing a good job in Boghra Breshna and is well, suited for his present position. Therefore, he was not recommended for any hydroelectric oriented positions in the Kajakai Program.

C.4. ii-continued

Although outside the scope of the training program of Kajakai, I would recommend that the Technical Director of Boghra Breshna, namely Engineer Sadat receive 3 to 4 months minimum Stateside training to expand his capabilities in both distribution and transmission line systems.

b. Engineer Faqir Baqi: Engineer Baqi was not recommended for any of the Kajakai Positions because:

i. He is presently the acting Plant Manager of Kajakai and I was made aware that he may not continue in this function. With this uncertainty present, any recommendation would be tentative at best. See exchange of correspondence (See memorandum, IECO Training Coordinator, dated August 14, 1971, EXHIBIT V of the Appendix; and, Letter, ABM to IECO Training Coordinator, dated August 15, 1971, EXHIBIT VI of the Appendix).

ii. Having occupied the top position of the Kajakai Program, it is doubtfull that Engineer would accept any lesser position in the program, particularly if his reduced rank and position would place him subordinate to a peer, which it would (Baqi as alternative to position 5, Electrical Maintenance Engineer suggested only-not recommended: See Section C. 2. a. 1. IV.)

c. Engineer Mohammed Housain Kargar: Engineer Kargar was not recommended for any of the Kajakai positions because:he is a very experienced and trained distribution system engineer, and would best be utilized as such. It would be my recommendation, although outside the scope of the Kajakai Program, that Kargar be placed as the Technical Director of Kandahar Breshna.

Engineer Kargar feels that in order to be effective in the organization of Kandahar Breshna, he should hold the key position of Chief of the Kandahar Breshna. I would support such a move, at least for a six month trial period.

Although outside of the scope of the Training Program of Kajakai, I would recommend that the Technical Director of Kandahar Breshna (presently Engineer Aslam), receive 3 to 4 months (minimum) Stateside training to expand his capabilities in both distribution and transmission line systems.

5. Summary

a. Priorities

i. Of the 56 men or training positions of the proposed program, ABM presented nine acceptable candidates (three other candidates proposed by ABM were not recommended for Kajakai positions for reasons explained in Sections C.4. a, b and c above). This re-

C. 5. a. i-continued

presents 16 percent (based on 56 men) or about 18 percent of the recommended revised manpower estimate (51 men).

ii. Table I, "Schedule Summary- Kajakai Hydroelectric Project Training Program," summarizes the recommended changes in starting dates and the subsequent changes in priority Number one and Number two priority positions(requiring immediate or nearly immediate selection and programing) have increased from six to sixteen positions.

iii. In cases where training is defered, such as positions 14A through 14D, candidates should be recruited (or requested through the Ministry of Planning according to established government procedure) well in advance of their recommended revised training starting date. Otherwise the manpower crisis will only be defered.

b. Manpower Requirements

i. Table II, "Recommended Revised Manpower Summary-Kajakai Training Program" complete with notes, provides a summary of the present and recommended revised list of the quantity of men and corresponding man-months of training.

There has been an overall reduction of men and total man-months of training. Training abroad in Iran and the U.S.A., however, has increased. The total number of men has been reduced from 56 to 51.

ii. In the case of Iranian Training, I am recommending taking advantage of the splendid opportunity of utilizing the new Iranian Ministry of Water and Power Utility Training Center which may be available at no or minimum cost to ABM. Present program, 24 men for 64 man-months (including 25 man-months reserve); recommended revised program, 23 men for 87 man-months(including 25 man-month reserve).

iii. In the case of U.S.A. training, I have recommended an increase of 39 man-months and the elimination of two man-months of training, affecting only four training positions. The bulk of this additional time is due to my recommendation for positions 16A and 16B (Chief Transmission and Distribution Engineers, Boghra and Kandahar Distribution Agencies, re-

C. 5. b. iii-continued

spectively) for 18 man-months each, which I consider essential for those two positions. Present program, 7 men for 32 man-months (including 8 man-month reserve); recommended revised program, 9 men for 69 man-months (including 8 man-month reserve).

5. a. SCHEDULE SUMMARY TABLE I

KAJAKAI HYDROELECTRIC PROJECT

TRAINING PROGRAM

Training Position No.	Title	Present Schedule Start Date	Present Schedule Priority No.	Recommended Revised Schedule Start Date	Recommended Revised Schedule Priority No.
Kajakai Project					
1	Plant Manager	past	1	10/71	1
2	Chief Maint. Engr.	past	1	10/71	1
3	Chief Oper. Engr.	4/72	4	4/72	2
4	Mech. Maint. Engr.	past	1	10/71	1
5	Electr. Maint. Engr.	10/71	2	10/71	1
6	Comm. Maint. Engr.	10/72	6	10/71	1
7	Trans. Maint. Engr.	10/71	2	recommend position omitted	
8 A/D	Shift Operators	10/72	6	10/72	1 or 3
9 A/D	Maint Foremen	1/72	3	earliest 1/73	4
				latest 6/74	8
10	Admin Assist.	10/71	2	6/74	8
11	Chief of Admin.	4/72	4	6/74	8
12	Area Engineer	10/72	6	6/74	8
13 A/B	Comm. Tech.	8/73	8	10/71	1
14 A/B	Relay & Instr. Tech.	8/73	8	6/73	5
15 A/Q	Skilled Craftsmen	10/72	6	6/74	8
Distribution Agencies					
16 A	Chief T&D Engr. Boghra	7/72	5	10/71	1
16 B	Chief T&D Engr. Kandahar	7/72	5	10/71	1
17 A	Chief of Admin. Boghra	1/73	7	3/74	7
17 B	Chief of Admin. Kandahar	1/73	7	3/74	7
18 A/F	Substation Operators	11/73	9	11/73	6
13 C/D	Comm. Tech.	8/73	8	10/71	1
14 C&D	Relay & Instr. Tech.	8/73	8	6/73	5
15 R/U	Skilled Craftsmen	10/72	6	recommended positions omitted	

5. b. RECOMMENDED REVISED MANPOWER SUMMARY — TABLE II

KAJAKAI TRAINING PROGRAM

Training Pos. No.	Title	Man Month Estimate: Present No. Men	Present Afgan	Present Iran	Present USA	Present Total	Rec. Revised No. Men	Rec. Revised Afgan	Rec. Revised Iran	Rec. Revised USA	Rec. Revised Total
			(2)					(2)	(5)		
1	Plant Manager	1	39	4(1)	8(1)	51(3)	1	33	4(1)	8(1)	45
2	Chief Maint. Engr.	1	39	3	7	49(3)	1	36	2	7	45
3	Chief Oper. Engr.	1	33	3	3	39	1	33	3	3	39
4	Mech. Maint. Engr.	1	41	3	5	49(3)	1	37	3	5	45
5	Electr. Maint. Engr.	1	37	3	5	45	1	37	3	5	45
6	Comm. Maint. Engr.	1	31	-	2	33	1	40	3	2	45
7	Trans. Maint. Engr.	1	41	4	-	45	-	-	-	-	-
8A/D	Shift Operators	4	124	8(1)	-	132	4	120	12(4)	-	132
9A/D	Maint. Foremen	4	168	-	-	168	4	68	23(6)	-	91
10	Admin Assist.	1	45	-	-	45	1	13	-	-	13
11	Chief of Admin.	1	36	3	-	39	1	13	-	-	13
12	Area Engineer	1	33	-	-	33	1	10	-	3	13
13A/B	Comm. Tech.	2	40	-	-	40(3)	2	50	-	-	50
14A/B	Relay & Instr. Tech.	2	40	6	-	46(3)	2	44	6	-	50
15A/Q	Skilled Craftsmen	16	528	-	-	528	16	208	-	-	208
Distribution Agencies											
16A	Chief T&D Engr. Boghra	1	20	-	-	20	1	24	3	18	45
16B	Chief T&D Engr. Kandahar	1	16	4	-	20	1	24	3	18	45
17A	Chief of Admin. Boghra	1	13	1(1)	-	14	1	13	3	-	16
17B	Chief of Admin. Kandahar	1	8	4	2	14	1	13	3	-	16
18A/F	Substation Operators	6	108	12(1)	-	120	6	110	10(7)	-	120
13C/D	Comm Tech.	2	46	-	-	46	2	90	-	-	90
14C/D	Relay & Instr. Tech.	2	40	6	-	46	2	44	6	-	50
15R/U	Skilled Craftsmen	4	132	-	-	132	-	-	-	-	-
		56	1,664	64(1)	32(1)	1,760	51	1,100	87(5)	69	1,256

Numbers in () indicate note

Notes for Table II

1. For training flexibility, 25 man-months in Iran and 8 man-months in the U. S. A. of unspecified training has been allowed. Man-months indicated in this table by this note are possible applications of this contingency and are shown for estimating purposes only. Actual use to be determined later.

Notes for Table II continued

2. Training periods shown for Afghanistan include 10 months initial operating period.

3. Any total training period in excess of 45 months impractical because maximum possible training period starting mid-October 1971 through to the end of the initial operating period is 45 man-months total.

4. I propose that a three month course specifically set up for training utility shift operators be used in Iran (IMWP/UTC) which increases Iranian man-months training requirements from 8m-mo. to 12 m-mo. (in reserve - to be decided later). See Section F of this memorandum.

5. Man-months shown for certain positions in Afghanistan and in Iran are not necessarily realistic for estimating costs as training afforded by the Ministry of Communications (positions 5, 13A thru D) and the Iranian Ministry of Water and Power (positions 2, 3, 4, 5, 8A/D, 9A, C, and D, 16 A/B, 17 A/B, 18A & D, etc) may be free of cost to ABM.

6. Value represents total recommended Iranian man-months for three men of the four men in this group (9A, 3 m-mo; 9C, 10 m-mo; 9D, 10 m-mo; total 23 m-mo).

7. Value represents recommended Iranian man-months for two of the six men in this group (18A, 5 m-mo; 18D, 5 m-mo; total, 10 m-mo).

D. ENGLISH LANGUAGE REQUIREMENTS OF KAJAKAI TRAINING PROGRAM

1. Section E., ARTICLE VII, Subarticle 7.7.2., page six of Amendment No. 1 of the contract, reads as follows: "Prior to assignment for training, OWNER shall arrange with an appropriate agency or individual acceptable to A.I.D. to review the qualifications of each candidate and test his proficiency in English. Candidates who show deficiencies will attend courses in English, arranged by OWNER, to reach the required level of proficiency"

2. USAID ENGINEERING (has agreed to allow ABM/IECO to utilize the USIS
Previously it had been the understanding of USAID that USIS English screening, testing and teaching was to be discontinued for all but specific USAID training applications. However, with further discussion between Mr. Herb Springer of USAID engineering and Acting USAID Training Officer, Mr. Jake Harshbarger, August 14, 1971, USAID) English training facilities on a space available basis. This means that the placing of English training in a class with space available, would only cost the standard minimum fee. If new courses are to be established specifically because of the increased requirements of ABM, ABM would have to pay for the increased course costs, instructor, etc. USAID permits the use of these facilities but requires that ABM/IECO assume all responsibility for this phase of the training programs organization and implementation.

3. UNITED STATES INFORMATION SERVICE (USIS)

On the recommendation of the acting USAID training officer, Mr. Jake Harshbarger, a meeting was held with Mrs. Nan Borton, Director, American Center-Kabul English Language Center, USIS on August 14, 1971. Mrs. Borton explained that USIS has nine classrooms with plans to increase. If ABM trainees can be placed in existing USIS/USAID classes (limited to about seven students each) an a space available basis, the cost is a nominal 1200 Afs per month. Classes are continuously operated, giving no difficulty for someone to enter at any time and to leave the course when the desired level of proficiency has been attained.

Mrs. Borton explained that English proficiency testing was presently being conducted each thursday afternoon. If testing at differnt times is required then the cost of the intructor's time is additional. Each student is tested initially to screen and place him in the proper course level, of which there are five levels. The student is then tested periodically to measure his degree of improvement and to terminate the instruction when the desired level of proficiency has been attained. The test used is the Standard ALIGU test (American Language Institute-Georgetown University)

D. 3-continued

which consists of four phases: listening; oral; grammar usage; and reading and vocabulary. Only the first three phases are given for "Working knowledge" levels of proficiency.

Classes are intensive English instruction for four hours per day, five days per week. If a class is to be set up specifically for ABM trainees, the cost is 200 Afs per hour per teacher. The cost of this phase of the program is then dependent on: the timing in which the trainees are sent to USIS; the degree of ability of the trainee which determines which level of class he should enter; and, the available space of the classes at the time the trainee enters into English instruction. So the cost is essentially impossible to estimate with so many unknown parameters. It could range from as low as 46,800 Afs (about $550 total) for 13 men each for 3 months at 1200 Afs per month as students in existing classes; or as high as 370,000 Afs (About $3000 total) for two new classes, for thirteen students at two different levels, at four hours per day, times 26 days per month, at 200 afs per hour per class.

I realize that the maximum possible cost range seems high, particularly as many of the candidates have a working knowledge in English and a number have had training in the U.S.A. already and have fluency in English. But I would emphasize the importance of full comprehension of the trainee to benefit from his instruction. Particularly for those traveling to the U.S.A. If the trainee goes to the U.S.A. without full comprehension because he felt he had sufficient English knowledge or because the training was thought expensive and redundent, then the higher costs of the possible loss in his U.S.A. instruction must be used as a comparison (air fare, per diem, and class costs which may vary from $ 150 to $ 300 per week alone). It has been my experience in the training field that foreign students coming to the U.S.A. for training, are often too confident in their English comprehension and ability to communicate and, particularly in the initial training period, fail to comprehend the majority of the material presented to them. Mrs. Nan Borton of USIS expressed that her experience was the same, namely that most Afghans with a good knowledge of English who had previously received training in the U.S.A. still required three to six months of intensive English at four hours daily to regain or obtain the necessary proficiency.

The ABM/IECO contract reads in part that..."OWNER shall arrange ...to review the qualifications of each candidate and test his proficiency in English..." therefor

D. 3. -continued

ficiency in English..." Therefore, regardless of the apparent English ability of the candidate, he shall be tested for proficiency and only if he falls below the necessary level of proficiency shall he be required to receive additional instruction.

It will be noted therefore, that as a recommendation I have included seven candidates, for the "proficiency" level and seven candidates for "good working knowledge level" of English preparation. See Table III for a "Summary of English Language Requirements, Kajakai Hydroelectric Project Training Program." The proficiency requirement codes A and B apply to the USIS English levels of instruction.

Mrs. Borton Explained that a formal letter of intent should be directed to her by ABM stating:

a. Quantity of personnel and levels of proficiency desired, describing the needs of each level.
b. Estimated schedule
c. Reference USAID loan

Mrs. Borton further explained that as each candidate is sent over to USIS for training under this phase of the program, he should carry an ABM letter of introduction stating his desired level of proficiency and a request for placemnt testing for him.

For the draft of the letter recommended to be sent to USIS in English under ABM letterhead to establish this phase of the program, see EXHIBIT VII of the Appendix.

4. THE PEACE CORPS

On August 14, 1971 I met with Mr. Larry Beck, Director of Training, Peace Corps-Afghanistan. Mr. Beck Explained that in the past the Peace Corps has been giving English instruction in the secondary schools of Afghanistan but that it is felt that the instruction would be far more effective and beneficial to Afghanistan if the instruction were to reach individuals who would benefit directly, such as improving his working abilities through learning the language. Therefore, the Peace Corps would be enthusiastic about establishing a course of instruction for the Kajakai Project.

Mr. Beck explained that in order to set up a program, the Peace Corps needs about one year advance notice to locate, send and train the

D. 3-continued

volunteers and to extablish a curriculum for the course. Training of the volunteers is done during two periods, December to Feburary and June to September of each year. The volunteers will conduct the course at ABM facilities requiring only the classroom, desks and chairs, and the text books. He explained further that the purchase of the books in advance of the course is absolutely esential as they have experienced cases requesting agency where the promised but failed to produce the necessary texts and it created a great hardship on the instructor.

I have recommended that the Peace Corps provide two volunteers to provide courses in basic technical English for one course to be held at the Kajakai Project Site and the other either in Lashkar Gar or Kandahar, location to be decided later. See Table III for a "Summary of English Language requirements, Kajakai Hydroelectric Project Training Program." The proficiency requirement code C applies to the Peace Corps level of proficiency.

A further discussion in the office of the Peace Corps on September 25, 1971 with Mr. Courteny Siceloff, Peace Corps Program Coordinator, Mr. Abdul Matin, Peace Corps Program Officer-Education, Mr. Rahim Aurang, Chief of Administration of ABM, and myself established further the cooperation of the Peace Corps in this matter. The Peace Corps requested that a form be submited with all necessary program information.

For the draft of the letter recommended to be sent to the Peace Corps in English under ABM letterhead to establish this phase of the program, see EXHIBIT VIII of the Appendix. For draft of filled-in Peace Corps form to accompany the letter of EXHIBIT VIII, see EXHIBIT IX of the Appendix.

TABLE III

D. 5. SUMMARY OF ENGLISH LANGUAGE REQUIREMENTS
KAJAKAI HYDROELECTRIC PROJECT TRAINING PROGRAM

TRAINING POSITION	NO. OF MEN	TITLE	PROFICIENCY REQUIREMENT CODE (see note 3)
KAJAKAI PROJECT			
1	1	Plant Manager	A (see note 1)
2	1	Chief Maintenance Engineer	A
3	1	Chief Operating Engineer	A
4	1	Mechanical Maintenance Engineer	A
5	1	Electrical Maintenance Engineer	A
6	1	Communications Maint. Engineer	A
7	1	Transmission Maint. Engineer	B
8A/D	4	Shift Operators	C
9A/D	4	Maintenance Foremen	C
10	1	Administrative Assistant	B
11	1	Chief of Administration	B
12	1	Area Engineer	B
13A/B	2	Communicutions Tech.	C
14A/B	2	Relay and Instr. Tech.	C
15A/Q	16	Skilled Craftsmen	NONE
DISTRIBUTION AGENCIES			
16A	1	Chief T&D Engineer-Boghra	B
16B	1	Chief T&D Engineer-Kandahar	B
17A	1	Chief of Administration-Boghra	B
17B	1	Chief of Administration-Kandahar	A
18A/F	6	Substation Operators	C
13C/D	2	Communications Tech.	C
14C/D	2	Relay and Instr. Tech.	C
15R/U	4	Skilled Craftsmen	NONE

PROFICIENCY REQUIREMENT CODES FOR TABLE III.

A-USIS:- English proficiency required for Stateside training. (for use of some academic training such as seminar type courses but primarily on-the-job training in utilities and instruction in manufacturers facilities). See note 2.

B-USIS:- Good working knowledge of English sufficient for comprehending and working with instruction and operating manuals in English and having fluency to work with American consultants and advisors and benefit from their instruction. See note 2.

C-PEACE CORPS: - Basic working knowledge (fair to minimum) of English for communication on-the-job with American construction people and other American technical personnel. English to be taught by Peace Corps volunteers at the Kajakai site or in Kandahar and Lashkar Gah Area. Course to be technical language oriented for construction, electrical and mechanical terms and expressions as well as basic intercommunication. See note 2.

Notes:for Table III:

1. This note indicates a tentative position as individual not yet selected and U. S. A training only in reserve. In addition, this position most probably to be filled with individual with fluency in English as a prerequisite.
2. Courses are four hours per day, five days per week intensive English training. Periodic testing to measure progress and halt training when desired level of proficiency is attained.
3. All training positions are shown in Table III as a "worse case" instructional load, even though positions are recommended for elimination or manpower reduced elsewhere in this memo.

International Engineering Co., Inc.

E. Communications Engineer and Technicians

1. It has been indicated in the schedules for the Preliminary Plans and the "Revised Description of the Training Positions" for the Kajakai Project, the selection for training of the Communications Maintenance Engineer, position six, around the latter months of 1972. Selection and training of four Communications Technicians, two for Kajakai (positions 13 A & B) and one each for Beghra and Kandahar Distribution Agencies (positions 13 C and 13D, respectively) are scheduled to begin training August 1973.

   As described for position 6, Communications Engineer (Section C. 2. f.) and positions 13 A/D, Communications Technicians (Sections C. 2. n and C. 3. d.) candidates have not been presented by ABM for these positions and the Ministry of Communications of Afghanistan would seem to be our only alternative for obtaining trained men in these categories. Due to the possible necessity of training men three years, the Ministry of Communications should be petitioned as soon as possible.

2. Telecommunications Training Center (TTC)

   On August 11, 1971, Engineer Ashna and I visited TTC to discuss the curricula of the training center and to visit the facilities to familiarize ourselves with their capabilities. Engineer Ghauss, the Director of TTC explained that TTC is a three year technical high school giving basic instruction in English, mathematics and physics. The technical subject areas are:

   a. Telephony (includes "outside plant-cable splicing," "Terminal station," etc.)

   b. Cables - open wire telephone/telegraph.

   c. Carrier - radio and telephone line, 12 channel.

   d. Telegraph/Telex/Phototelegraphy

   Engineer Ghauss explained that the first year is given in Dari, with the second and third years in English. All graduates go to the Ministry of Communication for assignment. Classes and priorities are established by the Planning Department of the Ministry. For example, 30 students graduate per year. Last year, 16 graduated in carrier systems, and now no classes in carrier are planned for the coming semester.

E. (Continued)

3. Ministry of Communications

On the suggestion of Engineer Ghauss, Engineer Ashna of ABM, and I met with Mr. Yakubi, Director General, Planning and Statistics Department, Ministry of Communications, on August 12, 1971. Mr. Yakubi stated that there are no plans for another carrier course at TTC in the near future. Unofficially, he saw no objection to placing ABM (AIT technicians) in TTC. If special classes are set up specifically for ABM, there may be costs to be borne by ABM. At present, the Ministry of Communications does not have enough technicians to supply the other Ministries. It is hoped, however, that TTC will eventually provide for the needs of the country.

Mr. Yakubi stated that the Ministry of Communications cannot decide nor advise on the best alternative for meeting ABM's need for carrier technicians. Mr. Yakubi stated that an official letter should be directed to him from ABM giving all the necessary information i.e., type of training desired, number of men, what is the equipment for which the training is desired, when technicians needed, etc.

See the draft of the letter recommended to be sent to the Ministry of Communications under ABM letterhead (after translation into Dari), Exhibit X of the Appendix.

F. Training in Iran

1. During the period of August 17 to 27, 1971, Mr. Rahim Aurang, Chief of Administration of ABM (Acting Field Training Coordinator for Kajakai) and myself made a trip to Tehran, Iran to discuss training possibilities with the Ministry of Water and Power. For the "Trip Log" and the "Minutes of Meeting" with the Iranian Authorities, see Exhibits XI and XII of the Appendix.

2. It was our purpose primarily to investigate the possibility of on-the-job type training in Iran. We were informed that the Iranian Ministry of Water and Power was preparing for the implementation of a six million dollar utility training center (IMWP/UTC) specifically for their electrical utility generation, transmission, and distribution systems. A number of the courses to be conducted are applicable to our needs. The officials to whom we spoke were enthusiastic that Afghans would participate. These officials were not in a position to decide, but it was their unofficial opinion that due to the high degree of friendship and cooperation between Iran and Afghanistan, that the training would be available to ABM without cost. The decision for this matter would rest with the Ministry of Planning or Foreign Affairs.

For a complete description of the training center and the curriculum, see Exhibit XII of the Appendix.

The IMWP recommended that ABM send an official letter to them stating all details of our intended or desired program in Iran. I have drafted such a letter,

F. 2. (Continued)

incorporating the Iranian phases of the "scope of training" for each of the training positions of Section C, which includes IMWP/UTC courses, OJT in their systems, and their proposed Utility Management Courses. For the "Draft of the letter recommended to be sent to the Ministry of Water and Power of Iran under AEM or Ministry of Mines and Industry letterhead (after translation into Farsi)", see Exhibit XIII of the Appendix.

I would emphasis, that copies of all correspondence with IMWP be sent informally to Mr. Mehr, First Secretary of the Royal Afghan Embassy to Iran, Tehran and that he be informed of all decisions and contacts. Only by keeping Mr. Mehr completely informed can we be assured of their continued superb support and assistance.

3. The "Management Development Program" of Tehran University has previously been recommended for attendance for a number of training positions. After discussing the scope of the course with a Dr. Akbari, who is responsible for the course (Tehran - 8/2/71), I would recommend that attendance of this course be limited to only the Plant Manager of Kajakai. Dr. Akbari explained the high level of the course and that of about 650 applicants only 40 are accepted. Each man who is accepted must be capable of leading discussion groups of about 10 men each. Those accepted are often of ministry levels, high management levels of private industry such as the oil industry of Iran, etc.

G. Procedures:

This memorandum is an interim report and recommendation as a conclusion to the investigation and observations of this trip to Afghanistan and Iran.

It is intended, therefore, that after the written comments are received relative to this memorandum from AEM and USAID Engineering, to prepare a revised description in one volume of the Training Program for Kajakai which is to include:

1. Complete set of procedures for the Field Training Coordinator (i.e. selection, evaluation, placement, planning, scheduling; trainee preparation, indoctrination; evaluation of progress and reporting past activities, costs, changes, problem areas, etc.).

2. Organizational Recommendations.

3. Training Positions, including the incorporation of all changes to the "Revised Description of Training Positions." As in the above, the scope of training,

C. 3. (Continued)

schedule changes, manpower estimates, costs, etc. will be included.

I have attempted to include all pertinent details of the training but above all I have attempted to be candid and realistic in my assessments and recommendations.

The results and conclusions of the memorandum were brought about through the cooperation and contributions of many individuals, particularly the personnel of ABM and USAID Engineering for which I am grateful. I must also thank Mr. Rahim Aurang, Chief of Administration, and Acting Field Training Coordinator for Kajakai, who was instrumental in this effort with his background on the Kajakai Project and indispensable in his assistance in the discussions with the Iranian authorities in Tehran.

I am convinced that with vigorous pursuit of this program, the Kajakai Training will succeed and provide a team of men which will be competent in their respective fields; contributing significantly to the technical capabilities of ABM and, therefore, Afghanistan.

Michael Long
Training Coordinator
International Engineering Co., Inc.

cc:
ABM (1 copy), Attn: Mr. Rahim Aurang, Chief of Administration and Acting Field Training Coordinator, Kajakai Hydroelectric Project.

USAID Engineering (2 copies), Attn: W. A. Stiles, Chief of Engineering

IECO (1 copy), Attn: V. J. Sliupas, Regional Manager, San Francisco

IECO (1 copy), M. Long, Training Coordinator, Kabul Afghanistan

INTERNATIONAL ENGINEERING, CO., INC.

APPENDIX

Contents	Number of Sheets
EXHIBIT I, "Minutes of Meeting", of September 22 and 23, 1971 with ABM.	4
EXHIBIT II, Kajakai Power Project Organization Chart (old chart IX-1 from preliminary plans, Chapter no. 9)	1
EXHIBIT III, Distribution Agency Organization Chart (old chart IX-2 from preliminary plans, Chapter no. 9)	1
EXHIBIT IV, Revised Organization Chart for Kandahar Breshna	1
EXHIBIT V, Memorandum, IECO Training Coordinator to ABM, Dated August 14, 1971	2
EXHIBIT VI, Letter, ABM to IECO Training Coordinator, dated August 15, 1971	1
EXHIBIT VII, Draft of the letter recommended to be sent to the USIS in English under ABM letterhead.	2
EXHIBIT VIII, Draft of the letter recommended to be sent to the Peace Corps in English under ABM letterhead.	1
EXHIBIT IX, Draft of the filled-in Peace Corps form recommended to be sent as annex to ABM letter of EXHIBIT VIII.	7
EXHIBIT X, Draft of the letter recommended to be sent to the Ministry of Communications under ABM letterhead (after translation of Dari).	3
EXHIBIT XI, Trip log of August 17 to 27, 1971 trip to Iran by Michael Long, Training Coordinator and Mr. Rahim Aurang acting Field Training Coordinator.	2
EXHIBIT XII, "Minutes of Meeting" between Ministry of Water and Power of Iran and Mr. Michael Long, Training Coordinator and Mr. Rahim Aurang, Acting Field Training Coordinator.	6
EXHIBIT XIII, Draft of the letter recommended to be sent to the Ministry of Water and Power of Iran under ABM letterhead.	5

International Engineering Co., Inc.
San Francisco, California, U.S.A.

MINUTES OF MEETING

Date: September 22 and 23, 1971

Location: Da Afghanistan Breshna Moassessa
Offices of Mr. Barez, General Director of Personnel
Kabul, Afghanistan

Participants: Mr. Rahim Aurang, Chief of Administration, ABM
Mr. Barez, General Director of Personnel
Mr. M.W. Long, Training Coordinator, Kajakai Hydroelectric Proj., IECC

Subject: Available Personnel for Selection for Kajakai Hydroelectric Project Training Program

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A. List of available personnel for operating positions for Kajakai Hydroelectric project as provided by Messrs. Barez and Aurang.

1. Engineer Mohammed Ali Shah Sadat, est. age 30.

   a. graduate of Kabul U. in electrical/mechanical engineering, 1964

   b. worked six years for ABM
      one year - Helmand Valley Distribution System
      five years - ABM Baghra Breshna Distribution System

2. Engineer Faqir Baqi

   a. graduate electrical/mechanical engineering, Kabul U., 1964

   b. working for ABM six years

3. Mr. Abdul Basir Zaqoomi

   a. AIT graduate

   b. one year in OJT in USA

4. Engineer Aslam - Kandahar Technical Director

   a. graduate of Kabul U

   b. four years with Naghlau Power Plant

5. Engineer Wali Mohammed, approx. age 30 years

   a. graduate civil engineer, Kabul U., 1967

   b. worked part-time for Afghan Highway American Contractors (during school perhaps)

   c. speaks English very well

   d. was field supervisor for Afghan counterparts in Kajakai Transmission Line Survey, 8 months

   e. was field supervisor for Chak-e-Wardak to Gazni 44KV transmission line survey

   f. with ABM since 1967 in ABM engineering office

   g. presently working as construction supervisor for modifications to Mahipar Power Plant since July 1971

   h. opinion of Mr. Aurang that Wali is active, responsible and competent. Considered one of the best of ABM engineers.

   i. suggested that position 12, or Area Engineer, might be an appropriate position for Engr. Wali.

6. Engineer Mohammed Housain Kargar

   a. graduate of Kabul U, 1964 - electrical/mechanical

   b. worked for HAVA

   c. worked for Kandahar Breshna

7. Engineer Mohammed Ashna

   a. graduate of Kabul U, 1964 - electrical/mechanical

   b. graduate of USA university

   c. suggested for position 2, Chief Maintenance Engineer

   d. speaks English best of all ABM engineers

8. Engineer Mohammed Gul

   a. top man in his class, Kabul U - 1970, graduate electrical/mechanical

   b. ABM engineering office for one year, Kandahar/Boghra/Kajakai Desk

   c. Zero practical experience

9. Naqibullah

   a. AIT graduate, electrical/mechanical - 1968

   b. two years with ABM Boghra Breshna

10. Said Abdul Wahid

   a. AIT graduate, electrical/mechanical - 1968

   b. Naghlan Power Plant

11. Mohammed Akbar

   a. graduate 9th grade level, Kandahar Mechanical Technical High School - 1964

   b. one year OJT as distribution line foreman in Iran

   c. Assistant Director of Distribution Department of Kandahar Breshna (1½ years to present)

   d. Five and one-half years with Kandahar Breshna, practical line work in supervisory capacity.

12. Mohammed Housain

a. graduate 9th grade level, Kandahar Mechanical Technical High School - 1968

b. one year Kandahar Breshna, lineman

c. one year OJT as distribution line foreman in Iran

d. one year to present as lineman with Boghra Breshna

B. ABM requests of Mr. M. Long, Training Coordinator, a review of the above available candidates in relation to the Kajakai Training Program. ABM asks for a candid opinion as to their suitability and a recommendation of the following:

1. Placing of candidates in positions proposed for Kajakai Hydroelectric project operating personnel;

2. Placing of candidates in positions proposed for the distribution agencies to be served by the Kajakai Hydroelectric project; and

3. A review and recommendation as to the organization charts of the proposed project and agencies in relationship to the personnel.

Prepared by:
Michael Long
Training Coordinator
International Engineering Co., Inc.

Mr. Rahim Aurang
Chief of Administration
Da Afghanistan Breshna Moassessa
Kabul, Afghanistan

ORIG. + 1 cc - ABM
cc:- USAID ENG (1)
cc:- Geo M. Long (1)

September 25, 1971
Date

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CHART IX-1

EXHIBIT II
sheet 1 of 1

PROJECT MANAGEMENT

(a) PLANT MANAGER (1)
(b) ADMINISTRATIVE ASSISTANT (1)

PROJECT OPERATION

(a) CHIEF OPERATING ENGR. (1)
(b) SHIFT OPERATORS (4)
(c) ASST. OPERATOR TURBINE (4)
(c) ASST. OPERATOR GENER. (4)
APRENTICES (4)
(e) CLERK/TYPIST (1)

PROJECT MAINTENANCE

(a) CHIEF M. ENGINEER (1)
(a) MECHANICAL M. ENGR (1)
(a) ELECTRICAL M. ENGR (1)
(b) TRANSMISSION M. ENGR (1)
(a) COMMUNICATION M. ENGR (1)
(b) MECHANICAL FOREMAN (1)
(b) ELECTRICAL FOREMAN (1)
(b) LINE FOREMEN (2)
(b) COMMUNIC. TECHNICIANS (2)
(b) RELAY TECHNICIANS (2)
(b) MECHANICS (4)
(b) ELECTRICIANS (4)
(b) LINEMEN (8)
(c) OILERS (2)
(c) MACHINISTS (1)
(c) RIGGER (1)
(c) PLUMBER (1)
(c) HELPERS (16)

PROJECT ADMINISTRATION

(b) CHIEF (1)
(c) PERSONNEL CLERKS (2)
(c) ACCOUNTANTS (2)
CASHIER (1)
TIMEKEEPERS (2)
(c) SAFETY INSPECTOR (1)
(e) SECRETARY & TYPISTS (3)
GUARD CORPS (20)

AREA SERVICES

(b) AREA ENGINEER (1)
(p) DAM TENDER (1)
(p) VALVE HOUSE TENDER (1)
(p) OUTLET VALVE/OPERATORS (4)
(c) SURVEYOR (1)
(c) ELECTRICIAN (1)
(c) HANDYMAN (1)
(c) CARPENTER (1)
(c) LABOR FOREMAN (1)
LABORERS (as required)
GARDENERS (as required)

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KAJAKAI POWER PROJECT ORGANIZATION CHART

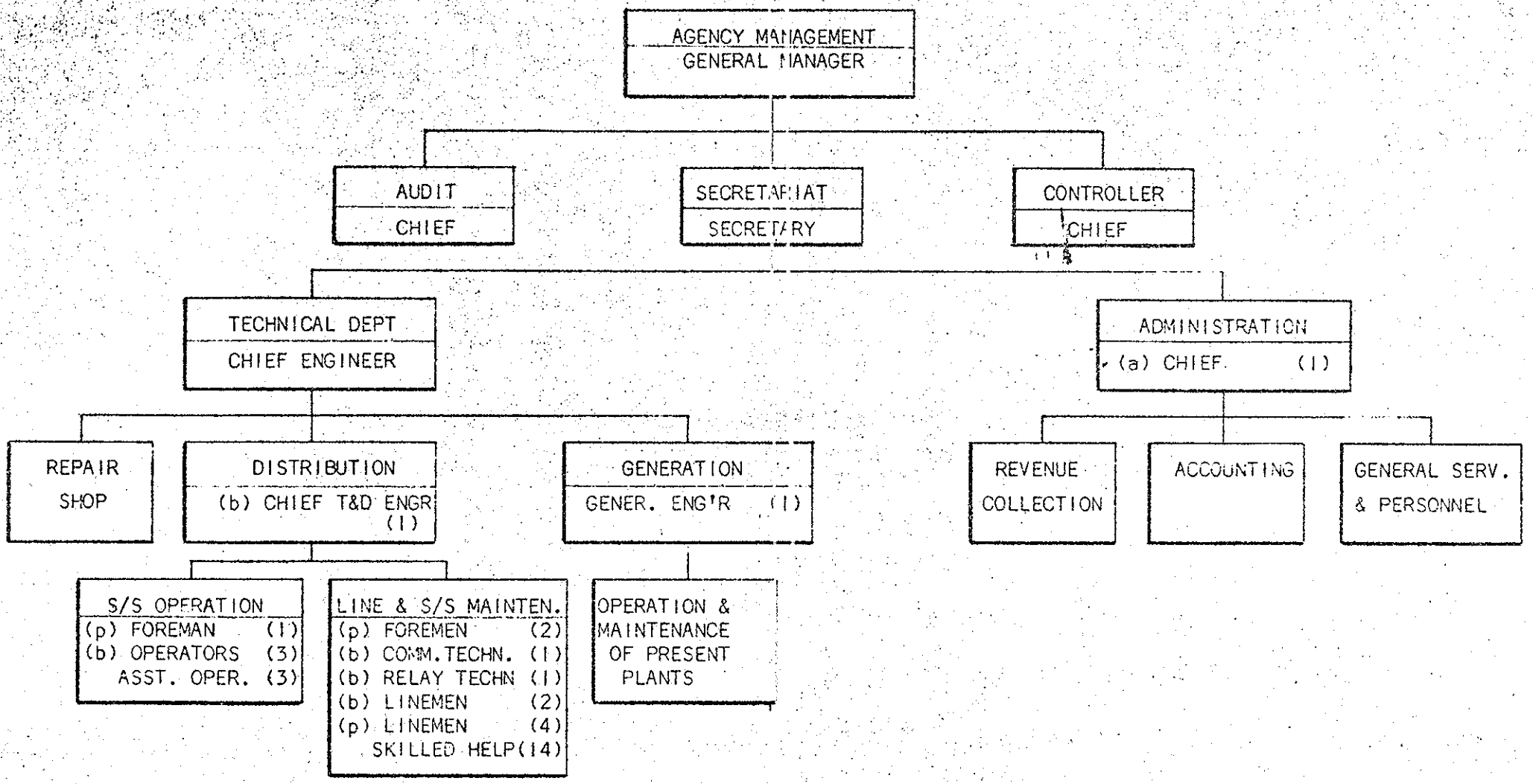

CHART IX-2

EXHIBIT III
sheet 1 of 1

DISTRIBUTING AGENCY ORGANIZATION CHART

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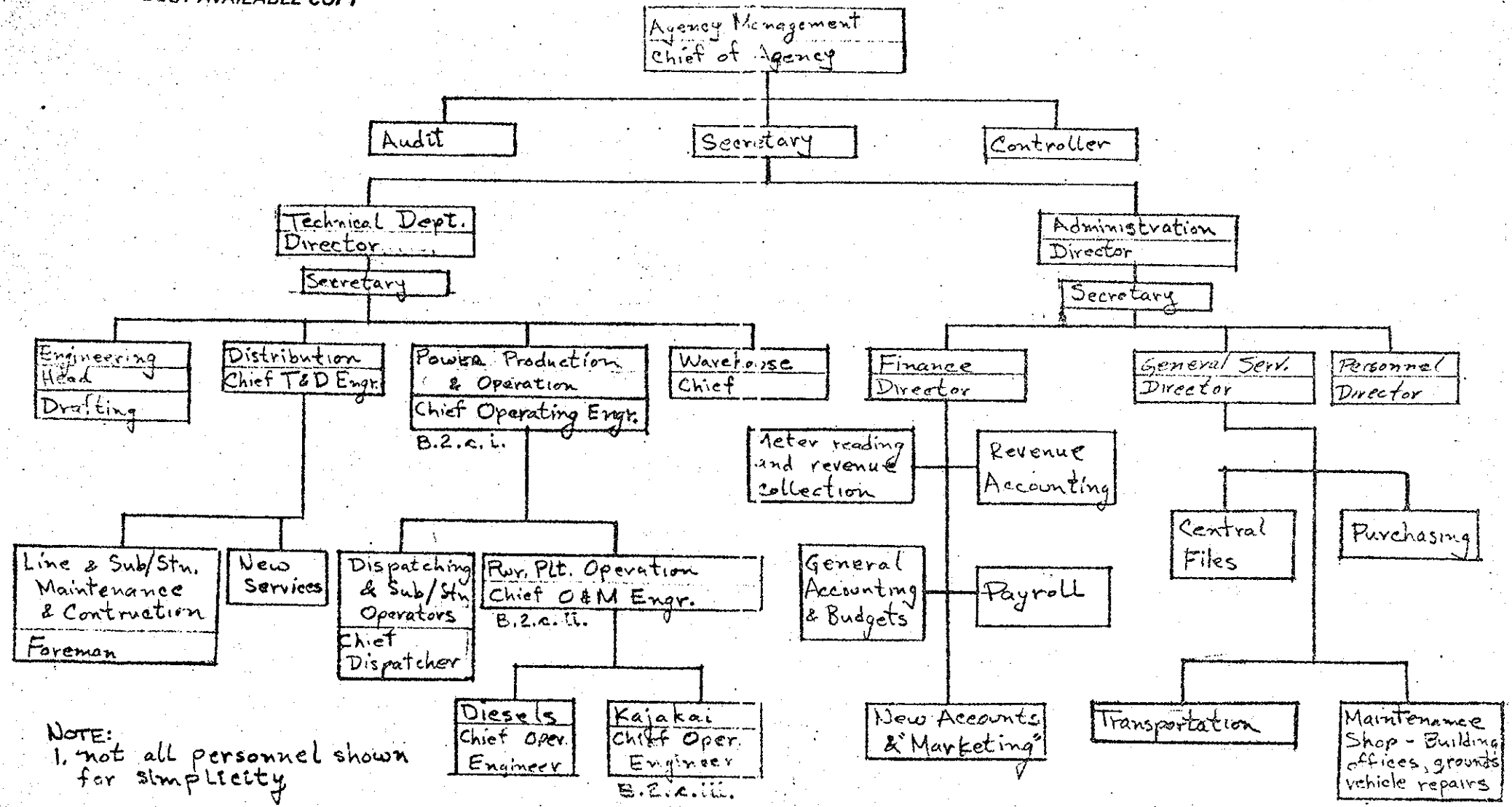

NOTE:
1. not all personnel shown for simplicity

EXHIBIT IV
Sh 1 of 1

KANDAHAR BRESHNA DISTRIBUTION AGENCY

PROPOSED REVISED ORGANIZATION CHART

Sept. 1971

INTERNATIONAL ENGINEERING CO., INC.
[illegible] Montgomery Street
San Francisco, California 94104
U. S. A.

MEMORANDUM

TO : Mr. [illegible] Hamid, General President
Da Afghanistan Breshna Sherkat
Kabul, Afghanistan

FROM : Mr. Michael Lent
Training Coordinator
Kabul, Afghanistan

DATE : August 11, 1971

SUBJECT : Kajakai Hydroelectric Project
Training Program

Mr. Hamid:

I am aware that the scope and nature of the training program for the Kajakai Project was not necessarily as ABM would have proposed it and that it is essentially a requirement in the utilization of the USAID loan funds. The total success or failure of this program does not depend on my mission here. However, I feel that the effectiveness of the program, as accepted and approved by ABM, is diminished considerably by not having the position of Plant Manager for Kajakai Project filled during my stay in Afghanistan.

Aside from the overall responsibility of the operation and maintenance of the Kajakai Power Plant, the principal duty of the Plant Manager will be the management and administration of the personnel under him. This is, of course, the main reason for his having been designated as my counterpart in Afghanistan as the Field Training Coordinator. I feel this is important not only to prepare him for the duties that will be placed on him after the plant resumes operation, but to completely familiarize him as to the capabilities and limitations of each of the men he will have to depend on for the efficient operation of the plant. By evaluating the needs of each man and providing the supplemental training required, the Plant Manager will be participating in the preparation of each man.

The ISCO/ABM contract budget has anticipated three trips to Afghanistan/Iran by the training coordinator. The total duration of these three trips is estimated at five months. This means that subsequent trips are anticipated to be of shorter duration than the present trip (two months) and scheduled approximately one year apart (please see the revised schedule). During this one-year interval, twelve men should be

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International Engineering Co., Inc.

Mr. Hamidullah Hamid - 2 - August 11, 1971

placed, their experience evaluated, and training preparation and/or on-the-job training started. Before the end of 1971, six of these men are scheduled to start in this program (including the Plant Manager).

I have investigated the immediate possibilities for trainees and certain commercial experts in Iran, visiting the Faculty of Engineering at Pahlavi University, the medical faculty of APT and the Telecommunications Training Center of the Ministry of Communications, all of which have been informative and essential to my duties. There are numerous other avenues and matters to be investigated. However, I feel it is my responsibility to you, the client, and to IECO who has placed their confidence in me to implement this phase of the program, to advise you that I feel that only fifty percent of my task will be completed if I return to the U. S. A. without passing my experience on to my counterpart in Afghanistan.

This means familiarizing the man thoroughly with the objectives and details of the program as proposed, giving him examples of the procedure, disbursement of funds, forms, organization, filing, insurance, trainee orientation, etc. as will be used for the U. S. A. training and establishing an equivalent for the Afghanistan and Iran training phases. As there are 55 men, each perhaps unique in background, participating in 15 different basic classifications, it is important that organizations be utilized to establish their programs, their final evaluation and to form complete records for personnel administration.

I realize this is only one of a multitude of details with which you must concern yourself. However, since you probably will have departed for Europe and the U. S. A. before my return from Iran with Mr. Aurang, I feel I must go on record at this time with the above counsel. To go to Iran with Mr. Aurang and to investigate training details with him is an excellent compromise but it cannot substitute for the important task (for which ABM is paying approximately $130 per day) that I should fulfill while in Afghanistan.

Respectfully,

Michael Long

cc: IECO - San Francisco
USAID ENGR - KABUL

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EXHIBIT VI.
sheet 1 of 1

Date

No.

Enclosure

Department

The Afghanistan Breshna Moassessesa

To Mr. Michael Lung
Training Coordinator
Kabul, Afghanistan.

Re: Your letter dated August 14, 1972

Dear Sire, Re: Afghanistan Hydroelectric Project Training Program.

As you are aware because of some reasons Mr. Auring will act as the Plant Manager and will carry out the duty of the Field Training Coordinator until the Plant Manager is selected.

Therefore he will work and cooperate with you in this project. In order to make your trip to Afghanistan more efficient you should have close contact with him and familiarize him thoroughly with the objectives and details of the program as proposed.

Upon your departure from Afghanistan he will work closely with personnel assigned for Kajakai Project. He will evaluate the needs of each man and provide supplemental training required and participate in the preparation of each man.

When you return back home you should always have contact with him and forward your recommendations and comments necessary for effectiveness and success of the training program to him.

Twelve men needed for this one year interval will soon be placed their experience evaluated and their training preparation or on the job training started.

Sincerely Yours
DA AFGHANISTAN BRESHNA MOASSESSESA

[illegible]
[illegible]
[illegible]

C/O [illegible] INC.
U.S.A. [illegible]
[illegible]

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55

Draft of the letter recommended to be sent to the USIS in English under ABM letterhead.

EXHIBIT VII
sheet 1 of 2

Date:

Mrs. Nan Borton, Director
American Center-Kabul English
Language Center, USIS
Kabul, Afghanistan

Subject: Kajakai Hydroelectric Project, English Language Training, USAID loan No. 306-H-013

Dear Mrs. Borton:

In accordance with the meeting held in your office with Mr. Michael Long, Training Coordinator for Kajakai Training Program, International Engineering Co., Inc. on August 14, 1971, we would submit the following tentative program outline for the USAID financed project in reference:

A. Seven trainees requiring English instruction for preparation of Stateside training. This Stateside training is to include some academic instruction but primarily will consist of on-the-job training in utility agencies and instruction in manufacturer's facilities.

B. Seven trainees requiring a "good working knowledge" level of English sufficient for comprehending and working with instruction and operating manuals in English and having fluency to work with American consultants and advisors and to benefit from their instruction.

The estimate for Group A is high in-as-much as it is our hope to obtain personnel for our program which has a good level of English proficiency already. Also for one training position of Group A, Stateside training is tentative only. The level of education of the personnel of both Groups A and B should be of college graduate level (engineers) and, therefore, have a good fundamental basis in English to start. We would ask, therefore, that each trainee be given proficiency tests to establish his class level of instruction and that periodic testing be given to record his progress and to halt his training when the desired level of proficiency has been attained.

We realize that this instruction is on a "space available" basis and if it is necessary to establish new courses due to our additional load on USIS facilities that the additional costs of instructors is to be borne by ABM. Due to the uncertainties of our program, (i.e., availability of manpower to fill training position and his availability for English instruction, etc.); and, the additional uncertainties of this phase of the program, (i.e. timing, the degree of ability of the trainee which determines which level of class he should enter,

and the available space of the classes at the time the trainee enters into English instruction) it is impossible to estimate the projected instructional lead.

Group A trainees should be selected and sent to USIS at various times within the year period of the final months of 1971 to the final months of 1972. Group B trainees should be selected and sent to USIS at various times within a one and one-half period beginning with the final months of 1971 and ending mid-1973.

As they become available for training, we will send each trainee to you on your scheduled testing days (presently we understand to be every Thursday afternoon) with a letter of introduction indicating his participation in this program and his group level of desired proficiency.

Thank you for your cooperation in this phase of the Kajakai Training Program.

Yours faithfully,
Da Afghanistan Breshna Moassessa

Engineer A. K. Attayee
Technical Vice-President

cc: USAID ENGR (1)
IECO-S. F. (1)

Draft of the letter recommended to be sent to the Peace Corps in English under ABM letterhead.

EXHIBIT VIII
sheet 1 of 1

Date:

Mr. Courteny Siceloff
Program Director
Peace Corps
Kabul, Afghanistan

Subject: Kajakai Hydroelectric Project
Peace Corps Volunteers for English Instruction

Dear Mr. Siceloff:

With reference to our September 25, 1971 meeting in your office with our Mr. Rahim Aurang, Chief of Administration; Mr. Michael Long, Training Coordinator, International Engineering Company, Inc.; and, Abdul Matin, Peace Corps Program Officer-Education, I wo uld confirm the following request for two Peace Corps volunteers:

1. A volunteer to conduct a basic technical English course for an estimated 12 technicians at the construction site of Kajakai Hydroelectric Plant.
2. A volunteer to conduct a basic technical English course for an estimated 10 technicians to be located at either Kandahar or Laskar Gah (location to be determined later).

Enclosed please find the Peace Corps information form filled in with the requested data.

We would like to thank you for your enthusiasm in this matter. It is our hope that with the present advance notice that the proper planning will assure success of this phase of Kajakai Training Program.

Yours Faithfully,
Da Afghanistan Breshna Moassessa

Engineer A. K. Attayee
Technical Vice-President

cc: USAID ENGR (1) with enclosure
IECO-S. F. (1) with enclosure

Draft of the filled-in Peace Corps
Form Recommended To Be Sent As
Annex to ABM Letter Of EXHIBIT VIII

1. Name of Agency Da AFGHANISTAN BRESHNA MOASSESSA (ABM)
نام نمایندگی

2. Contact Person dealing with Peace Corps Engineer A. K. Attayee, Technical Vice President
شخص موظف که با پیسکور معامله مینماید

3. Telephone Number 25110 or 25109, EXT 42
نمره تیلفون

4. Total Number of Volunteers Requested TWO
تعداد داوطلب پیسکور که درخواست گردیده

5. Job Titles and Number of Volunteers for each:
نام های وظایف وتعداد داوطلبان برای هریك :

Job 1 Technical English Instructor
Kajakai Hydroelectric Project
وظیفه اولی
No. of Vol. ONE
تعداد داوطلب

Job 2 Technical English Instructor
Kandahar or Lashkar Gah Location
وظیفه دومی
No. of Vol. ONE
تعداد داوطلب

Job 3 _____
وظیفه سومی
No. of Vol. _____
تعداد داوطلب

(please use a separate set of these questionnaires
for each job requested)
(لطفاً سوالات جداگانه ذیل را درقسمت هریک ازوظایفی که درخواست
شده استعمال نمائید)

وظیفه : _____

Job: One and Two - Technical English Instructors.

1. Describe fully the main job assignment for the volunteer. What are the different things that he will need to do?; which of these duties has the highest priority? How often will each of the duties be repeated? Which time of the year will the work load be heavier? What work will the volunteer do in slack periods?

۱ـ وظیفه اصلی که به داوطلب سپرده میشود مفصلاً تشریح گردد . چیزهای لازمه و مختلف راکه این داوطلب انجام بدهد کدام اند ؟ به کدام یک ازین وظایف حق اولیت داده شود ؟ غالباً کدام یک ازین وظایف تکرار خواهد شد ؟ درکدام وقت سال حجم کار اضافه می گردد ؟ کدام کار را داوطلب دراوقات فراغت انجام داده میتواند ؟

1. Both jobs 1 and 2 are identical, only locations differ.
   a. Job 1: A volunteer to conduct a basic technical English course for an estimated 12 operating technicians at the construction site of Kajakai Hydroelectric Power Plant.
   b. Job 2: A volunteer to conduct a basic technical English course for an estmated 10 operating technicians to be located at either Kandahar or Lashkar Gah (location to be determined later).
   c. Each course should include basic working knowledge (fair to minimum) of English for communications on-the-job with American Construction personnel and other American technical advisors. The courses should be technical language oriented for construction, electrical and mechanical terms and expressions for the utilization of instruction manuals in English and basic intercommunication.

۲ــ داوطلب باکدام یك ازافغان ها کارخواهند کرد ؟ امر نظارت کیست ؟ ایاوی کدام کانترپارت دارد ؟ نام وی چیست؟ لطفاً سویه تعلیمی ومسلکی مامورین فوق را توضیح بدهید ؟ داوطلب باکدام ملیت ها و ممالك کار خواهد کرد ؟ رابطه در بین چه خواهد بود ؟

2. What Afghans will the volunteer be working with? Who is the supervisor? Will he have a counterpart? What is his name? Please indicate the educational and professional background of above officials. What nationals of other countries will the volunteer be working with? What will be the relationship?

2. a. As it is our hope to staff the positions for operating personnel with qualified AIT or Technical High School graduates, some of the trainees may already posses a fairly good "working knowledge" of English. Therefore, the Peace Corps Volunteer should be prepared to test each individual at the beginning of the course and periodically during the course to report progress and to halt the instruction of an individual who has attained the desired level of proficiency or "working knowledge".

b. The Afghan counterpart is to be the Field Training Coordinator for the Kajakai Training Program. At present, Mr. Mohammed Rahim Aurang, Chief of Administration of ABM is designated for this position.

c. Nationals of other countries except for the American contractors, are not part of this program in Afghanistan.

۳ــ کدام نوع وسایل ولوازم جهت اجرای این وظیفه لازم خواهد بود ؟ چه نوع وسایل فعلاً موجود است؟ مسئول خریداری وسایل کی بوده ومراحل ان چگونه است ؟ ایا کدام مدرك قانع کننده در دست است که بدانیم وسایل وسامان لازمه در وقت ضرورت انجا موجود است ؟ کدام حمایه دیگر از کدام کشور دیگری نیز میسر است ؟

3. What equipment and supplies are necessary for performance of this job? Of these, what is presently available? Who is responsible and what are the procedures for purchases? What assurance is there that the necessary equipment and supplies will be available when needed? What support, if any, comes from other countries?

3. a. ABM understands it is to provide the necessary classrooms, desks and chairs and text books. Please advise ABM well in advance as to the texts or materials to be purchased.

b. The Field Training Coordinator is responsible for arranging for the necessary purchases.

c. No support is to come from another country.

٤ـ لزوم اهلیت وکفایت:
الف • لطفاء توضیح بدهید که برای وظایف لازمه خویش پیسکور ما دارای چه نوع استعداد وکیاقت باشد • هکذا اضافه کنید که درجه تحصیل ، مدت کار، وتجربه داوطلب پیسکور تاچه حد باشد •

4. Skill required:

A. Describe in detail the skill the volunteer should have, to perform the necessary tasks. Include the amount of education and the type and duration of work experience in the field that the volunteer should have.

4. A. We would expect the volunteers to have practical experience with slang, idiomatic language of the construction trade and familiarity with the terms and expressions for various construction, electrical and mechanical equipment. This is more important than formal education. Although some education in teaching methods and techniques for English as a Foreign language would be most useful.

ب • بعضاء امکان دارد که پیسکور نفر مورد ضرورت شما را یافت نمیتواند • در صورت وقوع چنین وضع در عوض شما چگونه پیسکور را ضرورت داشته ومیخواهید داوطلب ما چه نوع پس منظر و تجربه در امور محوله داشته باشد •

B. Sometimes Peace Corps cannot find those with the requested skill. If this develops in your situation, what substitute skill will you be willing to take - in terms of training and experience?

4. B. A volunteer can learn technical or construction English on-the-job but his teaching the subject would certainly not be as effective if he is just keeping ahead of his students.

۵ـ متفرقه :
الف • سفر :
چقدر سفر لازم است؟ درکجا ؟ چگونه آمادگی عادرین باره گرفته شده است؟

5. Miscellaneous:

A. Travel:
How much travel is required? Where? What provisions are made for this?

A. Only to training sites. Kajakai Construction site and either Kandahar or Lashar Gah. ABM will assure transportation of volunteer to training location.

ب • لسان :
ایاداوطلب زبان دری را بیاموزد ویا پشتورا ؟ چقدر لسان باید داوطلب بداند تاکارها موفقانه انجام داده شود ؟

B. Language:
Should the volunteer be trained in Dari or Pushto? How fluent should the volunteer be to do the job adequately?

B. Most technicians should be able to communicate in Dari. Fluency of volunteer necessary can best be answered by experienced Peace Corps.

ج • ایا کدام نفر در شعبهٔ شما موجود است تا بدون کدام حق الزحمه در قسمت تهیه داوطلب وی را کمک نموده با اعضای پروگرام تربیه یک جا کار نماید •

C. Who from your office will be available without cost to the Peace Corps to help train the volunteer, and work with the training staff?

C. ABM will be available for assistance, however contribution could only be minimum.

د • درکدام تاریخ باید داوطلب ما امادهٔ خدمت باشد ؟

D. What date should the volunteer be available for work?

D. September/October 1973. It is anticipated that it would be most convenient to conduct these courses starting the winter months of 1973 and 1974 as during this period construction should be at a seasonal slow down. The courses must be conducted during the final phases of the construction of Kajakai Hydroelectric Plant which is presently scheduled from August 1973 to the start-up date of mid-September 1974. Although not within the scope of this project, we would consider strongly the necessity of a continuing program beyond the start-up date.

٦ـ لطفاً دورنمای کار نمایندگی خویش را توضیح داده تعداد وموقعیت شعبات خویش را درصورتیکه موجود باشد واضح سازند • هکذا دلیل اینکه چرا داوطلب پیسکور تقاضا شده نیز تحریر فرمائید •

6. Describe the scope of work of the agency, the number and location of branches (if any), the reason that Peace Corps is requested to provide personnel.

6. ABM is the Electric Power Authority for the entire country of Afghanistan with seven regional electric distribution agencies. The Peace Corps is known to be teaching English in Afghanistan at mimimum cost. In addition, the Peace Corps has shown enthusiasm for conducting this type of course application, namely instruction directly to individuals who can benefit immediately in their jobs or careers.

لطفاً مکتوبی را که دران موضوع درخواست پیسکور از طرف رئیس نمایندگی صورت گرفته باشد ضمناً ارسال دارید •

Please attach a letter from the president requesting the placement of Peace Corps Volunteers in your agency.

اسم شخصی که این فورمه را خانه پوری نموده است _____

Name of person who filled out this form _____

Engineer A. K. Attayee
Technical Vice President

_____ تاریخ

_____ Date

65

Draft of the letter recommended to be sent to the Ministry of Communications under ABM letterhead (After translation into Dari).

EXHIBIT X
sheet 1 of 3

Mr. Yakubi, Director General
Planning and Statistics Department
Ministry of Communications
Kabul, Afghanistan

Subject: Kajakai Hydroelectric Project Training Program Communication Engineer and Technicians

Dear Mr. Yakubi:

On August 12, 1971, ABM Engineer Mohammed Ashna and Mr. Michael Long, Training Coordinator, International Engineering Company, met with you in your office to discuss the availability of communications technicians and the training facilities of the Telecommunications Training Center. This letter is the result of that meeting and is being sent, as you suggested, to give the details of the problem for the consideration of the Ministry of Communications.

A. For the Kajakai Hydroelectric Project, soon to near the beginning of construction, ABM will need a Communications Engineer and four Communications Technicians as part of it's operating staff.

1. Communications Engineer-the preferred alternative to this requirement is to obtain a graduate electrical engineer from Kabul University with preferences in electronics that can be instructed in carrier and basic telephony principles. This engineer should receive whatever instruction and on-the-job training that is available in Afghanistan for power-line carrier and basic telephony as required for the Kajakai Project. If he is proved to be capable, it is recommended that this engineer will be sent to the U. S. A. for training in the factory of the carrier equipment supplier. After returning to Afghanistan, this engineer will work with the construction contractor to install, test, check out, and start operation of the equipment. Once operation has started, this engineer's duties will be to instruct, guide and supervise the four communications technicians in the assembly, operation, maintenance, testing and repair of the power system carrier equipment to be installed on the Kajakai-Kandahar transmission line.

This engineer must also be trained in Relays and Instruments which is outside the scope of assistance requested from the Ministry of Communications and which will be arranged by ABM.

A. 1-continued

Depending on the comments and recommendations of the Ministry of Communications; the experience and training of the candidate, and the scheduling of available instruction, it is our hope that training can begin as soon as possible. This man would be required about mid-1973.

2. Communications Technicians-Four men trained in carrier (power-line carrier) and basic telephony. These men should receive whatever instruction and on-the-job training that is available in Afghanistan. These technicians after formation by TTC should receive on-the-job experience in power-line carrier with the communications Engineer at the available locations within the ABM system. In addition, these technicians would work also with the construction contractor to install, test, check out, and start the operation of the equipment. Depending on the comments and recommendations of the Ministry of Communications, the experience and training of the candidates, and the scheduling of available instruction, it is our hope training can begin as-soon-as-possible.

   These men would be required by mid-1974.

3. The carrier equipment is expected to be solid state, double frequency unit, with one voice channel and one channel for power line carrier relaying. The voice channel will be a three way party line, over a three way party line over a single channel, with end points at Kajakai and Kandahar and a midpoint junction. Voice frequency channels shall be voice multiplex equipment employing frequency division, single side-band suppressed carrier transmission, [illegible], and frequency shift. More detailed information will be available at a later date.

A.

B. ALTERNATIVES

As discussed in your office there are various alternatives for filling these positions:

1. Communications Engineer
   a. Obtaining from within the Ministry of Communications, a communications engineer, experienced in carrier. This man would then be trained further by ABM for his other job duties, i. e. relays and instruments.

   b. Obtain an electrical engineer, graduate of Kabul University; with a preference for electronics. Train him at TTC along with the communications technicians. The engineer should work closely

B. 1. b-continued

with the instructor and perhaps act as an assistant instructor so that his prestige won't be affected by taking instruction in a technical high school. Emphasis should be given to this man that he will be an "expert" when all of his training is completed.

2. Communications technicians (four men).

a. Obtaining from within the Ministry of Communications, four communications technicians, experienced in carrier. These men should be trained by ABM on-the-job within their system and on the specific equipment to be used, at the time of final installation, and initial operation.

b. Select graduates [illegible] from the next carrier class, if the classes are scheduled in time. On-the-job training by ABM would be the same as for (a).

c. Obtain four AIT graduates with preferences in electronics, and start them at TTC in the second year of the carrier curriculum.

d. Combine one man from alternative (a) with three men of alternative (b) or (c).

We, therefore, request a resolution to the above problem from the Ministry of Communication who is the most qualified in this area. We thank you for your cooperation and interest in this matter.

Very truly yours,

Engineer A. K. Attayee
Technical Vice-President

cc: USAID ENGR. (1)
IECO S. F. (1)

TRIP MEMO

Dates: August 17 to 29, 1971

Trip: Tehran, Iran

Participants: Mr. William Armory, Chief of Administration, Da Afghanistan Sherkat Bourshnass, Kabul, Afghanistan

Mr. Richard Lane, Training Coordinator, International Engineering Co., Inc., San Francisco, California, U.S.A.

Purpose of Trip: Investigate Sources of Training for Afghan Engineers and Technicians in Iran and Establish the Necessary Contacts for Future Implementation of AEM Training Program

Details

August 17 - Arrival in Tehran

August 18 - Met with Mr. R. Mohr, First Secretary of the Royal Afghan Embassy to Iran. The purpose of our trip was discussed and the official letter of introduction sent by the Afghan Ministry of Foreign Affairs was learned. Through the very fine efforts and cooperation of Mr. R. Mohr and the Charge d'Affaires, Mr. Tarzi, an appointment was made through the Ministry of Foreign Affairs of Iran with the Ministry of Water and Power, Engr. Hadi Zad.

August 19 - A meeting was held with Engineers Hadi Zad, Director General and Mahmoubeir Ashkar, Training Director of the Ministry of Water and Power, General Utilities Supervision Department. The purpose of our mission was presented and discussed. The possibility of on-the-job training and utilization of the newly formed Utility Training Center was discussed in detail. See Minutes of Meeting for details.

August 21 - Visited Utility Training Center presently under construction. We were accompanied by Engineer Wahyee, Manager of the training center. The training center is located approximately 30 minutes by car to the east of Tehran in Tehran Pars. A tour of the facilities was led by Engr. Wahyee. The curriculum was discussed with Mr. Holzer, Chief Consultant with Fallco-Ford. Some details of the training were discussed i.e. the method of instruction for the use of hot line tools, control room operations and procedures, and dispatching.

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TRIP LOG

August 22 - Visited Parsh Abad Thermal Power Plant on the outskirts of Tehran with three units of 16.5 MW each. We met with Engr. Sorgh, Plant Manager and toured the plant with Engr. Sarshk Mol, shift engineer, and Engr. Ali Elyan of the Program and Planning Department of MWP. A visit was made to all areas of the plant. Parsh Abad has been used for OJT in the past and it was estimated that a maximum of 20 men could be trained at the facility.

August 23 - Visited Sad-e-Amir Kabir (Karaj) Dam and hydroelectric plant located 50 Km to the west of Tehran. The trip was arranged through Mrs. Mostyan (secretary to Engr. Fereha, Head of Tehran Water Department). At the dam we were met by Mr. Yegana who accompanied us on a tour through the power plant, dam crest, and the camps for the operating personnel. The power plant consists of two units of 42 MW each (Teyshiba), Francis turbines under a head of 150 meters. Voltage is stepped up from 16.4 to 132 KV for transmission (80 Km). Operating personnel include a Plant Manager, a Generator engineer, a turbine engineer, and a chief maintenance engineer (mechanical electrical). Shift operators for the control room, and turbine and generator floors alternate on 3 shifts. No dispatching or relay maintenance is performed at the Plant. All facilities and equipment were very well maintained.

August 23 - Met with Mr. R. Mohr, First Secretary of the Royal Afghan Embassy to Iran. We briefed him on the result of our meeting with the MWP and the tours taken. Financial arrangements and details for payments to the Afghan trainees were discussed. He requested that the Embassy be kept informed as to developments so that his office may handle all matters in Iran effectively. Mr. Mohr stated that he would forward our thank you to the MWP.

Conclusion: The trip was successful with all objectives achieved. The Iranian authorities extended full cooperation and made every effort to plan and implement an effective program for us. The interest and effort of Mr. Mohr, First Secretary of the Royal Afghan Embassy to Iran, was particularly instrumental for the success of our mission.

Rahim Amrang
Chief of Administration
Da Afghanistan Breshna Moassasa

Michael Long
Training Coordinator
International Engineering Co., Inc.

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MINUTES OF MEETING

Date: August 18, 1971 (9:00 a.m. to 11:30 a.m.)

Location: Ministry of Water and Power
General Utilities Supervision Department
Sol-e-Chorsi Square
Khiabane-Mofateh
Tehran, Iran

Subject: Training of Engineers and Technicians from Da Afghanistan Breshna Moassessa, Afghanistan in Iran.

Participants:

Eng. Hadi Zad - Director General - General Utilities Supervision Department, Ministry of Water and Power.

Eng. Manouchehr Milbfar - Training Director, Ministry of Water and Power.

Rahim Aurang - Chief of Administration, Da Afghanistan Breshna Moassessa (AEM), Kabul, Afghanistan.

Michael Long - Training Coordinator, International Engineering Co., Inc., (IECO), San Francisco, Calif. U.S.A.

General:

Through an official letter of the Ministry of Foreign Affairs of The Royal Government of Afghanistan to the Royal Embassy of Afghanistan in Tehran, Iran, Messrs. Aurang (AEM) and Long (IECO) were introduced to that embassy for the purpose of establishing a meeting between the power authorities of the two countries. The purpose of the meeting was to investigate the possibilities of training engineers and technicians of Da Afghanistan Breshna Moassessa, Afghanistan within the utility systems of Iran, primarily by on-the-job training.

On August 18, 1971 through the very fine efforts and cooperation of Messrs. Mohr and Farzi, the First Secretary and Charge d'Affaire of the Royal Embassy of Afghanistan, an appointment was made through the Ministry of Foreign Affairs of Iran with the Ministry of Water and Power, Eng. Hadi Zad.

Minutes:

The meeting began with a general discussion of the purpose of our mission with Eng. Hadi Zad. A copy of the tentative list of trainees

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was presented (see final sheet of these minutes).

Eng. Hadi had described the Ministry's Training Center and asked Mr. Adibfar to join the meeting for further elaboration of the Training Center and curricula.

Points Raised and Discussed (not necessarily in order):

A. There are ten regional distribution agencies in Iran, generally distributing up to 20 kv with a few locations up to 63kv. Power transmission at 63, 132, and 230kv and generation (except for few remote diesel stations) is under the responsibility of a separate Generation and Transmission Department. Iranian Power System employs approximately 17,000; 15% skilled laborers, 15% non-technical office staff, 15% top technicians, and 5% engineers.

B. The MWP has been training about 400 to 500 technicians per year in their present training center. The training has been in the areas of generation, transmission and distribution.

In addition, MWP has sent about 40 utility system managers to the USA over the past three years through the Korea Engineering Company, under USAID sponsorship. Fifteen to twenty more will go to the USA next year under this same management training program. The program consists of four to five weeks in university courses or seminars and the remainder of the time, six to seven weeks, visiting various utility systems.

Teheran General Electric is also sending managers, middle managers, and technicians for training.

C. Within the next eight months, it is expected the new MWP training center will be completed and the equipment installed sufficiently to go into operation. The new training center is now being constructed at a total cost of six million dollars (four million has already been spent). USAID funds are being utilized in the project.

1. The initial plan is to organize the curricula, texts, etc. through an 18 month contract with Philco - Ford of the U.S.A. which has only just started. At present, prospective Iranian instructors are being selected and trained in English. These instructors will teach in English with their American counterparts during this initial 18 month period. At the end of this period, all training is to be carried out in Farsi. A text for instruction in technical terms is now being prepared. One such text will be sent AID when completed.

   Some of the instructors were chosen from the old training center and others are newly hired. A total of 60 to 70 will be prepared.

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2. The training center is being built East of Teheran, in Tehersa town district, about thirty minutes by car (25 km). The 450,000 square meter area will contain classrooms, laboratories, staff housing, auditorium, cafeteria, dormitories and recreation facilities to eventually accomodate 500 students in residence. The dormitories should be ready for occupancy in about six months.

3. The courses and subjects to be taught are as follows:

a. Transmission (and subtransmission -63kv)

1) High Voltage Substation Maintenance - 20 weeks

2) High Voltage Cable Splicing - 9 weeks

3) Equipment Operators (erection equipment) - 10 weeks

4) Transmission Linemen (includes hot-line maintenance, 63 and 132kv) - 22 weeks

b. Distribution (23kv to 400 volts)

1) Linemen - 8 weeks (best men go to transmission system linemen Courses, a.4) above)

2) Low Voltage/Medium Voltage Substation Maintenance - 16 weeks

3) LV/MV Cable Splicers - 6 weeks

4) Meter Specialist - 14 weeks

c. Generation (at present, emphasis is on thermal generation)

1) Control Room Operator (power plants or sub-station) - 12 weeks

2) Turbine Operator (thermal and hydro) - 14 weeks

3) Maintenance Mechanic - 12 weeks

4) General Steam Plant Operator - 14 weeks

d. Electronics

General course of the fundamentals of electronics, i.e. vacuum tubes to solid state, etc. - 35 weeks

Each trainee receives three to five weeks of orientation, introduction to general terms, safety, use of hand tools, etc. on-the-job

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training is a part of the training of each man so he is considered as "Assistant" until such time as his on-the-job training phase is completed.

The MWP issues a completion certificate which is only for internal MWP recognition. An additional five weeks orientation of teaching principles is given to those who are to become instructors.

4. Technicians that prove to be outstanding in a specific course are selected for training in all phases of a group. A complete two year course entitles a man to be called an Engineering Helper which is essentially a crew foreman in function.

A man who successfully completes his course but does not prove to be exceptional, is put into a job utilizing the particular skill, i.e. HV cable splicer, as a technician.

5. The selection of students, filling of course seats, and scheduling of courses is done by the Power Planning Department. This department receives the manpower requirements from the various distribution agencies, candidate recommendations, etc. and then establishes the course emphasis for the forthcoming training period.

6. It is intended by the MWP that by 1973 utility management courses will also be part of the curricula. This would include instruction for managers, middle managers and supervisors.

7. As a cost estimate, 60,000 Rials per year (nine month year) was given from the MWP's experience with the old training center. This cost is without food and housing, only direct costs. The total estimated cost would then be from $150 to $200 per month - $100 for direct costs plus $50 for food and housing.

The above is to be considered a rough estimate only. The MWP said that since the training center is established for Iranian utility system use and is financed as a system development cost, the cost figures per student have not been worked out. Eventually, the individual distribution agencies would be required to share in the cost of training.

The MWP said that in the case of the training of Afghans, or any other foreign national, that the costs would not be established by them but by another agency or ministry, perhaps the Ministry of Foreign Affairs. It was the unofficial feeling however, that the Iranian Government would accept Afghan trainees as guests.

It was also thought, that in-so-much as the training center was unique and of such a caliber that future use of the center as a training ground for technicians and engineers of other Middle East countries under United Nations funding might be suggested in the next meeting of Economic Commission for Asia and the Far East (ECAFE). As Afghanistan and Iran would both be invited to attend, this could be a subject for mutual discussion.

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D. It was explained that it had been our intention to request on-the-job training for the Afghan men indicated on the estimate submitted. The MWP indicated that although they thought OJT to be useful, that it was certainly never as effective as the proposed training center, particularly as it required residency and therefore, more discipline in its instruction. We agreed with this opinion.

The MWP listed some of the available locations for OJT in Iran:

1) The best and most organized of the power authorities are the Khuzistan Water and Power Authority (KWPA) and the Teheran Water and Power Authority.

2) Some OJT is available for diesel stations. The operators of these stations lack formal education and training but are extremely competent in operation and maintenance through long experience.

3) Farah Abad Thermal Power Plant - three units of 82.5 mw each, located within Teheran to the south.

4) Shah Abas Hydroelectric Power Plant, Isfahan - three units with total of 53 mw.

5) Reza Shah Kabir Hydroelectric Power Plant only now being let for bid. With an eventual four units of 250 mw each. This will be Iran's largest power plant. As the dam is presently under construction, this plant may not practically be available for OJT.

6) Mohammed Reza Shah Pahlavi Hydroelectric Plant (Dez Dam) - with an eventual four units of 65 mw each, one unit now in operation.

7) Farah Nez Hydroelectric Power Plant with five units of 17 mw each, located 250 km north of Teheran.

8) Karaj Hydroelectric Power Plant presently under full operation located within easy driving distance of Teheran.

9) New Thermal - electric Power Plant to be completed within two to three months, with two 156 mw units (plus two future units).

It is recommended that OJT follow rather than precede any course work in the training center.

E. The MWP explained that Harza Engineering Company is presently under a management contract with them as advisors in the areas of technical, accounting and finance, training, and organizational consulting. These areas include system operation, trouble shooting, long range planning

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(five and twenty year program), budgeting, establishing a uniform system of accounting and the setting of rates. The contract has been extended to March 1973. At present there are twenty American consultants which is to increase to thirty-four.

7. To establish the training program for Afghans in Iran, AID should write a formal letter to Mr. Nazemi, Deputy Minister, Ministry of Water and Power (with copy to Mr. Jalil Kaji) during reference to Iran's reading and writing requirements of engineers and technicians to be trained, time schedule, etc. OJT and training in IWP training center should be listed separately.

Dhian Parwaly
Da Afghanistan Breshna Moassessa

Michael Long
International Engineering Co.

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ITT INTERNATIONAL ENGINEERING CO.
SAN FRANCISCO, CALIFORNIA, U.S.A.

PROPOSED PERSONNEL FOR TRAINING IN IRAN

DESCRIPTION	NO. OF MEN	PROPOSED PERIOD ON-THE-JOB TRAINING-MAN-MONTHS	NOTE
MOTOR PLANT			
1. Plant Manager	1	3	A, B
2. Chief Maint. Engr.	1	2	B
3. Chief Operating Engr.	1	2	B
4. Mechanical Maint. Engr.	1	3	-
5. Electrical Maint. Engr.	1	3	-
7. Transmission Maint. Engr.	1	4	-
8A/D Shift Operators	4	8 (2 Ea.)	A
11. Chief of Administration	1	2	B
14A/D Relay and Instr. Tech.	2	6 (3 Ea.)	-
DISTRIBUTION AGENCIES			
16B Chief T & D Engr.	1	3	B
17A Chief of Admin.	1	1	A, C
17B Chief of Admin.	1	3	B
13A/F Substation Operators	6	12 (2 Ea.)	A
14 C/D Relay and Instr. Tech.	2	6 (3 Ea.)	-
TOTAL	24 Men	68 Man-Months	B

NOTES:

A. Period shown is suggested only - training to be determined later.

B. Not shown is a one-month period in Iran for a management course.

C. One month shown for position 17A is suggested only and might be utilized for on-the-job training or one-month training course; to be determined later.

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Draft of the letter recommended to be sent to the Ministry of Water and Power of Iran under ABM or Afghan Ministry of Mines and Industry letterhead.

Date:

Mr. Hazrati, Deputy Minister
Ministry of Water and Power
Tehran, Iran

Subject: Training of Afghan Personnel

Dear Mr. Hazrati:

On August 19, 1971 Messrs. Mohammed Rahim Aurang, Chief of Administration of Da Afghanistan Breshna Moassessa (ABM) and Michael Long, Training Coordinator, International Engineering Co. Inc. met with your personnel, Engineer Hadi Zad, Director General, General Utilities Supervision Department, and Engineer Manouchehr Adibfar, Training Director. The meeting had been arranged through the Royal Afghan Embassy and the Iranian Ministry of Foreign Affairs. The main subject of discussion was the availability of training for Afghan Electric utility personnel in Iran. The Utility Training Center presently under construction and course and instructor development was discussed at considerable length. Engineer Adibfar presented the tentative program curriculum.

Engineer Hadi Zad has recommended that ABM write a letter to you indicating the description, scope of training and tentative schedules of our desired training program in Iran. He suggested that courses of the Utility Training Center and on-the-job training be listed separately. Engineer Hadi Zad will be informed of this matter by means of a carbon copy of this letter, on his recommendation.

Tabulated below is a Summary of Anticipated Training in Iran. We have attempted to be realistic and detailed enough to assist your organization in instructional load planning.

SUMMARY OF ANTICIPATED TRAINING IN IRAN

ABM reference number	Number of men	Trainee's Job Title	Course Title (or scope of OJT)	Anticipated course (or OJT) duration-weeks
A. Utility Training Center:				
9C & 9D	2	Line Crew Foremen	High Voltage substation maintenance (Transmission Section)	20
9C & 9D	2	Line Crew Foremen	Transmission Linemen (Transmission Section)	22
16A & 16B	2	Transmission & Distribution Engineers	Transmission Linemen (see note 1)	4
14A/D	4	Relay and Instrument Technicians	Meter Specialist (Distribution Section)	14
6	1	Communications Engineer	Meter Specialist (See note 2)	14
8A/D	4	Shift Operators (Hydro Plant Operation)	Control Room Operator (Generation Section)	12
18A & D	2	Substation Operators	Control Room Operator (Generation Section)	12
3	1	Chief Operating Engineer	Control Room Operator (see note 3)	4
9A	1	Mechanical Crew Foreman	Maintenance Mechanic (Generation Section)	12
B. Utility Management Program				
2	1	Chief Maintenance Engineer	Management course	
3	1	Chief Operating Engineer	Management Course	
17A & 17B	2	Chief of Administration, Regional Distribution Agency	Management Course	

SUMMARY OF ANTICIPATED TRAINING IN IRAN -cont.

ABM reference number	Number of men	Trainee's Job Title	Course Title (or scope of OJT)	Anticipated course (or OJT) duration-weeks
16A & 16B	2	Transmission and Distribution Engineers	Middle-Management course	
C. On-the-Job Training (OJT)				
1	1	Plant Manager	Hydro-survey, of power plants, managerial procedures and methods, personnel, cost controls, operation planning and scheduling, preventive maintenance, safety regulations.	12
2	1	Chief Maintenance Engineer	Hydro-preventive maintenance and record keeping procedures	4
3	1	Chief Operating Engineer	Hydro-operating procedures, safety regulations, preventive maintenance, dispatching	4
4	1	Mechanical Maintenance Engineer	Hydro-preventive maintenance, work safety, testing and repair of plant mechanical systems.	12
5	1	Electrical Maintenance Engineer	Hydro-preventive maintenance, work safety, testing, and repair of plant electrical systems	12
17A & 17B	2	Chiefs of Administration of Regional Utility Distribution Agencies	Distribution-management with various agencies, finance, accounting, personnel, purchasing, meter reading, & revenue accounting	8

SUMMARY OF ANTICIPATED TRAINING IN IRAN-cont.

ABM Reference Numbers	Number of men	Trainee's Job Title	Course Title (or scope of OJT)	Anticipated course (or OJT) duration-weeks
16A & 16B	2	Transmission & Distribution Engineers	Transmission-69KV to 132KV class, operation and maintenance, dispatching, design and construction	4
18A & 18D	2	Substation Operators	Transmission-110KV substation operation, dispatching, safety procedures, preventive maintenance.	8

Notes for Summary:

1. It would be desireable if two transmission and distribution engineers (references 16A & 16B) themselves undergoing training, could partially overlook the training of the line foremen (9C & 9D) to see their progress and capabilities and to familiarize themselves with the scope of training and the techniques employed. Depending on schedule timing, 4 weeks duration should be adequate for this purpose.

2. This Communications Engineer (ABM reference 6) will have, in addition to communications, responsibilities for operation, maintenance, testing and setting of relays and instruments. If he will agree, we feel it desireable that he attend this course full-time along with his subordinates, the four relay and instrument technicians(ABM reference 14A/D).

3. It would be desirable if the Chief Operating Engineer (AMB reference 3) could partially overlook the training of the six Shift and Substation Operators (8A/D, 18A, & 18D) to see their progress and capabilities and to familiarize himself with the scope of training and the techniques employed. Depending on schedule timing, 4 weeks duration should be adequate for this purpose.

4. The entire program implementation depends on the scheduling of the Utility Training Center courses, both technical and managerial and the availability of on-the-job (OJT) training.

avoided and a well organized program can be

We would appreciate your observations and comments on the above program. It is anticipated that the Iranian phases of our training program will not be required until the year 1973. It is our hope by planning in advance that problems can be developed. We would also appreciate receiving the revised list of the Utility Training Center courses, the curriculum of each course, and the respective schedule dates. As indicated above we are interested in both the technically and managerially (management, middle management, and supervisor level) oriented courses.

Only incidentally, it was suggested that ABM could receive a copy of the text being prepared for instruction in English technical terms. We remain very much interested in such a publication.

We would like to thank you again for the very fine hospitality extended to our representatives during this last visit to Iran. (Note to ABM translater: at this point add Farsi cordiallities as required).

Very truly yours,

Mr. Hamidullah Hamid
General President
Da Afghanistan Breshna Moassessa

cc:-Mr. Hadi Zad, Director General
General Utilities Supervision
Department, Ministry of Water and
Power of Iran, Tehran, Iran
-Mr. Mehr, First Secretary, The Royal
Afghan Embassy to Iran, Tehran, Iran.
-USAID ENGR (1)
-IECO-S. F. (1)