BIC TAIFER
ERTILIZER
PROJECT

SABIC TAIFER FERTILIZER PROJECT

A JOINT VENTURE BY

SAUDI BASIC INDUSTRIES CORPORATION

AND

TAIWAN FERTILIZER COMPANY

ASIBILITY
STUDY

OLUME X

FEASIBILITY STUDY
VOLUME X
DEVELOPMENT OF THE JOINT VENTURE COMPANY

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SABIC-TAIFER FERTILIZER PROJECT

FEASIBILITY STUDY

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SECTION : I

INTERIM PERIOD

The Interim Agreement for this Project as signed by the executives of SABIC and TFC on January 6, 1979 specifies the following items of work which are to be done by the SABIC-TAIFER Fertilizer Project Team within a period of 12 months under the supervision of the Project Executive Committee:-

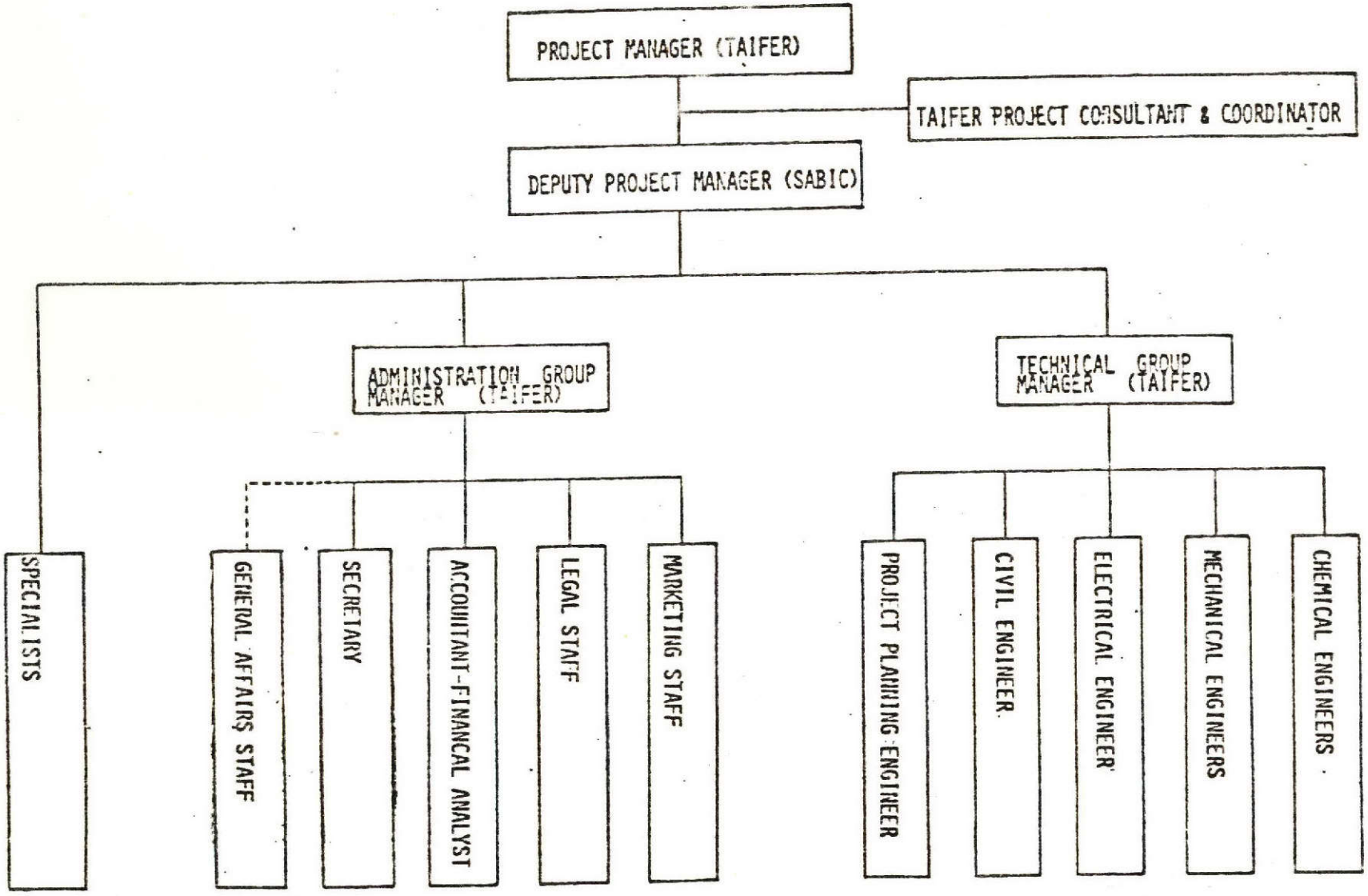
1. Preparation of a detailed definition of the project.
2. Negotiation with possible licensors for the selection of processes.
3. Preparation of the terms of reference for the Project Consultant.
4. Preparation of complete invitation to bid documents for the engineering, procurement, construction supervision and start-up assistance of the plant.
5. Send to the selected Project Consultants Invitations to Bid on a firm cost basis or reimbursable with a fixed fee.
6. Evaluation of bids.
7. Negotiation with best offer bidders for the purpose of selecting the successful bidder and recommending contractual terms for execution by the Project Consultant.
8. Preparation of both the Project Execution Schedule and that for the period of the Interim Agreement only.

9. Preparation of a budget for work to be done under the Interim Agreement.
10. Project feasibility economics.
11. Preparation of a market study.
12. Preparation of detailed financial analysis of the Project, including but not limited to cash flows, DCF calculations and sensitivity analysis.
13. Select and negotiate contracts with shipping and marketing consultants if necessary.
14. Development of any further information required to enable SABIC and TFC to apply for Project financing.
15. Supply SABIC and TFC with information required to enable them to negotiate agreements on Joint Venture, Offtake, Services.

Upon signature of the Interim Agreement, the Project Executive Committee was established. It consists of four members of whom two are nominated by each of the Parties, one of the SABIC members being appointed Chairman, while another was appointed as a Committee Representative. Project Manager, recommended by TFC, was also appointed. The Project Team was formed from members of the two Parties, including experienced engineers and economists with the necessary expertise to assist in implementing the work to be done under the Interim Agreement.

In the first Committee meeting held in the SABIC office on January 7, 1979, the following organization chart and revised work schedule were approved:-

"SABIC - TAIFER UREA PROJECT TEAM" ORGANIZATION CHART



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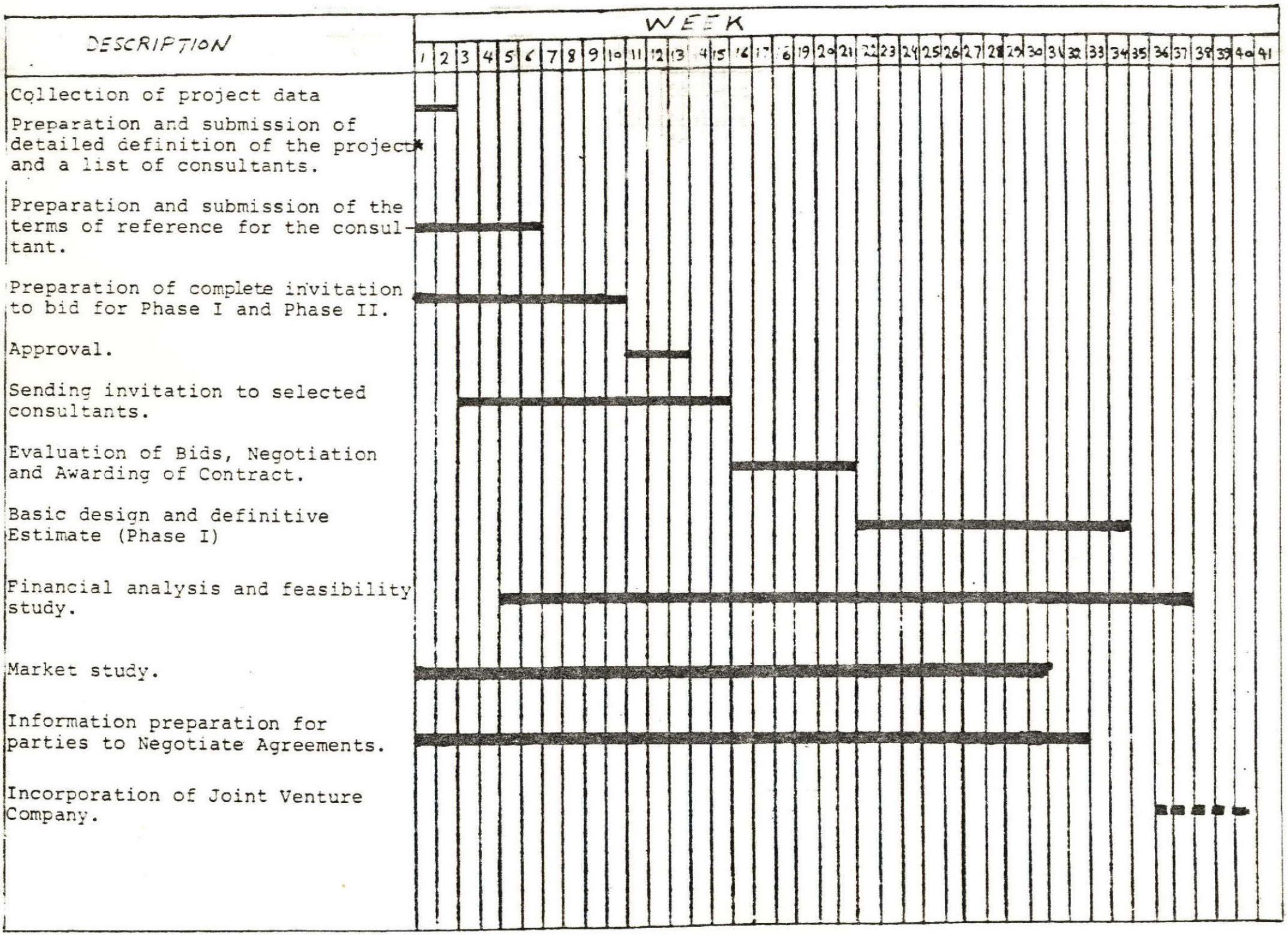


The Team started to perform its duties in the SABIC office at Riyadh, Saudi Arabia immediately after the first Committee meeting on January 7, 1979. All essential work has been accomplished by the Team as follows:-

A. COLLECTION OF PROJECT DATA:

The Royal Commission was consulted for the collection and clarification of Project data. SABIC and Bechtel infrastructure engineers were frequently consulted. All Project data for the consultant was completed on schedule.

B. PREPARATION OF THE TERMS OF REFERENCE FOR THE CONSULTANTS:

The first draft of the Terms of Reference for both phases I and II was completed in January, 1979. In early February, Members of the Committee and the Project Team visited and had meetings with the two selected Consultants at their respective offices; they were Uhde, Dortmund, Federal Republic of Germany and Pullman Kellogg, Houston, Texas, U.S.A. The final draft was completed in the middle of February, 1979.

C. PREPARATION OF COMPLETE INVITATION TO BID FOR PHASE I AND II:

After discussions inside the organization itself and with outside specialists, the Invitation to Bid package was completed by the Team and approved by the Committee in early March, 1979.

D. SENDING INVITATION TO SELECTED CONSULTANTS:

Upon approval of the complete set of Invitations-to-Bid for

Consultant Services of Phase I and Phase II of the Project in March 1979, the Project Team was authorized to send formal inquiry documents to the two selected Consultants referred above. Both of them have proven experiences in the design, procurement, construction and start-up of ammonia-urea plants.

E. EVALUATION OF BIDS, NEGOTIATION AND AWARDING OF CONTRACT:

Bid packages from Uhde and Pullman Kellogg were delivered and reached the Project Team's office at SABIC on April 8, 1979 as scheduled. They were carefully and thoroughly reviewed and analysed. After clarification with the bidders and discussions within the Project Team a Bid Evaluation Report was submitted to the Committee by the Team on May 8, 1979. A decision was made in June by the Committee to award the contract to Pullman Kellogg as the Technical Consultant of the Project. Upon conclusion of negotiation, a Letter of Intent for Phase I was sent to Kellogg by the Committee Representative.

F. BASIC DESIGN AND DEFINITIVE ESTIMATE:

The Letter of Intent, which authorized the Consultant to start Phase I work, was accepted by Kellogg and the work has been executed since June 28, 1979. In early July, the Committee Representative and Members of the Project Team held meetings with Pullman Kellogg in their Houston headquarters to settle all basic data for initial engineering. The definitive cost estimate and engineering documents were completed as scheduled by Pullman Kellogg on September 28, 1979.

G. MARKET STUDY:

By the end of January, 1979, British Sulphur of London, England was contracted to make a Survey of the World Urea Market. Their field research was made in March with the participation of a Team member. In May and July, discussions were made between the Team and British Sulphur on the draft report. The final report consisting of a Survey of the World Urea Market was delivered by British Sulphur in mid September, 1979.

A report on marketing arrangements was completed by TFC by mid September, 1979.

H. FINANCIAL ANALYSIS AND FEASIBILITY STUDY:

In March, 1979, the Project Team held meeting with the World Bank representatives stationed at Riyadh on the preparation of the financial analysis for this Feasibility Study Report. Two more meetings were held in May between the Team and the Bank on Financial Study Formulae and Computer Input and Outlet. As a result a financial analysis computer program was adapted to suit the purposes of the Project and was used in the preparation of this Feasibility Study.

SECTION II

INCORPORATION OF THE COMPANY

The Joint Venture Company will be incorporated according to the laws of the Kingdom of Saudi Arabia.

Sabic undertook as part of its contribution to this project to handle all the legal formalities needed and to obtain all governmental approvals required for the incorporation of the Company.

The following steps represent a summary of the incorporation procedure:-

A. An application to the Investment Committee (Ministry of Industry and Electricity) should be submitted asking for permission for this project and outlining its feasibility.

B. Concurrently the Memorandum of Association of the Company which is signed by the two parties, is submitted to the Ministry of Commerce.

C. After obtaining the approval of the Investment Committee (Ministry of Industry and Electricity); the Committee's

approval and the Memorandum of Association of the Company are submitted to the Ministry of Industry and Electricity for its approval.

D. After obtaining the approval of the Ministry of Industry and Electricity, the Company's documents are registered in the Document Registration Office.

E. A summary of the Memorandum of Association is published in the Official Gazette "Umm Al-Qura".

F. Concurrently initial funds must be paid by the Partners as part of their equity and deposited in a Saudi bank in the name of the Company; and a certificate from the bank is obtained.

G. The Ministry of Commerce after checking that all the needed documents are obtained and in accordance with the Saudi Laws will register the Company in the Commercial Register and allow it to handle business in accordance with its aims and objectives.

It is expected that one month will be needed to complete these formalities; but that is not expected to cause any delay to the project.

SECTION III

DEVELOPMENT OF THE COMPANY

The development of the Company will pass through two periods; the Pre-Operation Period and the Operation Period.

The Pre-Operation Period will start with the formation of the Company and continue until the starting of the commercial production of the plant, while the Operation Period will extend beyond that.

An outline of the development of the Company during each of the two periods is given below:-

A. PRE-OPERATION PERIOD:

A-1. DURATION:

The Pre-Operation Period will start with the formation of the Company which is planned late 1979 and will extend to the middle of 1982 according to the schedule, but for the purpose of the financial feasibility study the end of 1982 will be assumed.

A-2. OBJECTIVES AND AIMS:

The main objectives of the Company during the Pre-Operation Period will be:-

i. The erection of the plant within the budget and in accordance with the desired technical specifications.

ii. The development of capable manpower to run the plant.

iii. The training of Saudies to play the principal role in the operation and the management of the Company.

iv. Carrying out marketing surveys and the preparation of Marketing Plans with the cooperation of Sabic and TFC, to ensure successful marketing efforts in the early years of operations.

A-3. DEVELOPMENT OF ORGANIZATION STRUCTURE:

The organization structure will develop during the pre-operation period, resulting in the provision of a complete organization capable of running the plant at the end of this period, while in the mean time achieving the aims of this period (mainly the establishment of the plant within the budget and in accordance with the desired technical specifications.)

During this period the Company will follow up and supervise the design of and procurement for the plant; a team of experts from the Company will be stationed in the designers' (i.e. Pullman Kellogg) offices for this purpose. The Company will monitor and approve all expenditure for equipment and materials in order to ensure that the optimum selections are made.

During the construction phase the Company staff will play a major role in the scheduling, inspection, supervision, follow-up and cost control of the project; during that phase the Company will integrate and coordinate its efforts with the construction management contractor (i.e. Bakhsh - Pullman Kellogg). The Company will aim during this period to utilize the maximum number of its available qualified staff in order to minimise the number of the construction management contractor staff, as the contract for that phase will be a reimbursable contract. The Company will ensure that the contractor provides an adequate construction management team.

Concurrently the Company will pursue an active training program for Saudies on all the aspects of plant design, construction and operation making use of SAFCO's, TFC's and Kellogg's facilities including effective on-job training.

Attached figures I, II and III shows the organizational development through that period; it can be noted that this is based on achieving the aims outlined above. In order to ensure the most efficient use of manpower during this period the manning of this organization will be phased, with some departments built up later than others.

The development in the early years will focus more on the maintenance and engineering departments while the operation department will be manned slightly later; the main considerations for manning the different departments will be how much use can be made of that category of manpower during the construction of the plant and what are the training and/or orientation time needed for each category of manpower.

The supporting departments will follow the development of the technical departments to provide the needed support and assistance.

The development of the marketing department will start early to give adequate time for the marketing staff to develop the plans and contacts needed and ensure coordination with the Partners.

A-4. MANPOWER QUALIFICATIONS:

For each category of manpower detailed requirements will be established by the Company management; the main criteria being educational background and experience. An attempt will be made in each case to strike the correct balance between these two complementary requirements.

As a general guide line all positions in level 4 and above in Fig. III (i.e. supervisory level)will require a college degree plus a certain experience. All positions below level 4 in Fig. III will be manned be non-graduates. There will of course be exceptions to these general rules as there are certain positions which must be manned by graduates (e.g. level 4 in Engineering Section) while there are higher levels than level 4 which can be manned by non-graduates of long experience (e.g. Sr. Supervisors in the Operations Dept.).

In the following a brief summary will be given for the manpower in the different positions:-

i) Managers (Level 1):

Four managers will be needed to head the following departments; Technical Services, Operations, Marketing and Administration; all of these managers should be college graduates in related technical disciplines with 7 - 10 years of experience.

ii) Superintendents (Level 2):

Twelve Superintendents will be needed to head the following sections; Maintenance, Laboratory, Engineering, Ammonia, Urea, Safety, Marketing, General Affairs, Accounting, Training, Internal Auditor and Public Relations sections. The superintendents of most sections should be college graduates in related disciplines with 5-8 years experience.

iii) Plant Engineers/Chemist & Sr. Supervisors (Level 3):

Twenty six senior supervisory staff will be needed distributed as following:-

Technical Services	:	9
Operations	:	7
Safety/Inspection	:	2
Marketing	:	2
Administration & Accounts	:	5

Experience should be 3 - 6 years for college graduates, while certain positions could be filled by non-graduates of longer experience.

iv) Engineers, Supervisors and Accountants (Level 4):

A total of 56 will be needed, including graduates of 1 - 3 years experience for the Engineering and Accounts sections, while most of the other jobs could be performed by non-graduates of 5 - 10 years experience.

v) Foreman, Sr. Operators (Level 5):

This level is to be manned by Secondary School graduates of 2 - 5 years of experience. Intermediate School graduates of longer experience could be used as well.

vi) Operators, Technicians, Assistants, Clerks (Level 6):

For this level Secondary or Technical School graduates will be suitable after proper training or Intermediate School graduates with longer training.

vii) Semiskilled (Level 7):

No specific educational requirements beside reading and writing skill.

A-5. RECRUITMENT PLAN:

Except for the positions of President and Executive Vice Presidents which are manned according to special agreement between the Partners, the recruitment plan will target on the manning of all the positions with qualified Saudi manpower as available.

For this purpose an active recruitment plan will be pursued, augmented by an efficient training programme. As however it is appreciated that the availability of such Saudi manpower is limited, the Company will as necessary recruit Non-Saudies with proper qualifications and experience.

TFC has undertaken to supply the Company with a certain minimum number of qualified personnel in accordance with Table I, this undertaking is of a great importance to the success of the project as it means that the Company will have a considerable number of experienced personnel at Start-up time.

In the attached Table II the numbers and the classifications of the manpower to be recruited in each year of the

Pre-Operation period are shown. The Company will pursue its recruitment plan by employing Saudies and Non-Saudies according to its needs making use of the help of TFC or receuiting from others as the need may arise.

In attached Table III the expected number of Saudies and Non-Saudies in the Company during the Pre-Operation period is shown.

During the Start-up period, the Company will utilize the assistance of a start-up advisory team from the plant designers (i.e. Kelloggs and Stamicarbon) in an advisory capacity, but such a team is not considered as a part of the Company's organization.

A-6. TRAINING PLAN:

The Company will pursue an active training plan comprising on-job and off-job training. The construction phase will be utilized fully for on-job training of inspection, maintenance and engineering personnel. For this purpose a maximum degree of integration with the Construction Management Contractor is planned.

Concurrently formal training programs will be conducted in TFC's plants, Kellogg's offices and the vendors' shops. The training assistance of SAFCO (Saudi Arabian Fertilizer Co.) will be also sought and utilized to the maximum extent as SAFCO owns a plant similar generally to the planned plant and working under similar climatic conditions. Two engineers have already been trained for periods of 3/4 months on SAFCO's plant and more will be sent as they are recruited.

In the attached Table IV the planned recruitment of Saudi trainees is shown; this includes substantial numbers of college graduates in different disciplines, and graduates of Secondary and Intermediate Schools. In attached Table V the minimum numbers of trainees in different disciplines which TFC has undertaken to train are outlined, training programs for these trainees will be prepared by TFC in the disciplines needed for their intended positions in the Company.

B. OPERATION PERIOD:

B-1. DURATION:

This period will start with the beginning of the commercial production of the plant and continue until the end its

operational, which is assumed to be 15 years for the purpose of this study. For the purpose of financial analysis a period starting at the beginning of 1983 and finishing at the end of 1997 has been assumed.

B-2. OBJECTIVES AND AIMS:

The main objectives of the Company during this period will be:-

i. The efficient operation of the plant by maximizing the production and reducing the operational costs.

ii. The successful marketing of the Product in cooperation with SABIC and TFC.

iii. The training and development of Saudi manpower.

B-3. ORGANIZATION STRUCTURE:

The organization structure will be as developed at the last year of the Pre-Operation Period (Fig. IV); the same considerations as outlined in Para A-4 and A-5 regarding "Manpower Qualifications" and Recruitment Plan will be followed.

In attached Table VI the numbers of Saudies and Non-Saudies are shown for the life of the Project. These projections are based on the assumption that all the trainees in the last Pre-Operation year will join the Company's organization in the first year of operation, then the number of Non-Saudies will be reduced 10% yearly. The supply of Saudies will come then the recruitment and training plan and from promoting Saudies after they attain certain experience levels.

B-4. TRAINING PLAN:

The Company will continue with its training plan to qualify Saudies to fill the positions manned by expatriates. For this purpose a training center will be established and recruitment of trainees will continue as long as there is a need. This training plan is needed also to fill positions which will become vacant due to normal manpower attrition.

It is assumed that 10 college graduate trainees and 30 non-graduate trainees will be included in the organization structure to satisfy this training policy and the manpower turn-over needs. This requirement will actually be reduced in the later years of the Operation Period, but for the purposes of this study such reduction has not been assumed.

TABLE I

MINIMUM MANPOWER TO BE PROVIDED BY TFC

TIME	1980	1981	1982	TOTAL
CATEGORY				
SENIOR STAFFS & MANAGERS	4	2	2	8
SUPERINTENDENTS, SUPERVISORS & ENGINEERS	10	15	20	45
CRAFTSMEN & OPERATORS		30	70	100
ADMINISTRATIVE STAFFS	6	8	8	22
TOTAL	20	55	100	175

NOTE: THE COMPANY SHALL NOTICE TFC THE REQUIRED PERSONNEL, ITS NUMBERS AND CATEGORIES THREE (3) MONTHS BEFORE THE EMPLOYMENT DATE.

TABLE II

RECRUITMENT PLAN

PRE-OPERATION PERIOD

CATEGORY	YEAR			TOTAL
	1980	1981	1982	
PRESIDENT/V. PRESIDENT	2	-	-	2
MANAGERS	3	1	-	4
SUPERINTENDENTS	7	5	-	12
ENGINEERS/SUPERVISORS	9	15	27	51
MAINTENANCE FOREMEN	-	10	4	14
MAINTENANCE TECHNICIANS	-	28	27	55
SR. OPERATORS/OPERATORS	-	-	85	85
BAGGING OPERATORS/CLERKS /FOREMEN	-	-	105	105
ENGINEERING ASSISTANTS/DRAFTING	-	3	2	5
CHEMISTS	-	-	4	4
LABORATORY ASSISTANTS	-	-	10	10
INSPECTORS/ASSISTANTS	-	4	3	7
STOREKEEPERS/ASSISTANTS	-	3	3	6
MARKETING STAFF	-	-	4	4
ACCOUNTANTS/AUDITORS/ASSISTANTS	2	5	4	11
ADMINISTRATIVE SUPERVISORS/TRAINERS /ASSISTANTS	4	9	5	18
MEDICAL DOCTOR	-	1	-	1
NURSES	-	2	4	6
SECRETARY/CLERK/TYPISTS	6	7	11	24
GUARDS/SEMISKILLED	3	19	27	49
TOTAL	36	112	325	473

TABLE : III

MANPOWER DISTRIBUTION IN THE PRE-OPERATION PERIOD

Year	Technical Depts.				Non-Technichal Depts.				Trainee Saudi		Saudi Total	Non Saudi Total	Total
	Level 4 & Higher		Level 5 & Lower		Level 4 & Higher		Level 5 & Lower		Grad.	Non-Grad.			
	Saudi	Non-Saudi	Saudi	Non-Saudi	Saudi	Non-Saudi	Saudi	Non-Saudi					
Ist.	4	8	0	0	9	4	8	3	15	10	46	15	61
2nd.	9	22	20	31	20	9	26	11	15	30	120	73	193
3rd.	19	43	122	184	30	13	43	19	15	50	279	259	538

TABLE IV

SAUDI TRAINEES REQUIREMENT IN THE

PRE-OPERATION PERIOD

CATEGORY	YEAR			TOTAL
	1980	1981	1982	
College Graduates	15	15	15	45
Secondary/ Intermediate Schools Graduates	10	30	50	90
TOTAL	25	45	65	135

TABLE V

TRAINING PLANS AND PROGRAMS

TIME / CATEGORY	1980	1981	1982	TOTAL
ENGINEERS	10	5	5	20
CRAFTSMEN	-	15	10	25
OPERATORS	-	10	40	50
OTHER STAFFS	5	-	-	5
TOTAL	15	30	55	100

NOTE: THE COMPANY SHALL NOTICE TFC THE EXPECTED TRAINING CATEGORY AND THE DETAILED TRAINING SCHEDULE THREE (3) MONTHS BEFORE THE TRAINING DATE.

TABLE : VI

MANPOWER DISTRIBUTION IN THE OPERATION PERIOD

YEAR	TECHNICAL DEPTS				NON-TECHNICAL DEPTS.				TRAINEE SAUDI		SAUDI TOTAL	NON-SAUDI TOTAL	TOTAL
	LEVEL 4 & HIGHER		LEVEL 5 & LOWER		LEVEL 4 & HIGHER		LEVEL 5 & LOWER		Grad.	Non-Grad			
	SAUDI	NON-SAUDI	SAUDI	NON-SAUDI	SAUDI	NON-SAUDI	SAUDI	NON-SAUDI					
Ist.	34	28	172	134	30	13	43	19	10	30	319	194	513
2nd.	37	25	189	117	32	11	47	15	10	30	345	168	513
3rd.	40	22	208	98	34	9	51	11	10	30	373	140	513
4th.	42	20	229	77	35	8	55	7	10	30	401	112	513
5th.	44	18	252	54	36	7	59	3	10	30	431	82	513
6th.	46	16	277	29	37	6	62	0	10	30	462	51	513
7th.	48	14	306	0	38	5	62	0	10	30	494	19	513
8th.	49	13	306	0	39	4	62	0	10	30	496	17	513
9th.	50	12	306	0	40	3	62	0	10	30	498	15	513
10th.	51	11	306	0	41	2	62	0	10	30	500	13	513
11th.	52	10	306	0	42	1	62	0	10	30	502	11	513
12th.	53	9	306	0	43	0	62	0	10	30	504	9	513
13th.	54	8	306	0	43	0	62	0	10	30	505	8	513
14th.	55	7	306	0	43	0	62	0	10	30	506	7	513
15th.	56	6	306	0	43	0	62	0	10	30	507	6	513

SABIC-TAIFER FERTILIZER PROJECT

PRE-OPERATION PERIOD ORGANIZATION DEVELOPMENT CHART

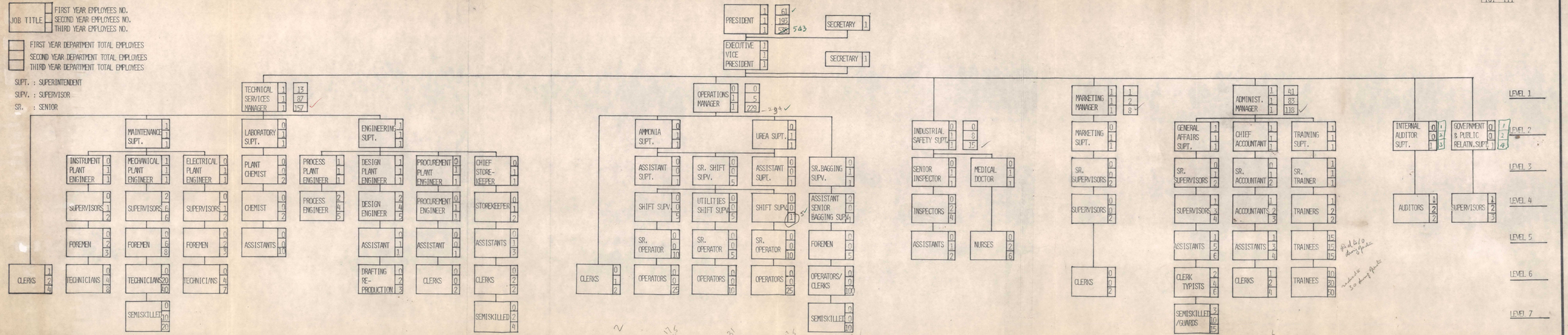
FIG. III

JOB TITLE — FIRST YEAR EMPLOYEES NO. / SECOND YEAR EMPLOYEES NO. / THIRD YEAR EMPLOYEES NO.

FIRST YEAR DEPARTMENT TOTAL EMPLOYEES
SECOND YEAR DEPARTMENT TOTAL EMPLOYEES
THIRD YEAR DEPARTMENT TOTAL EMPLOYEES

SUPT. : SUPERINTENDENT
SUPV. : SUPERVISOR
SR. : SENIOR

LEVEL 1
LEVEL 2
LEVEL 3
LEVEL 4
LEVEL 5
LEVEL 6
LEVEL 7



KINGDOM OF SAUDI ARABIA

SABIC-TAIFER FERTILIZER PROJECT

OPERATIONS ~~PERIOD~~ ORGANIZATION CHART

Annex B-6
Last page, VBN

FIG. IV

JOB TITLE
NUMBER OF EMPLOYEES
TOTAL DEPARTMENT EMPLOYEES
SUPT. : SUPERINTENDENT
SUPV. : SUPERVISOR
SR. : SENIOR

PRESIDENT 1 (513)
SECRETARY 1
EXECUTIVE VICE PRESIDENT 1
SECRETARY 1

TECHNICAL SERVICES MANAGER 1 (157)
- MAINTENANCE SUPT. 1
  - INSTRUMENT PLANT ENGINEER 1
    - SUPERVISORS 2
    - FOREMEN 3
    - TECHNICIANS 8
  - MECHANICAL PLANT ENGINEER 1
    - SUPERVISORS 6
    - FOREMEN 8
    - TECHNICIANS 40
    - SEMISKILLED 20
  - ELECTRICAL PLANT ENGINEER 1
    - SUPERVISORS 2
    - FOREMEN 3
    - TECHNICIANS 7
- LABORATORY SUPT. 1
  - PLANT CHEMIST 2
    - CHEMIST 2
      - ASSISTANTS 10
- ENGINEERING SUPT. 1
  - PROCESS PLANT ENGINEER 1
    - PROCESS ENGINEER 5
  - DESIGN PLANT ENGINEER 1
    - DESIGN ENGINEER 5
      - ASSISTANT 1
        - DRAFTING RE-PRODUCTION 3
  - PROCUREMENT PLANT ENGINEER 1
    - PROCUREMENT ENGINEER 1
      - ASSISTANT 1
        - CLERKS 2
  - CHIEF STORE-KEEPER 1
    - STOREKEEPER 2
      - ASSISTANTS 3
        - CLERKS 2
          - SEMISKILLED 4
- CLERKS 14

OPERATIONS MANAGER 1 (229)
- AMMONIA SUPT. 1
  - ASSISTANT SUPT. 1
    - SHIFT SUPV. 5
      - SR. OPERATOR 10
        - OPERATORS 25
  - SR. SHIFT SUPV. 5
    - UTILITIES SHIFT SUPV. 5
      - SR. OPERATOR 5
        - OPERATORS 10
- UREA SUPT. 1
  - ASSISTANT SUPT. 1
    - SHIFT SUPV. 5
      - SR. OPERATOR 10
        - OPERATORS 25
  - SR. BAGGING SUPV. 1
    - ASSISTANT SENIOR BAGGING SUPV. 1
      - FOREMEN 5
        - OPERATORS /CLERKS 100
          - SEMISKILLED 10
- CLERK 2

INDUSTRIAL SAFETY SUPT. 1 (15)
- SENIOR INSPECTOR 1
  - INSPECTORS 4
    - ASSISTANTS 2
- MEDICAL DOCTOR 1
  - NURSES 6

MARKETING MANAGER 1 (8)
- MARKETING SUPT. 1
  - SR. SUPERVISORS 2
    - SUPERVISORS 2
      - CLERKS /TYPISTS 2

ADMINIST. MANAGER 1 (95 + 20 = 108)
- GENERAL AFFAIRS SUPT. 1
  - SR. SUPERVISORS 2
    - SUPERVISORS 4
      - ASSISTANTS 6
        - CLERK /TYPISTS 6
          - SEMISKILLED /GUARDS 15
- CHIEF ACCOUNTANT 1
  - SR. ACCOUNTANT 2
    - ACCOUNTANTS 3
      - ASSISTANTS 4
        - CLERKS 4
- TRAINING SUPT. 1
  - SR. TRAINER 1
    - TRAINERS 2
      - TRAINEES 10 (5/Yr)
        - TRAINEES 30 (20/Yr)
- INTERNAL AUDITOR SUPT. 1
  - AUDITORS 2
- GOVERNMENT & PUBLIC RELTN. SUPT. 1
  - SUPERVISORS 3

LEVEL 1
LEVEL 2
LEVEL 3
LEVEL 4
LEVEL 5
LEVEL 6
LEVEL 7

WB-21170

Mr. SCHLLER
By LK January)

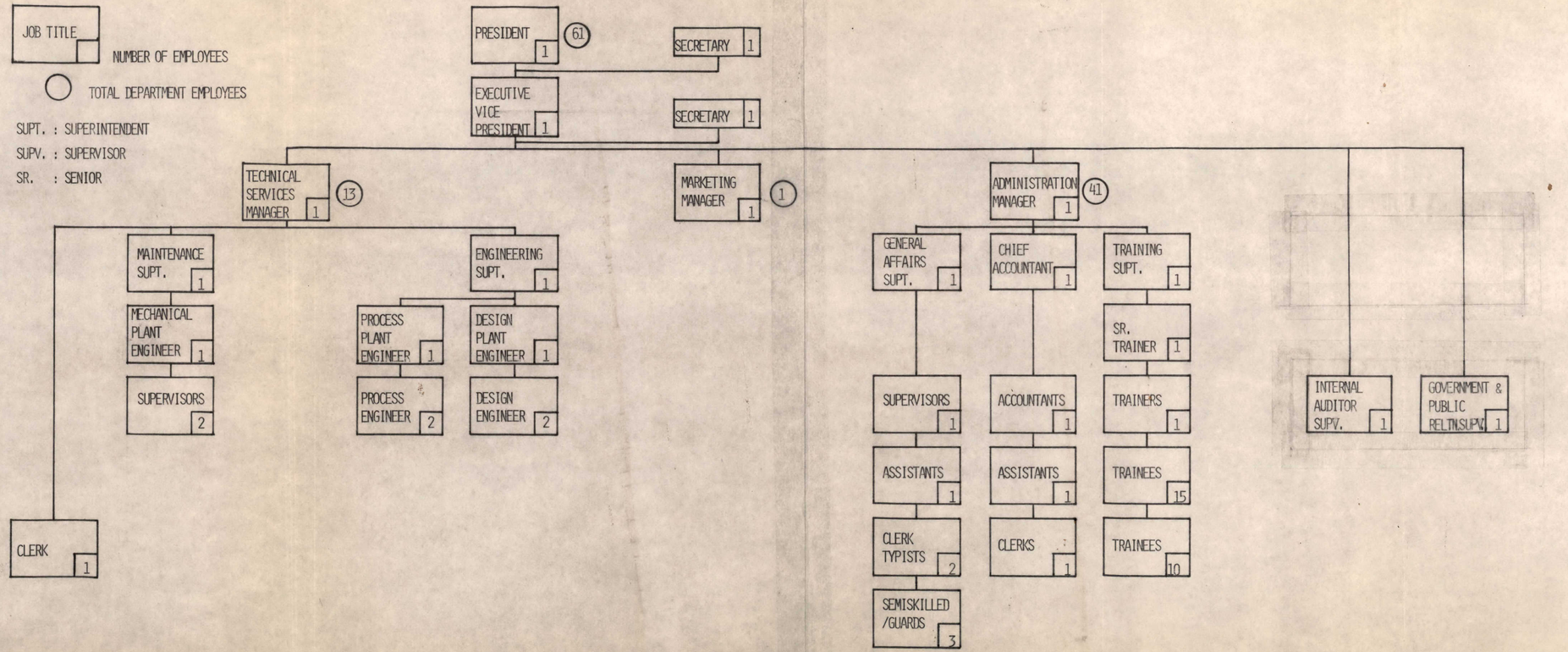
FIG. I

SABIC-TAIFER FERTILIZER PROJECT
FIRST PRE-OPERATION YEAR ORGANIZATION CHART

JOB TITLE [ ] NUMBER OF EMPLOYEES

( ) TOTAL DEPARTMENT EMPLOYEES

SUPT. : SUPERINTENDENT
SUPV. : SUPERVISOR
SR. : SENIOR



SABIC-TAIFER FERTILIZER PROJECT

SECOND PRE-OPERATION YEAR ORGANIZATION CHART

FIG. II

JOB TITLE [ ] — NUMBER OF EMPLOYEES

( ) — TOTAL DEPARTMENT EMPLOYEES

SUPT. : SUPERINTENDENT
SUPV. : SUPERVISOR
SR. : SENIOR