



SMUD

SACRAMENTO MUNICIPAL UTILITY DISTRICT □ 6201 S Street, Box 15830, Sacramento, California 95813; (916) 452-3211

July 30, 1979

Dr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Dear Dr. Denton:

In response to your letter dated June 29, 1979 regarding information required to review corporate capabilities to handle incidents similar to the Three Mile Island-2 accident, we are submitting our capabilities.

The Sacramento Municipal Utility District has reviewed the technical and management resources at its command to cover any unusual event that may occur. We are a public utility governed by an elected board of directors. They contract for the General Manager to administer the affairs of the District in accordance with their policies. He in turn delegates specific operational responsibilities to the Assistant General Managers, Directors of Services and Conservation, and General Counsel.

I. Management Resources (Offsite)

The activities directly connected with Rancho Seco are primarily assigned to the Assistant General Manager and Chief Engineer, Mr. John Mattimoe. In case of a TMI-2 accident, he is responsible for initiation and allocation of the District's resources to cope with the situation. Additional resources are available from Babcock & Wilcox, the NSSS supplier, and Bechtel Corporation, who provided the architect/engineering services for Rancho Seco Unit No. 1. Both are under contract to provide emergency services as needed. The magnitude of resources and personnel available from these two companies precludes listing their capabilities. They have in the past and are now currently providing these services at the District's request. These contracts evidence their agreement to continue this arrangement in the future. Contract No. 4246 with Bechtel Corporation is an open end contract and contract No. 6367 with Babcock & Wilcox will expire December 31, 1979. A new contract will be written at the expiration of contract No. 6367.

The General Manager, subject to approval of the Board of Directors, is responsible for the contractual arrangements with the above stated companies. The pertinent information regarding these two contracts is provided in Attachment Nos. 1 and 2. An organizational chart showing all District management positions is included as Attachment No. 3. Those organizations either directly involved with the nuclear power plant or having a significant interface with its operation are highlighted.

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Each management position on Attachment No. 3, starting with the General Manager who would provide a significant contribution is shown. It defines their current duties and responsibilities. Their functions, responsibilities and authority transcends those requirements associated solely with the Rancho Seco operation. It includes additional areas associated with their non-nuclear activities and demonstrates the wide range of management experience available to be used in case of an accident.

Under conditions similar to the TMI-2 accident, these people would assume the positions dictated for responding to the unique situations that would be encountered. They would provide the interface to external organizations such as the local, state and Federal agencies. They would be involved under direction of the General Manager to recruit the expertise within their organizations and also outside companies to provide the needed manpower either at the Rancho Seco site or at the general office for the required support activities.

The specific action by the plant site personnel and offsite non-plant staff will be covered under the Technical Resources section. The Management Area is concerned with mobilization of the available resources and for the assignment of the personnel to cover each unique situation. We feel that our organization is adequately staffed to provide the desired response in the area of management capabilities. The additional manpower from both the Babcock & Wilcox organization and Bechtel Corporation would include some management personnel capable of providing definitive direction to their staff. The expertise of these offsite personnel would also be evaluated and assignments made to positions where they could best contribute.

We recognize that considerable interface is necessary to local, state and Federal agencies. The Rancho Seco Emergency Manual addresses the actions that must be taken under the spectrum of accidents that can be postulated. It covers in detail the types of emergencies and what actions are to be taken including the interface actions to the local, state and Federal agencies.

The organizations directly involved in the Rancho Seco operations are shown on Attachment No. 4. In conformance to the letter request, we are including the functions, responsibility and authority associated with each management position. It includes their educational and experience background that qualifies them for their position. The personnel identified in the management resource section would also be utilized in the technical resource section, when necessitated, because of their expertise in certain areas of plant design and operation.

General Manager - William C. Walbridge

- A. Administers the affairs of the District under the policies set by the elected Board of Directors. This includes responsibility for determining the management structure of the District and the delegation of authority and responsibility.
- B. BS in Electrical Engineering
MBA in Business Administration
Registered Professional Electrical Engineer - California

C. Twenty years of utility engineering and management.

Assistant General Manager and Chief Engineer - J. J. Mattimoe

A. Responsible for the safe and efficient operation of all power plants and associated electrical generation and distribution equipment. He is also responsible for the planning, design, and construction of District facilities, both general plant and electrical plant, and for the District's quality assurance program. He is Chairman of the Management Safety Review Committee.

B. BS in Civil Engineering
Registered Professional Civil Engineer - California
Registered Professional Nuclear Engineer - California

C. Thirty two years utility experience in engineering and management; fifteen of which have been in the nuclear power field.

Assistant General Manager, Operations - William K. Latham

A. Responsible for planning, designing, construction, maintenance, and operation of the District electrical distribution system, and the operation and maintenance of the District transmission facilities. He is a member of the Management Safety Review Committee.

B. BS Electrical Engineering
Additional university credits in electrical system protection and basic nuclear reactor engineering
Registered Professional Electrical Engineer - California

C. Eighteen years utility experience in engineering and management.

Assistant General Manager and Controller - William C. Bossenmaier

A. Responsible for the Accounting Department, Data Processing Department, Purchases and Stores Department, Systems and Procedures, and Internal Auditing.

B. BA in Business Administration
MBA in Business Administration
Certified Public Accountant
Certified Internal Auditor

C. Thirty three years experience.

Assistant General Manager and Treasurer - Kenneth J. Mellor

A. Supervises financial planning, investment of funds and security sales for the District. He is responsible for administering District rates, rules, and regulations, the insurance and risk management program, and coordinating State Legislative and Energy Commission activities. Responsible for his staff, Customer Services Department, and the Consumer Relations Department.

- B. BS Electrical Engineering
Registered Professional Electrical Engineer - California
- C. Twenty one years utility engineering and management experience.

Generation Engineering Manager - D. G. Raasch

- A. Responsible for the design and construction of generation and cogeneration facilities for the District, provide technical leadership in determining standards for generation plant construction and materials; direct outside engineering firms assisting in the design and construction management of facilities; coordinate and administer fuel management and licensing activities; member of the Management Safety Review Committee.
- B. BS in Electrical Engineering
Post Graduate work in Nuclear Engineering
Registered Professional Electrical Engineer - California
Registered Professional Nuclear Engineer - California
- C. Twenty years utility experience in project/licensing and management; sixteen have been in the nuclear power field.

Quality Assurance Director - L. G. Schwieger

- A. Responsible to prepare, administer, and audit the District's quality assurance programs; evaluate quality assurance programs of construction and supply contractors; direct compliance with the District's quality assurance program at construction sites, vendors' plants, and in the operation of designated District facilities; and is a member of the Management Safety Review Committee.
- B. BS in Chemical Engineering
Registered Professional Quality Engineer - California
Nuclear Power Courses by NUS Corporation
- C. Twenty eight years of instrument and controls and quality assurance engineering and management experience; eleven years are in the utility field.

Engineering Department Manager - John Ravera

- A. Forecast system load and resource needs and determine the most economical sources of power and methods of delivery to the customer. Actively participate in fuel management efforts, purchase power arrangements, power exchanges, transmission interties, and the related contract negotiations. Design additions to the distribution, transmission, substation, and general plant facilities. Prepare construction and purchase specifications and evaluate bid proposals. Provide technical leadership in determining standards for distribution plant construction and materials. Direct the efforts of outside architectural and engineer-

ing firms assisting in the design of facilities. Act as an interface between the District and outside regulatory agencies. Member of the Management Safety Review Committee.

- B. BS Electrical Engineering
MBA Business Administration
Registered Professional Electrical Engineer - California
- C. Twenty years utility experience in engineering and management.

Transmission and Distribution Operations Department Manager - John D. Dunn

- A. Monitor and control the SMUD electrical system so it may be constructed, operated, and maintained efficiently and safely to supply the customer energy as demanded; in coordination with the Engineering Department, design, operate, and maintain the electrical protection systems and those communication systems not provided by the Pacific Telephone Co.; construct, maintain, and help to operate all substations.
- B. BS in Electrical Engineering
Registered Professional Electrical Engineer - California
Registered Professional Control Systems Engineer - California
- C. Twenty years utility experience in engineering and management; nine years were in the nuclear power field, eleven years non-nuclear.

Hydro Operations Manager - John Hiltz

- A. Operate and maintain all hydroelectric generating units and associated equipment (except system protection and communication equipment), water storage reservoirs, diversion dams, and associated water systems. Maintain and repair access roads year-round. Operate and maintain weather modification and weather recording equipment. Coordinate all maintenance outages and generation schedules through the Transmission and Distribution Operations Department with PG&E. Act as an interface between the District and outside regulatory agencies. Chairman of the Rancho Seco Security Committee.
- B. BCE in Civil Engineering
Prestressed Concrete Nuclear Reactor Structure Seminar
MIT Water-Cooled Nuclear Power Reactor Safety
AIF Workshop on Reactor Licensing and Safety
Fundamentals of Nuclear Engineering
Registered Professional Civil Engineer - California and Ohio
- C. Fourteen years of utility experience in engineering and management; six of these years were in the nuclear power field.

Distribution Construction Department Manager - George Fraser

- A. Construct, maintain, and help to operate SMUD's distribution and

transmission systems, install and properly maintain those instruments required to measure the energy used by customers or supplied under contract

- B. BS Electrical Engineering
Advanced course at MIT in Water Cooled Nuclear Power Reactor Safety
Nuclear Engineering course at University of California, Sacramento
Registered Professional Electrical Engineer - California
- C. Fifteen years utility electrical engineering and management experience.

Director of Services and Security - William Hammond

- A. Responsible for District training and coordination of accident prevention and reporting programs. Direct District programs for recruiting, selecting, classifying, retaining employees, and providing safe working conditions. Coordinate the District's employee-employer relations program, selection and advancement activities, the classification and pay plan, the supplemental benefits program, and labor relations. Administer the District civil service system and perform various other functions related to personnel management. Operate the District telephone system.

Direct security programs to safeguard District personnel and property. Responsible for guard services, lock and key control, issuance of employee identification cards and security badges, control of Rancho Seco access, control of after-hour entry into other District facilities, parking control and enforcement, personnel background investigation and investigation of crimes against the District.

- B. BA Economics
MS Public Administrations
- C. Ten years utility experience in personnel management, two years of the total includes security.

Consumer Relations Department Manager - Marlen Davis

- A. Maintain liaison and further understanding with the community. ' groups dedicated to community improvement. Maintain activities designed to aid the news media in effectively communicating to the public SMUD's policies and operations.
- B. BS Electrical Engineering
Registered Professional Electrical Engineer - California
- C. Thirty two years utility experience.

Purchases and Stores Manager - Gordon Merrill

- A. Handle initial purchase, expediting, claims, and contract administration relating to purchases for major construction projects such as generating plants, total responsibility for administering and improving the District's inventory system.
- B. AA Business Administration
- C. Twenty years procurement experience; one-half year of which is in the utility field.

II. TECHNICAL RESOURCES

A. Plant Staff

The Rancho Seco staff consists of all the personnel assigned to the Nuclear Operations Department. The operating organization is in conformance to ANSI N18.1 and includes the personnel encompassing both the management and operating units. It covers the manager, operators, technicians and maintenance personnel. An organization chart (Attachment No. 6) covering the arrangement of the functional levels has been included.

The plant staff is composed of personnel that have the combined education, experience and skills to handle both normal and abnormal operating and accident conditions. The staff has been trained and drills are continually performed to verify a level of readiness to handle unique situations such as the TMI-2 accident.

We emphasize the necessity for a training program and schedule exercises to ensure safe and efficient operation of the facility under stress conditions. These programs are reviewed by the District's management and also receive the close scrutiny of the NRC's inspectors. The abnormal, emergency and security procedures are reviewed by the Plant Review Committee and exercises are performed to demonstrate their viability.

The successful operation of the Rancho Seco plant demonstrates the capability of the organization to function under the demands of day-to-day operation. It includes many power escalations, taking the reactor critical, startups, shutdowns, both emergency trips and normal runback of unit to zero power.

We are confident that our personnel have the capability and experience to operate the plant in a safe and efficient manner.

The plant management positions consist of the following:

Manager of Nuclear Operations:

Responsible for the overall management of the facility.

Plant Superintendent:

Technical and administrative control of the day-to-day physical operation and maintenance of the plant as carried out by the Operations, Maintenance, Radiation Protection, Chemistry and Training Divisions.

Engineering and Quality Control Supervisor:

Engineering and technical requirements to assure the safe and efficient operation of the plant.

Supervisor, Nuclear Maintenance Division:

Organize and conduct the preventative and repair maintenance programs for mechanical, electrical and I&C equipment including the necessary procedures and records.

Technical Assistant:

Provide technical assistance to other staff members to insure compliance with the operating license and continuing audit of plant operations, with particular consideration for the license and the applicable state and Federal regulations.

Supervisor, Nuclear Operations Division:

Responsible for the functional, safe and efficient operation of the plant in accordance with established procedures and the Technical Specifications.

Chemistry and Radiation Supervisor:

Organize and conduct the chemistry and radiation program including the necessary procedures and records.

Senior Nuclear Engineer:

The Senior Nuclear Engineer provides necessary engineering design and technical review capabilities.

Training Supervisor:

The overall administration and documentation of the Nuclear Operations Department training programs.

Mechanical Maintenance Supervisor:

Organize and conduct the preventative and repair maintenance programs for mechanical equipment including the necessary procedures and records.

Shift Supervisors:

Responsible for the safe and efficient operation of the plant in accordance

with the Technical Specifications and operating procedures during his assigned shift.

Mechanical Engineering Associate:

Provide necessary engineering design and technical review capabilities.

Nuclear Chemist:

Investigate, evaluate and make recommendations regarding correct application of nuclear generating plant chemistry and radiation controls.

Electrical/Instrument & Control Supervisor:

Organize and conduct the preventative and repair maintenance programs for electrical/instrument and controls equipment including the necessary procedures and records.

Safety Technician:

Conduct safety inspection of the facility to check for compliance with applicable safety orders, codes, and laws. Conduct fire fighting training.

Senior Control Room and Control Room Operators:

Operate the plant in accordance with the Technical Specifications and approved operating procedures.

Health Physicist:

Develop, refine and verify the application of programs in maintaining the radiation exposures of employees and the public to levels "as low as reasonably achievable."

Education and Experience:

Manager of Nuclear Operations: R. J. Rodriguez

A. Educational Background/Training:

Graduate of United States Naval Academy - 1959
1-1/2 years Nuclear Power Submarine Training Program
Three months observation training at Indian Point No. 1
Six week Reactor Technology Course presented by B&W
Ten week Nuclear Steam Supply Systems simulator training presented by B&W

B. Experience:

Two and one half years was a nuclear plant watch officer on board a nuclear power submarine. Conducted and supervised startup, shut-down and operations. Administrative and operational responsibility

for reactor control system, plant electrical and machinery systems.

Navy's SIC training prototype as the Training Officer. Responsible for administration of classroom training, in-plant training progress and examination for qualification of nuclear plant operators.

Chief Engineer for a nuclear submarine power plant.

Assistant Superintendent for Nuclear Operations with SMUD, October 1968 to February 1970.

Nuclear Plant Superintendent with SMUD, February 1970 to January 1978.

Manager of Nuclear Operations with SMUD, January 1978 to present.

Licensed by NRC as a Senior Licensed Operator.

Nuclear Plant Superintendent: R. P. Oubre'

A. Education Background/Training:

BSCE from Tulane University - 1961

Advanced Navy Nuclear Power School for six months

U. S. Navy Submarine School for six months

Prototype training on S3G prototype at the Desselring Site for six months

B. Experience:

After prototype training, remained on S3G staff as Leading Engineering Officer of the Watch and Assistant Engineer for Training

On nuclear fast attack submarine in the Engineering Department involved in the operation and maintenance of the reactor plant

Manager of HTGR Training with Gulf General Atomic, Inc. Directly involved in testing and operating procedure production training for the Fort St. Vrain Nuclear Generating Station

Assistant Superintendent, Nuclear Plant Operations with SMUD, March 1970 to January 1978

Nuclear Plant Superintendent with SMUD, January 1978 to present

Engineering & Quality Control Supervisor: J. V. McColligan

A. Educational Background/Training:

Graduated from University of Pittsburg with BSME - 1961

Four week Rancho Seco Orientation Course

Three week course in Thermodynamics and Heat Transfer and Nuclear Power Fundamentals Course

One month at a modern, fossil-fired power plant

A total of four months at the Indian Point and Connecticut Yankee Nuclear Plants

B&W Reactor Technology and Nuclear Power Plant Simulator Courses

B. Experience:

Junior Engineer, Operating Foreman, Reactor Engineer and Operating Engineer with Duquesne Light Company

Certified by Naval Reactors for over three years as Operations Supervisor (equivalent to a Senior Reactor Operator)

Registered Professional Engineer - State of California

Supervisor, Nuclear Maintenance Division: George A. Coward

A. Educational Background/Training:

BSME from University of Illinois in 1959

Completed courses in Nuclear Engineering at CSU, Sacramento

Five months observational training at PG&E's Contra Costa Steam Power Plant, Connecticut Yankee Nuclear Power Plant and Indian Point No. 1

Four month Review of Reactor Principles Course at California State University, Sacramento

Ten week Reactor Technology course by B&W

120 hour non-destructive testing training course for certification of NDT Level II in Radiographic, Ultrasonic, Magnetic Particle, Penetrant and Eddy Current testing methods

B. Experience:

Shift engineer and test coordinator for Duke Power Company during hot functional testing of Oconee Nuclear Station Unit 1.

Member of the Operating Department Manager's Technical Staff with eight years of industrial experience in instrumentation testing, and process engineering. Initially assigned to SMUD's hydroelectric project for startup of the White Rock and Camino No. 2 Units.

Transferred to Rancho Seco as Senior Power Plant Engineer in October 1969. Assumed position as Supervisor, Nuclear Maintenance Division in May 1978.

Technical Assistant to Manager of Nuclear Operations: Ronald W. Colombo

A. Educational Background/Training:

Graduate of North Carolina State University, BS in Nuclear Engineering - 1962

Trained at Contra Costa Plant in Antioch, CA for three months
Three months at Indian Point, Unit No. 1 (included observation
of Core III refueling)
Six week Reactor Technology Course by B&W
Ten week Steam Supply System Simulator Course by B&W
Instrumentation Systems at Hewlett Packard, Palo Alto, CA., Wang
Computer School, Tewksburg, Mass., and Nuclear Reactor Safety at
MIT, Cambridge, Mass.

B. Experience:

Sterling Forest Reactor in Tuxedo, NY, Assistant Supervisor of
Reactor Operations

Lead responsibility at Saxton Nuclear Experimental Reactor, employed
by Westinghouse Electric Atomic Power Division

Technical Assistant to the Manager of Nuclear Operations, Secretary
of the Management Safety Review Committee, Chairman of the Plant
Review Committee with SMUD from November 1969 to present

Licensed by NRC as a Senior Licensed Operator

Supervisor, Nuclear Operations Division: William J. Ford

A. Educational Background/Training

Navy Nuclear Power School, then served aboard a nuclear submarine
during new construction and commissioning for two years
Three months observation training at Contra Costa Power Plant
Three months at Indian Point No. 1
Six weeks Reactor Technology Course presented by B&W
Ten weeks Nuclear Steam Supply System Simulator Training Course
by B&W

B. Experience:

With the Navy, Senior Chief Electronic Technician, Engineer Officer
of the Watch (normally an Officer's function). Served on staff at
the SIW PWR prototype at Idaho Falls, Idaho as an Engineer Officer
of the Watch (equivalent to a Licensed Senior Operator). Also
training coordinator responsible for training military and civilian
personnel on plant theory and operation.

With Dairyland Power Cooperative of Lacrosse, Wisconsin as Shift
Supervisor at the LACBWR. He held a "cold" AEC Senior Operator's
License for LACBWR.

With SMUD as Shift Supervisor from September 1969.

With SMUD as Supervisor, Nuclear Operations Division from April 1978

Licensed by NRC as a Senior Licensed Operator

Chemical and Radiation Supervisor: Roger I. Miller

A. Educational Background/Training:

Received BA in Chemistry from Reed College in 1952
MS Degree in Radiological Physics from University of Rochester - 1958
Training courses in Reactor Engineering, Water Chemistry, First Aid and Safety

5. Experience:

Hanford Atomic Products, operation, extensive involvement in reactor operations, fuel reprocessing operations, radiation control and chemical process controls

Brookhaven National Laboratory, radiological and operational safety

Aerojet General Nuclears Corporation, radiation chemistry, analytical chemistry, fuel development and fabrication, radiation dosimetry and applications, member of Aerojet's Reactor Safeguards Committee. Responsible for preparation of hazards analyses for irradiation experiments in test reactors.

Chemical and Radiation Engineering Associate with SMUD from May 1970 to June 1973. Chemical and Radiation Supervisor from June 1973 to present.

Senior Nuclear Engineer: Daniel D. Whitney

A. Educational Background/Training:

BSME Nuclear Graduate of Oregon State University in 1965
MS in Nuclear Engineering from Stanford University
Operator Training Course for Rancho Seco taught by California State University, Sacramento
B&W Reactor Technology Course by B&W

B. Experience:

With the Air Force, directed field level aircraft maintenance activities, including overhaul, quality assurance, non-destructive testing, and engineering evaluation of mechanical and electronic aerospace instrumentation and support equipment.

Assisted Ocone Nuclear Station in startup as a test engineer. Member of the Zero Power Physics Test Group

At Rancho Seco involved in review of the core physics and thermal hydraulics design, specifications and test procedures. Had responsibility for ZPPT and Power Escalation Programs. With SMUD from June 1970 to present.

Registered Professional Mechanical Engineer
Registered Professional Nuclear Engineer

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Training Supervisor: Jack M. Mau

A. Educational Background/Training:

Six week Reactor Technology Course by B&W
Ten week Nuclear Steam Supply System Simulator Training Course
by B&W
Two day Fire Fighting School at Treasure Island in San Francisco

B. Experience:

Operating Supervisor at Point Beach PWR from initial fuel loading
through initial criticality and testing and rise to power testing

Reactor Operator during refueling of Vallicitos BWR, General Electric
Co., fuel loading physics tests and rise to power.

Senior Control Room Operator with SMUD from January 1971 to December
1973. Shift Supervisor with SMUD from December 1973 to January 1978.
Station Training Supervisor with SMUD from January 1978 to present.

Licensed by NRC as Senior Licensed Operator.

Mechanical Maintenance Supervisor: David Cass

A. Educational Background/Training:

Retired from Naval Submarine Service - Nuclear Qualified

B. Experience:

Extensive naval prototype experience and five years as maintenance
supervisor at Lacrosse BWR, Wisconsin

Maintenance Supervisor for the SIW prototype

Training coordinator, responsible for guidance of 60 men through
problems of qualifying, including final checks on all phases of the
plant.

Leading machinist responsible for preventative maintenance schedules,
overhauling, and operation of turbines, pumps, valves, motors,
generators, etc.

Chief-In-Charge of the Engineering Room and Reactor aboard the US
Swordfish

With SMUD as Mechanical Maintenance Supervisor since July 1969

Outage Planning: Miché Carter

A. Educational Background/Training:

Six week Reactor Technology Course by B&W

Ten week Nuclear Steam Supply System Simulator Training Course
by B&W
Two day Fire Fighting School at Treasure Island in San Francisco

B. Experience:

Engineer Watch Stander, electrical controls for power plant during
initial fuel loading of USS Scamp, USN

Reactor Operator for USS Scamp, pre-overhaul physics testing

Engineering Watch Supervisor USS Scamp for rise to power after 18
month shutdown

Refueling naval nuclear power plants, 1966-1970

Nuclear Shift Test Engineer, physics testing for initial criticality,
rise to power testing, plant shutdown condition for refueling at
Mare Island Naval Shipyard, Vallejo, California

Senior Control Room Operator with SMUD from January 1971 to December
1973. Shift Supervisor with SMUD from December 1973 to present

Licensed with NRC as a Senior Licensed Operator

Shift Supervisor: Daniel E. Comstock

A. Educational Background/Training:

Attended Navy Nuclear Power School, then assigned to a Polaris
Nuclear Submarine.

Six week Reactor Technology Course by B&W

Ten week Nuclear Steam Supply System Simulator Training Course by
B&W

B. Experience:

Served aboard a Polaris during construction, commissioning and opera-
tion as Engineering Watch Supervisor and also Senior Engineering
Lab Technician.

With Carolina Power and Light was a control operator at Roxboro
Steam Electric Plant, then assisted in the startup of Unit #2, a
685 MWe coal fired plant

Participated in the initial training program for H. B. Robinson
Nuclear Station Unit #2, a 760 MWe Westinghouse PWR. Obtained a
"cold" AEC Senior Reactor Operator License and assisted in all
phases of startup (testing, fuel loading, etc.)

With SMUD as a Senior Control Room Operator from January 1979. Pro-
moted to Shift Supervisor in March 1973.

Shift Supervisor: Doyle Gouker

A. Educational Background/Training

Navy for four years
One month observation training at Connecticut Yankee
Three months observation training at Indian Point No. 1
Six week Reactor Technology Course by B&W
Ten week Nuclear Steam Supply System Simulator Training Course by B&W

B. Experience:

Boiler Tender on surface crafts with U.S. Navy

Auxiliary Operator with PG&E at 600 MWe Moss Landing gas/oil fired conventional steam electric generating station

Control Room Operator with PG&E at 1000 MWe Morro Bay Station

Obtained AEC Reactor Operators License with PG&E at Humboldt Bay Plant

Shift Supervisor with Dairyland Power obtaining a "cold" AEC Senior Reactor Operators License for the LaCrosse Nuclear Generating Plant

Shift Supervisor with SMUD since September 1979

Licensed by NRC as a Senior Licensed Operator

Shift Supervisor: Joseph S. King

A. Educational Background/Training:

Six week Reactor Technology Course presented by B&W
Two day Fire Fighting School at Treasure Island, San Francisco

B. Experience:

Tucson Gas and Electric as a watch tender

Martin-Marietta Company as a maintenance mechanic "A"

Nevada Power Company as an Auxiliary Operator, a Control Operator and a System Load Dispatcher

With SMUD as a Control Room Operator from January 1971 and a Senior Control Room Operator from December 1973 and as a Shift Supervisor from November 1976 to present

Licensed by NRC as a Senior Licensed Operator

Shift Supervisor: William E. Spencer

A. Educational Background/Training:

At Hanford, completed "N" Reactor Training Program. After this was chosen as Control Room Specialist
Three months observation training at Indian Point No. 1
Six week Reactor Technology course by B&W
Ten week Nuclear Steam Supply System Simulator Training Course by B&W

B. Experience:

After Navy, was an operator, fabricating uranium fuels at Hanford Plant, Washington. Then went to Reactor Operator.

Certified Class I Reactor Control Operator

Shift Supervisor at SMUD from September 1969 to present

Licensed by NRC as a Senior Licensed Operator

Shift Supervisor: Thomas D. Tucker

A. Educational Background/Training:

AA in Electricity from Fresno City College
Two day Fire Fighting School at Treasure Island in San Francisco

B. Experience:

With Fiese and Firstenburger was a pump casting operator

With Southern California Edison Company was a plant equipment operator at the South Point Nevada Power Station.

With SMUD, hired as an Auxiliary Operator, September 1971; then a Control Room Operator in November 1972; a Senior Control Room Operator in December 1973; and a Shift Supervisor in June 1976.

Licensed by the NRC as a Senior Licensed Operator

Mechanical Engineering Associate: Donald C. Blachly

A. Educational Background/Training:

BSME from California State University, Sacramento - 1971

B. Experience:

Army Corps of Engineers as an inspector in construction and installation of mechanical equipment.

Assistant Mechanical Engineer with SMUD from October 1973. Associate Mechanical Engineer with SMUD from October 1976.

Shift Engineer and Testing Coordinator during the pre-operational and startup test programs

Licensed by the NRC as a Senior Licensed Operator

Nuclear Chemist: Fred W. Kellie

A. Educational Background/Training:

BA in Chemistry with emphasis on radiochemistry
Training in Waste Water Treatment, Fire Control, Gamma Spectroscopy, Radiation Dose Assessment, Water Chemistry Analysis, and Radiation Protection with SMUD

B. Experience:

Five years of naval work on nuclear submarines as an ELT performing chemical and radiological controls

With SMUD as Senior Chemical and Radiation Assistant from June 1971 to May 1977. With SMUD as a Nuclear Chemist from May 1977 to present.

Electrical/Instrument & Control Supervisor: Norman C. Brock

A. Educational Background/Training:

BSEE from Lamar University in 1961
Completed courses in Nuclear Engineering, Analog Control Theory and Hardware, Nuclear Plant Reliability Data
One week training on the B&W Simulator

B. Experience:

McDonald-Douglas designing, testing, maintaining manual and automated systems for Saturn Space Program

Aerojet Nuclear Company designing systems for the NERVA Program

Consultant to the Navy on various classified programs

With SMUD from June 1974 as I&C Engineer and Supervisor of Nuclear Instrumentation. Participated in final checkout, fuel loading, startup, power operation

Safety Technician: R. Schumacher

A. Educational Background/Training:

Degree in Business/Psychology from Marquette
Graduate of various fire schools (Anso, Chemical Cos., etc.)
Graduate of Texas A&M in Nuclear Power Plant Fire Protection-First Class Pilot Group

Registered with the State of California as a Professional Engineer

B. Experience:

Safety Advisor for State of Wisconsin Industrial Commission

Personnel & Safety Supervisor for Allis Chalmers - Valley Iron Works

Personnel & Safety Director for Riverside Paper Corporation

With SMUD as Safety Technician from 1976 to present

Senior Control Room Operator: Allan N. Fraser

A. Educational Background/Training:

AA Degree in Mechanical-Electrical Technology from Sacramento City College

B. Experience:

With Wells Fargo's head office was an operating engineer

With SMUD as an Equipment Attendant in September 1971; Auxiliary Operator July 1972; Control Room Operator December 1973; Senior Control Room Operator from November 1976 to present

Licensed as a Senior Licensed Operator by NRC

Senior Control Room Operator: Michael C. Hieronimus

A. Educational Background/Training:

AA Degree in Mechanical-Electrical Technology at Sacramento City College

B. Experience:

With SMUD as an Equipment Attendant in September 1971; Auxiliary Operator November 1972; Control Room Operator December 1973; Senior Control Room Operator March 1976 to present

Licensed by NRC as a Senior Licensed Operator

Senior Control Room Operator: Richard Macias

A. Educational Background/Training:

Graduated from Sacramento State College in Mechanical-Electrical Technology

B. Experience:

With SMUD as an Equipment Attendant, October 1972; Auxiliary Operator

December 1973; Control Room Operator August 1976; Senior Control Room Operator June 1978 to present

Licensed by NRC as a Senior Operator

Senior Control Room Operator: John C. Nichols

A. Educational Background/Training:

Six week Reactor Technology Course by B&W
Two day Fire Fighting School at Treasure Island, San Francisco

B. Experience:

With PG&E as a Control Operator

With SMUD as a Control Room Operator January 1971; Senior Control Room Operator December 1973 to present

Licensed by NRC as a Senior Licensed Operator

Senior Control Room Operator: Dennis E. Tipton

A. Educational Background/Training:

Degree in Marine Engineering from the California Maritime Academy, Vallejo, CA

B. Experience:

With Campbells Soup, a boiler engineer

With El Rancho Properties, a maintenance engineer

With SMUD as an Equipment Attendant October 1972; Auxiliary Operator December 1973; Control Room Operator August 1976; Senior Control Room Operator September 1977 to present

Licensed by NRC as a Senior Licensed Operator

Control Room Operator: Wayne S. Morisawa

A. Educational Background/Training:

Degree in Mechanical Electrical Technology from Sacramento City College

B. Experience:

With SMUD as an Equipment Attendant, September 1971; Auxiliary Operator December 1973; Control Room Operator August 1976 to present

Licensed by NRC as a Licensed Operator

Control Room Operator: Dante J. Zompetti

A. Educational Background/Training:

Two years credits at Strickles Business College, Topeka, Kansas

B. Experience:

With Red Star Industries as a Chief Engineer

With Union Carbide Company as a Maintenance Man

With Mercy General Hospital as a Stationary Engineer

With SMUD as an Auxiliary Operator September 1971; Control Room Operator December 1973 to present

Licensed by NRC as a Licensed Operator

Control Room Operator: Leonard F. Adkins

A. Educational Background/Training:

Courses at Hanford Project in operation of a reactor

B. Experience:

With Batelle-Northwest as a Reactor Technician

With General Electric as a Reactor Operator

With Westinghouse as a Senior Technician

With SMUD as an Auxiliary Operator September 1971; Control Room Operator December 1973 to present

Licensed with NRC as a Licensed Operator

Control Room Operator: Norman S. Giroux

A. Educational Background/Training:

Completed U. S. Navy Nuclear Power Training

Member of Nuclear Power Training Unit, U. S. Navy

Qualified as Mechanical Operator - USS Long Beach - 1970

Presently has 30 units toward BS majoring in Physics from University of California, Sacramento

B. Experience:

With SMUD as a Power Plant Helper July 1973; Equipment Attendant March 1974; Auxiliary Operator December 1974; Control Room Operator September 1976

Licensed by NRC as a Licensed Operator

Health Physicist: Steve Coats

A. Educational Background/Training:

BS in Physics from Baker University
MS Radiation Biophysics from University of Kansas

B. Experience:

Nebraska Department of Radiation Health as a Radiation Health Specialist

Argonne National Laboratories as a Health Physicist

SMUD as a Health Physicist 1977 to present

B. Offsite (Non-Plant Staff)

The available personnel will be recruited from the various SMUD organizations depicted on SMUD Organization Chart, Attachment No. 3, to provide the necessary offsite support. Certain engineers will be reassigned to Rancho Seco and report directly to the Manager of Nuclear Operations for specific assignments. The major portion of the engineering/professional support will be assigned to the Manager of Generation Engineering for tasks related to the TMI-2 type accident. The security personnel will continue to receive direction from the Director of Security who is currently in charge of the security operations. The Manager of Purchases and Stores will retain supervisory responsibility for those personnel assigned to provide full time support of purchasing and expediting services to obtain those emergency supplies necessary to support the Rancho Seco operation.

The General Manager will personally direct the executive staff and Consumer Relations personnel assigned to provide liaison activities to the news media, local, state, and Federal agencies.

The personnel to provide the offsite support will be obtained from the various District organizations and will be supplemented by personnel from Babcock & Wilcox and the Bechtel organization. The recruitment within the District will be as follows:

1. Generation Engineering Department:

Function: Responsible for licensing, design and construction of District's electrical generation facilities.

Number of professional-technical personnel that would be made available to Rancho Seco for unusual events like the TMI-2 accident: Eighteen (18).

2. Quality Assurance:

Function: Prepare, administer, and audit the District's quality assurance programs and programs of contractors to verify compliance with 10CFR50, Appendix B.

Number of professional-technical personnel that would be made available to Rancho Seco for unusual events like the TMI-2 accident:
Five (5).

3. Engineering Department:

Function: Forecast system load and negotiate power exchange contracts. Design civil and electrical features for transmission, distribution and bulk power substations. Prepare and update all in-house drawings, plus maintain the drawing files.

Number of professional-technical personnel that would be made available to Rancho Seco for unusual events like the TMI-2 accident:
Two (2).

4. Hydro Operations:

Function: Maintain and operate the District's hydroelectric power stations.

Number of professional-technical personnel that would be made available to Rancho Seco for unusual events like the TMI-2 accident:
Two (2).

5. Transmission and Distribution Operations Department:

Function: Monitor and control District's electrical system to assure safe and efficient construction, maintenance and operations of transmission and distribution system.

Number of professional-technical personnel that would be made available to Rancho Seco for unusual events like the TMI-2 accident:
Six (6).

6. Security Operations:

Function: Maintain and enforce the District's security program, including issuance of ID cards and badges, control building access and perform background investigations.

Number of additional professional-technical security personnel that would be made available to Rancho Seco for unusual events like the TMI-2 accident: Two (2).

7. Consumer Relations:

Function: Advertising, shows and exhibits, group meeting and educa-

tional presentations, Rancho Seco and Consumer Information Centers, news media contacts.

Number of professional-technical personnel that would be made available to Rancho Seco for unusual events like the TMI-2 accident: Four (4).

Note: All personnel of the department would be available for news media liaison work to keep the public informed.

8. Executive Staff:

Function: Provide treasury activities which include rates, rules, regulations, insurance, legislative and California Energy Commission liaison.

Number of professional-technical personnel that would be made available to Rancho Seco for unusual events like the TMI-2 accident: Two (2).

9. Purchases and Stores:

Function: Purchase all equipment, materials and supplies, plus receive materials and supplies.

Number of professional-technical personnel that would be made available to Rancho Seco for unusual events like the TMI-2 accident: Three (3).

10. Data Processing Department:

Function: Create, review, modify, program and maintain District's general and special computers.

Number of professional-technical personnel that would be made available to Rancho Seco for unusual events like the TMI-2 accident: Two (2).

An organizational chart (Attachment No. 3) is included to identify where the personnel will be obtained.

The assignment of personnel in the event of a TMI-2 type accident is as follows:

A. Nuclear Power Plant Operations: (To be assigned to R. J. Rodriguez, Manager of Nuclear Operations) Two personnel available:

1. Senior Mechanical Engineer:

BS Mechanical Engineering
Registered Professional Mechanical Engineer - California and Washington
Registered Professional Nuclear Engineer - California

Experience:

Fifteen years mechanical engineering and two year nuclear power plant shift supervisor for a total of seventeen years full time utility experience.

2. Nuclear Engineering Associate:

BS Engineering Physics
MS Nuclear Engineering
U.S. Naval Nuclear Power School
Registered Professional Nuclear Engineer - California
Registered Professional Mechanical Engineer - California
NRC Senior Reactor Operator License - 1977-1978
Qualified Engineering Officer of the Watch on the USN S5W and S5G type submarine reactors

Experience:

Three years in Reactor Physics, three years mechanical engineering and five years operations for a total of eleven years in the nuclear power field; six years have been utility experience.

Assignments B.1 through B.12 would be under the direction of D. G. Raasch, Manager of Generation Engineering.

B. Engineering Support:

1. Nuclear Engineering Support: One available

Senior Nuclear Engineer:

BS Engineering Physics
Graduate level courses in Nuclear Engineering
Registered Professional Nuclear Engineer - California

Experience:

Five years reactor physics, five years mechanical and six years safety analysis and licensing for a total of sixteen years in the nuclear power field; nine years have been with a utility.

2. Mechanical Engineering: Two personnel available

a. Supervising Mechanical Engineer:

BS Mechanical Engineering and Masters in Business Administration
Registered Professional Mechanical Engineer - California and Arizona
Registered Professional Nuclear Engineer - California

Experience:

Twenty years mechanical engineering for a utility of which fourteen have been in the nuclear power field and six non-nuclear.

b. Senior Mechanical Engineer:

BS Mechanical Engineering
Registered Professional Mechanical Engineer - California
Registered Professional Fire Protection Engineer - California

Experience:

Nine years in the nuclear power field and seven years non-nuclear experience for a total of sixteen years utility experience.

3. Structural/Civil Engineering: Two personnel available

a. Supervising Civil Engineer:

BS Civil Engineering
Registered Professional Civil Engineer - California

Experience:

Four years in the nuclear power field and ten years non-nuclear for a total of fourteen years with eleven of those years utility experience.

b. Senior Civil Engineer:

BS Civil Engineering
Registered Professional Civil Engineer - California

Experience:

One year nuclear power field and nine years non-nuclear for a total of ten years full time utility experience.

4. Metallurgical and Materials: Three personnel available

a. Senior Quality Engineer:

BS Chemistry
MBA in Management
Registered Professional Quality Engineer - California
Certified Quality Engineer by American Society of Quality Control
Member of Management Safety Review Committee to provide experience in welding and metallurgy

Experience:

Five years utility experience in the nuclear power field and seven years engineering management in the non-nuclear field.

b. Senior Quality Engineer:

BS Mechanical Engineering
MS Mechanical Engineering
Registered Professional Quality Engineer - California
Certified Quality Engineer by American Society of Quality Control

Experience:

Six years utility experience in the nuclear power field and thirteen years non-nuclear engineering experience.

c. Quality Engineering Assistant:

BS Electrical Engineering

Experience:

One year utility experience in the nuclear power field.

5. Instruments and Controls: Four personnel available

a. Supervising Instrument and Controls Engineer:

BS Electrical Engineering
BS Electronics
Registered Professional Controls Engineer - California

Experience:

Twenty two years experience in the nuclear field of which nine years have been with a utility.

b. Senior Mechanical Engineer:

BS Mechanical Engineering
Registered Professional Mechanical Engineer - California
Registered Professional Controls Engineer - California

Experience:

Ten years instrument and controls in the nuclear power field, five years mechanical engineering non-nuclear and five years instrument and controls non-nuclear experience for a total of twenty years utility experience.

c. Electrical Engineering Assistant:

BS Electrical and Electronic Engineering
Registered Engineer-In-Training - California

Experience:

One year utility experience in the nuclear power field

d. Principal Engineering Technician I:

Attending college for BS in Electrical Engineering
Navy Nuclear Propulsion Program
Qualified AIW Reactor Operator (1959-1971)
Qualified S&W Reactor Operator (1972-1974)

Experience:

Six years reactor physics, six years health physics, eleven of these years have been in the utility nuclear power field.

6. System Engineering: Three personnel available

a. Manager, Transmission and Distribution Operations

(see Management personnel section)

b. System Planning Engineer:

BS Electrical Engineering
Registered Professional Electrical Engineer - California

Experience:

Twenty years electrical engineering and management, twelve years utility planning for a total of thirty two years utility experience of which two years have been in the nuclear power field.

c. Communications Wire Chief:

AA Electronics Communication
CPEI Electronics Communication Engineer
FCC Telephone License (1948-1979)

Experience:

Eleven years systems engineering, twenty years communications for a total of thirty one years of which nineteen years are utility experience. One year has been in the nuclear power field.

7. Electrical Engineering: Eight personnel available

a. Supervising Electrical Engineer:

BS Electrical Engineering
MS Electrical Engineering
Registered Professional Electrical Engineer - California
Registered Professional Control System Engineer - California

Experience:

Eight years utility experience in the nuclear power field.

b. Senior Electrical Engineer:

BS Electrical Engineering
Additional credits in Nuclear Engineering
Registered Professional Electrical Engineer - California

Experience:

Two years nuclear power field and twelve years non-nuclear for a total of fourteen years; eleven of which are utility experience.

c. Supervising Electrical Engineer.

BS Electrical Engineering (and basic nuclear plant courses for Rancho Seco)
Registered Professional Electrical Engineer - California

Experience:

Thirty years utility experience in electrical engineering and management.

d. Senior Electrical Engineer:

BS Electrical Engineering

Experience:

Thirty three years utility experience in electrical engineering and management.

e. Senior Electrical Engineer:

BS Electrical Engineering
Registered Professional Electrical Engineer - California

Experience:

One year nuclear power field and nine years non-nuclear for

a total of ten years utility experience.

f. Electrical Engineering Associate:

BS Electrical Engineering
Registered Professional Controls Engineer - California

Experience:

Sixteen years nuclear power field and twelve years non-nuclear and management experience of which eight years have been utility experience.

g. Electrical Engineering Associate:

BS Electrical Engineering
Registered Professional Electrical Engineer - California

Experience:

Fifteen years utility experience in the non-nuclear electrical field.

h. Electrical Engineering Associate:

BS Electrical Engineering
Registered Professional Electrical Engineer - California

Experience:

Four years non-nuclear utility experience.

8. Thermal-Hydraulics: One individual available

Rate Economist:

BS Engineering (Thermo-Dynamics)
MBA Finance/Personnel

Experience:

Three years electrical, one year mechanical, one year civil and five years other types of engineering for a total of ten years of utility experience.

9. Plant Chemistry and Radiochemistry: Two personnel available

a. Senior Chemical Engineer:

BS Chemical Engineering
MS Chemical Engineering (Degree not awarded for lack of thesis)

Experience:

Three years nuclear power field and three years non-nuclear experience for a total of six years utility experience.

b. Quality Engineer Associate:

BS Chemical Engineering
MS Petroleum Engineering
Registered Professional Quality Engineer - California

Experience:

Seven years part time nuclear power field, fourteen years non-nuclear and management experience; six years have been utility experience.

10. Health Physics: Three personnel available

a. Environmental Specialist:

BA Biology
MPH Radiological Health

Experience:

Twelve years utility experience in health physics in the nuclear power field.

b. Senior Engineering Technician:

BA Environmental Studies

Experience:

Two years non-nuclear, five years full time and two years part time nuclear power field experience for a utility.

c. Civil Engineering Associate:

BA Economics
BS Civil Engineering
MS Environmental Engineering
Registered Professional Civil Engineer - California

Experience:

Twelve years non-nuclear civil engineering of which five years have been utility experience.

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11. Nuclear Fuels: Three personnel available

a. Supervising Nuclear Engineer:

BS Electrical Engineering
MS Nuclear Engineering
Registered Professional Nuclear Engineer - California

Experience:

Seventeen years engineering and management in the nuclear power field of which ten years have been utility experience.

b. Assistant General Manager and Treasurer:

(See management section)

c. Senior Electrical Engineer:

BS Electrical Engineering
Registered Professional Electrical Engineer - California

Experience:

Fourteen years non-nuclear electrical engineering, four years part time reactor physics and four years part time fuel management; total of twenty years utility experience.

12. Maintenance Engineering: Two personnel available

a. Senior Mechanical Engineer:

BS Mechanical Engineering
Registered Professional Mechanical Engineer - California

Experience:

Twenty years non-nuclear mechanical engineering, ten years have been utility experience.

b. Senior Mechanical Engineer:

BS Mechanical Engineering
MBA Business Administration
Registered Professional Mechanical Engineer - Massachusetts and Pennsylvania

Experience:

Two years full time mechanical engineering in the nuclear power field, thirty four years in non-nuclear engineering and management; fifteen of those years were utility experience.

- C. Communications and Public Relations: (Direction from the General Manager) Four personnel available
- a. Manager of Consumer Relations:
(see management section)
 - b. Supervisor Community Affairs Division:
BA Business Administration (Public Relations)
Experience:
Twenty three years utility public relations experience.
 - c. Senior Public Information Representative:
3A Journalism Government
Experience:
Six years utility public relations experience.
 - d. Public Information Representative:
Experience:
Five years utility public relations experience.
- D. Security: (Director of Security, W. Hammond) Four personnel available
- a. Supervising Special Agent:
AB Criminal Justice Administration
Sacramento Police Academy
Certificates: Management, University of California; Supervisory, Solano College; Police Emergency Planning, University of California; Explosive and Sabotage Device, Department of Army; Executive Certificate on Terrorism, FBI; Police Executive and Management Certificate, Los Angeles Police Department
California Peace Officers Standards & Training (POST) certificates
Certified Peace Officer (current) - California
Experience:
Seven years nuclear security field, four years industrial security field, ten years law enforcement field, five years military security; includes fifteen years of supervision/management.
 - b. Special Agent:
AA Criminal Justice
Grange County Peace Officers Academy

Certificates: Supervisory, Solano College; evidence gathering, fingerprint classification, photography, record management, emergency planning and criminal law
California Peace Officers Standards & Training (POST) certificates
Certified Peace Officer (current) - California

Experience:

Four years nuclear security field, five years industrial security field, eleven years law enforcement field, two years military security; includes seven years supervisory experience.

c. Manager of Data Processing:

Albany Business College

Experience:

Fifteen years utility data processing experience.

d. Programmer II:

BS Computer Science

Experience:

Five years utility computer programming experience.

Note: C&D will be used to assist in security computer programming changes necessitated by influx of response personnel.

E. Purchasing: (Manager of Purchases and Stores, Gordon Merrill)
Three personnel available

a. Principal Buyer:

BS Electrical Engineering

Experience:

Ten years part time nuclear purchasing experience for a utility.

b. Senior Buyer:

BS Electrical Engineering

Experience:

One year electrical engineering and nine years part time nuclear purchasing experience for a utility.

c. Buyer:

BS Industrial Administration

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Experience:

Twenty five years part time nuclear purchasing experience; twelve of which have been for a utility.

The assignments will depend on the magnitude and severity of the accident condition. In general, the two engineers currently within the Generation Engineering Department with considerable operating experience would be reassigned to the Nuclear Operations Department. They would either be reassigned to the Rancho Seco site or remain at the general office as support to the nuclear power plant operations and also provide information to the offsite staff.

The Manager of Generation Engineering would organize the personnel similar to his current operation where each major engineering discipline is headed by a supervising engineer. Additional personnel, recruited from other organizations, including Babcock & Wilcox and Bechtel personnel, would supplement the staff. Expertise is available both in the management and technical areas to provide unique and definitive information and design experience unique to the Rancho Seco plant. Some of these personnel have either previously worked on the Rancho Seco plant or now provide a support function to the facility from other organizations such as Quality Assurance, Transmission and Distribution, Engineering and the Technical Staff.

As previously stated, the remaining organizations of Security, Purchasing, Consumer Relations and Executive Staff will remain in their assigned organization as shown on the SMUD Organization Chart, Attachment No. 3, and will support the operation as needed. Their assignments would remain essentially in conformance to job functions currently being performed.

The functional areas such as plant chemistry and radiochemistry, health physics, nuclear fuels and maintenance engineering will be directly under the direction of the Manager of Generation Engineering. The offsite organization chart shows both the discipline or field engineering groups reporting directly, as well as the functional organizations reporting to the Manager of Generation Engineering (Attachment No. 5).

The management resource section illustrates the depth available to allocate management personnel from other sections of the District. Most managers have an engineering background and have been involved in Rancho Seco's design, construction and operational activities. They would be used as well as the Babcock & Wilcox and Bechtel personnel.

The General Manager would immediately make the personnel from other departments available and would contact both B&W and Bechtel for their response. The Assistant General Manager and Chief Engineer would allocate the personnel between the onsite and offsite activities as he determined need. In his position of overall technical responsibility, the vagaries of the situation would dictate personnel assignment to mitigate accident consequences.

The offsite organization shows all groups reporting to the Manager of Generation Engineering for their support assignments. The Assistant General

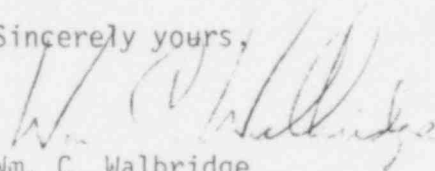
Manager and Chief Engineer, as the District officer assigned direct responsibility for operation of all operating facilities, would exercise judgment as to priorities of assignments and availability of manpower. He would direct the daily activities and coordinate with all responsible organizations to expeditiously mobilize his resources to cope with the situation.

The Assistant General Manager and Treasurer, as the District officer in charge of public information, would provide the liaison to the news media and keep the public informed of the accident situation.

The considerable resources available, both within the District and outside organizations, would immediately be made available to safeguard the public. It is the opinion of the District that all organizations, local, state and Federal, would contribute to mitigate the consequences of an accident, and would work with the District as necessary to implement the required action.

If further information is needed to clarify our organization, please specify the desired information.

Sincerely yours,



Wm. C. Walbridge
General Manager

Attachments

AMENDMENT TO
AGREEMENT FOR
CONTINUING TECHNICAL SERVICES

Article III B of that certain agreement for technical services executed as of November 11, 1971, by SACRAMENTO MUNICIPAL UTILITY DISTRICT, hereinafter called "Sacramento", and BECHTEL INCORPORATED, hereinafter called "Bechtel", is hereby amended to read as follows:

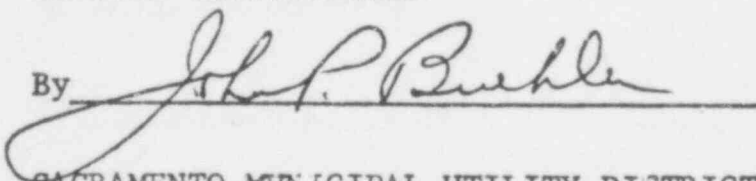
B. Bechtel's Indirect Costs, Overheads and Fees

To compensate Bechtel for Indirect Costs, including allowance for sick leave, vacation and holiday pay, social and retirement benefits, health insurance contributions, Workmen's Compensation Insurance, Social Security contributions, State Unemployment Insurance, Public Liability and Property Damage Insurance Premiums, and any other items generally classified as payroll burden, and for Overheads, and Fees, Bechtel shall be paid an amount equal to 1.25 times the Direct Payroll Costs (exclusive of the premium portion of the overtime payroll costs), computed under Section 1 of Paragraph A of this Article, applicable to Bechtel's personnel assigned to Bechtel's established offices in San Francisco and Los Angeles; provided that if Bechtel personnel based at Sacramento's Rancho Seco Nuclear Generating Station perform work under this contract, Bechtel shall be paid an amount equal to .95 times such Direct Payroll Costs rather than 1.25 times such Direct Payroll Costs.

Dated: January 6, 1972

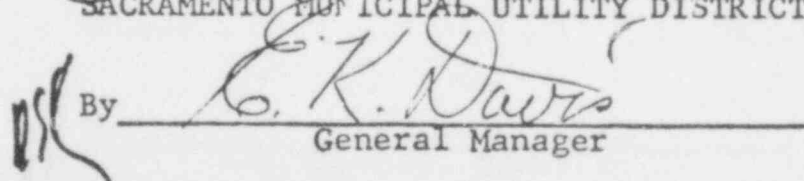
BECHTEL INCORPORATED

By



SACRAMENTO MUNICIPAL UTILITY DISTRICT

By



General Manager

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JK

AGREEMENT

FOR

CONTINUING TECHNICAL SERVICES

THIS AGREEMENT is effective as of Nov. 11 , 1971, between SACRAMENTO MUNICIPAL UTILITY DISTRICT, having its principal offices in Sacramento, California, herein called "Sacramento", and BECHTEL INCORPORATED, having its principal place of business in San Francisco, California, herein called "Bechtel".

WITNESSETH:

WHEREAS, Sacramento desires Bechtel to perform engineering services as requested by Sacramento from time to time in connection with facilities owned by Sacramento, which services will be described in written Requests For Services to be issued to Bechtel by Sacramento;

WHEREAS, Bechtel desires so to do for the compensation and in accordance with the terms and conditions herein specified;

NOW, THEREFORE, the parties hereto agree as follows:

ARTICLE I SCOPE OF SERVICES

At the request and direction of Sacramento, Bechtel shall perform engineering services based upon information furnished to it by Sacramento from time to time during the performance of the work hereunder. Bechtel shall be entitled to rely on such information.

ARTICLE II SACRAMENTO'S REQUEST FOR SERVICES

At such time as Sacramento desires Bechtel to perform work and engineering services hereunder, Sacramento shall designate such work and services by issuance to Bechtel of a written Request For Services describing the work and services to be performed and making reference to this Agreement. If Bechtel agrees to perform the designated services, Bechtel shall indicate its acceptance of the written Request For Services by execution thereof by an officer of Bechtel and shall return to Sacramento one signed copy thereof. Bechtel agrees to perform the work or services in accordance with the terms and conditions of this Agreement.

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MASTER SERVICES CONTRACT

SMUD CONTRACT
NO. 6357

(a contract for engineering services,
repair work, equipment and parts)

Attachment No. 2
Page 1 of 2

THIS CONTRACT, made and entered into as of December 15, 1977 /
by and between the Babcock & Wilcox Company (hereinafter called the
COMPANY), and Sacramento Municipal Utility District
(hereinafter called the PURCHASER),

WHEREAS, PURCHASER, from time to time, will require various engineering
and technical services, maintenance and repair work, equipment, and
spare or replacement parts;

WHEREAS, COMPANY is willing and able to provide such services, labor,
equipment and parts, within the limitations of resources available
within COMPANY, under the terms and conditions hereinafter set forth;

NOW, THEREFORE, in consideration of the premises and of other good and
valuable consideration, the parties hereto agree as follows:

1.0 SCOPE OF SUPPLY

1.1 By COMPANY

During the term of this Contract PURCHASER may request from
COMPANY and COMPANY shall, subject to availability to
COMPANY of the necessary manpower, facilities, equipment,
and other resources, submit a task proposal to perform
work within the following scope in connection with or in
support of PURCHASER's Nuclear Steam Supply System known
as the Rancho Seco Nuclear Unit

and the fuel thereof:

1. Technical or engineering advice and consultation.
2. Computer usage as required to furnish such advice and consultation.
3. Training services, including simulator training.
4. Advice and consultation concerning Test Planning, availability of Test Planning Documentation and Test Scheduling.
5. Collection of Test Data and evaluation of Test Results.
6. Recommending to PURCHASER'S supervisory personnel tasks to be assigned.

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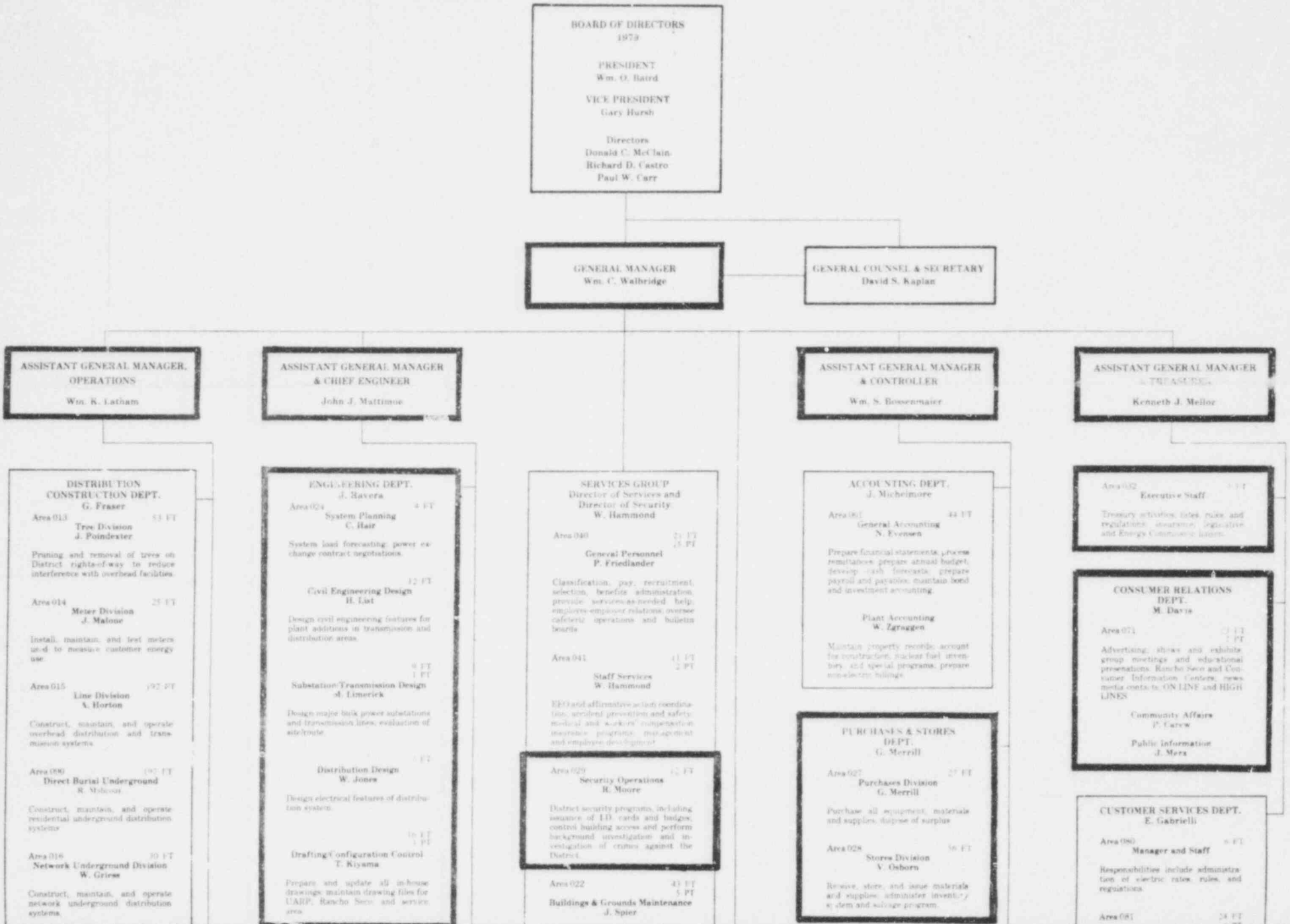
1.0 SCOPE OF SUPPLY

- 7. Labor and supervision for maintenance and repair work.
- 8. Spare or replacement parts, hereinafter collectively "Parts", incidental or required by 1.1 (1) or 1.1 (4) above or as otherwise agreed.

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SACRAMENTO MUNICIPAL UTILITY DISTRICT

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DISTRIBUTION PLANNING DEPT.
L. Fassler

Area 012 43 FT
New Business Estimator's Division
K. Silva

Process and design distribution systems to serve new business customers and provide follow-up to see installation proceeds as needed by customers. Maintain records of electrical distribution systems.

Area 019 27 FT
Project Planning Division
J. Connolly

Plan, design, and schedule construction and maintenance of all distribution system improvements, such as substations, in-feed, and load centers.

Area 091 15 FT
Technical Staff

Provide technical assistance required by Operations and help improve reliability and operation of distribution systems.

LAND DEPARTMENT
B. Boles

Area 026 37 FT

Acquire, dispose, administer, manage, record, and map lands, land rights, land uses and interests and permission occupancy privileges. Act in liaison with other agencies on land related matters. Conduct land surveys for stations and lines. Review and arrange for payment of property taxes for District properties located outside of the service area.

TRANSMISSION & DISTRIBUTION OPERATIONS DEPT.
J. Dunn

Area 011 49 FT
Dispatching
R. Ewing

Monitor, control District's electrical system to assure safe and efficient operation, construction, and maintenance to supply energy to customers as demanded.

Area 017 23 FT
System Protection and Communication
(Vacant)

Install, operate, and maintain electrical protection systems and those communication systems not provided by Pacific Telephone, establish design criteria for these systems.

Area 018 40 FT
Substations
H. Kessler

Construct, maintain, and operate all substations.

Area 010 31 FT
Administrative Staff*
A. Carlomagno

Interpret District policies, set goals, administer paper work, and provide assistance required by other departments in Operations area. Administer Joint File Program.

HYDRO OPERATIONS DEPT.
J. Hiltz

Area 054 39 FT
4 FT

Hydroelectric operations and maintenance.

GENERATION ENGINEERING DEPT.
D. Raasch

Area 020 30 FT

Responsible for licensing, design, and construction of generation facilities.

NUCLEAR OPERATIONS DEPT.
R. Rodriguez

Area 058 13 FT
Nuclear Engineering & Technical
J. McCalligan

Engineering, inspection, and plant performance.

Area 05 187 FT
4 FT
Nuclear Operations & Maintenance
P. Oubre

Nuclear plant operations and maintenance, chemistry and health physics control.

Area 056 16 FT
Administrative

Responsible for department administrative tasks, payroll, library, reproduction, and document control.

Area 021 7 FT
1 FT
Quality Assurance Program*
L. Schwieger

Program, administer, and audit the District's quality assurance programs and programs of contractors. Direct compliance with quality assurance programs.

Area 021 41 FT
3 FT
Transportation
W. Farmer

Fleet maintenance, automotive pool.

Area 020 26 FT
18 FT
Office Services
C. Cheung

Operation of central files, telephone system, mail and reproduction, word processing center, microfilm service.

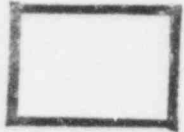
CONSERVATION GROUP
Director
Energy Conservation & Utilization
P. Hollick

Area 075 48 FT
Conservation Planning Division
E. Merrick

Evaluate, research, and develop conservation plans, programs, and activities.

Power Advisory Division
L. Orange

Energy conservation program implementation and energy use advisory services.



DATA PROCESSING DEPT.
W. Condon

Area 061 45 FT
Systems & Programming
M. Quam

Create, review, modify, and maintain general computer systems and programs, provide technical assistance to non-IT programming personnel.

Systems & Software
J. Pesler

Research and make recommendations regarding computer equipment and associated software, provide programming services for special purpose computers.

Computer Operations
R. Thomason

Operate and maintain District's central computer, teleprocessing terminals, and data entry facility, acquire, store, and maintain data needed by general computer system.

Area 060 8 FT
Systems & Procedures*
D. McClusky

Develop, review, and modify interdepartmental systems and procedures, design and control District forms, maintain and improve manuals, perform studies and make recommendations, administer "Speak-Out" program.

Area 060 5 FT
Internal Auditing*
S. FT

Audit, evaluate and report findings and recommendations on District policies, procedures, records and operations, with particular attention to internal controls.

Credit Division
G. Giles

Administer District credit policy, follow-up on delinquent accounts, collect damage claims, process new subdivisions.

Area 082 65 FT
1 FT
Field Services Division
J. Kelly

Perform meter reading, correct and disconnect customers, collect payments or terminate for non-payment, investigate high bill complaints and accidents involving District property, rate investigations.

Area 083 15 FT
6 FT
Customer Order Division
J. Goetzman

Maintain customer records, process orders concerning customer moves, new service, inquiries, and complaints.

Area 084 18 FT
Billing Division
R. Ellis

Administer and maintain billing system.

POOR ORIGINAL

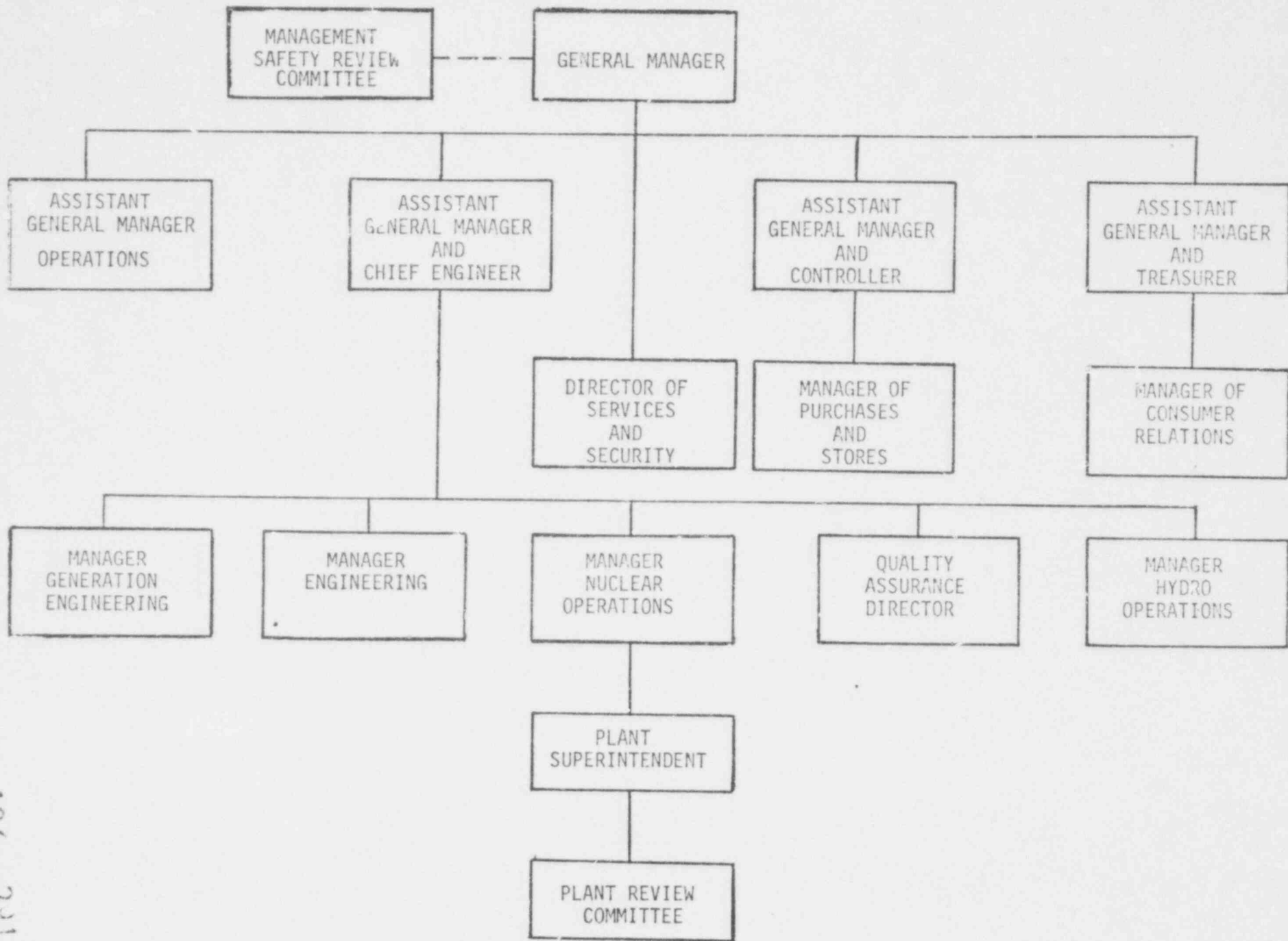
Organizations involved with nuclear program.

*Denotes individual areas reporting to an Assistant General Manager.

Numbers to the right of each work unit indicate number of employees in the unit. FT indicates FULL TIME staff. PT indicates PART TIME staff.

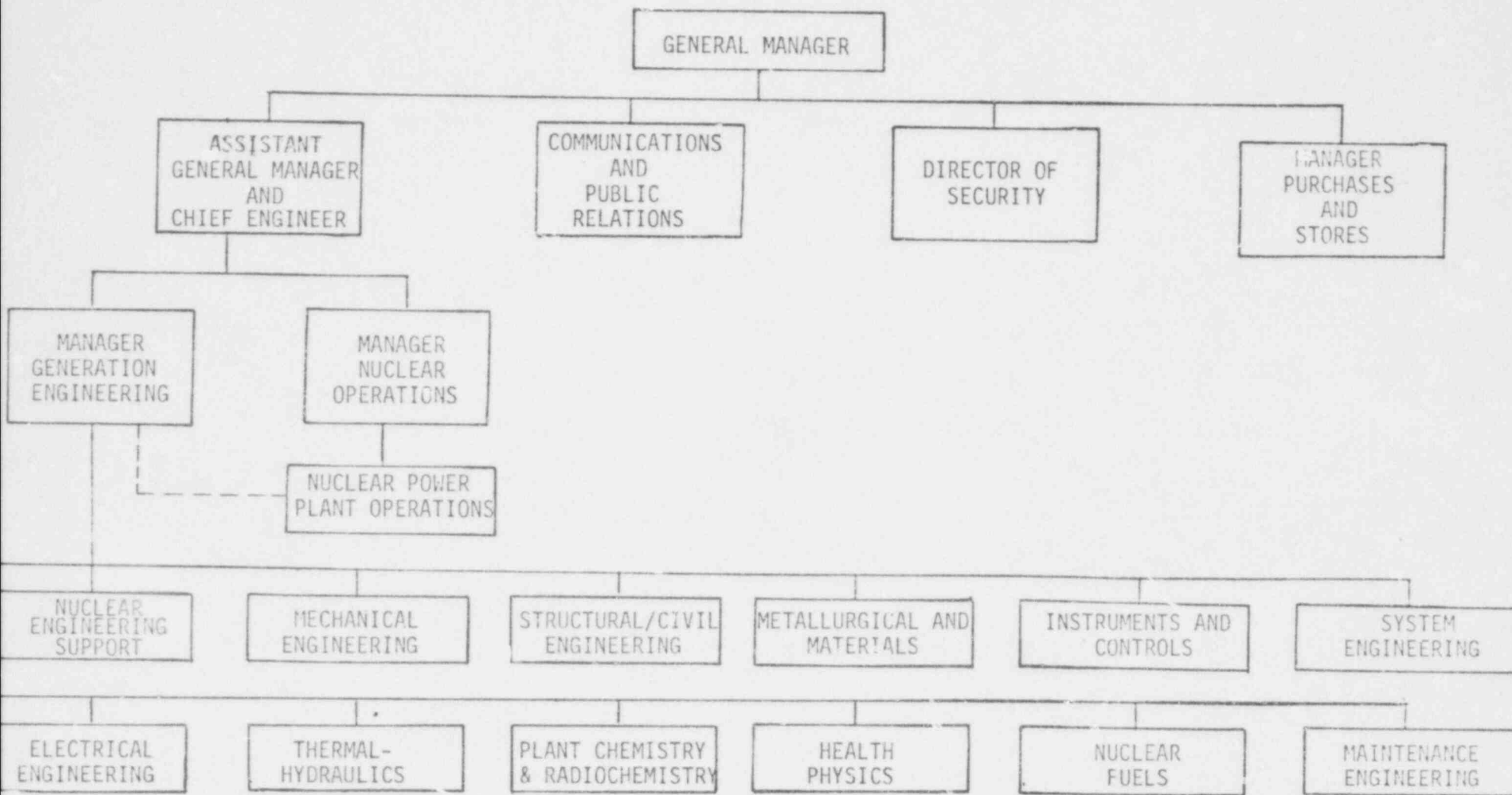
March 1979

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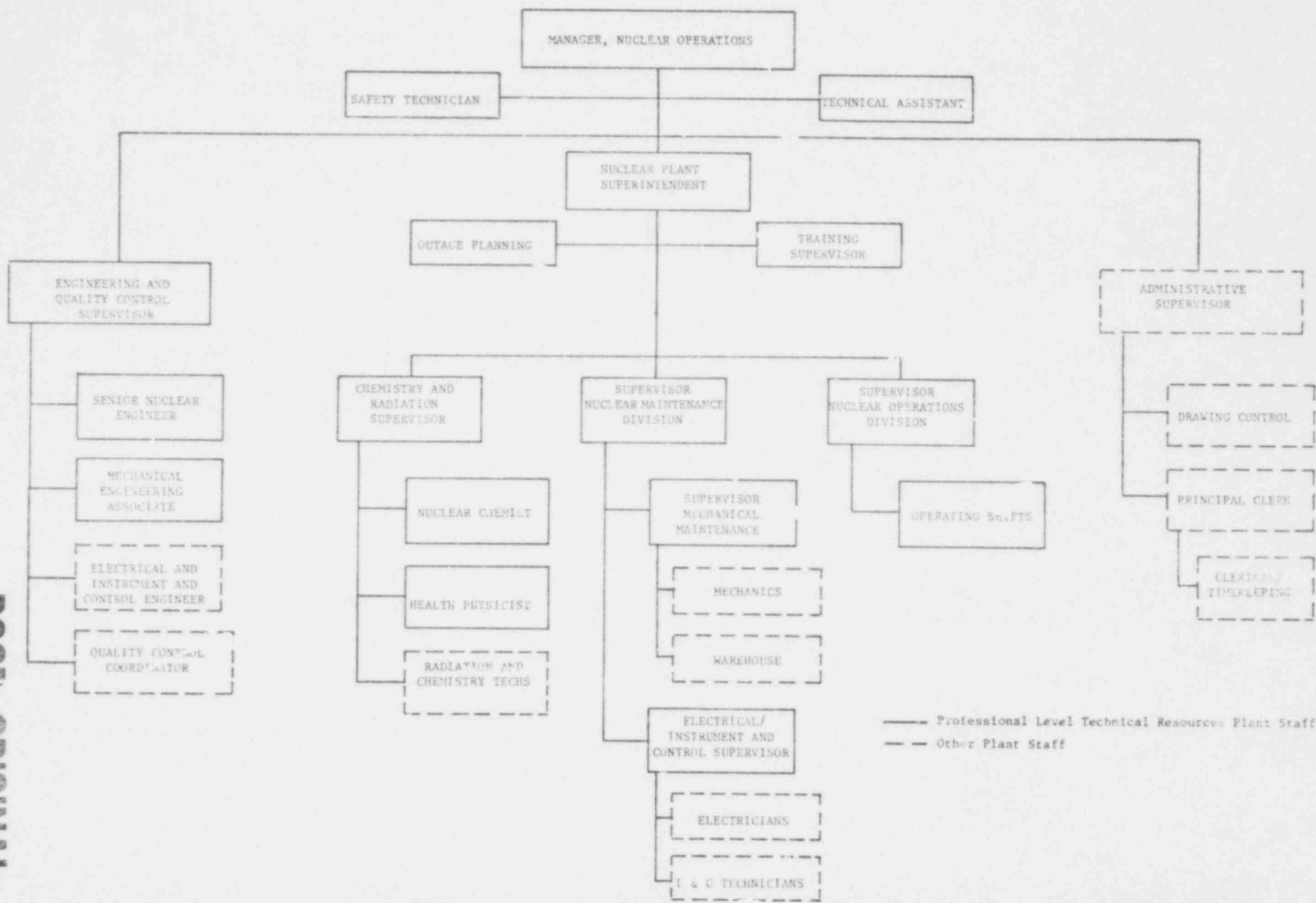
OFFSITE ORGANIZATION



496 292

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POOR ORIGINAL



— Professional Level Technical Resources Plant Staff
 - - - Other Plant Staff