Telephone 617 366-9011
TWX
710-390-0739

YANKEE ATOMIC ELECTRIC COMPANY

WYR 79-86

20 Turnpike Road Westborough, Massachusetts 01581

July 26, 1979

United States Nuclear Regulatory Commission
Washington, D. C. 20555

References: (a) Letter dated June [illegible] 1979, signed by Harold R. Denton
Subject: Management and Technical Resources Available to Handle Unusual Events
(b) Docket No. 50-29, License No. DPR-3

Gentlemen:

Yankee Atomic Electric Company, Nuclear Services Division (NSD) provides operational and technical management, operational support, technical services, radiological services, analytical services, engineering services, and emergency support for the Yankee Nuclear Power Station. The management and technical support provided is described in the Technical Specifications of the Yankee Atomic Electric Company License (Docket No. 50-29, License No. DPR-3).

Operational and technical support services are provided to Vermont Yankee and to Maine Yankee and are in accordance with contracts between Yankee NSD and the respective company.

The management, technical staff and resources of Yankee and YNSD are committed full-time to the continuous management, monitoring and review of all aspects of nuclear plant construction, operation, testing, licensing and design performance. We believe this insures continuous technical and operational excellence and both reduces the probability of untoward incidents and provides a defense-in-depth program should unusual circumstances require emergency actions.

If required, the management of Yankee Atomic Electric Company, Nuclear Services Division, can allocate the entire company resources to combat any unusual event. These resources include over 240 engineering personnel with greater than 2450 man-years of engineering experience, 1625 man-years of which is specifically nuclear experience covering the entire spectrum of expertise required to operate and support nuclear power plants.

543 205

7907310437

A

The details and depth of this expertise are described in the enclosures accompanying this submittal. The depth of experience includes a number of individuals who were key figures in developing nuclear power in New England and were responsible for the development, design, testing and continuing operation of one of the first nuclear power plants in the country.

It is pointed out that this submittal is intended to apply directly only to the Yankee Atomic Electric Company plant at Rowe, Massachusetts (Docket No. 50-29, License No. DPR-3). Submittals for the Vermont Yankee Nuclear Power Station (Docket No. 50-271, License No. DPR-28), and for the Maine Yankee Atomic Power Station (Docket No. 50-309, License No. DPR-36), will be made under separate cover.

We feel the information contained herein answers the requests contained in Reference (a). Should you have any questions, however, we will be glad to discuss them with you.

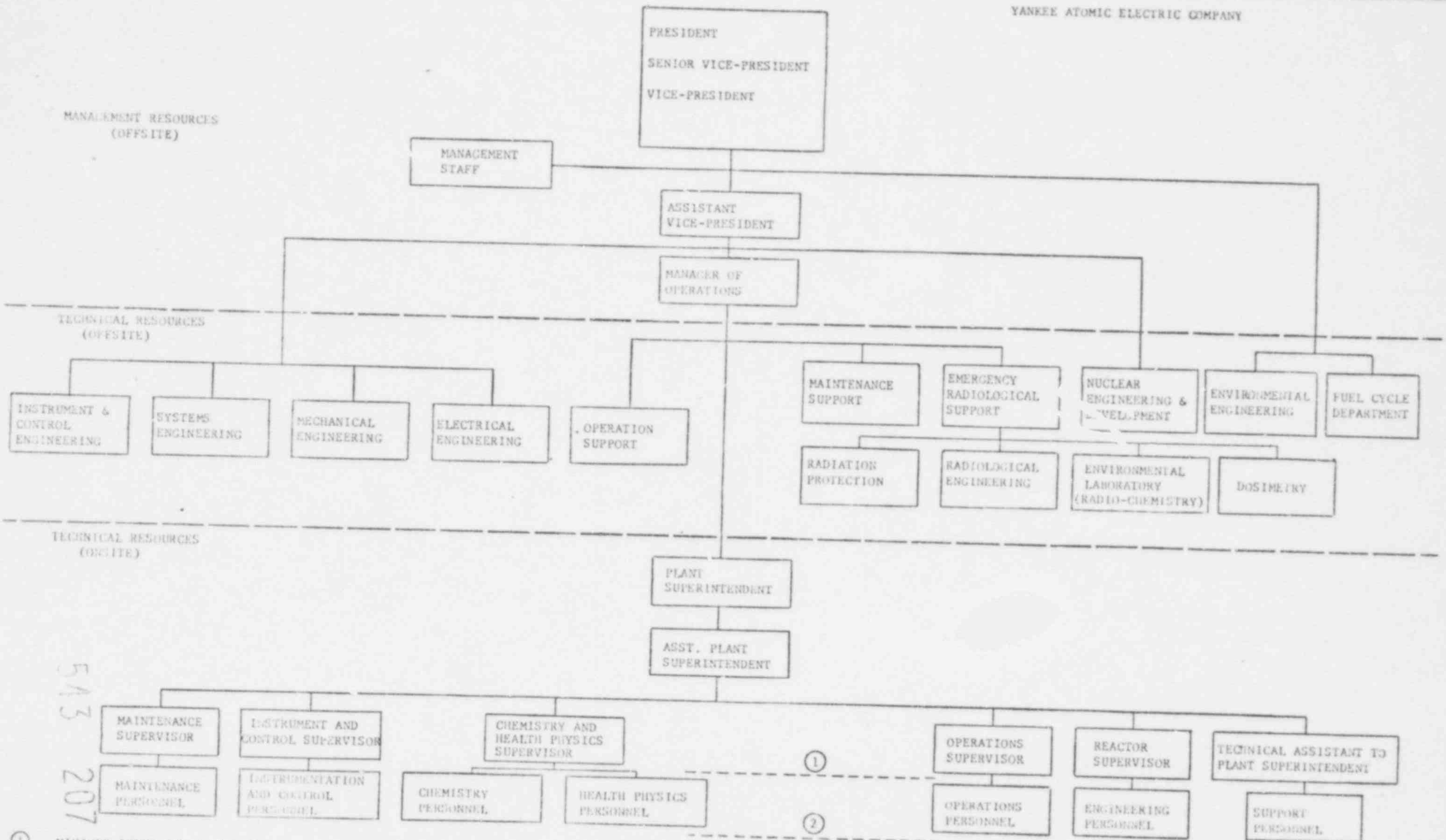
Very truly yours,

YANKEE ATOMIC ELECTRIC COMPANY

L. E. Minnick
President

ah
Attachment

YANKEE ATOMIC ELECTRIC COMPANY



543 207

(1) MANAGER LEVEL (ANSI N18.1)
(2) PROFESSIONAL-TECHNICAL LEVEL (ANSI N18.1)

EMERGENCY RESPONSE ORGANIZATION

July 1979

MANAGEMENT POSITIONS

1. President

A. Educational Background

BSME

B. Experience

(1) Nuclear (directly related)

25 years nuclear experience in all aspects of nuclear power plant research, design, construction, operation, and management. Was made a corporate officer in Yankee Atomic Electric Company in 1963, and was Vice President-engineering responsible for design, construction, start-up and operation of 2 PWR's and, BWR in New England. From 1974 to 1978 was Director of Nuclear Engineering and Operations at the Electric Power Research Institute. In 1978 returned to Yankee as President.

Has participated in a variety of Nuclear Industry Standards, Safety, and Advisory Committees. Is a registered Professional Engineer in Massachusetts and a Fellow of the American Nuclear Society.

(2) Other

Six earlier years as a utility engineer primarily in fossil fired electric power production.

2. Senior Vice-President

A. Educational Background

BSME

B. Experience

(1) Nuclear (directly related)

20 years nuclear experience in all phases of nuclear plant design, construction, startup and operation. Has held positions of Project Engineer for the design and construction of a large PWR. Responsible for pre-op testing and startup of a large PWR. Plant Superintendent of a Westinghouse PWR, Vice-President of Yankee Atomic Electric Company responsible for the Engineering and Operation of 2 PWR's and 1 BWR in New England. Professional Engineer in states of Massachusetts, New Hampshire, and California. Member American Nuclear Society. Serving as Vice-Chairman of Operations Sub-Committee of AIF Policy Committee on Follow-Up to TMI-2 Accident.

(2) Other

Twelve earlier years in fossil fired power production utility serving in engineering and supervisory capacities.

3. Vice-President

A. Educational Background

(1) BSME

(2) One year assignment at Argonne National Laboratory for work and training on the Experimental Boiling Water Reactor. While at Argonne took advanced math courses from the University of Illinois - Chicago Extension, and Reactor Theory and Reactor Control courses at the Argonne International School.

(3) Held reactor operator license and senior reactor operator license on a Westinghouse PWR.

B. Experience

(1) Nuclear (directly related)

22 years nuclear experience including positions as Plant Superintendent for a Westinghouse PWR, Manager of Operations for 2 Westinghouse PWR's, one C.E. PWR and one G.E. BWR. Vice President with overall responsibility for Engineering, Construction, Project Management and Quality Assurance.

(2) Other

Eight earlier years as a utility engineer in Instrument and Control supervision for a fossil fired electric power production company.

Registered Professional Engineer in the State of Maine, New Hampshire and Commonwealth of Massachusetts. Member of the American Nuclear Society, Reactor Operation Division, The American Society of Mechanical Engineers, and Past Chairman of ASME Section XI, In-Service Inspection of Nuclear Reactor Coolant Systems; Chairman of the Safety Committee on the Duties and Qualifications of Authorized Inspection Agencies, Inspectors and Specialized Engineers, and the Committee on Operations and Maintenance Requirements for Nuclear Power Plants. Member of the ASME Nuclear Power Codes and Standards Committee, and a former member of the Boiler and Pressure Vessel Committee, and the Policy Board, Codes and Standards.

Functions and Responsibilities For The Preceding Positions

1. Provide experienced executive level management in all disciplines of Yankee Atomic Electric Company.

2. Provide executive management of all communicative networks with Utility Executives, Board of Directors, Local, State and Federal Officials, Media Officials.

3. Provide executive management of all logistic support and total accident response direction and coordination.

4. Provide executive level direction of all engineering, operations, assessment, analytical and radiological support required to combat the emergency.

Authority:

Any of the individuals in the above group has the authority to allocate the entire resources of the Company, as required, to combat the emergency. This includes over 240 engineers and managers with over 2450 man years engineering experience, 1625 of which is direct nuclear experience.

4. Assistant Vice-President

A. Educational Background

(1) BS Chemical Engineering

(2) OL and SOL license training, obtaining a SOL license for a Westinghouse PWR

B. Experience

(1) Nuclear (directly related)

24 years nuclear experience, 12 of which are nuclear plant experience. Shift Supervisor responsible for reprocessing system operation at Dupont Savannah River Plant. Involved in design of APPR (SM-1 Prototype Nuclear Generating Facility) at Alco Products, Inc., Schenectady. Following assembly of SM-1 at Fort Belvoir, performed evaluation of chemistry and radio chemistry aspects of systems and laboratories during and after plant startup. Held positions as Manager of Plant Chemistry and Radiochemistry, Plant Superintendent for a Westinghouse PWR, Manager of Operations for a Westinghouse PWR, a C.E. PWR and a G.E. BWR, and Assistant Vice-President of Operations and Engineering for 2 PWR's and a BWR.

(2) Other

None

Functions and Responsibilities

1. Provide experienced senior management in the disciplines of Operations, Engineering, Nuclear Engineering, Chemistry and Radiochemistry.

2. Provide management of the communication network and logistic support between the Emergency Control Center, Company executives, all engineering disciplines of YNSD and Regulatory Agencies.

3. Provide senior management of the overall accident response coordination.

Authority:

The Assistant Vice-President has the authority to allocate the entire resources of Company engineering and operational disciplines.

5. Manager of Operations

A. Educational Background

(1) BSME

(2) OL and SOL training, obtaining a OL and SOL license for both a Westinghouse PWR and a Combustion Engineering PWR.

B. Experience

(1) Nuclear (directly related)

12 years of nuclear experience, 10 of which were nuclear plants, holding various positions including Plant Superintendent for a C.E. PWR and Manager of Operations for a Westinghouse PWR, a C.E. PWR and a G.E. BWR.

(2) Other

7 earlier years in various engineering assignments in electric utility and fossil fired power plants.

Functions and Responsibilities

1. Provide management at a senior level in Operations, Emergency Response, Maintenance, Communications Network and Logistics.

2. Provide coordination of the entire accident response effort.

3. Provide initial communications and establish communications network with the site Emergency Coordinator for flow of data and information to Company upper management and direction to the site through the Superintendent or Emergency Coordinator.

4. Provide management of the logistics required to combat the emergency.

5. Manage the Emergency Control Center and provide assistance personnel as required/requested to combat the conditions.

Authority:

The Manager of Operations has the authority to:

1. Activate the Emergency Control Center.

2. Initiate the Yankee Mutual Assistance Plan.

3. Dispatch support personnel and equipment to the location of the emergency.

4. Allocate the resources of the entire Company in the disciplines of Operations, Maintenance, Radiological Protection and Communications. Also has the authority to allocate the entire Company resources in the disciplines of Security and Fire Protection.

MANAGEMENT STAFF

The Management Staff has specialized duties and performs unique tasks tc assist Management in the accomplishment of its overall mission. An example of duties is Licensing that is responsible for coordination between the NRC and the Yankee Plants. Unique tasks include participation on National Codes and Standards Committees, representing Management on Industry Committees such as AIF, ANSI, EEI, etc., and coordination of the SEP review of the Yankee Rowe Plant.

TITLE	DEGREE	LICENSE	TOTAL EXP.	NUC. EXP.
Principal Eng.	BS-EE		28	20
ATO Vice Pres.	BS-Chem. Eng.	OL'60, SOL'63	29	25
ATO Vice Pres.	BA-Phys. MS, Mng. Sci. & Eng.	SOL'71	16	16
Licensing Eng.	BS-Sci. & Math		10	10
Jr. Engineer	BS-Mech. Eng. Tech.		5	5

7/16/79

OPERATIONS DEPARTMENT

The Operations Department provides integrated supervision of Plant activities through the Plant Superintendent. The Department provides the primary interface between the Plant and Yankee NSD and the USNRC on all matters related to the operation of and/or changes to the Plant as described in the FHSR and the Technical Specifications.

TITLE	DEGREE	LICENSE	TOTAL EXP.	NUC. EXP.
Manager	BS-ME	SOL'68-CY, 72-MY	19	19
Plant Startup Mgr.	BS-ME	SOL'71	13	13
Senior Engineer	------		36	21
Senior Engineer	------	OL'69, SOL'75	13	13
Senior Engineer	------	OL'60, SOL'64	37	20
Senior Engineer	------	OL'60	26	20
Senior Engineer	BS-Chem.		39	22
Senior Engineer	Assoc.-ME	OL'69, SOL'69	14	13
Senior Engineer	------	OL'69	32	22
Engineer	BS-ME, MS-ME		6	3
Engineer	BS-ME		10	7
Engineer	BS-ME		5	5
Engineer	BS-EE	SOL. Equiv.	5	5
Engineer	------		42	4
Jr. Engineer	BS-EE, MS-EE	SOL. Equiv.	1	1
Jr. Engineer	BS-ME		0	0
Jr. Engineer	BS-ME		6	3
Jr. Engineer	------		5	3
Security Advisor	BS-Naut.		34	7
Fire Prot. Coord.	BS-EE		14	11
Technician	Assoc.-Mach. Tool Design		2	2
Technician	------		7	2

ENVIRONMENTAL ENGINEERING DEPARTMENT

The Environmental Engineering Department is made up of four groups, each dedicated to a specific function of radiaton and non-radiation environmental protection as it applies to nuclear plant personnel and to the general public. The four groups are Radiation Protection, Radiological Engineering, Environmental Science, Environmental Laboratory and a sub-group to operate the Radition Dosimetry System for the Yankee Plants. The responsibilities of the groups are described below.

TITLE	DEGREE	TOTAL EXP.	NUC. EXP.
Manager	BS-Indust. Ed. (1)	22	21
Senior Engineer	BS-Physics, MS-NE, PhD-NE	9	9

RADIATION PROTECTION GROUP

The Radiation Protection Group provides expertise to continuously review the plant radiation protection program (radiation protection procedures and manuals, training, equipment, and dosimetry). The Group continuously reviews and maintains development of the emergency plan and its implementation. The Group coordinates the response of the local hospital in support of plant radiological medical requirements. The Group maintains the Yankee and NUSCo Plant Availability List program including maintenance of radiation exposure, medical and training records to meet Plant access requirements.

TITLE	DEGREE	TOTAL EXP.	NUC. EXP.
Manager	BS-NE, MS-Rad. Pr.,*	10	10
Senior Engineer	-----	30	12
Engineer	BS-NE, MS Rad. Pro.,*	5	5
Jr. Engineer	BS-Hlth. Phys.	4	4

* American Board of Health Physics Certificate

(1) Operating License for USNS Savannah 1962

RADIOLOGICAL ENGINEERING GROUP

The Radiological Engineering Group provides expertise in evaluating and assuring the safe design and operation of nuclear plant equipment as it applies to radiological effects. Analyses are performed of radiological effects under design basis accident and routine operational conditions. The Group provides collection, review, storage and analysis of meteorological data for reporting purposes, equipment design and application, and radiological release incidents.

TITLE	DEGREE	TOTAL EXP.	NUC. EXP.
Manager	BS-CE, MS-Rad. Bio.,*	15	13
Senior Engineer	BS-NE	8	8
Engineer	BS-NE, MS-Rd. Sci.	5	5
Engineer	AB-Psych., MSC-Rad, Hlth.	6	1
Engineer	BS-ME, MS-Env. Sci.	6	5
Engineer	BS-Phys,MS-Phys,MS-Rad Hlth	1	1
Engineer	BS-Phys, MS-Atmos. Sci.	2	2
Jr. Engineer	BS-Meteo.	6	2
Jr. Engineer	BS-Meteo., MS-Comp. Sci.	5	1
Jr. Engineer	BS-HP, MS-HP	10	1

* American Board of Health Physics Certificate

ENVIRONMENTAL SCIENCES GROUP

The Environmental Sciences Group provides technical services in the establishment and maintenance of environmental surveillance and study programs to assess the impact of plant operation on the environment.

TITLE	DEGREE	TOTAL EXP.	NUC. EXP.
Manager	BS-Math, MS-Ocean	8	7
Senior Engineer	BS-Biol., MS-Biol.	9	4
Senior Engin	BS-EE, MS-Oc. Eng.	12	4
Senior Engineer	BS-Biol., MS-Biol.	7	7
Engineer	BS-Biol.	10	6
Engineer	BS-Mar. Eng.	12	12
Engineer	BS-Met., MS-Ocean	12	5
Jr. Engineer	BS-Wildlife	2	2
Jr. Engineer	BS-Env. Hlth., MS-Bio. Stat.	12	1

ENVIRONMENTAL LABORATORY LAB

The Environmental Laboratory Group has general responsibility to provide analytical and technical support services related to offsite environmental and ecological programs for the plant. The services encompass radiological and non-radiological aspects of established monitoring and surveillance activities.

TITLE	DEGREE	TOTAL EXP.	NUC. EXP.
Manager	BS-Phys,MS-Rad Hlth,PhD-Rad	13	13
Senior Engineer	BS-Chem., MS-Chem.	10	5
Jr. Engineer	BA-Chem. Math	2	2
Jr. Engineer	BS-Chem.	2	2
Jr. Engineer	BS-Chem., Rad. Sci.	2	2
Jr. Engineer	BS-Biol., MS-Rad. Sci.	1	1
Jr. Engineer	BS-Env., MA-Env.	4	4
Technician	BA-Biol.	1	1

RADIATION DOSIMETRY SYSTEM

The Radiation Dosimetry System is responsible for Plant Supprt and development in the areas of radiation dosimetry, electronic data processing of radiation exposure records and radiation bioassay.

TITLE	DEGREE	TOTAL EXP.	NUC. EXP.
Senior Engineer	-------	12	7
Engineer	-------	14	14
Jr. Engineer	-------	7	7
Technician	-------	4	3
Technician	-------	2	2
Technician	-------	5	5

FUEL CYCLE DEPARTMENT

The Fuel Cycle Department is responsible for evaluating and assuring the safe design, procurement of nuclear fuel cycle materials, fabrication of and the efficient economic operation of nuclear fuel and other reactor core components and involvement in the design, licensing and fuel management.

TITLE	DEGREE	TOTAL EXP.	NUC. EXP.
Manager	BS-Chem. Eng.	20	20
Core Components:			
Senior Engineer	BS-Eng.	14	14
Engineer	BS-EE	9	9
Engineer	BS-Phys., MS-NE	15	11
Nuclear Materials:			
Manager	BBA	22	9
Senior Engineer	BS-Bio. Chem.	16	13
Senior Engineer	BS-NE, MBA	11	6
Senior Engineer	AB, AM, PhD-Geol.	6	6
Senior Engineer	BS, MS-Met., MBA	6	7
Engineer	BS-EE, MS-NE	7	7

NUCLEAR ENGINEERING AND DEVELOPMENT

The Nuclear Engineering and Development Department is responsible for providing the engineering and licensing work associated with transient and accident analysis, engineered safeguard system design, reactor fuel and core design and behavior, thermal-hydraulic analysis and reactor physics to assure that the nuclear power plant designs are safe and economical.

TITLE	DEGREE	LICENSE	TOTAL EXP.	NUC. EXP.
Manager	BS-NE, MS-NE, PhD-NE	OL-'71, SOL-'71 SOL-'69	11	11
Senior Engineer	BS-EE*		16	11
Senior Engineer	BS-ME*		12	12
Senior Engineer	BS-ME, MS-ME		10	8
Senior Engineer	BS-Phys., MS-NE		16	16
Senior Engineer	BS-ME, MS-NE-ME, PhD-NE		11	11
Senior Engineer	BS-Phys, MS-NE		11	11
Senior Engineer	BS-Eng. Phy, MS-NE-PhD-NE		19	19
Senior Engineer	BS-Fuel Technol.		15	11
Engineer	BS-ME, MS-ME		5	2
Engineer	BS-Phys., MS-Phys., MS-NE		10	6
Engineer	BS-NE, MS-NE		5	5
Engineer	BS-NE, MS-NE		6	6
Engineer	MS-NE		6	6
Engineer	BS-NE		5	5
Engineer	BS-ME, MS-NE		5	5
Engineer	BS-NE, NS-NE		3	3
Engineer	BS-NE, MBA		10	10
Engineer	BS-Math		2	2
Engineer	BS & MS-Pwr. Eng., MS-NE		6	6
Engineer	BS-E, MS-NE, DSc-NE		10	10
Engineer	BS, Eng. Phys. & NE, MS-NE		4	3
Engineer	BS-NE, MS-NE		2	2
Engineer	BS-NE, MS-NE		5	5
Engineer	BS-ME, MS-NE		12	10
Engineer	BS-Phys., MS-Nuc.		7	7
Jr. Engineer	BS-Phys.		1	1
Jr. Engineer	BS-NE		0	0
Jr. Engineer	BS-NE		0	0
Jr. Engineer	BS-ME		1	1
Jr. Engineer	BS-NE, MS-NE		1	1
Jr. Engineer	BS-ME, ME-ME		0	0

* More than six years nuclear power plant experience

MECHANICAL ENGINEERING GROUP

The Mechanical Engineering Group is responsible for providing the Plant with expertise in the related disciplines of mechanical, materials, structural, civil and NDE engineering. This reponsibility includes determination and/or verification of design conditions for piping, components and related hardware, preparation and/or review of engineering design calculations and selection and/or evaluation of materials for use in piping, components and related hardware.

TITLE	DEGREE	TOTAL EXP.	NUC. EXP.
Manager	BS-ME, MS-Nuc. Eng.,*	12	11
Senior Engineer	BS-AE	29	5
Senior Engineer	BS-CE, MS-CE,*	12	9
Senior Engineer	BS-Mettal.	11	7
Senior Engineer	BS-ME	10	9
Senior Engineer	BS-ME	12	10
Senior Engineer	BS-IE	22	3
Engineer	BS-CE, MS-CE	4	2
Engineer	BS-CE	5	5
Engineer	BS-ME	12	5
Engineer	BS-ME, MS-ME	6	6
Jr. Engineer	BS-ME	6	6
Jr. Engineer	BS-ME Tech.	3	3
Jr. Egineer	------	7	1
Jr. Engineer	BS-ME	2	2

* Professional Engineers License in one or more states

ELECTRICAL ENGINGEERING GROUP

The Electrical Engineering Group is responible for providing the Plant with expertise in the area of Electrical Engineering-Power as it applies to nuclear power stations. The responsibility includes preparation, reveiw and approval of calculations, specifications, systems descriptions, logic diagrams, bidder list, proposals and descriptive materials, economic and technical studies. Also included is a practical working knowledge of all national standards, regulatory criteria, regulatory guides and other requirements applicable to nuclear power plant electrical engineering.

TITLE	DEGREE	TOTAL EXP.	NUC. EXP.
Manager	B.Tech.-EE	17	14
Senior Engineer	BS-EE	16	11
Senior Engineer	BS-EE	10	3
Engineer	BS-EE, MS-EE	14	8
Engineer	BS-EE, MS-EE	10	1
Engineer	BS-EE, MS-EE	7	5
Engineer	BS-EE, ME-EPE	6	5

SYSTEMS ENGINEERING GROUP

The Systems Engineering Group is responsible for providing the Plant with the engineering and licensing expertise required for the proper design, operational performance and maintenance of nuclear power plant fluid systems and their components. This responsibility includes the determination of certain design bases of components and structures as they apply to regulatory requirements.

TITLE	DEGREE	LICENSE	TOTAL EXP.	NUC. EXP.
Manager	BS-Marine	S5W-63, SEG-64	27	17
Senior Engineer	BS-ME		13	10
Senior Engineer	Assoc. ME	OL'60, SOL'63	40	20
Senior Engineer	BS-NE	S1C-63	10	9
Engineer	BS-ME		5	5
Engineer	BS-NE		6	5
Engineer	Assoc.-ME		5	0
Engineer	BS-ME		7	7
Jr. Engineer	BS-ME		3	2

7/16/79

INSTRUMENTATION AND CONTROL ENGINEERING GROUP

The Instrumentation and Control Engineering Group is responsible for providing the Plant with expertise associated with the design and specifications of I&C systems to be factored into overall plant design. Also, to recommend or review modifications to plant systems as required to meet the design basis, and to evaluate plant protective and safety system design bases periodically to assure adherence to the latest licensing criteria and requirements.

TITLE	DEGREE	TOTAL EXP.	NUC. EXP.
Manager	BS-EE, MBA	21	17
Senior Engineer	BS-EE	30	11
Senior Engineer	BS-FE, MSEM	9	24
Engineer	BS-EE	10	5
Engineer	BS-ME, MSEM	8	6
Engineer	BS-EE, MBA	7	6
Engineer	BS-EE	5	5
Jr. Engineer	BS-EE	2	1

7/18/79

PLANT STAFF

PROFESSIONAL LEVEL TECHNICAL RESOURCES

The following tabulation lists those members of the Plant Staff that fall under ANSI N18.1 catagory of Managers in that they are assigned broad responsibilities for the direction of those Departments determined to be part of the Emergency Response Organization.

TITLE	EDUCATIONAL BACKGROUND	INITIAL LICENSE	TOTAL EXP.	NUC. EXP.
Plant Superintendent	3 years credit for BS-Chem. Eng. State of Mass. 1st Class Engineer's License	OL-1960 SOL-1963	39	20
	Fireman and Assistant Boiler Operator Worc. Co. Elec. 1948-1952 Operating Engineer Am. St. & Wire 1952-1954 Assistant Chief Operator Heywood Wakefield 1954-1959 Shift Supervisor Yankee August 1959 - July 1966 Assistant Chief Engineer Yankee July 1966 - October 1966 Operation Supervisor Yankee October 1966 - March 1969 Assistant Plant Superintendent Yankee March 1969 - July 1971 Plant Superintendent Yankee July 1971 - Present			
Asst. Superintendent	1 year credit for BS-NE	OL-1971 SOL-1975	17	17
	Reactor Control Supervisor U.S. Navy Oct. 1961 - April 1969 Technical Assistant Yankee May 1969 - July 1971 I&C Supervisor Yankee July 1971 - July 1973 TAPS Yankee July 1973 - December 1975 Asst. Plt. Supt. Yankee December 1975 - Present			
Operations Supervisor	1 year credit for BS-Pwr. Eng. State of Mass. 1st Class Engineer's License	OL-1960 SOL-1964	30	20
	Assistant Watch Engine[illegible]tern Mass. Elec. Prior to August 1959 Control Room Operator [illegible] August 1959 - May 1966 Shift Supervisor Connecticut Yankee May 1966 - March 1969 Operations Supervisor Yankee March 1969 - Present			
Maintenance Supervisor	1 year credit for BS-EE	-----	31	12
	1st Class Electrician NEPCO 1948 - February 1966 Plant Mechanic Yankee February 1966 - August 1967 Lead Plant Mechanic Yankee August 1967 - October 1969 Assistant Maint. Foreman Yankee October 1969 - December 1972 Maintenance Supervisor Yankee December 1972 - Present			

7/18/79

TITLE	EDUCATIONAL BACKGROUND	INITIAL LICENSE	TOTAL EXP.	NUC. EXP.
Reactor Engineer	BS-NE, MS-Phys. (NE)	OL-1974 SOL-1975	6	6
	Engineering Assistant Yankee August 1972 - August 1973 Technical Assistant Yankee August 1973 - February 1974 Plant Reactor Engineer Yankee February 1974 - Present			
I&C Supervisor	1 year credit for BA- Acct. 2 years credit for BS-Electronics	-----	18	18
	Control Technician Yankee June 1960 - January 1973 Technical Assistant Yankee January 1973 - July 1973 Instrument & Control Supv. Yankee July 1973 - Present			
Chem. & H.P. Super.	BA-Chem., MS-Chem.	-----	8	8
	Radiochemist Maine Yankee 1970 - November 1973 Chem. & H.P. Supv. Yankee November 1973 - Present			
Health Physicist	BS-Rad. Sci. MS-Rad. Sci. in 1980	-----	4	4
	Engineering Assistant Yankee October 1975 - June 1977 Plt Hlth. Physicist Yankee June 1977 - Present			
Technical Asst. to the Plant Superintendent (TAPS)	Assoc. - Industrial Electronics 2 year credit for BS-ME	OL-1974	16	11
	Reactor Operator US Navy May 1969 - October 1971 Engineer Assistant Yankee March 1972 - November 1973 Technical Assistant Yankee November 1973 - December 1975 TAPS Yankee December 1975 - Present			

7/18/79

The following tabulation lists those members of the Plant Staff that fall under ANSI N18.1 category of Professional-Technical in that they are responsible for supervising and performing technical services in the Emergency Response Organization. These members are listed under the Plant Departments to which they are assigned.

TITLE	EDUCATIONAL BACKGROUND	INITIAL LICENSE	TOTAL EXP.	NUC. EXP.
Operations Department				
Asst. Operations Supervisor	1 year credit for BS-Pwr. Eng. State of Mass. 1st Class Engineers License	OL-1960 SOL-1968	21	20
	Watch Engineer Mass. Electric Co. Prior to August 1959 Control Room Operator Yankee August 1959 - June 1967 Shift Supervisor Yankee June 1967 - May 1973 Assistant Operations Supervisor Yankee May 1973 - Present			
Maintenance Department				
Tech. Asst. Maint.	BA-Phys.	-----	7	5
	Assoc. Engineer NEPCO 1972 - June 1974 Engineering Assistant Yankee June 1974 - February 1976 Technical Assistant Yankee Februrary 1976 - Present			
Tech. Asst. Maint.	BS-Eng.	-----	7	7
	Technical Assistant Yankee NSD 1972 - April 1978 Technical Assistant Yankee April 1978 - Present			
Reactor Engineering Department				
Engineering Asst. Reactor Engr.	BS-ME	-----	6	6
	Assoc. Engineer B & W June 1973 - November 1975 Engineering Assistant Yankee November 1975 - Present			
Technical Asst. Reactor Engr.	BS-Chem. Eng.	OL-1978 SOL-1978	5	5
	Engineering Assistant Yankee January 1974 - October 1978 Technical Assistant Yankee October 1975 - Present			

TITLE	EDUCATIONAL BACKGROUND	INITIAL LICENSE	TOTAL EXP.	NUC. EXP.
Instrument and Control Department				
Technical Asst. I&C	BS-EE	-----	10	6
Instrument Technician Northeast Utilities 1973 - March 1979 Technical Assistant Yankee March 1979 - Present				
Engineering Asst. I&C	2 years credit for BA- Econ. 1 year credit for BS-EE	-----	9	8
Electrician NEPSCO 1970 - February 1976 Control Technican Yankee February 1976 - March 1979 Engineering Assistant Yankee March 1979 - Present				
Chemistry & Health Physics Department				
Chemistry				
Technical Asst. Chem.	BS-Chem. Eng.	-----	11	11
Reactor Operator US Navy 1968 - August 1974 Engineering Assistant Yankee August 1974 - July 1977 Technical Assistant Yankee July 1977 - Present				
Technical Asst. Chem.	BS-Chem.	-----	12	12
Radiochemist Yankee August 1967 - June 1973 Technical Assistant Yankee June 1973 - Present				
Technical Asst.	BS-Env. Sci.	-----	4	4
Engineering Assistant Yankee November 1975 - June 1979 Technical Assistant Yankee June 1979 - Present				
Health Physics				
Technical Asst. H.P.	BS-Rad. Hlth. MS Rad. Hlth.	-----	3	3
Engineering Assistant Yankee January 1977 - July 1979 Technical Assistant Yankee July 1979 - Present				

TITLE	EDUCATIONAL BACKGROUND	INITIAL LICENSE	TOTAL EXP.	NUC. EXP.
Engineering Asst. H.P.	BS-Rad. Hlth.	-----	3	3
	HP Technician VEPCO December 1976 - November 1977 Engineering Assistant Yankee November 1977 - Present			
TAPS (Technical Assistance to Plant Superintendent				
Technical Asst. TAPS	Assoc.-EE, 3 years credit for BE-ME		11	11
	Reactor Operator US Navy August 1968 - September 1974 Engineering Assistant Yankee September 1974 - March 1977 Technical Assistant Yankee March 1977 - Present			
Technical Asst. TAPS	-----	OL-1967 SOL-1978	20	19
	Auxiliary Operator Yankee June 1961 - July 1966 Control Room Operator Yankee July 1966 - May 1977 Engineering Assistant Yankee May 1977 - July 1978 Technical Assistant Yankee July 1978 - Present			
Technical Asst. TAPS	-----	OL-1970 SOL-1978	15	15
	Auxiliary Operator Yankee July 1963 - April 1970 Control Room Operator Yankee April 1970 - July 1978 Engineering Assistant Yankee July 1978 - Present			
Technical Asst. TAPS	2 years credit for BS-ME	OL-1974	15	15
	Reactor Operator US Navy 1963 - June 1973 Engineering Assistant Yankee June 1973 - June 1975 echnical Assistant Yankee June 1975 - Present			