Docket No.: 50-443

Applicant: Public Service Company of New Hampshire (PSNH)

Facility: Seabrook Station, Unit 1

Subject: Summary of Management Meeting between PSNH and the NRC

Held on August 9, 1984 in Bethesda, Maryland

On August 9, 1984, the NRC staff and applicant representatives met in Bethesda, Maryland to hear a presentation by the applicant on the status of Seabrook Station, Unit 1 engineering, construction, licensing, start-up, operations and quality assurance and on plans for transferring responsibility for construction and operation of Unit 1 to a managing agent. Attachment 1 is a copy of the slides the applicant presented. Attachment 2 is a list of attendees.

The applicant noted that steps are underway for transferring the responsibility for construction and operation of Unit 1 to a maraging agent, designated as New Hampshire Yankee (NHY). Transference will take place in three phases. Phase 1, which is presently in effect, has NHY as a division of PSNH. Phase 2 for which a schedule has yet to be established and for which regulatory matters have to be taken into consideration will establish NHY as a separate (from PSNH), licensed entity. Phase 3 for which a schedule has yet to be developed and for which regulatory matters have to be taken into consideration will establish NHY as a division of a "new" Yankee Atomic Electric Company. The applicant noted that although corporate changes are underway and the managing agent concept is being developed, the personnel responsible for construction and operation of Unit 1 are essentially the same and will remain essentially the same.

The applicant noted that since March 1984 a number of actions have been taken to improve control of the Seabrook Unit 1 construction. For instance, specific steps have been taken to improve management control and communications between engineering, construction, Q.A., etc. Also as part of this improvement in management control and communications, other action has been taken such as a reduction in contractors (9 thus far) and establishing one set of site procedures and one site QA program.

As of 7/9/84, and working on a reduced effort basis, the applicant provided the following milestones:

RCS Hydro - By March, 1985 Hot functional - By October, 1985 Core load - By April 1986 Commercial Operation - By August, 1986

The applicant stated that the week of August 6, 1984 is the first week where full site construction activity resumed. The applicant further stated that when the project is fully funded, (expected by the end of 1984), the Unit 1 workforce will be increased to about a peak of 4700 (3000 manual/1700 non-manual).

The applicant indicated that Unit 1 is about 80% complete and that the percent installation of construction commodities (eg. civil work, large bore pipe, large bore hanger, etc.) are preceding in the expected sequence except for small bore hangers. The applicant is providing special attention to resolving the problems in this area.

The staff noted the following items for the applicant's consideration:

- The staff will need documented details of the managing agent concept on a timely basis to determine what are the regulatory implications of this action.
- All regulatory items that must be complete for full power operation must be done by the time the license is issued at core load or exemptions will be needed.
- The integrated organization that is being implemented by the applicant should be documented in the FSAR as soon as possible.
- A fully working (ie. not just go through the motion) allegation program should be established now so that the applicant can deal with allegations in a timely fashion. Additional discussions with the staff about allegation programs may be warranted.
- ° A meeting with the staff to discuss experience level of operators.
- In light of the fact that the applicant is hard pressed to bring the project in on cost and within the new schedule, care must be exercised to prevent operations from accepting something less complete in the plant than that which dictates good operational practices.

Victor Nerses, Project Manager Licensing Branch No. 3 Division of Licensing

Enclosure: As stated

cc: See next page

VNerses/ch GWKnighto 8/15/84 8/15/84 Mr. Robert J. Harrison President and Chief Executive Officer Public Service Company of New Hampshire Post Office Box 330 Manchester, New Hampshire 03105

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Dr. Mauray Tye, President Sun Valley Association 209 Summer Street Haverhill, Massachusetts 01839

Robert A. Backus, Esq. O'Neil, Backus and Spielman 116 Lowell Street Manchester, New Hampshire 03105

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Resident Inspector Seabrook Nuclear Power Station c/o US Nuclear Regulatory Commission Post Office Box 700 Seabrook, New Hampshire 03874

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Mr. A. M. Ebner, Project Manager United Engineers & Constructors 30 South 17th Street Post Office Box 8223 Philadelphia, Pennsylvania 19101

Mr. Philip Ahrens, Esq. Assistant Attorney General State House, Station #6 Augusta, Maine 04333

Mr. Stephen D. Floyd
Public Service Company of
New Hampshire
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Manchester, New Hampshire 03105

Seacoast Anti-Pollution League Ms. Jane Doughty 5 Market Street Portsmouth, New Hampshire 03801

Mr. Diana P. Randall 70 Collins Street Seabrook, New Hampshire 03874 Mr. Calvin A. Canney, City Manager City Hall 126 Daniel Street Portsmouth, New Hampshire 03801

Ms. Letty Hett Town of Brentwood RFD Dalton Road Brentwood, New Hampshire 03833

Ms. Roberta C. Pevear Town of Hampton Falls, New Hampshire Drinkwater Road Hampton Falls, New Hampshire 03844

Ms. Sandra Gavutis Town of Kensington, New Hampshire RDF 1 East Kingston, New Hampshire 03827

Ms. Anne Verge, Chairman Board of Selectmen Town Hall South Hampton, New Hampshire 03842

Mr. Angie Machiros, Chairman Board of Selectmen for the Town of Newbury Newbury, Massachusetts 01950

Ms. Rosemary Cashman, Chairman Board of Selectmen Town of Amesbury Town Hall Amesbury, Massachusetts 01913

Honorable Richard E. Sullivan Mayor, City of Newburyport Office of the Mayor City Hall Newburyport, Massachusetts 01950

Mr. Donald E. Chick, Town Manager Town of Exeter 10 Front Street Exeter, New Hampshire 03823 Mr. Alfred V. Sargent, Chairman Board of Selectmen Town of Salisbury, MA 01950

Senator Gordon J. Humphrey U. S. Senate Washington, DC 20510 (Attn: Tom Burack)

Senator Gordan J. Humphrey 1 Pillsbury Street Concord, New Hampshire 03301 (Attn: Herb Boynton)

Mr. Owen B. Durgin, Chairman Durham Board of Selectmen Town of Durham Durham, New Hampshire 03824

Charles Cross, Esq. Shaines, Mardrigan and McEaschern 25 Maplewood Avenue Post Office Box 366 Portsmouth, NH 03801

Mr. Guy Chichester, Chaiman Rye Nuclear Intervention Committee c/o Rye Town Hall 10 Central Road Rye, New Hampshire 03870

Jane Spector
Federal Energy Regulatory
Commission
825 North Capital Street, NE
Room 8105
Washington, D. C. 20426

# NEW HAMPSHIRE YANKEE MANAGEMENT PRESENTATION

**AUGUST 9, 1984** 

New Hampshire Y A N K E E

# NEW HAMPSHIRE YANKEE MANAGEMENT PRESENTATION

Managing Agent

Project Overview

Engineering

Construction

Startup & Operations

Quality Assurance

E. A. BROWN

W. B. DERRICKSON

J. DeVINCENTIS

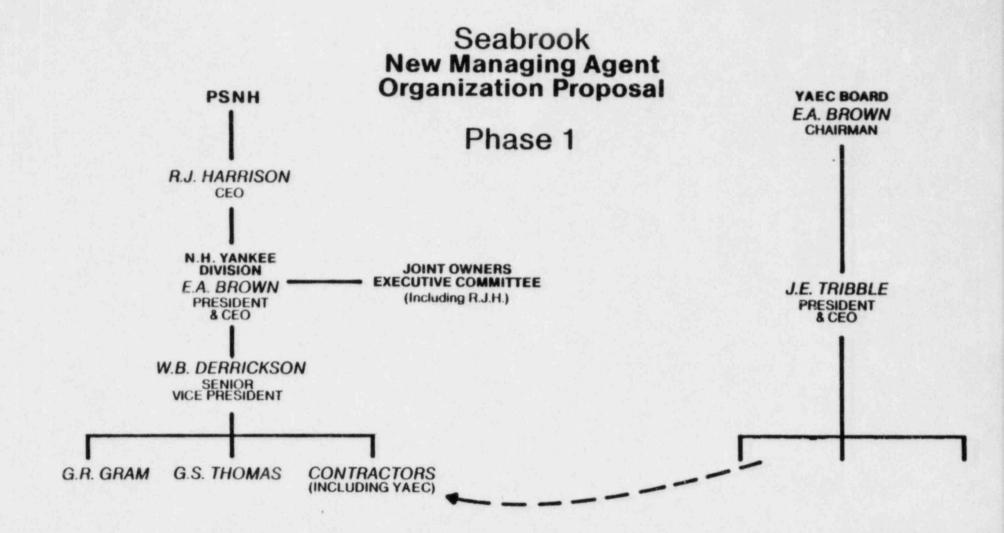
G. R. GRAM

G. S. THOMAS

G. F. McDONALD

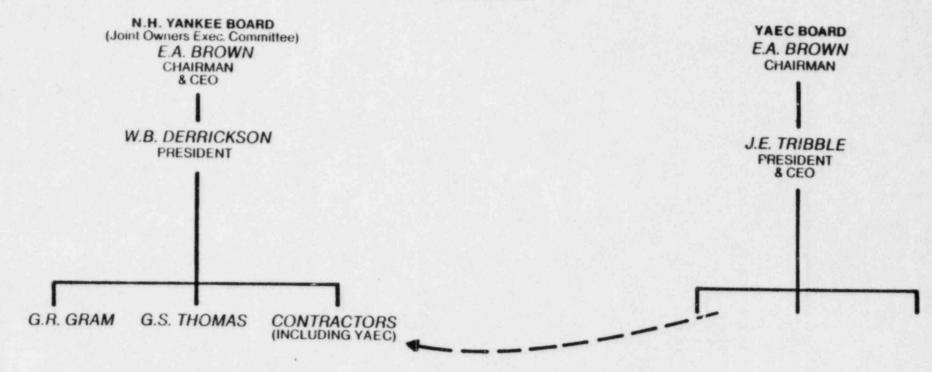
Managing Agent

E. A. BROWN



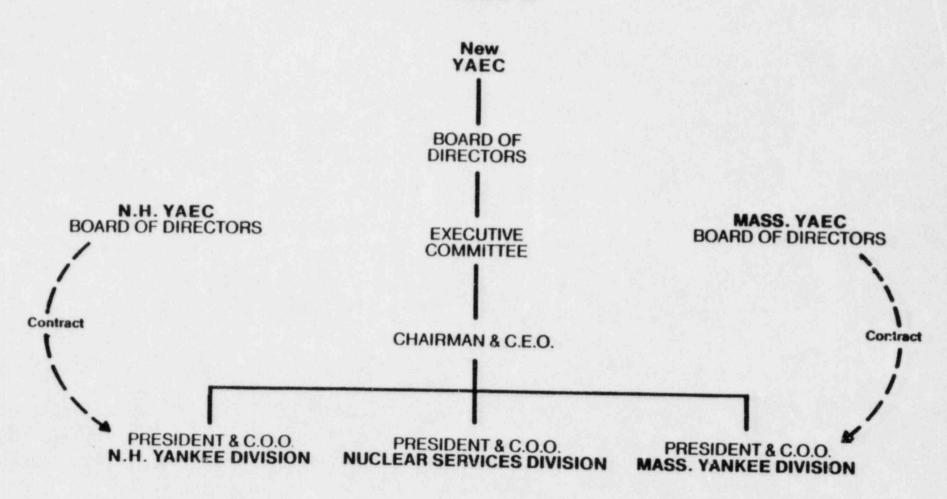
## Seabrook New Managing Agent Organization Proposal

Phase 2

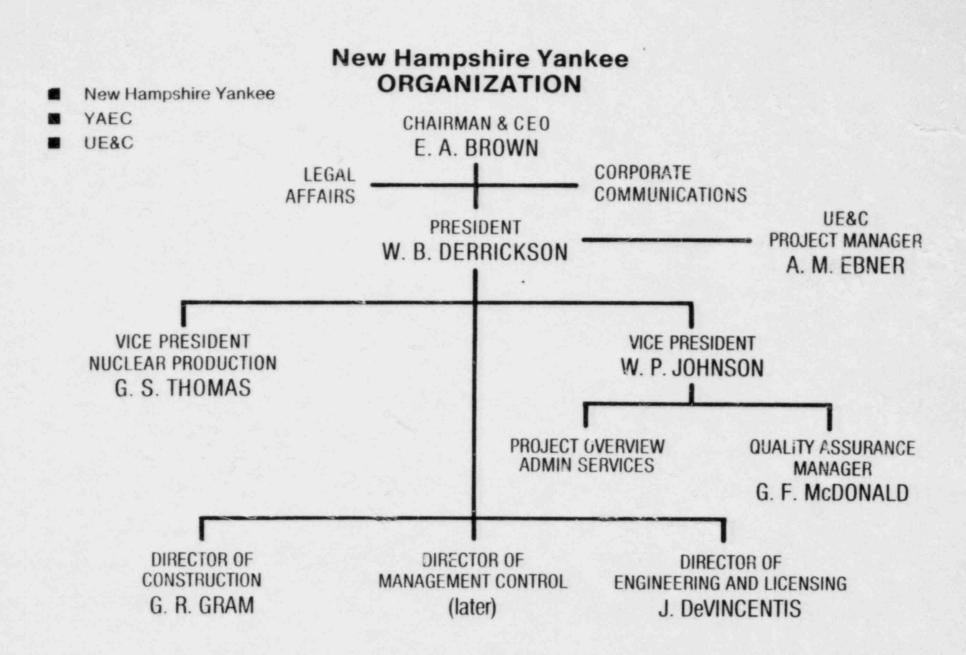


### Seabrook New Managing Agent Organization Proposal

Phase 3

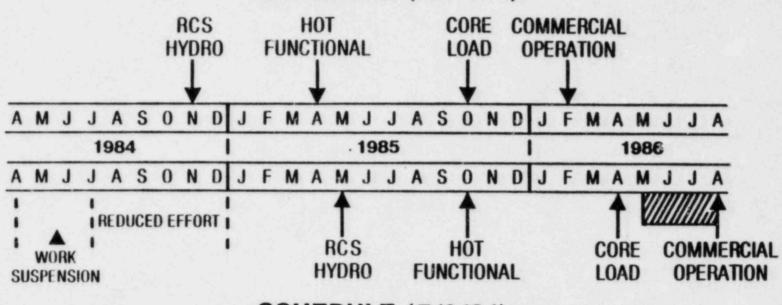


W. B. DERRICKSON



# SEABROOK STATION UNIT 1 and Common

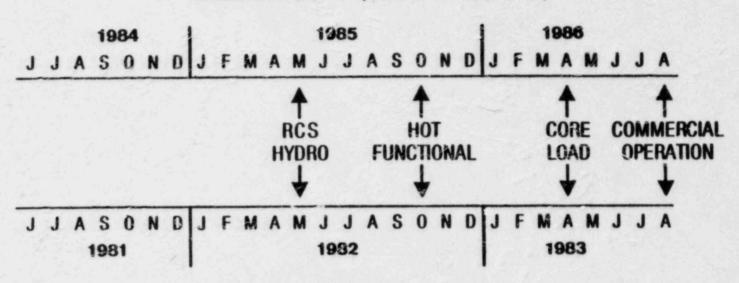
### **SCHEDULE** (4/16/84)



**SCHEDULE** (7/9/84)

# SEABROOK/ST.LUCIE Scheduie Comparison

Seabrook Unit 1 (Schedule 5/31/84)



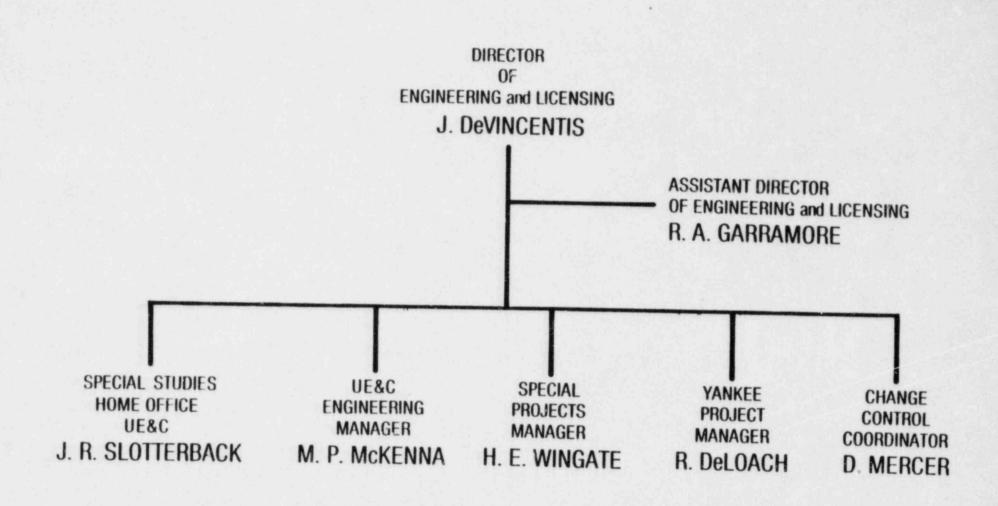
St. Lucie Unit 2 (Actual)

# **Engineering & Licensing**

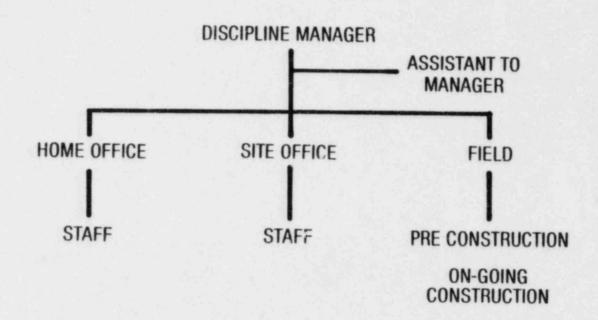
J. DeVINCENTIS

### **ORGANIZATION GOALS**

- Improve Communication
- Improve Accountability
- Simplify Administrative Procedures
- Improve Productivity



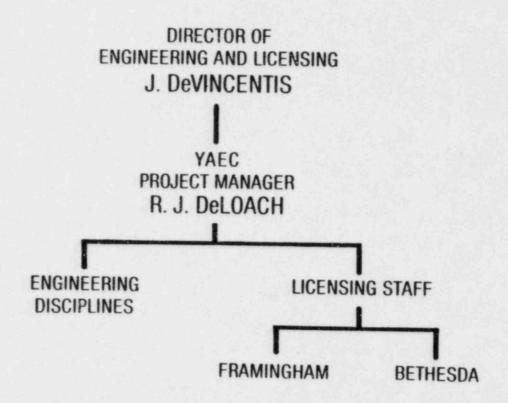
### TYPICAL DISCIPLINE



### MAJOR PROGRAMS

- Design Change Control
- As-Constructed Engineering Documentation
- Failure Modes Effects Analysis
- Analysis Of System Transients
- Cable Tray Supports/Bracing

### LICENSING ORGANIZATION



# LICENSING OVERVIEW

•	Operating License Application Docketed	10/81
•	Final Environmental Statement	12/82
•	Safety Evaluation Report	3/83
•	ACRS Report On Low Power Operation	4/83
•	ASLB Hearings On Technical Contentions	8/83

# NRC SUPPORT REQUIRED COMPLETION SCHEDULE

•	Review SER Outstanding Issues	4ат/84 - 4ат/85
•	NRR Site Audits	3at/85
•	Review Proposed Tech Specs	4от/85
•	Emergency Drill Participation/Appraisal	4at/85
•	ACRS Full Power Recommendation	4at/85
•	Operating License	1 oT/86

# SAFETY EVALUATION REPORT (SER)

# 19 OUTSTANDING ISSUES - FSAR

- 2 Resolved
- 9 NRC Review
- Applicant Pursuing (3 Generic Issues)

# INTEGRATED DESIGN INSPECTION (IDI)

- Report Received March 4, 1984

  - 127 Findings 12 Unresolved Items
  - 15 Observations
- Conclusion "The Overall Design Appeared To Be Adequately Controlled."
- Response Provided June 29, 1984
  - Identified 3 Minor Hardware Changes

## TMI ISSUE STATUS

- SER Outstanding Issue #8 TMI Action Plan Items
  - 7 Open
  - 4 Closed
  - 9 Confirmatory
- SER Outstanding Issue #16

Shift Technical Advisor (NRC)

SER Outstanding Issue #19

Control Room Design Review (NRC)

Applicant To Submit Status Report December 1984

#### APPENDIX R STATUS

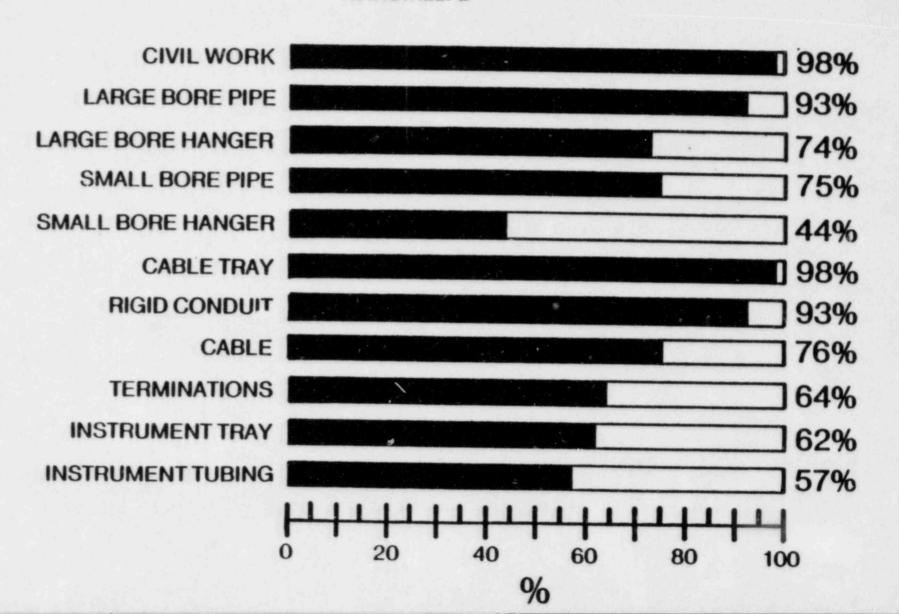
- SER Issued With No Major Outstanding Items
- NRC Regional Workshops Held April, 1984
- Preliminary Appendix R Report Update Discussed With NRC At 7/11/84 Meeting
- Formal Submittal Expected By 8/31/84

Construction

G. R. GRAM

Seabrook – Where It Stands

# SEABROOK STATION UNIT 1 and COMMON CONSTRUCTION COMMODITIES % INSTALLED



#### **PIPING AND HANGERS**

### PIPE

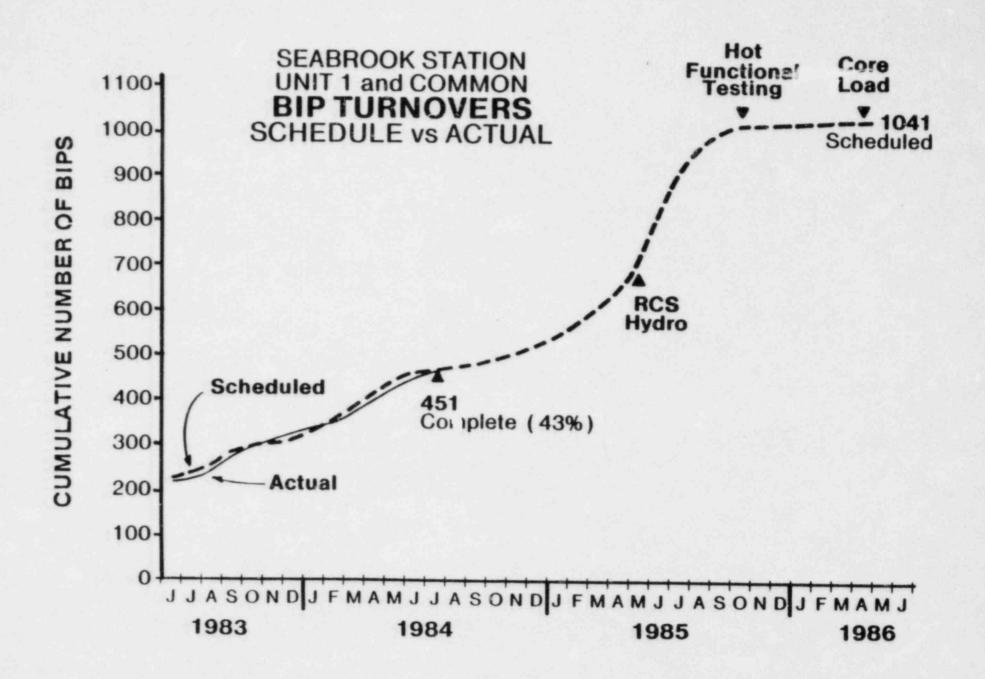
Large Bore Good Shape Small Bore OK

93% 75%

### HANGERS

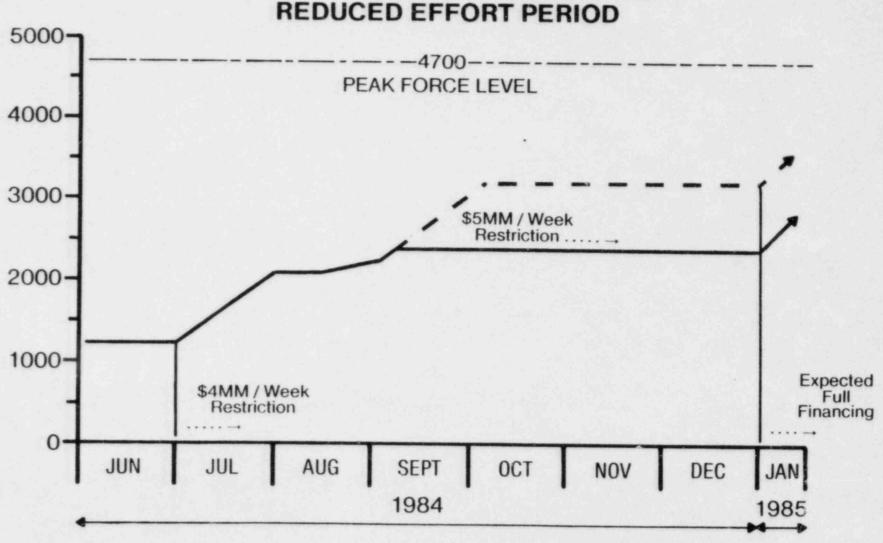
Areas Being Addressed

- EngineeringQuantity
- Status
- Documentation



#### SEABROOK STATION UNIT 1 AND COMMON

# PROJECT WORKFORCE DURING REDUCED EFFORT PERIOD



# PROJECTED PEAK MANPOWER

•	Manual	3000
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•	Non-Manual	1700

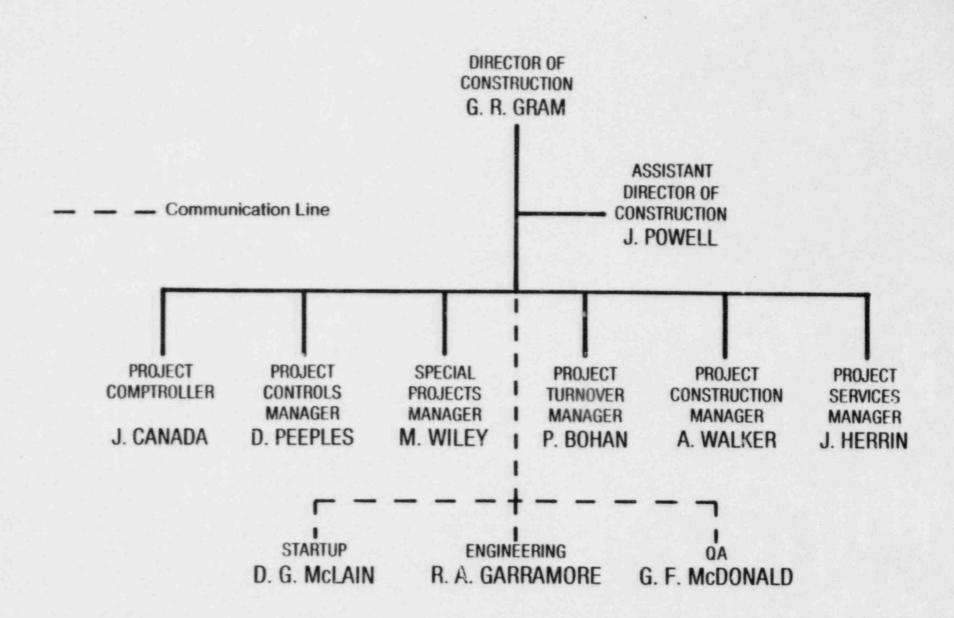
<sup>•</sup> Total 4700

#### HOW TO GET IT DONE

- Organization Goals
- Integrated Project Organization
- Direct Employment
- Fixed Cost Building Completion
- Other Management Actions

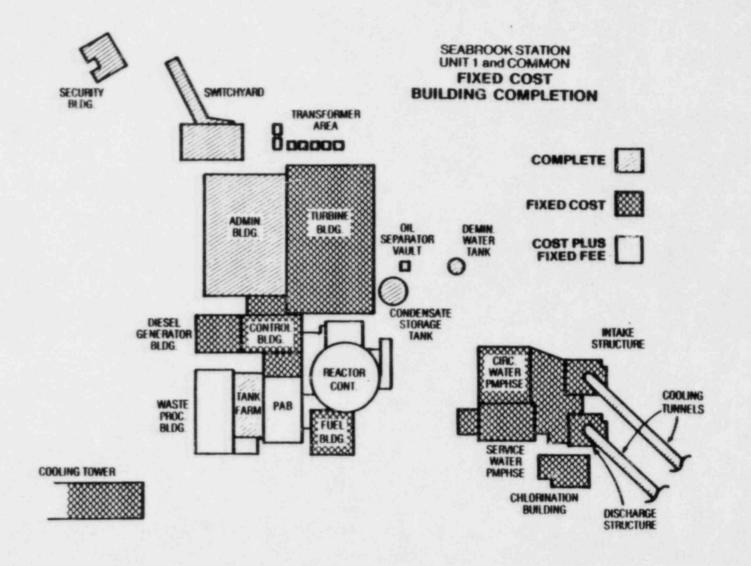
# ORGANIZATION GOALS

- Teamwork Concept
- Improve Communication
- Improve Accountability
- Grassroots Feedback



### DIRECT EMPLOYMENT

- 10% Reduction In Construction Non-Manual Force
- Improved Communication
- Improved Craft Utilization
- Fewer Interfaces
- Better Logistics
- Saves 10 Million Dollars

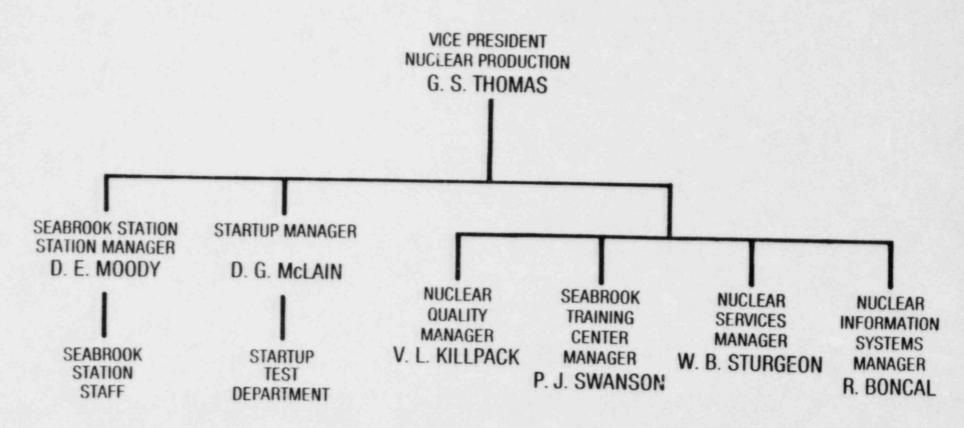


Startup & Operations

G. S. THOMAS

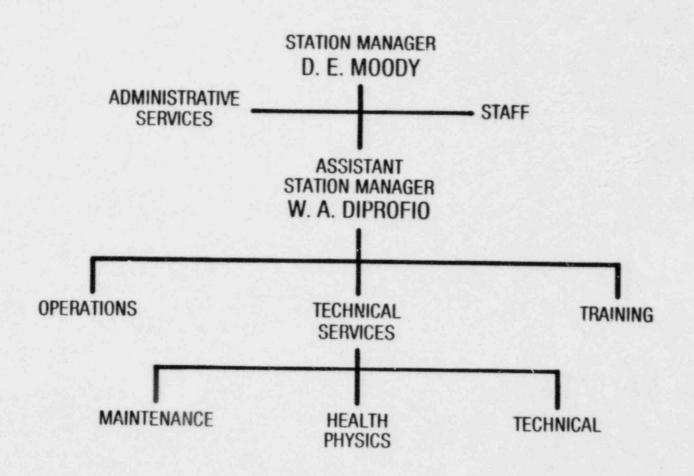
Organization

# New Hampshire Yankee NUCLEAR PRODUCTION ORGANIZATION



**NUCLEAR SUPPORT SERVICES** 

# New Hampshire Yankee SEABROOK STATION STAFF



Initial Startup Testing

# RESPONSIBILITIES DURING TESTING ACTIVITIES

		TEST PHASE			
	FUNCTION	1	2	3	4-6
4	Test Direction	•	•	•	•/0
	Operation	•	0	0	0
	Maintenance	•	•	0	0

• = STARTUP TEST DEPARTMENT

O = SEABROOK STATION STAFF

# Seabrook Station Unit 1 TEST PROCEDURE PREPARATION STATUS

General Tests	100%
Preop Tests	82%
Acceptance Tests	
Startup Tests	81%

Station Operation

## STAFFING AND EXPERIENCE LEVELS

STAFFING
Seabrook Station Staff
Nuclear Support Services

415 / 485
76 / 100

EXPERIENCE
Experience Levels Are More Than
Double Required Levels

# STAFF ED PERIENCE TO ANS 3.1 - 1978 REQUIREMENTS

POSITION #	YRS REQD S/B STAFF AVG YRS SS	TOTAL MYRS
Plant Mgr. 2	***************************************	42
Tech Svcs. & 4 Ops. Mgrs.	***************************************	72
Maint. Mgr. 2	***************************************	47
ProfTech 3	***************************************	50
ProfTech. & 6 **********************************		132
Supvr. w/Lic. 14 (S/S & USS)	***************************************	178
Sr. Tech & 133 Journeymen	***************************************	1331
Lic. Operator 12 SRO & RO)	<b>*************************************</b>	93
		1945

#### **OPERATOR LICENSING STATUS**

- Site Specific Simulator In Operation
- STA Training Complete
- Detailed Systems Training Complete
- Emergency Operating Procedures Validated Through WOG
- Cold-License Examinations Scheduled For 9/84, 12/84, 3/85

### TRAINING COMPLETION STATUS

Supervisory	. 71%
Electrical	
Mechanical	. 69%
Chemistry	
Health Physics	
I & C	
Auxiliary Operators	. 86%
OVERALL	. 74%

#### OTHER ACTIVITIES

Proposed Tech Specs Submitted to DOL

SORC Membership Assigned & Functioning

NSARC Membership Assigned & Functioning

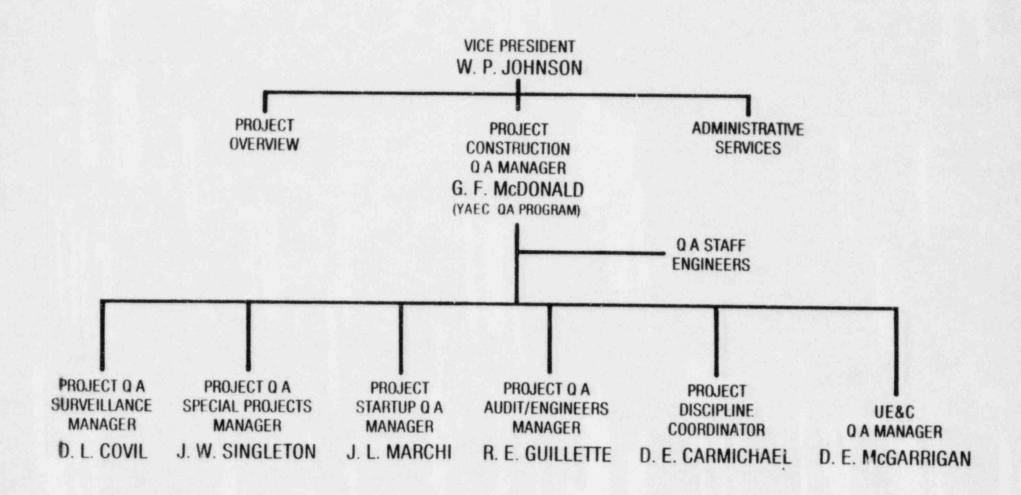
ISEG 4/5 Positions Staffed And Functioning

**Quality Assurance** 

G. F. McDONALD

## PROJECT QA/QC CONTROL LEVELS

- Level 1 Quality Control By Vendors, Contractors, And Constructors On The Activities They Perform
- Level 2 Surveillance Of Design, Fabrication And Construction Activities, Including Level 1 Quality Control
- Level 3 Audits By YAEC QA Department Of Activities Performed By Level 1 And 2 Organizations



### **QUALITY ASSURANCE PROGRAM**

- Integrated QA/QC Organization
- 10 CFR 50.55 (f) Implications
- Management Support of QA

### **EFFICIENCIES DUE TO REORGANIZATION**

- Interface
- Project Specific Procedures & Programs
- Project Trendings & Corrective Action
- Escalated Management Action Programs

## SALP & INTEGRATED ORGANIZATION

- Corrective Actions Committed
- Scope Of Work Changes
- Owners Verification Programs

# SEABROOK PROJECT EXTERNAL EVALUATION OF THE QUALITY ASSURANCE PROGRAM

- 1. NRC
  - IE Headquarters Construction Appraisal Team (CAT)
  - IE Headquarters Integrated Design Inspection (IDI)
  - Systematic Assessment Of Licensee Performance (SALP)
  - Regional And Resident Based Inspections
- 2. UTILITIES
  - Institute Of Nuclear Power Operations (INPO)
- 3. MANAGEMENT AUDIT
  - Audit by Management

# CONSTRUCTION APPRAISAL TEAM INSPECTION (CAT)

- Hardware And Documentation For The Construction Areas Reviewed Were Generally Found To Be In Accordance With Requirements And Commitments
- Concern Relative To Communication Between The Construction And Engineering Organizations
- Six Items Referred To NRC Region I For Follow-up
- Individual Items Identified Are Resolvable From A Technical Standpoint
- Management Attention Required To Assure That Future Site Activities Are Not Adversely Affected

#### **QUALITY ASSURANCE**

- Strong Management Support
- Favorable NRC Assessments
- Favorable Third Party Assessments
- Effective Program

# SEABROOK STATION QUALITY ASSURANCE FINDINGS

Management support of Quality Assurance continues to be a strong point in the construction of Seabrook Station. The hardware deficiencies that have been identified relate more to process control and design interpretation problems than they do to programmatic failures on the part of the installation contractors.

NRC Systematic Assessment of Licensee Performance 8/17/83

Audit and surveillance personnel are well qualified. Management is supportive of Q/A activities.

NRC Construction Assessment Team Inspection Report Dated, 1982

There are good working relationships between QA/QC personnel and their counterparts in other organizations, including the Nuclear Regulatory Commission resident inspector and authorized nuclear inspector, who speak very favorably of QA/QC and the overall program effectivness.

Management Analysis Company Report Dated, 1983

During this assessment, it was apparent that the overall QA/QC functions were performed in a manner that was conducive to controlling and improving the quality of the project. There is adequate freedom from cost and schedule pressures. QA/QC personnel received a cooperative attitude from project personnel.

Institute of Nuclear Power Operations Seabrook Self-Initiated Construction Project Evaluation Report, Nov., 1983

	Management is supportive of Quality Assurance.
	Strong site QA impleme tation is evident at the surveillance and audit levels.
	Licensee responsiveness to NRC initiatives/concerns is good.  Operator training reflects an advanced state of the art and utilizes
_	a site-specific simulator.
	The Operations Staff is being integrated early into the Pre-Operational Test Program.

Trip Report, Commissioner Victor Gilinsky, August 19, 1983

Quality record for Seabrook has been above industry standards.

Neilsen Wurster Group Inc. Report to N.E. Governors Conference Dated May 14, 1984 Summary

#### SUMMARY

- Steps Are Underway For Transition To New Hampshire Yankee
- Plant Is About 80% Complete
- 43% Of BIPs Turned Over
- Engineering In Good Shape
- Schedule Will Be Met Pending Financing Approvals

FUE EAGUE (
BOB Perlis

E.S. CHRISTENBURY

E.J. Reis

W.T. Russell

TED ANKRUM

L.I.L. BEACH

HOWARD WONG

ARREN EISENEWT

NRC/OPA NRC/OELD NRC/OELD NRC/OELD NRC/NRR/OHFS NRC/IE NRC/IE NRC/IE NRC/IE NRC/IE NRC/IE NRC/IE -1 . ....

manyment meeting with PSNH on Seabrook

V. NERSES H.R. Denton Tom MURLEY DICH STAROSTERKI EDWARD A . EROWN Robert J. HARRIS-WB Derrickson AM Ebner G.F. Mc DONALD JOHN DE VINCENTU ROBERT E SWEENEY DENNIS ADOMAitiE George 5 Nomes Ik R. Grain B. K. Singh Sukughton Robert Hammack Jane E. Spector Joseph R KANE Hena Bagchi Steven Kurdziel WARREN C. LYON

> PAUL FRITZSCHE L.P. Crocker Jon Souransky

NRR Administrator, Region I NRC

BURC Region I

Pies - New Hany shine lanker Day of 15 NH

Pres a CEO PSNH

Sr VP N.H Yankee DIV PSNH
Project Mgr - UEJC

Q.A. MGR YAEC

ENCIGY LUCASING DIROCTE

NH YANKLE BETHESOM OFFICE MGR.

WESTINGHOUSE WRD - SEABROOK PROJ MGR.

NH. YSW/EL-NRYNRR/DL/LB#3, Project manager

Lea Br. Chuy, DL, NRR Flectric Pates Funestingation, FERC

FERC, OGC/ Electric Rates
Ferc, OEPR/DIV. of Elect. Rate Regulation

FERC OEPRIDIVA Elec Att Regulation

International Energy Ass. Lim. RSB/NRC

STATE HOUSE STATION 112 AUGUSTA NRC, PHF9/LQB

Harmon, weiss a bordan

#### MEETING SUMMARY DISTRIBUTION

V. Nerses H. R. Denton T. Murley Rich Starostecki B. K. Singh G. W. Knighton Warren C. Lyon L. P. Croker Sue Gagaer Bob Perlis E. S. Christenbury E. J. Reis W. T. Russell Ted Ankrum A. Bill Beach Howard Wong Darrell Eisenhut

bcc: Applicant & Service List