

SEP 23 1985

Docket No.: 50-443

APPLICANT: Public Service Company of New Hampshire, et al.

FACILITY: Seabrook Station, Unit 1

SUBJECT: SUMMARY OF NRC CASELOAD FORECAST PANEL MEETING AND SITE VISIT
TO ASSESS CONSTRUCTION COMPLETION SCHEDULE

On September 4, 1985, the NRC staff met with the applicant to receive a briefing on construction plans and activities. On September 5, 1985, the staff toured the site and made first-hand observations of the status of the on-going construction programs. After the tour, the staff met with the applicant to receive further briefing on construction plans and activities and to receive additional clarification of information provided by the applicant on the previous day. Enclosure 1 is a list of attendees at the meeting. Enclosure 2 is the meeting notice and agenda. A handout prepared by the applicant and used as an outline for the September 4, 1985 briefing is attached in Enclosure 3.

The purpose of the meeting and tour was to provide the NRC staff an opportunity to make independent observations and conclusions to support the establishment of priorities for the limited personnel resources now available to perform required licensing tasks.

The applicant projection for Seabrook Unit 1 fuel load is June 30, 1986.

151

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

Enclosures:
As stated

cc: See next page

DL:LB#3
Vnerces/es
9/20/85

DL:LB#3
Wrighton
9/20/85

8509300514 850923
PDR ADOCK 05000443
A PDR

Mr. Robert J. Harrison
Public Service Company of New Hampshire

Seabrook Nuclear Power Station

cc:

Thomas Dignan, Esq.
John A. Ritscher, Esq.
Ropes and Gray
225 Franklin Street
Boston, Massachusetts 02110

E. Tupper Kinder, Esq.
G. Dana Bisbee, Esq.
Assistant Attorney General
Office of Attorney General
208 State House Annex
Concord, New Hampshire 03301

Mr. Bruce B. Beckley, Project Manager
Public Service Company of New Hampshire
Post Office Box 330
Manchester, New Hampshire 03105

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

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

Mr. John DeVincentis, Director
Engineering and Licensing
Yankee Atomic Electric Company
1671 Worcester Road
Framingham, Massachusetts 01701

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

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

Ms. Beverly A. Hollingworth
7 A Street
Hampton Beach, New Hampshire 03842

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

William S. Jordan, III
Diane Curran
Harmon, Weiss & Jordan
20001 S Street, NW
Suite 430
Washington, DC 20009

Mr. Warren Hall
Public Service Company of
New Hampshire
Post Office Box 330
Seabrook, New Hampshire 03874

Jo Ann Shotwell, Esq.
Office of the Assistant Attorney General
Environmental Protection Division
One Ashburton Place
Boston, Massachusetts 02108

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

D. Pierre G. Cameron, Jr., Esq.
General Counsel
Public Service Company of New Hampshire
Post Office Box 330
Manchester, New Hampshire 03105

Mr. Diana P. Randall
70 Collins Street
Seabrook, New Hampshire 03874

Regional Administrator, Region I
U.S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, Pennsylvania 19406

Public Service Company of
New Hampshire

- 2 -

Seabrook Nuclear Power Station

cc:

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

Chairman, Board of Selectmen
Town Hall
South Hampton, New Hampshire 03827

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

Ms. 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. William B. Derrickson
Senior Vice President
Public Service Company of
New Hampshire
Post Office Box 700, Route 1
Seabrook, New Hampshire 03874

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

Mr. R. Sweeney
New Hampshire Yankee Division
Public Service of New Hampshire
Company
7910 Woodmont Avenue
Bethesda, Maryland 20814

Seabrook Caseload Forecast
September 9/4

V. NERSES
A. CERNE
G. W. Knighton
W. B. Thompson
JOHN DE VINCENTIS
David A. Maidrand
Lloyd J. Prosser
Dennis G. McLain
DONALD E. MOODY
George R. Gram
G. F. McDONALD
George S. Thomas
John G. Tefft
OMAR C. PECK JR
STEVEN L. PRIBL
C. MATTHEW WILEY
ROBERT E. SWEENEY
BILL SANCHEZ

NRC/ARR/DL/LB#3	Proj. Mgr.
NRC: REGION I	Sr. Res Insp
NRC/NRK/DL/LB#3	Ch. LB3
NHY	Dir. Encl & Lic
YN50	Asst Proj Mgr.
NHY	Startup Manager
NHY	STATION MANAGER
NHY	Dir. of Construction
NHY	CONST. MGR.
NHY	IP Admin. Asst.
NHY	STARTUP PROJECT ENGINEER
UE&C	SUPERV. P&S
UE&C	SUPERV. SENIOR ANALYSIS
NHY	OWNER'S CONS. DEPT. MGR
NHY	BETHESDA OFFICE
NHY	ENGINEER, LICENSING

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

Seabrook

Mr. Robert J. Harrison
President and Chief Executive Officer
Public Service Company of New Hampshire
Post Office Box 330
Manchester, New Hampshire 03105

Thomas Dignan, Esq.
John A. Ritscher, Esq.
Ropes and Gray
225 Franklin Street
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Office of the Assistant Attorney General
Environmental Protection Division
One Ashburton Place
Boston, Massachusetts 02108

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General Counsel
Public Service Company of New Hampshire
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Manchester, New Hampshire 03105

Regional Administrator - Region I
U.S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, Pennsylvania 19406

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Office of Attorney General
208 State House Annex
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SEABROOK

Caseload Forecast Agenda

1. Overview of project construction and preoperational testing schedule, including progress and major milestones completed, current problems and any anticipated problem areas that may impact the current projected fuel load date. (Include impact because of the inability to achieve full funding by January 1985 and thereafter.)
2. Detailed review and current status of design and engineering effort (by major discipline), including any potential problems that may arise from necessary rework. (Include impact of SARS changes and status of cable tray bracing and support changes.)
3. Detailed review and current status of procurement activities, including valves, pipe, instruments, cable, major components, spare parts, etc.
4. Actual and proposed craft work force (by major craft), craft availability, productivity, potential labor negotiations and problems.
5. Detailed review and current status of all large and small bore pipe hangers, restraints, snubbers, etc., including design, rework, procurement, fabrication, delivery and installation. (Discuss impact of approval/non-approval of proposal to waive ASME code stamping of Class 2 and 3 NF supports.)
6. Detailed review of project schedule identifying critical path items, near critical items, amount of float for various activities, the current critical path to fuel loading, methods of implementation of corrective action for any activities of negative float, and provisions for contingencies. The estimated project percent complete as well as the method used as of June 15, 1985.
7. Detailed review and current status of bulk quantities, including current estimated quantities, quantities installed to date, quantities scheduled to date, current percent complete for each, actual versus forecast installation rates, in cubic yards/mo., linear feet/mo., or number/mo., and basis for figures.
 - (a) concrete (CY)
 - (b) Process Pipe (LF)
 - Large Bore Pipe (2 1/2" and larger)
 - Small Bore Pipe (2" and smaller)
 - (c) Yard Pipe (LF)
 - (d) Large Bore Pipe Hangers, Restraints, Snubbers (ea)
 - (e) Small Bore Pipe Hangers, Restraints (ea)
 - (f) Cable Tray (LF)

- (g) Total Conduit (LF)
- (h) Total Exposed Metal Conduit (LF)
- (i) Cable (LF)
 - Power
 - Control
 - Security
 - Instrumentation
 - Plant Lighting
- (j) Terminations (ea)
 - Power
 - Control
 - Security
 - Instrumentation
 - Plant Lighting
- (k) Electrical Circuits (ea)
 - Power
 - Control
 - Security
- (l) Instrumentation (ea)

8. Detailed review and current status of preparation of preop and acceptance test procedures, integration of preop and acceptance test activities with construction schedule, system turnover schedule identifying each system and status, preop and acceptance tests schedule identifying each test and status, current and proposed preop and acceptance tests program manpower.

- (a) Total number of procedures required for fuel load.
- (b) Number of draft procedures not started.
- (c) Number of draft procedures being written.
- (d) Number of procedures approved.
- (e) Number of procedures in review.
- (f) Total number of preop and acceptance test required for fuel load identifying each.
- (g) Number of preop and acceptance test completed identifying each.
- (h) Number of preop and acceptance tests currently in progress identifying each and status.
- (i) Number of systems and/or subsystems turned over to start-up identifying each.
- (k) Number of systems turned over to Operations Group, identifying each system and the outstanding open items for each system.
- (k) Number of retest expected, if any, identifying each retest and the cause for retest.

9. Detailed discussion of potential schedular influence due to changes attributed to NUREG-0737 and other recent licensing requirements.

10. Discussions of schedular impact, if any, regarding potential deficiencies reported in accordance with 10 CFR 50.55(e).
11. Overview of current construction and startup management organization showing interfaces between the two. (Discuss status of BIP turnover schedule with particular emphasis on potential adverse impact on schedule of I+C and HVAC system turnover delays).
12. Detailed review and current status of design, engineering and construction effort including quantities, work-off rates and completion schedule for:
 - (a) ATWS design changes
 - (b) High energy line break (HELB)
 - (c) Pipe stress (as-built) analysis
 - (d) N-stamp certification program
 - (e) Updating drawings and specifications to as-built conditions
 - (f) Environmental qualification of safety-related equipment
 - (g) Seismic qualification of safety-related equipment
 - (h) Radiation Monitoring System
 - (i) Solid waste handling system
 - (j) HVAC Systems
13. Detailed review of room/area turnover schedule and status. (Discuss impact of lump-sum work in specific buildings -- eg: diesel generator, cooling tower, et. al.)
14. Review of open punch list items by category (hardware/paper work) identifying each and the work-off rates vs add on-rate. (Provide discussion of Project Completion System for major open items and the overall trend for open items on the Imcomplete Items List).
15. Discuss status of USNRC Reg. Guide 1.97 qualification and QA Program
16. Detailed review and discussion of work remaining in containment including quantities, installation rates and schedules for completion.
17. Detailed review and current status of power accession testing procedures and operational procedures.
 - a. Power accession test procedures including safety-related and nonsafety-related.
 1. Numbers required.
 2. Numbers not started
 3. Numbers in preparation and approval process
 4. Numbers approved

- b. Operating procedures required for fuel loading; including station administrative, station operational, surveillance (e.g. technical specification), maintenance and emergency procedures.
 - 1. Numbers required
 - 2. Numbers not started
 - 3. Numbers in preparation and approval process
 - 4. Numbers approved
- 18. Detailed review and current status of permanent station and support staffing, training and licensing.
 - a. Staffing for Unit 1 operation, including presently employed, projected and authorized for each group reporting to the Vice President, Nuclear Production (Reference FSAR Fig. 13.1-1).
 - b. Staffing of Unit 1 station organization including presently employed contracted, projected, and authorized for each organization subgroup (Reference FSAR Fig. 13.1-5).
 - c. Training program, outstanding training courses required prior to fuel load, identify job titles, numbers of personnel, and projected completion.
 - d. Operator and senior operator licenses presently onsite, contracted, projected, and required for fuel loading.
- 19. Site tour and observation of construction activities.
- 20. Discussion of the status of the as-engineered/as-constructed verification programs being conducted as part of the ASME Completion Program (eg Bulletin 79-14 stress analyses) and other construction completion programs (eg: beam verification, TP-8, TP-10)

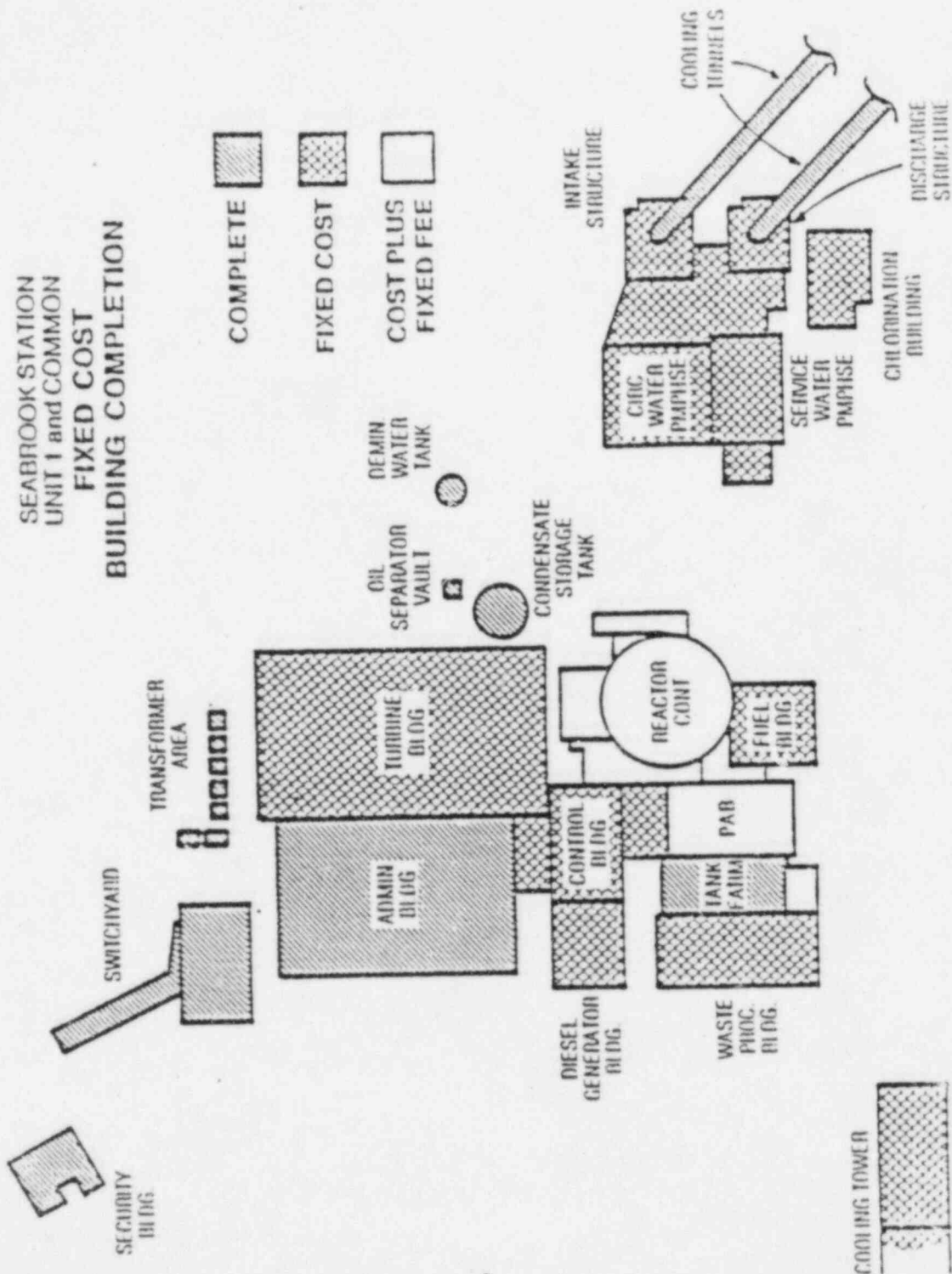
Project Status
Seabrook Station Unit 1
For The
NRC Caseload Forecast
September 4, 1985

Highlights

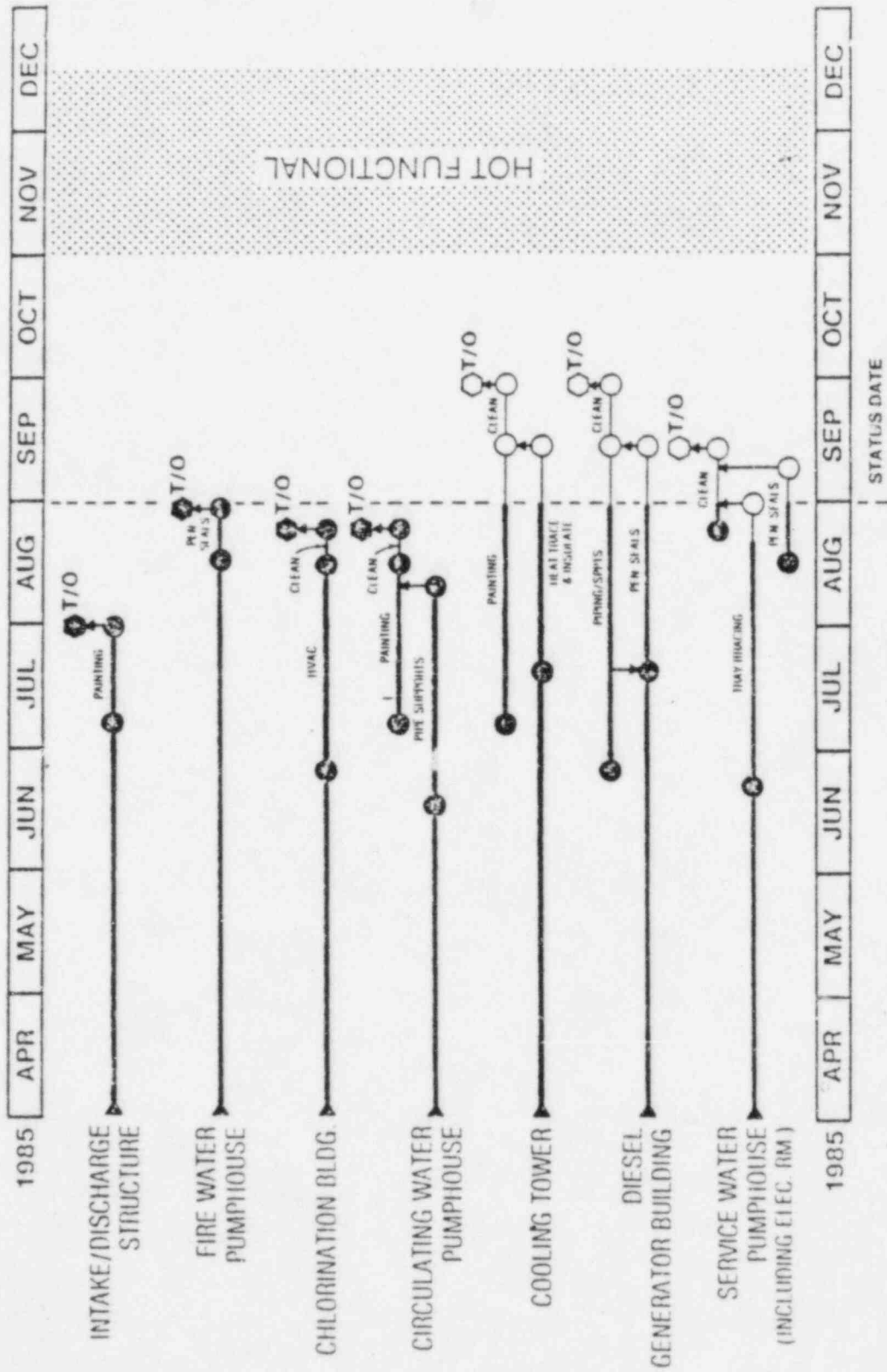
- Project On Schedule And Under Budget
 - Secondary Hydro Complete
 - Cold Hydro Completed 3 Weeks Ahead Of Schedule
 - ASME Piping Installation Complete
 - 35 Operators Licensed
 - Circulating Water System Test In Progress
 - Approximately 270 BIPs Turned Over In Last Year
 - Essentially On Schedule For June 30, 1986 Core Load
 - Buildings Essentially Complete Include:
 - Chlorination Building
 - Fire Pump House
 - Intake/Discharge Structures
 - Circulating Water Pump House
 - Cooling Tower
 - Diesel Generator Building
-

SEABROOK STATION
UNIT 1 and COMMON

FIXED COST
BUILDING COMPLETION



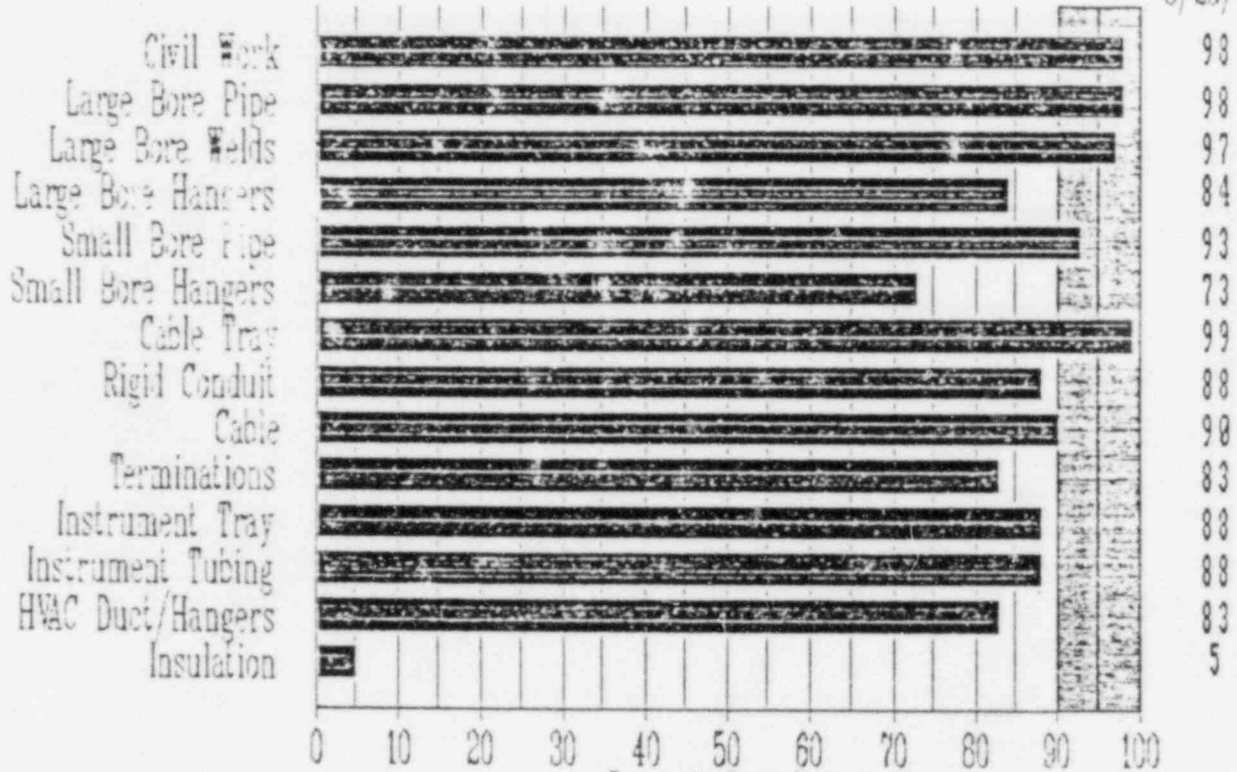
SEABROOK STATION UNIT 1 and COMMON BUILDING CLOSEOUTS



Construction Commodities

Seabrook Station Unit 1 & Common

Percent
8/25/85

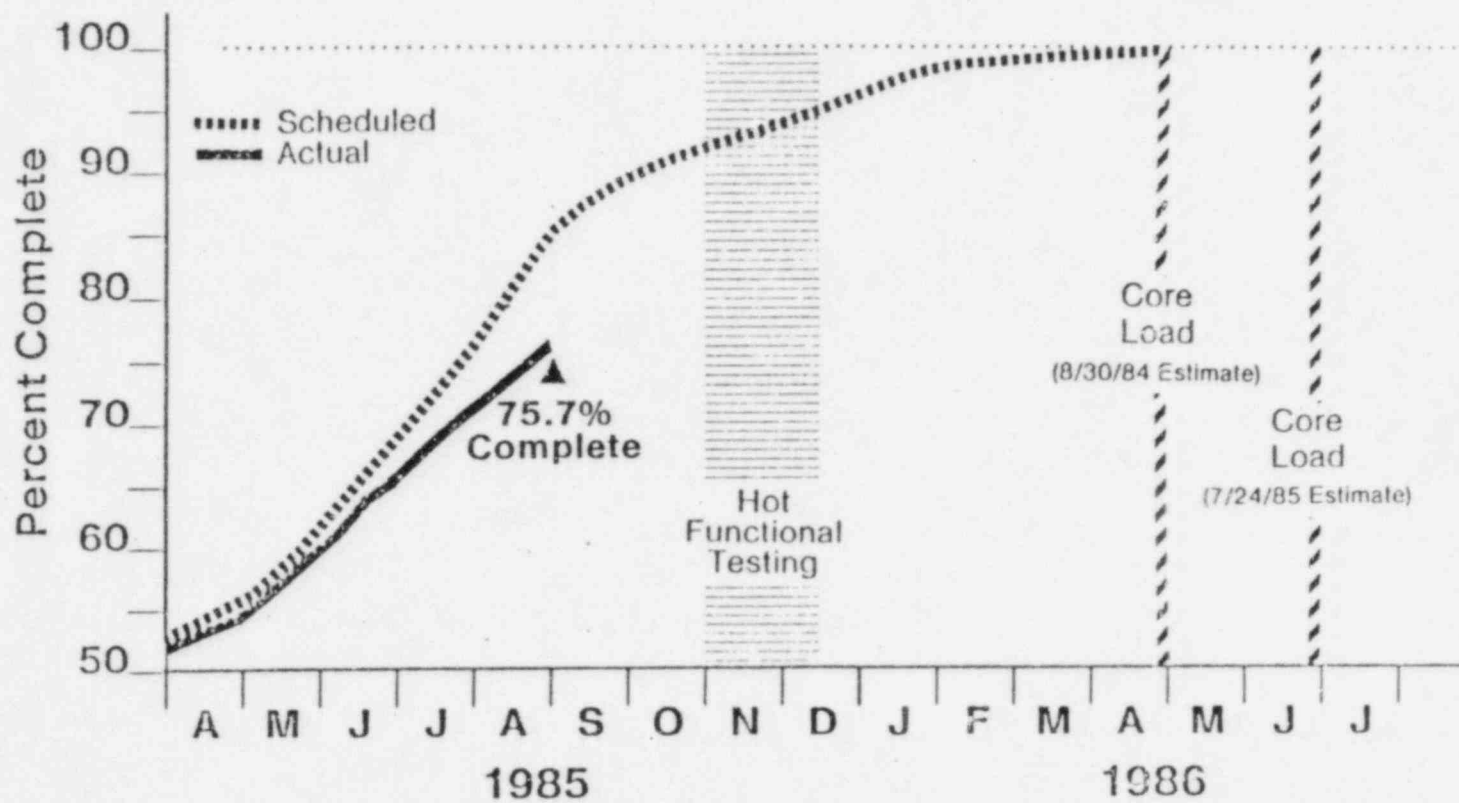


BASIS: 7/85 Target Budget Update

Not Including Lump Sum Scope

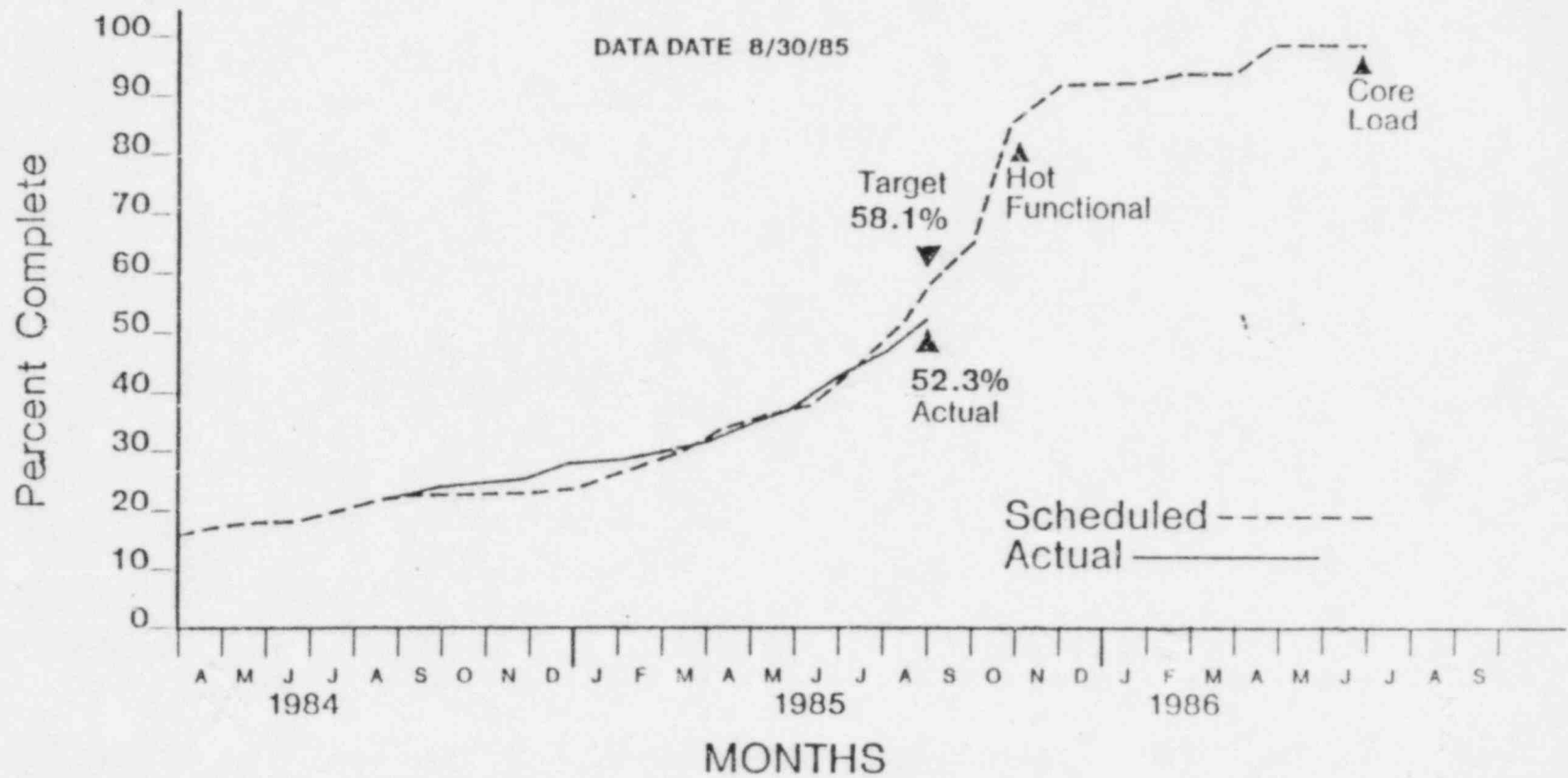
Seabrook Unit 1 & Common BIP TURNOVERS

Data Through 8/30/85

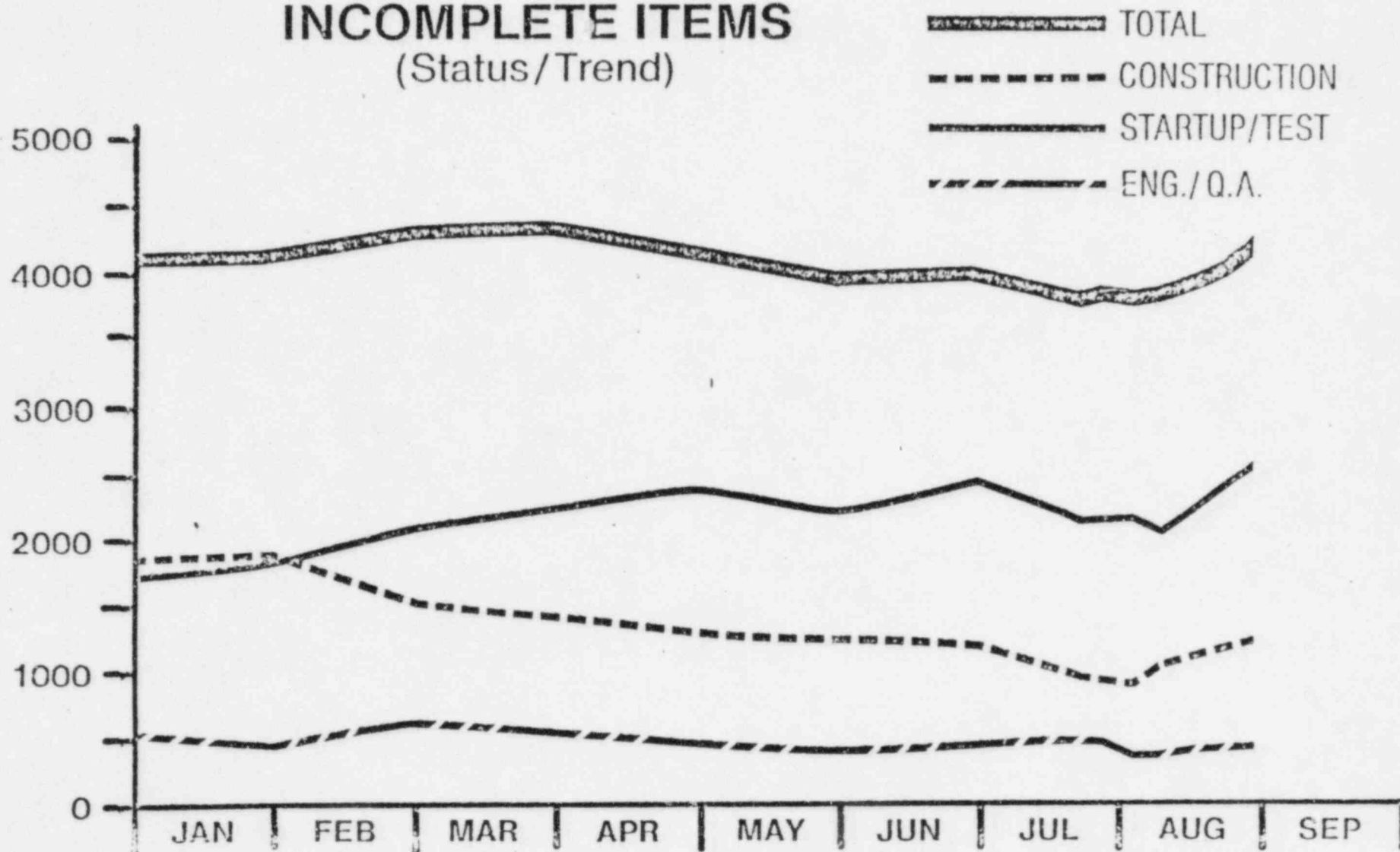


Seabrook Station Unit 1 and Common

Phase 1 Tests Schedule vs Actual



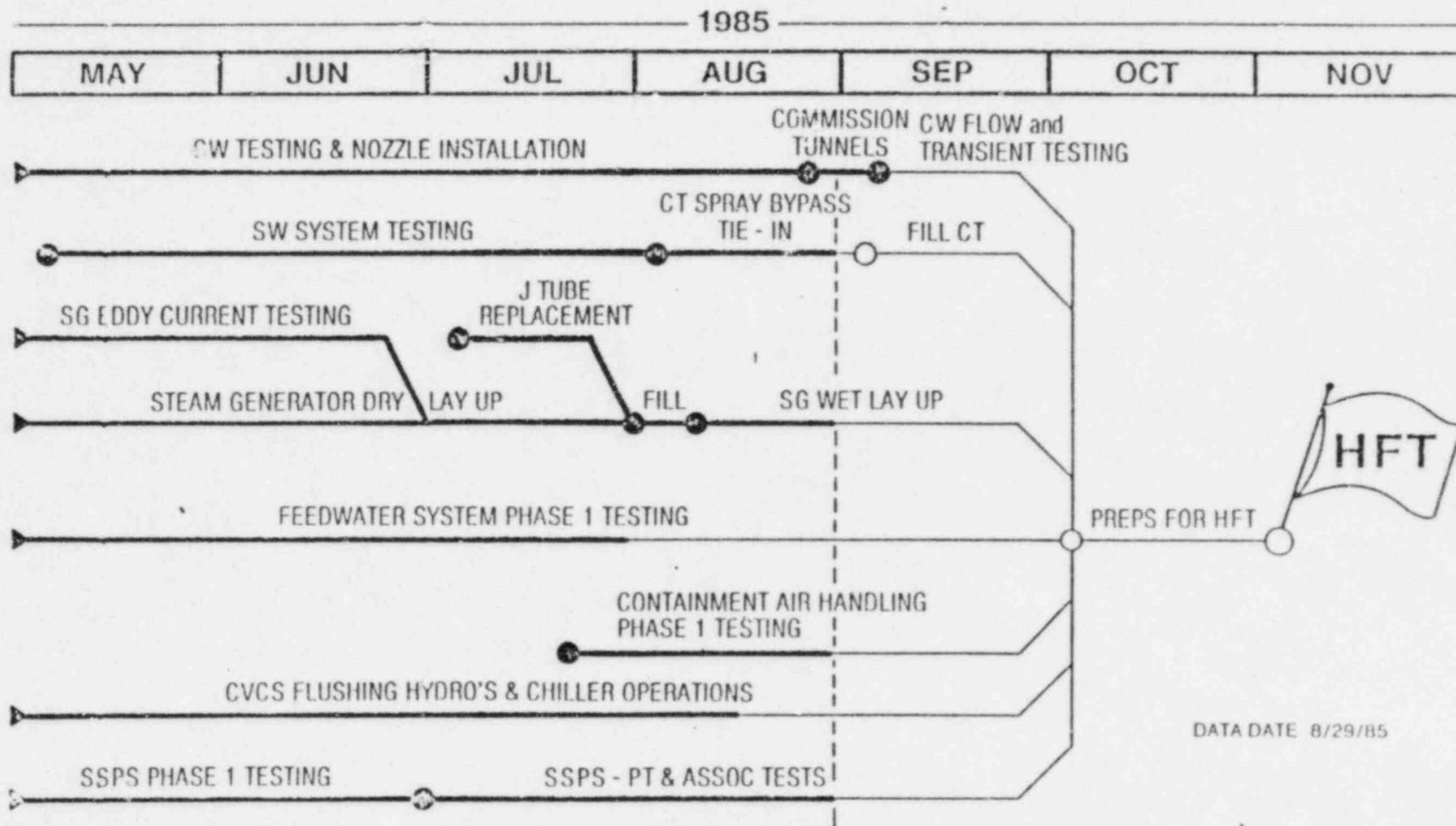
Seabrook Station Unit 1 and Common
INCOMPLETE ITEMS
(Status/Trend)



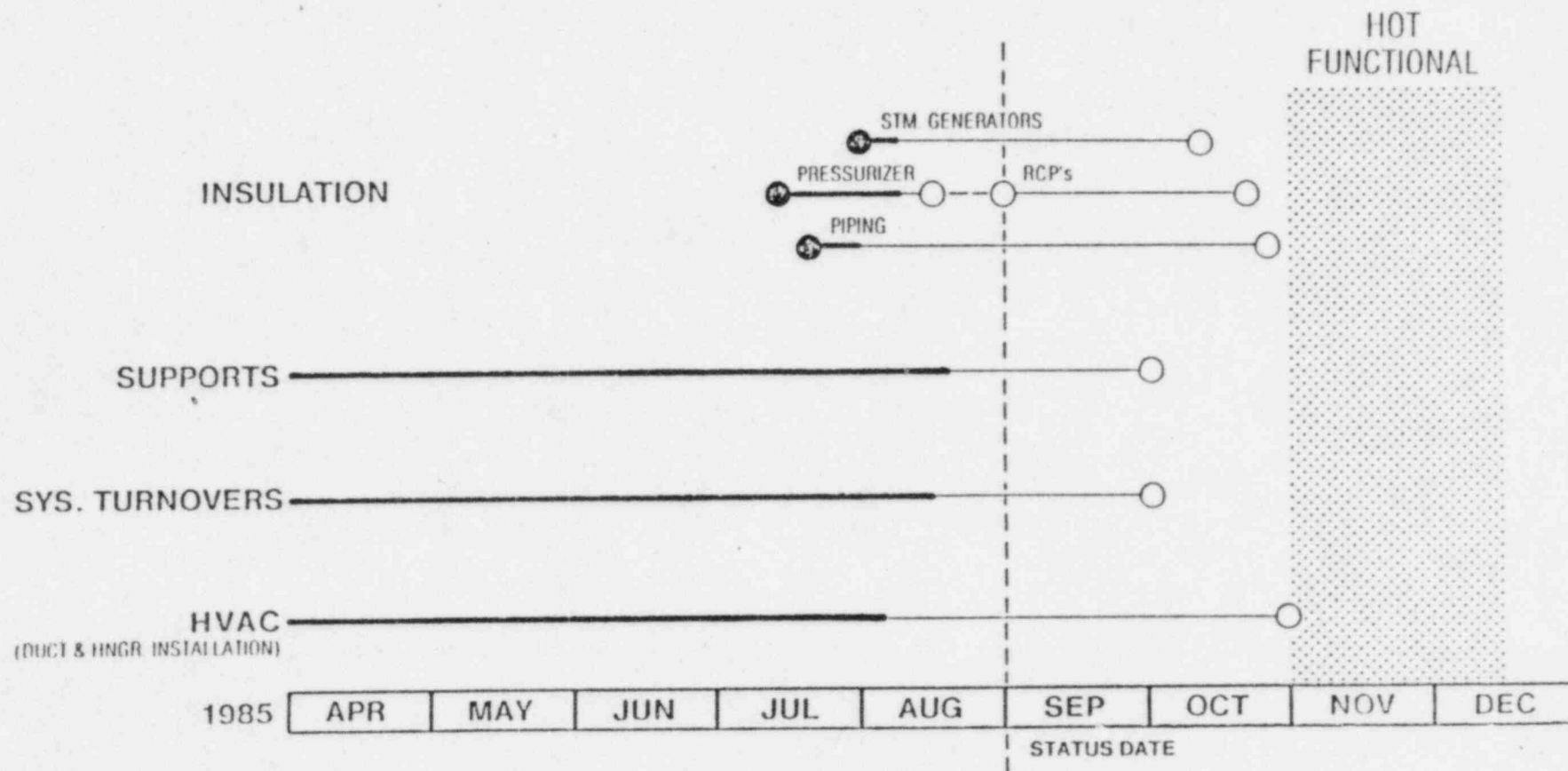
1985

Status as of 8/30/85

SEABROOK STATION UNIT 1 and COMMON HOT FUNCTIONAL STARTUP STATUS



SEABROOK STATION UNIT 1 and COMMON
 PROGRESS ON MAJOR ITEMS FOR HOT FUNCTIONAL



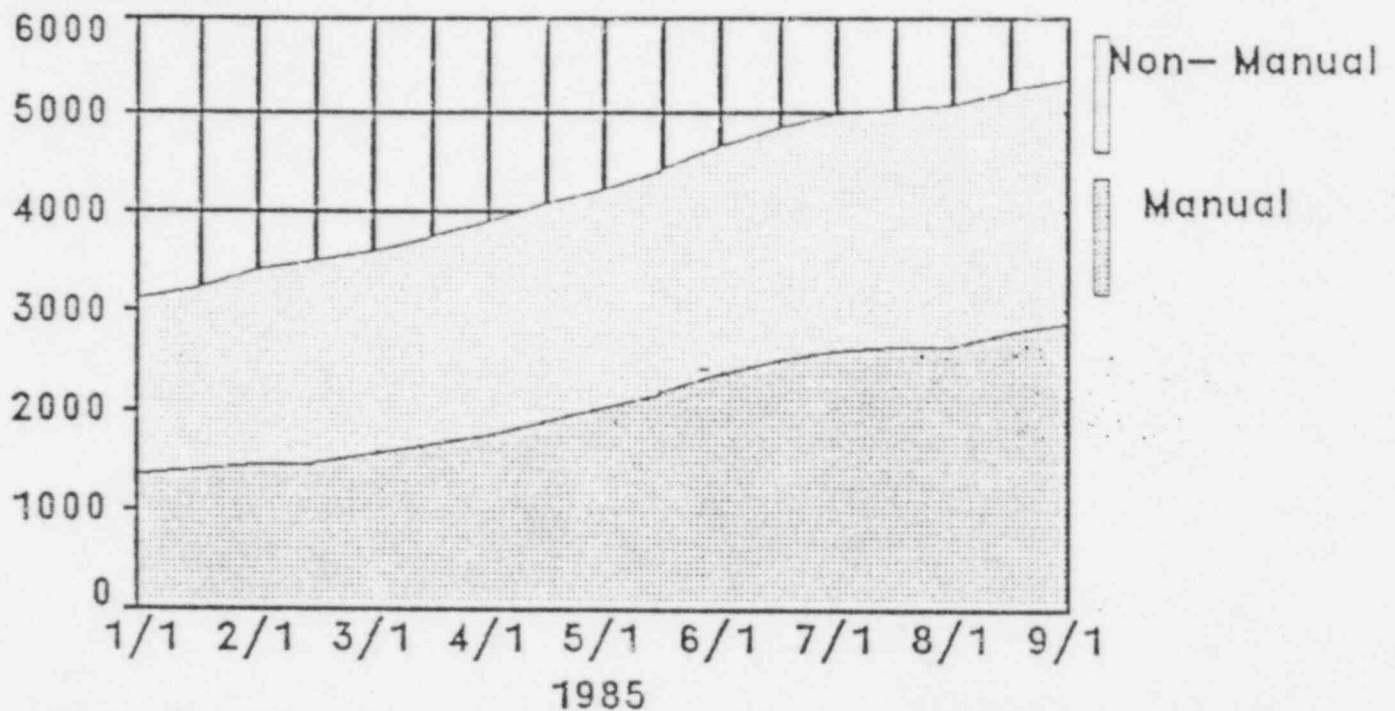
**Seabrook Unit 1 & Common
Project Population**
(8/30/85)

Craft Workers	2998	
Non-Manual		
- Engineering	799	
- QA/QC	518	
- Startup	187	
- Construction	603	
- Security	118	
- Other (Management & Administration Services)	221	
- Non-Manual Total	2446	
SUB-TOTAL PROJECT		5444
NHY Operations		575
TOTAL PROJECT		6019

Project Work Force

Seabrook Station Unit 1 & Common

Work Force

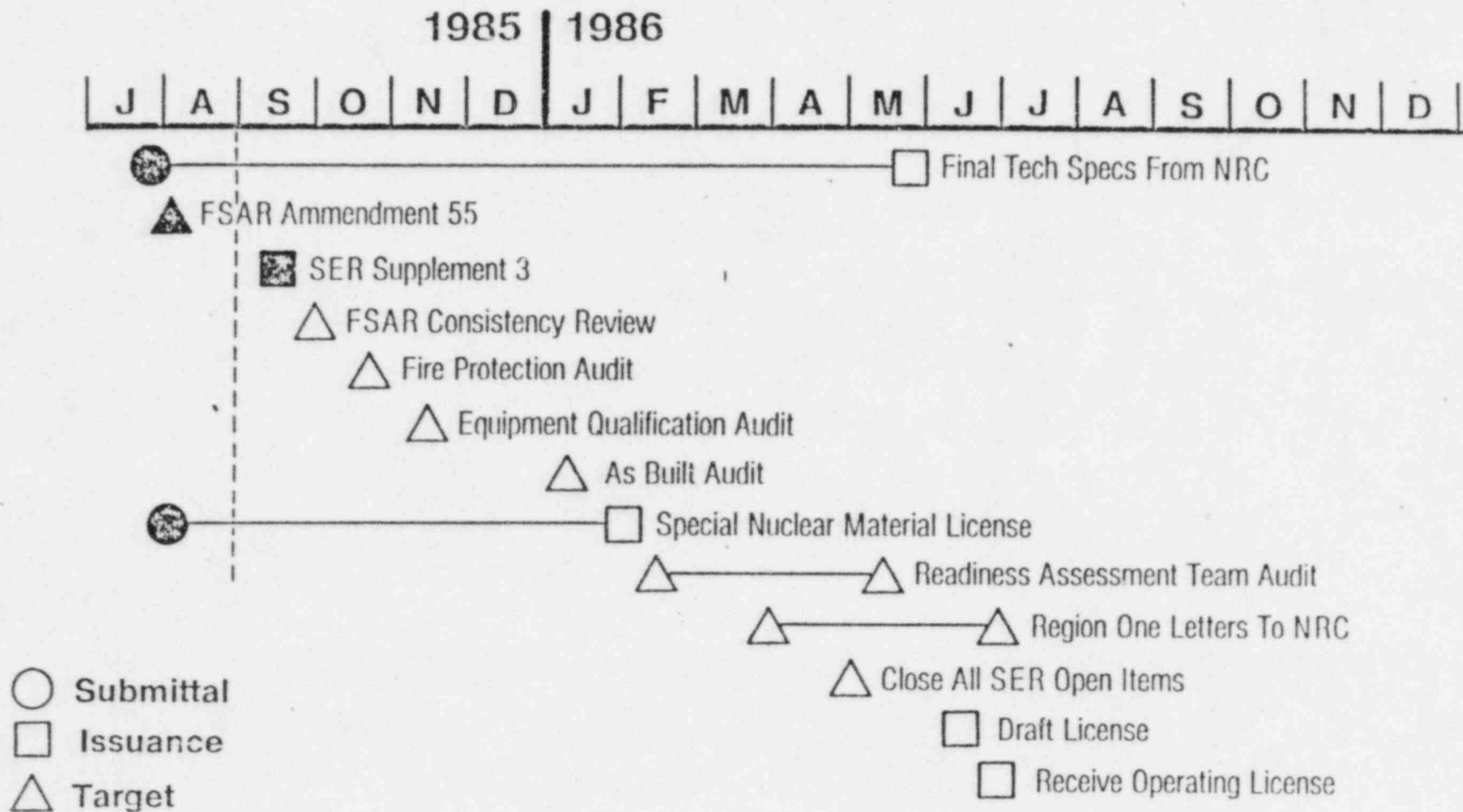


Not Including NHY Operations

Data: 8/30/85

Seabrook Station Unit 1 and Common Significant Licensing Activities

DATA DATE 8/30/85



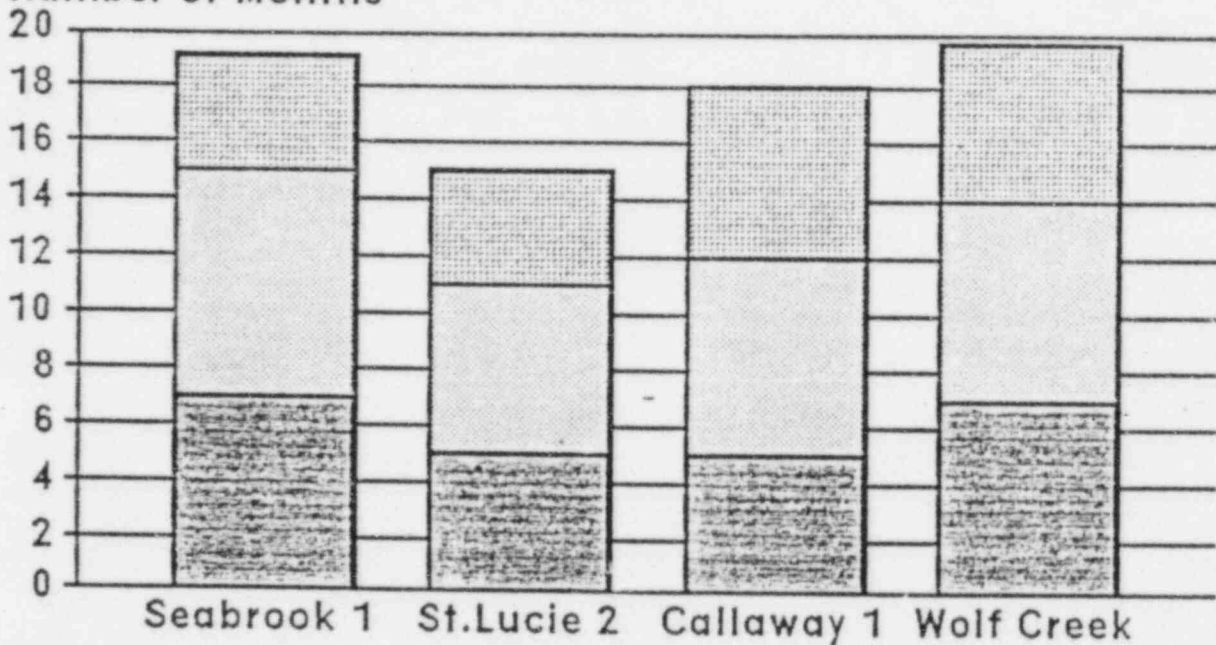
Areas Under Management Review

- HVAC Completion
 - Cable Tray Bracing
 - Hanger Completion Activities
 - Project Management Transition
(Construction To Operation)
 - Emergency Planning
-

Schedule Comparison

Seabrook/St.Lucie/Callaway/Wolf Creek

Number of Months



Hydro-HFT
 HFT-Load
 CoreLoad-C.O. Others (Actual)

Seabrook (Based on 7/24/85 Update)

SEP 23 1985

MEETING SUMMARY DISTRIBUTION

Docket No(s): 50-443

NRC PDR

Local PDR

NSIC

PRC System

LB3 Reading

Attorney, OELD

GWKnighton

Project Manager VNurses

JLee

NRC PARTICIPANTS

V. Nurses

A. Cerne

G. W. Knighton

R. Hartfield

bcc: Applicant & Service List