

DEC 19 1992

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Docket Nos. 50-325, 50-324
License Nos. DPR-71, DPR-62

Carolina Power and Light Company
ATTN: Mr. R. A. Watson
Senior Vice President
Nuclear Generation
P. O. Box 1551
Raleigh, NC 27602

Gentlemen:

SUBJECT: MEETING SUMMARY - BRUNSWICK

This refers to the management meeting conducted at NRC's request in the Brunswick Media Center in Southport, North Carolina, on December 10, 1992. The purpose of the meeting was to discuss restart issues at Brunswick. A list of attendees, a summary, and a copy of your slides are enclosed.

It is our opinion that this meeting was beneficial in understanding the status of implementing your improvement programs. As mutually agreed, another such meeting (to be held in early January 1993) will be confirmed under separate correspondence.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and its enclosures will be placed in the NRC Public Document Room.

Should you have any questions concerning this matter, please contact us.

Sincerely,

Original signed by:
Jon R. Johnson/for

Ellis W. Merschoff, Director
Division of Reactor Projects

Enclosures:

1. List of Attendees
2. Meeting Summary
3. Licensee Slides

cc w/encls:
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Southport, NC 28461

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(cc w/encls cont'd - See page 2)

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Carolina Power and Light Company

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Carolina Power and Light Company

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NRC Resident Inspector

U.S. Nuclear Regulatory Commission

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12/18/92

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ENCLOSURE 1

Carolina Power and Light Company

W. Cavanaugh III, President & COO
R. A. Watson, Senior Vice President, Nuclear Operations
J. A. Dobbs, Special Assistant to Manager, Brunswick Nuclear Project
R. E. Morgan, Interim Manager, Brunswick Nuclear Project
M. J. Brown, Plant Manager, Unit 2, Brunswick
A. M. Lucas, Vice President, Nuclear Engineering

U. S. Nuclear Regulatory Commission

S. D. Ebnetter, Regional Administrator, Region II, (RII)
W. T. Russell, Associate Director for Inspection and Technical Assessment,
Office of Nuclear Reactor Regulation (NRR)
C. H. Berlinger, Chief, Electrical Engineering Branch, NRR
G. C. Lainas, Assistant Director for Region II Reactors, NRR
J. R. Johnson, Deputy Director, Division of Reactor Projects (DRP), RII
E. G. Adensam, Director, Project Directorate (PD) II-1
D. M. Verrelli, Chief, Reactor Projects Branch 1, DRP, RII
R. H. Lo, Project Manager, PD II-1, NRR
R. L. Prevatte, Senior Resident Inspector - Brunswick, DRP, RII
J. J. Lenahan, Reactor Inspector, Materials and Processes Section, Division of
Reactor Safety, RII
K. M. Clark, Senior Public Affairs Officer, RII

ENCLOSURE 2

Meeting Summary

The Regional Administrator opened the meeting by stating that the NRC has received the Carolina Power and Light Company (CP&L) submittals for the Brunswick Unit 2 Integrated Restart Schedule and the Corporate Improvement Initiatives. He expressed concern with the lack of quantitative goals for those items that will not be 100 percent complete before restart. CP&L's proposed readiness reviews of both equipment and personnel which are described in the November 30, 1992, submittal need to be strengthened. He requested that CP&L meet with the NRC after completion of their readiness reviews to present their results.

CP&L representatives provided an overview of the progress on the Unit 1 scope and schedule. The system work logic has been defined and is being sequenced into the outage networks. A definitive plan will be submitted by December 30, 1992.

The licensee emphasized that their commitments for restart of Unit 2 are contained in Appendix 3 to their July 23, 1992, submittal. Discussion of the status of each item is contained in their November 30, 1992 letter. The licensee intends to conduct their readiness review by their Nuclear Assessment Department, and will use INPO to review select systems and to train Brunswick's personnel.

Inspections of the site's four Emergency Diesel Generators is continuing and will be performed sequentially and not in parallel. Shutdown risk is being performed by a process comparable to NUMARC 91-06. This will ensure defense in depth. Changes to the scheduled work are assessed for risk prior to implementation. Diesel Generator No. 1 issues are being actively pursued. Upon completion of repairs, the diesel will undergo break-in as well as a 13-day endurance run.

The backlog review of Short-term Structural Integrity (STSI) issues is continuing using the criteria specified in PN-30 to determine which items can be delayed until after restart. However, the licensee indicated that all STSI issues will be completed by the end of the next Refueling Outage.

The validation of previous hotside/coldside walkdowns began on December 1, 1992. The percent of revalidation will depend on the number of discrepancies identified and the licensee's evaluation of any operability question.

Walkdowns of the miscellaneous steel verification program are complete and components requiring repair are being corrected. Building walls requiring repair will be completed by the end of January 1993.

During the closing remarks the Regional Administrator stated that the tour of the facility indicated that progress was being made in rectifying deficient conditions. He believed the meeting to be very productive. He suggested the next meeting be held in early January to maintain communications on the status of open issues. The next meeting agenda should include as a minimum:

1. The scope and schedule for readiness review of both equipment and personnel;
2. Quantified standards and goals for issues such as hot and cold side reverification, maintenance backlog and management; MOV testing program implementation, Corporate program to improve corrective actions and self-assessments.

AGENDA

*CP&L/NRC Meeting On
Brunswick Nuclear Project
Thursday, December 10, 1992
3:00 p.m. to 5:00 p.m.*

- | | | |
|---|-------------|------|
| I. Opening Remarks | NRC
CP&L | 3:00 |
| II. Unit 1 Integrated Startup Scope & Schedule | | |
| • Progress on Unit 1 Schedule | Dobbs | 3:15 |
| III. Unit 2 Integrated Startup Scope & Schedule | | |
| • General Overview/Key Milestones | Brown | 3:20 |
| • Startup Readiness Review | | |
| • Progress of Major Activities | | |
| - Diesel Generator #1 | | |
| - Backlog Review | Cowan | 3:45 |
| - Miscellaneous Structural Steel | Leininger | 4:05 |
| - Seismic Walls | | |
| IV. Three Year Plan Overview | | |
| | Morgan | 4:15 |
| V. Corporate Improvement Plan Overview | | |
| | Watson | 4:30 |
| VI. Closing Remarks | | |
| | NRC
CP&L | |

IMPROVEMENT PLANS

<i>DELIVERABLE</i>	<i>DATE DUE</i>	<i>STATUS</i>
<i>INTEGRATED STARTUP PLAN AND UNIT 2 SCHEDULE</i>	<i>11/30/92</i>	<i>SUBMITTED</i>
<i>CORPORATE IMPROVEMENT INITIATIVES</i>	<i>11/30/92</i>	<i>SUBMITTED</i>
<i>BRUNSWICK THREE-YEAR PLAN</i>	<i>12/15/92</i>	<i>ON-SCHEDULE</i>
<i>UNIT 1 INTEGRATED STARTUP SCHEDULE</i>	<i>12/30/92</i>	<i>ON-SCHEDULE</i>

UNIT 1 INTEGRATED STARTUP SCHEDULE DEVELOPMENT

- **UNIT 1 STARTUP SCOPE WAS SUBMITTED TO THE NRC
ON NOVEMBER 30, 1992 IN THE INTEGRATED STARTUP PLAN**
- **UNIT 1 SYSTEM WORK WINDOW LOGIC HAS BEEN DEFINED AND
IS CURRENTLY BEING SEQUENCED INTO THE OUTAGE NETWORK**
- **SEQUENCING OF CORRECTIVE AND PREVENTIVE MAINTENANCE,
MODIFICATIONS, PROJECTS, AND TESTING IS IN PROGRESS**
- **FINAL SCHEDULE REVIEW AND SITE MANAGEMENT SIGN-UP
BY DECEMBER 28, 1992**
- **REVISION 0 TO BE APPROVED BY MANAGEMENT AND
SUBMITTED TO THE NRC ON DECEMBER 30, 1992**

UNIT 2
INTEGRATED STARTUP SCHEDULE
CRITICAL PATH REMAINING DURATIONS
AS OF DECEMBER 10, 1992

• DIESEL INSPECTIONS	51 DAYS
• 4160V BUS/BREAKER WORK	4 DAYS
• SWITCHYARD WORK	10 DAYS
• CRD MAINTENANCE	13 DAYS
• SYSTEM CLOSEOUT/LINEUPS	21 DAYS
• STARTUP/SYNCHRONIZATION	<u>9 DAYS</u>
TOTAL	108 DAYS

SHUTDOWN RISK ASSESSMENT

I. CURRENT ASSESSMENT PROCESS

- **PROCESS IS COMPARABLE WITH NUMARC 91-06, "GUIDELINES FOR INDUSTRY ACTION TO ASSESS SHUTDOWN MANAGEMENT"**
- **PROCESS SPECIFICALLY ENSURES DEFENSE IN DEPTH OF THE FOLLOWING SHUTDOWN SAFETY FUNCTIONS:**
 - **DECAY HEAT REMOVAL**
 - **INVENTORY CONTROL**
 - **AC POWER AVAILABILITY**
 - **REACTIVITY CONTROL**
 - **CONTAINMENT CONTROL**
- **LOGIC CHANGES TO OUTAGE SCHEDULE ARE ASSESSED PRIOR TO SCHEDULE CHANGE**
- **EXAMPLES OF POTENTIAL SCHEDULE CHANGES REQUIRING ASSESSMENT ARE: CONCURRENT DIESEL GENERATOR WORK AND STARTING AUXILIARY TRANSFORMER LOGIC CHANGES**

STARTUP READINESS PLAN

PRIOR TO UNIT 2 STARTUP:

- ***EQUIPMENT AND SYSTEM READINESS***
 - ***PN-30 PROCESS***
 - ***ENCLOSURE 3 ITEMS (JULY 23, 1992)***
- ***STARTUP TESTING PLAN***
 - ***SURVEILLANCE TESTING***
 - ***POST-MAINTENANCE TESTING***
 - ***SPECIAL TESTING***

STARTUP READINESS PLAN

- **SELF-ASSESSMENT**

- **MANAGEMENT READINESS ASSESSMENT OF EACH UNIT PRIOR TO STARTUP**

- **READINESS WILL COVER KEY PERFORMANCE AREAS:**

COMMITMENTS

OUTSTANDING CORRECTIVE ACTIONS

ADVERSE CONDITION REPORTS

PLANT MATERIAL CONDITION

LIMITING CONDITIONS FOR OPERATIONS (LCO)

PERSONNEL PERFORMANCE

EQUIPMENT TESTING RESULTS

OUTSTANDING TEMPORARY CONDITIONS

- **DURING STARTUP**

PERFORMANCE EVALUATION

AUTHORIZE STARTUP ACTIVITIES TO CONTINUE

SENIOR MANAGEMENT ON SHIFT

- **INDEPENDENT ASSESSMENTS**

- **NUCLEAR ASSESSMENT DEPARTMENT**

- **INPO**

DIESEL GENERATOR SUMMARY

I. DIESEL #1 ISSUES

- ***FLEX DRIVE GEAR ALIGNMENT
FRACTURED NO. 9 BEARING
CRANKSHAFT STRAIGHTNESS***
- ***BROKEN IDLER GEAR TEETH***
- ***OVERHEATED THRUST RING***
- ***DIESEL MOVEMENT ON THE FOUNDATION***

II. ACCEPTANCE TESTING

- ***EDDY CURRENT TESTING***
- ***"BREAK-IN" RUNS***
- ***13 DAY ENDURANCE RUN***

III. PLANNED INSPECTIONS, DIESELS #2, #3, AND #4

- ***BEARINGS***
- ***THRUST RINGS***
- ***FLEX DRIVES***

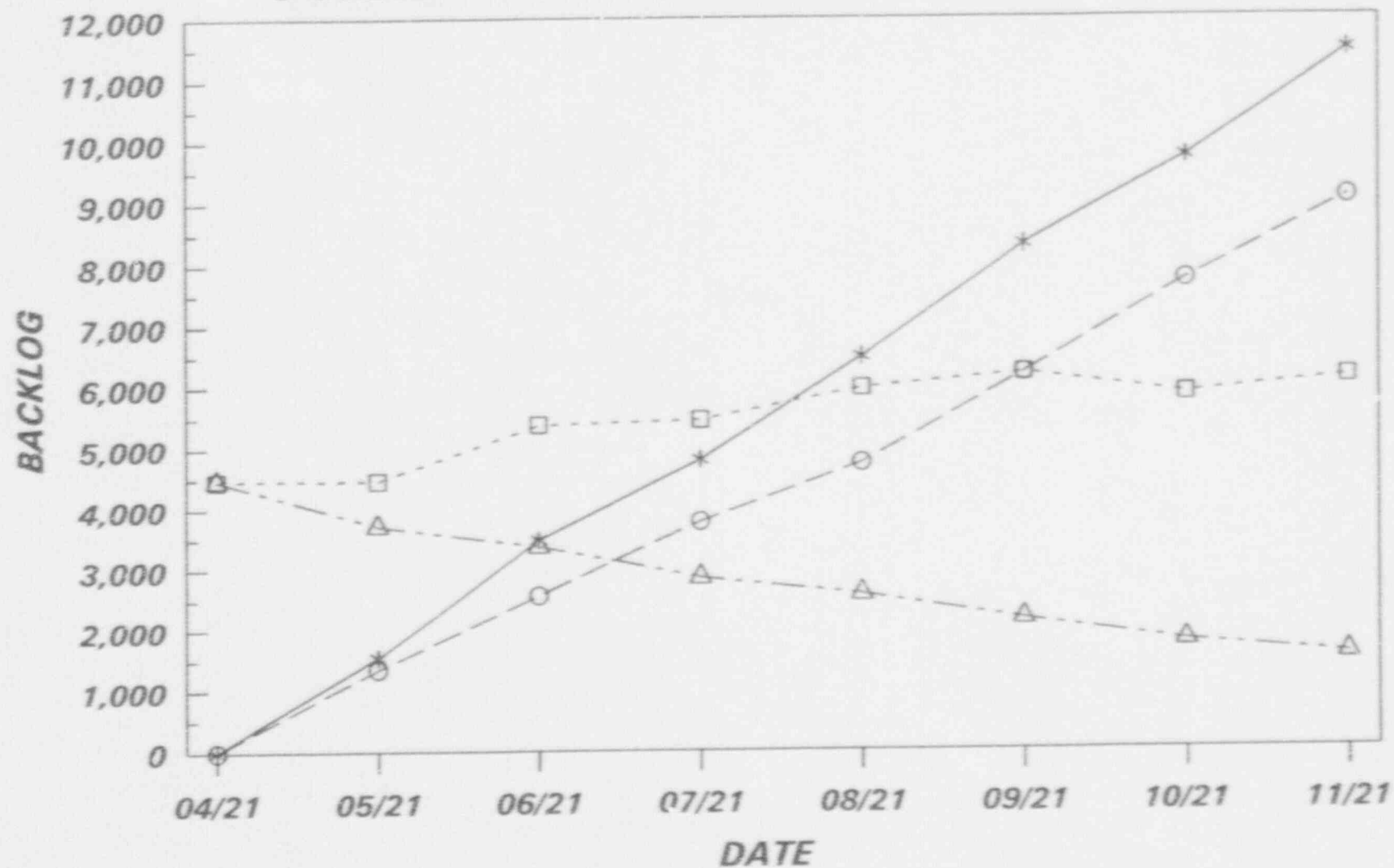
BACKLOG REVIEW

- ***Work Item Review Process (PN-30)***
- ***Work Item Status***
- ***Validation of Previous Walkdowns to Identify Work Items***

WORK ITEM REVIEW PROCESS PN-30

- ***ESTABLISHED THE INTEGRATED STARTUP SCHEDULE (ISS) INITIAL SCOPE***
- ***REV 1 IMPROVES THE SYSTEM READINESS REVIEW PROCESS***
- ***REV 1 PROGRAMMATICALLY TRANSITIONS FROM ISS SCOPE DEVELOPMENT TO ISS SCOPE CONTROL***

UNITS 1 AND 2 CORRECTIVE MAINTENANCE BACKLOG



INITIATED

—*—

COMPLETE

—○—

TOTAL BACKLOG

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CMBKLOG

VALIDATION OF PREVIOUS WALKDOWNS

- **WALKDOWNS CONSIST OF THREE PHASES --
EVALUATE EFFECTIVENESS ONGOING AND AT THE
COMPLETION OF EACH PHASE**
- **TEAM COMPOSITION**
 - TEAM LEADER
 - CIVIL, MECHANICAL, ELECTRICAL PERSONNEL
 - MINOR MAINTENANCE TEAM
 - JANITORIAL ASSISTANCE
- **PHASE 1 BEGAN ON DECEMBER 7, 1992.**
- **WALKDOWN STATUS**
 - APPROXIMATELY 450 ITEMS IDENTIFIED
 - ONLY 2 POTENTIAL OPERABILITY QUESTIONS/
IDENTIFIED - ACRs WRITTEN
 - 28 ITEMS UNDER EVALUATION
 - REMAINING HAVE BEEN REPAIRED OR SCHEDULED
- **OPERABILITY QUESTIONS**
 - SUPPORT OF 1 INCH CARBON DIOXIDE LINE
 - 1 CONDUIT SUPPORT SPAN

MISCELLANEOUS STEEL VERIFICATION PROGRAM

I. UNIT 2 STARTUP STATUS

- **ENGINEERING IN FINAL STAGE OF COMPLETION**
 - WALKDOWNS - 100% COMPLETE (9,728 COMPONENTS)
 - EVALUATIONS - 98% COMPLETE (3,798 COMPONENT IRREGULARITIES)
 - PLATFORM ANALYSES - 95% COMPLETE
- **RESULTS TO DATE**
 - 545 COMPONENTS REQUIRING ACTION
 - 357 MAINTENANCE
 - 103 INDUSTRY PRACTICE
 - 85 RESTORE DESIGN MARGINS
 - 0 OPERABILITY ISSUES
- **PHYSICAL REPAIRS IN PROGRESS/SCHEDULED FOR COMPLETION BY FEBRUARY 1, 1993**

II. UNIT 1 STARTUP STATUS

- WALKDOWNS - 68% COMPLETE (8,037 COMPONENTS)
- EVALUATIONS - JUST BEGUN

BUILDING WALLS STATUS (12-02-92)

- *Two hundred forty-four (244) walls in Class I Structures were inspected and reviewed*
- *Fifty-one (51) walls were reclassified as safety-related*
- *Sixty-one (61) walls required modification*
 - *52 to meet seismic requirements*
 - *3 to meet tornado requirements*
 - *6 to meet seismic and tornado requirements*
- *Of the 61 walls, 38 have been modified and declared operable and the remaining 23 are in various stages of design, construction, inspection, and as built design verification*
- *Remainder are scheduled to be completed by the end of January*

THREE YEAR PLAN OVERVIEW

- ***VISION-ORIENTED STRATEGY***
 - ***SITE OWNERSHIP***
- ***PLANT & PEOPLE IMPROVEMENTS***
- ***MANAGEABILITY***
- ***STANDARDS/PLANNING/ACCOUNTABILITY***
- ***1993 DETAILS***
- ***EVALUATE ACHIEVEMENT/ADJUST***
- ***UPDATE FALL 1993***
- ***COMMITMENT EXPECTATIONS***
- ***DYNAMIC COMMUNICATIONS***

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CAROLINA POWER & LIGHT COMPANY CORPORATE IMPROVEMENT INITIATIVES

- **ORGANIZATIONAL STUDY**
- **NUCLEAR SAFETY REVIEW PROGRAM ENHANCEMENTS**
- **NUCLEAR SAFETY ORIENTATION AND CONTINUOUS IMPROVEMENT**
- **PEER GROUP PROGRAM IMPLEMENTATION**
- **SUPERVISORY ASSESSMENT CENTER IMPLEMENTATION**
- **SUPERVISORY DEVELOPMENT PROGRAM COMPLETION**
- **MANAGEMENT DEVELOPMENT/SUCCESSION PLANNING
PROGRAM IMPLEMENTATION**
- **TECHNICAL TRAINING PROGRAM DEVELOPMENT**
- **INTEGRATED SCHEDULE PROGRAM DEVELOPMENT**
- **WORK PLANNING AND CONTROL PROCESS IMPROVEMENTS**
- **BACKLOG REDUCTION PLAN DEVELOPMENT**
- **HOUSEKEEPING AND MATERIAL CONDITION IMPROVEMENTS**

SUMMARY

- **UNIT 2 START-UP SCHEDULED FOR MARCH 28, 1993**
- **UNIT 1 START-UP SCHEDULE TO BE DEVELOPED BY YEAR-END**
- **BRUNSWICK'S THREE-YEAR PLAN FOR PREMIER, WORLD-CLASS PERFORMANCE WILL BE SUBMITTED DECEMBER 15, 1992**
- **CORPORATE IMPROVEMENT INITIATIVES WILL RAISE STANDARDS AND LEVELS OF PERFORMANCE AT ALL NUCLEAR STATIONS**
- **CORPORATE MANAGEMENT AND BRUNSWICK EMPLOYEES ARE COMMITTED TO THE SUCCESS OF THESE PLANS**