



Carolina Power & Light Company

DEC 04 1987

SERIAL: NLS-87-262
10CFR50.62

United States Nuclear Regulatory Commission
ATTENTION: Document Control Desk
Washington, DC 20555

BRUNSWICK STEAM ELECTRIC PLANT, UNIT NOS. 1 AND 2
DOCKET NOS. 50-325 & 50-324/LICENSE NOS. DPR-71 & DPR-62
ATWS-ARI DRAWINGS

Gentlemen:

On September 18, 1987, the NRC issued a Safety Evaluation Report (SER) for the Brunswick Steam Electric Plant (BSEP), Units 1 and 2 concerning compliance with the ATWS Rule, 10CFR50.62. In that SER, the NRC concluded that the testability features of the alternate rod injection (ARI) system while at power is not acceptable. It also stated that Carolina Power & Light Company (CP&L) should modify the testability portion of the ARI design so that surveillance testing while at power does not prevent the ARI system from responding to an automatic or manual ARI initiation signal.

Carolina Power & Light Company has changed the design of the ARI system to address the NRC concerns discussed in the September 18, 1987 SER. The ARI system has been redesigned to allow testing at power without preventing the system from providing its intended protection while testing is in progress. The enclosed drawings, which replace Figures 10, 11, and 12 of CP&L's June 18, 1987 submittal, show these changes. More contacts were added to the test isolation switches to allow isolation of a single circuit, allowing the other to remain available for ARI initiation.

The Company intends to install the proposed ARI system on BSEP-2 during the upcoming outage, which is scheduled to begin on January 2, 1988.

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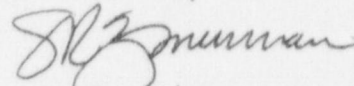
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Please refer any questions regarding this submittal to
Mr. Stephen D. Floyd at (919) 836-6901.

Yours very truly,

A handwritten signature in dark ink, appearing to read 'S. R. Zimmerman', is written above the typed name.

S. R. Zimmerman
Manager

Nuclear Licensing Section

/BAB (\cor\)

Enclosure

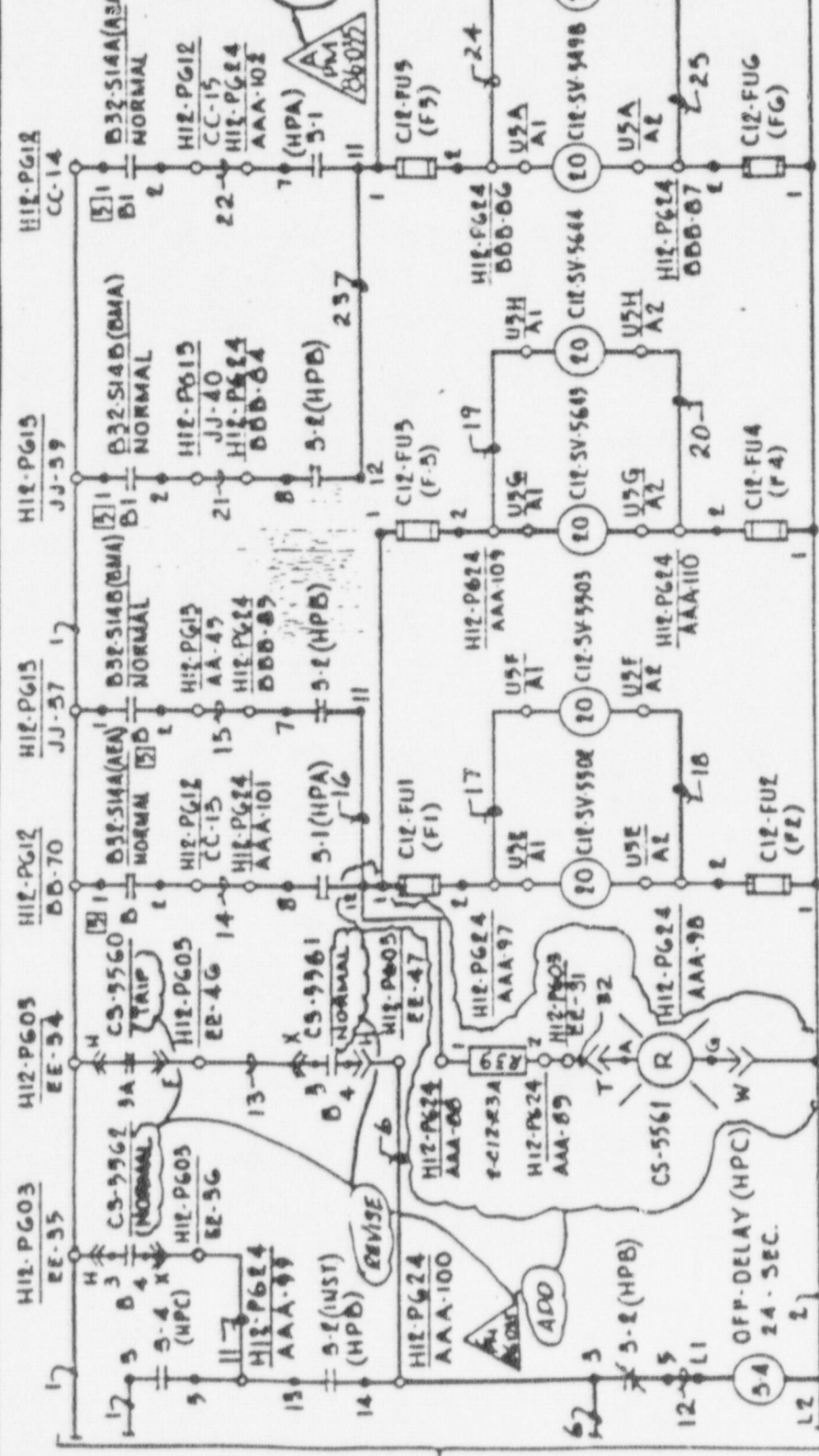
cc: Dr. J. Nelson Grace
Mr. W. H. Ruland
Mr. E. D. Sylvester

ENCLOSURE 1

ALTERNATE ROD INJECTION SYSTEM

DRAWINGS

NOTES
 1. ALL WIRE NUMBERS PREFIXED BY 2-HZ5-2 UNLESS OTHERWISE NOTED.
 2. FOR CAB. HI2-PG24 SEE F-9524-24 FP-50625-1.
 3. FOR CAB. HI2-PG03 SEE F-9502-1 TO 10 & FP-50614-1 TO 10.



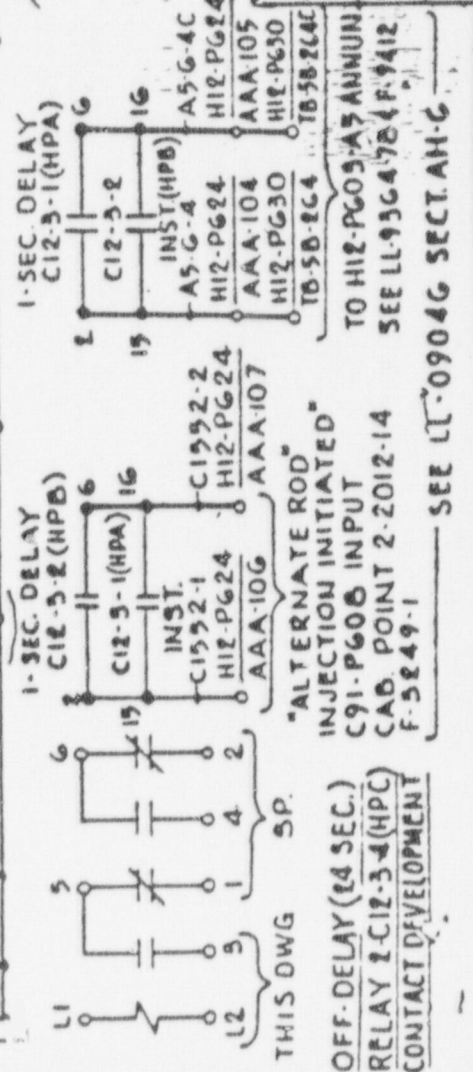
THIS DWG. TO BE ADDED IN ITS ENTIRETY AS LL-9046 SECT. AH.7

DATE	ENGINEER	STATE REC.

REVISED & REDRAWN

CAROLINA POWER & LIGHT CO
 BRUNSWICK STEAM ELECTRIC PLANT
 UNIT NO. 2-C12
 CONTROL ROD DRIVE SYSTEM
 SOLENOID VALVE LOGIC
 SH.7 CONTROL WIRING DIAGRAM
 DWG NO. LL-09046 SECT. AH.7

NO.	REVISION	DATE	DESCRIPTION
1	REVISED AS PER REM-17417		



"ALTERNATE ROD INJECTION INITIATED"
 C91-PG08 INPUT
 CAB. POINT 2-2012-14
 F-5249-1

OFF-DELAY (24 SEC.)
 RELAY 2-C12-3-4 (HPC)
 CONTACT DEVELOPMENT

SEE LL-09046 SECT. AH-C