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 VAUGHN, G.E. Carolina Power & Light Co.
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SUBJECT: Notices of extension of In-Service Insp & Testing second ten-year interval from 910307 to 920219.

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Carolina Power & Light Company

P.O. Box 1551 • Raleigh, N.C. 27602

APR 03 1991

SERIAL: NLS-91-064

G. E. VAUGHN
Vice President
Nuclear Services Department

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

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2
DOCKET NO. 50-261/LICENSE NO. DPR-23
EXTENSION OF IN-SERVICE INSPECTION AND TESTING SECOND TEN-YEAR INTERVAL

Gentlemen:

Subarticle IWA-2400(c) (1977 edition, summer 1978 addenda) allows the ten-year ISI/IST interval to be extended, for units which are out of service continuously for six months or more, for a period equivalent to the outage. During 1984-1985, HBR2 experienced an outage of 349 days for steam generator replacement; accordingly, the second ten-year interval will be extended by 349 days, from March 7, 1991 until February 19, 1992. Submittals consistent with current guidance regarding in-service inspection and testing will be made appropriately in advance of the commencement of the third ten-year interval.

Refueling outage No. 14 is currently planned to commence in spring 1992, early in the third interval. The second interval hydrostatic testing was begun during refueling outage No. 12 and is scheduled for completion during refueling outage No. 14 under the provisions of IWB-2412(b), which allow the inspection period to be extended by as much as one year to enable the inspection to coincide with a plant outage.

Questions regarding this matter may be referred to Mr. R. W. Prunty at (919) 546-7318.

Yours very truly,

G. E. Vaughn

JSK/jbw (1017RNP)

cc: Mr. S. D. Ebnetter
Mr. L. Garner (NRC-HBR)
Mr. R. Lo

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April 3, 1991

Docket No. 50-261

Mr. Lynn W. Eury
Executive Vice President
Power Supply
Carolina Power & Light Company
Post Office Box 1551
Raleigh, North Carolina 27602

Dear Mr. Eury:

SUBJECT: RESPONSE TO GENERIC LETTER 90-06, "RESOLUTION OF GENERIC ISSUE 70, 'POWER-OPERATED RELIEF VALVE AND BLOCK VALVE RELIABILITY,' AND GENERIC ISSUE 94, 'ADDITIONAL LOW-TEMPERATURE OVERPRESSURE PROTECTION FOR LIGHT-WATER REACTORS,' PURSUANT TO 10 CFR 50.54(f) (TAC NO. 77373 AND 77446)

On June 25, 1990, the NRC issued Generic Letter (GL) 90-06 which contained the staff resolution of Generic Issues 70 and 94. The GL requested that licensees adopt the staff positions and appropriate technical specifications (TS) for their facilities.

By letter dated December 21, 1990, you responded to the GL and indicated that (1) Staff Positions 1 and 2 of Section 3.1 of Enclosure A to the GL will be implemented, and (2) TS as described in Enclosures A and B to the GL will be submitted in accordance with the guidance provided in the GL. Through a telephone conversation with Jan Kozyra and John Eads of your staff, the NRC staff has been informed that the phrase "and associated control systems," which had inadvertently been left out, is part of your response to NRC Staff Position 1, Section 3.1, Part C.

The staff will review the TS changes corresponding to item (2) above when they are received. In addition, you are requested to inform the staff in writing when the staff positions identified in item 1 above have been implemented.

Sincerely,

Original signed by:
Ngoc Le for:
Ronnie H. Lo, Senior Project Manager
Project Directorate II-1
Division of Reactor Projects II/I
Office of Nuclear Reactor Regulation

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Mr. L. W. Eury
Carolina Power & Light Company

H. B. Robinson Steam Electric
Plant, Unit No. 2

cc:

Mr. R. E. Jones, General Counsel
Carolina Power & Light Company
P. O. Box 1551
Raleigh, North Carolina 27602

Mr. Dayne H. Brown, Director
Department of Environmental,
Health and Natural Resources
Division of Radiation Protection
P. O. Box 27687
Raleigh, North Carolina 27611-7687

Mr. H. A. Cole
Special Deputy Attorney General
State of North Carolina
P. O. Box 629
Raleigh, North Carolina 27602

Mr. Robert P. Gruber
Executive Director
Public Staff - NCUC
P. O. Box 29520
Raleigh, North Carolina 27626-0520

U.S. Nuclear Regulatory Commission
Resident Inspector's Office
H. B. Robinson Steam Electric Plant
Route 5, Box 413
Hartsville, South Carolina 29550

Mr. C. R. Dietz
Manager, Robinson Nuclear Project
Department
H. B. Robinson Steam Electric Plant
P. O. Box 790
Hartsville, South Carolina 29550

Regional Administrator, Region II
U.S. Nuclear Regulatory Commission
101 Marietta Street
Suite 2900
Atlanta, Georgia 30323

Mr. Heyward G. Shealy, Chief
Bureau of Radiological Health
South Carolina Department of Health
and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

Mr. R. Morgan
General Manager
H. B. Robinson Steam Electric Plant
P. O. Box 790
Hartsville, South Carolina 29550

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

Docket No. 50-261

April 3, 1991

Mr. Lynn W. Eury
Executive Vice President
Power Supply
Carolina Power & Light Company
P.O. Box 1551
Raleigh, North Carolina 27602

Dear Mr. Eury:

SUBJECT: H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2 - EVALUATION
AND MITIGATION OF COMPONENT DEGRADATION (TAC NO. 79026)

During the recent refueling outage at the H. B. Robinson Steam Electric Plant, Unit No. 2 (HBR-2), the Carolina Power & Light Company (CP&L or the licensee) found indications of material degradation in the following components during inspections or hydrostatic tests: (1) the safety injection (SI) accumulator, (2) control rod drive (CRD) guide tube support pins, (3) service water system pipes, and (4) steam generator (SG) upper girth welds. Based on the CP&L submittals, identified below, and on information received during telephone conference calls, the staff finds the licensee's actions for inspecting, evaluating, and mitigating this component degradation to be acceptable.

Under the provision of 10 CFR 20.21, CP&L has reported to NRC that leakage from a nozzle coupling on SI accumulator C was observed during hydrostatic tests. All 27 nozzle couplings (9 per accumulator) were examined ultrasonically and with liquid penetrant. Indications of leakage were found at four nozzle couplings. CP&L stated that these flawed nozzle couplings have been replaced in accordance with American Society of Mechanical Engineers (ASME) Code requirements before the plant was returned to service. The staff finds the inspection and replacement of defective nozzle couplings to be acceptable.

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During ultrasonic examination, rejectable indications were found on some of the CRD guide tube support pins. CP&L stated that all such pins (a total of 106) were replaced with new pins during the refueling outage. The new pins have a new and improved design and have been heat-treated to a minimum temperature of 2000 degrees Fahrenheit for better resistance to stress corrosion cracking. The staff finds that the inspection and replacement of all CRD guide tube support pins are acceptable.

During a visual and ultrasonic examination of the buried service water piping, a loss of cross section was discovered in pipe joint areas that were not internally coated with cement lining. The inspection results and the basis for the mitigation were provided in a report dated January 1991. By letter dated January 2, 1991, in accordance with the requirements of ASME Code Case N-480, CP&L submitted its minimum bounding wall calculations for the affected areas. The licensee determined that all the affected pipe joints, with the exception of pipe joints S-10 and S-42, are acceptable for continued service in their present condition. CP&L indicated that several pipe joints, including pipe joints S-10 and S-42, will be repaired or replaced in accordance with the ASME Code requirements and that all the pipe joints not internally coated would be internally coated with cement lining during the outage. The staff has reviewed CP&L's report and minimum wall evaluation and found them acceptable. A safety evaluation to support the staff's findings will be issued separately.

During an In-Service Inspection, flaw indications were found by ultrasonic examination of the weld between the upper transition cone and the shell in SGs A and C. A magnetic particle examination was also performed on the inside surface of the transition weld to confirm the flaw indications. By letter dated January 8, 1991, CP&L submitted a flaw evaluation report done by Structural Integrity Associates, Inc. A bounding flaw size of 0.47 inch in depth and 2 inches in length was used in the stress and fracture analyses; and a conservative thermal transient cycle simulating the injection of the feedwater at 70 degrees Fahrenheit with the shell at an operating temperature of 518 degrees Fahrenheit was assumed in the fatigue crack growth calculations. The results of these analyses indicated that the observed flaw indications will not grow enough to violate Code margins on structural integrity of the SG shells during the next 18-month operating cycle. The staff has reviewed the evaluation report and found the analysis acceptable. However, because of the uncertainties inherent in the analysis, CP&L has agreed to perform additional ultrasonic tests on the girth weld flaws if a mid-cycle shutdown of sufficient length occurs during the next operating cycle. Furthermore, within 45 days of resumption of reactor operation, CP&L will submit a revised flaw evaluation report to provide more information about their analysis. After the report has been submitted, a safety evaluation will be issued detailing the staff's findings.

In summary, the staff finds the licensee's inspections, evaluations, and mitigation of the component degradation to be acceptable. The staff concludes that the structural integrity of the reactor coolant pressure boundary will be maintained and that HBR-2 is safe for continued operation for at least one additional fuel cycle.

Original signed by:
Ngoc Le for:

Ronnie H. Lo, Senior Project Manager
Project Directorate II-1
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

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Mr. L. W. Eury
Carolina Power & Light Company

H. B. Robinson Steam Electric
Plant, Unit No. 2

cc:

Mr. H. Ray Starling
Manager - Legal Department
Carolina Power & Light Company
P. O. Box 1551
Raleigh, North Carolina 27602

Mr. Dayne H. Brown, Director
Department of Environmental,
Health and Natural Resources
Division of Radiation Protection
P. O. Box 27687
Raleigh, North Carolina 27611-7687

Mr. H. A. Cole
Special Deputy Attorney General
State of North Carolina
P. O. Box 629
Raleigh, North Carolina 27602

Mr. Robert P. Gruber
Executive Director
Public Staff - NCUC
P. O. Box 29520
Raleigh, North Carolina 27626-0520

U.S. Nuclear Regulatory Commission
Resident Inspector's Office
H. B. Robinson Steam Electric Plant
Route 5, Box 413
Hartsville, South Carolina 29550

Mr. C. R. Dietz
Manager, Robinson Nuclear Project
Department
H. B. Robinson Steam Electric Plant
P. O. Box 790
Hartsville, South Carolina 29550

Regional Administrator, Region II
U.S. Nuclear Regulatory Commission
101 Marietta Street
Suite 2900
Atlanta, Georgia 30323

Mr. Heyward G. Shealy, Chief
Bureau of Radiological Health
South Carolina Department of Health
and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

Mr. R. Morgan
General Manager
H. B. Robinson Steam Electric Plant
P. O. Box 790
Hartsville, South Carolina 29550

Docket No. 50-261
50-325 and 50-324
50-400

Mr. Lynn W. Eury
Executive Vice President
Power Supply
Carolina Power & Light Company
Post Office Box 1551
Raleigh, North Carolina 27602

Dear Mr. Eury:

SUBJECT: TEMPORARY REASSIGNMENT OF PROJECT DIRECTOR, PROJECT DIRECTORATE II-1

This is to inform you that effective April 1, 1991, I will be temporarily reassigned for a period of three months and Mr. Anthony Mendiola will be Acting Director for Project Directorate II-1.

Mr. Mendiola can be reached on (301) 492-1466.

Sincerely,

Elinor G. Adensam, Director
Project Directorate II-1
Division of Reactor Projects I/II

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Mr. L. W. Eury
Carolina Power & Light Company

cc:

Mr. R. E. Jones, General Counsel
Carolina Power & Light Company
P. O. Box 1551
Raleigh, North Carolina 27602

Mr. Kelly Holden, Chairman
Board of Commissioners
P. O. Box 249
Bolivia, North Carolina 28422

Regional Administrator, Region II
U. S. Nuclear Regulatory Commission
101 Marietta Street, Suite 2900
Atlanta, Georgia 30323

Resident Inspector/Harris NPS
c/o U. S. Nuclear Regulatory Commission
Route 1, Box 315B
New Hill, North Carolina 27562

Mr. R. B. Richey, Vice President
Harris Nuclear Project
P.O. Box 165
New Hill, North Carolina 27562

Mr. J. W. Spencer
Plant General Manager
Brunswick Steam Electric Plant
P.O. Box 10429
Southport, North Carolina 28461

Mr. Russell B. Starkey, Jr.
Vice President
Brunswick Nuclear Project
P. O. Box 10429
Southport, North Carolina 28461

Resident Inspector
U. S. Nuclear Regulatory Commission
Star Route 1
P.O. Box 208
Southport, North Carolina 28461

Mr. C. S. Hinnant
Plant General Manager
Harris Nuclear Plant
P.O. Box 165
New Hill, North Carolina 28562

Mr. Robert P. Gruber
Executive Director
Public Staff - NCUC
P. O. Box 29520
Raleigh, North Carolina 27626-0520

Mr. R. Morgan
General Manager
H. B. Robinson Steam Electric Plant
P.O. Box 790
Hartsville, South Carolina 29550

Mr. H. A. Cole
Special Deputy Attorney General
State of North Carolina
P.O. Box 629
Raleigh, North Carolina 27602

Mr. D. R. Dietz
Manager, Robinson Nuclear Project
Department
H. B. Robinson Steam Electric Plant
P.O. Box 790
Hartsville, South Carolina 29550

Mr. Heyward G. Shealy, Chief
Bureau of Radiological Health
South Carolina Department of Health
and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201