

JAN 14 1988

Docket No. 50-325/324

DISTRIBUTION
See attached sheet

Mr. E. E. Utley
Senior Executive Vice President
Power Supply and Engineering & Construction
Carolina Power & Light Company
Post Office Box 1551
Raleigh, North Carolina 27602

Dear Mr. Utley:

SUBJECT: ENVIRONMENTAL ASSESSMENT ON REQUEST FOR EXEMPTION FROM
CERTAIN REQUIREMENTS OF 10 CFR PART 50, APPENDIX J,
BRUNSWICK STEAM ELECTRIC PLANT, UNITS 1 AND 2
(TAC NOS. 66048 AND 66049)

Enclosed is a copy of an "Environmental Assessment and Finding of No
Significant Impact," for your information. This assessment relates to your
your August 5, 1987, request for an exemption from 10 CFR 50, Appendix J,
paragraph II.A.3.

This assessment has been forwarded to the Office of the Federal Register for
publication.

Sincerely,

ES

Ernest D. Sylvester, Project Manager
Project Directorate II-1
Division of Reactor Projects - I/II

Enclosure:
As stated

cc: w/enclosure
See next page

8801200268 880114
PDR ADOCK 05000324
P PDR

PA
LA: PD21: DRPR
PAnderson
12/1/87

BM
PE: PD21: DRPR
BMozaferi
12/31/87

BM
PM: PD21: DRPR
ESylvester
12/31/87

BCB
D: PD21: DRPR
EAdensam
12/1/87

1/14/88

DISTRIBUTION

Docket File
NRC & Local PDR
PD21 r/f
S. Varga
G. Lainas
P. Anderson
E. Sylvester
OGC-B
E. Jordan
J. Partlow
ACRS (10)
GPA/PA

UNITED STATES NUCLEAR REGULATORY COMMISSIONCAROLINA POWER & LIGHT COMPANYBRUNSWICK STEAM ELECTRIC PLANT, UNITS 1 AND 2DOCKET NOS. 50-325/324ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT

The U. S. Nuclear Regulatory Commission (the Commission) is considering issuance of an exemption from the requirements of Appendix J to 10 CFR Part 50 to Carolina Power & Light Company, (the licensee), for the Brunswick Steam Electric Plant, Unit Nos. 1 and 2, located in Southport, North Carolina.

ENVIRONMENTAL ASSESSMENTIdentification of Proposed Action:

The exemption would grant relief from 10 CFR 50, Appendix J, paragraph III.A.3, which requires that all Type A (Containment Integrated Leak Rate) tests be performed in accordance with ANSI N45.4-1972, Leakage Rate Testing of Containment Structures for Nuclear Reactors." ANSI N45.4 requires that leakage calculations be performed using the Point to Point Method or the Total Time method. The licensee would rely, instead, on the Mass-Point method described in ANSI/ANS 56.8-1981, "Containment System Leakage Testing."

The licensee's request for exemption and the bases therefor are contained in a letter dated August 5, 1987.

The Need for the Proposed Action:

The proposed exemption is from the Standard (ANSI N45.4-1972) referenced in 10 CFR Part 50, Appendix J, which requires the containment leakage calculations be performed using either the Point-to-Point or Total Time method. The licensee has performed the calculations using the Mass-Point method, a newer method that has been accepted by the NRC staff. Additionally, the revised Standard

(ANSI/ANS 56.8-1981, "Containment Leakage Testing") specifies the use of the Mass-Point method exclusively; and the new Standard is proposed to be incorporated into a planned revision of Appendix J.

Environmental Impacts of Proposed Action:

The proposed exemption would permit the use of the Mass-Point method in performing leakage calculations. The Mass-Point method has been accepted by the NRC staff as a more accurate technique that will increase confidence in the integrity of the containment. This exemption will not affect containment integrity and does not affect the risk of facility accidents. Thus, post-accident radiological releases will not be greater than previously determined, nor does the proposed exemption otherwise affect radiological plant effluents, or result in any significant occupational exposure. Likewise, the exemption does not affect non-radiological plant effluents and has no other environmental impact. Therefore, the Commission concludes that there are no significant radiological or non-radiological environmental impacts associated with the proposed exemption.

Alternatives to the Proposed Action:

Because it has been concluded that there is no measurable impact associated with the proposed exemption, any alternatives to the exemption will have either no environmental impact or greater environmental impact.

The principal alternative to the exemption would be to deny the requested exemption. Such action would not reduce environmental impacts of the Brunswick Unit 1 and 2 operations and would result in reduced operational flexibility.

JAN 14 1988

Alternative Use of Resources:

This action does not involve the use of resources not previously considered in connection with the "Final Environmental Statement Related to the Operation of the Brunswick Steam-Electric Plant, Units 1 and 2," dated January 1974.

Agencies and Persons Consulted:

The NRC staff reviewed the licensee's request and did not consult other agencies or persons.

FINDING OF NO SIGNIFICANT IMPACT

The Commission has determined not to prepare an environmental impact statement for the proposed exemption.

Based on the foregoing environmental assessment, the staff concludes that the proposed action will not have a significant effect on the quality of the human environment.

For further information with respect to this action, see the application for exemption previously listed, which is available for public inspection at the Commission's Public Document Room, 1717 H Street, N.W., Washington, D.C. 20555 and at the University of North Carolina at Wilmington, William Madison Randall Library, 601 S. College Road, Wilmington, North Carolina 28403-3297.

Dated at Bethesda, Maryland this 14th day of January 1988.

FOR THE NUCLEAR REGULATORY COMMISSION

/s/
Bart C. Buckley, Acting Director
Project Directorate II-1
Division of Reactor Projects - I/II

*See previous concurrence

LA:PD21:DRPR
PAnderson/dsf*
12/22/87

PE:PD21:DRPR
BMozaferi*
12/31/87

PM:PD21:DRPR
ESylvester*
12/31/87

OGC-B
SHLewis*
1/11/88

D:PD21:DRPR
EAdensam
1/14/88

Besfor

JAN 14 1988

Alternative Use of Resources:

This action does not involve the use of resources not previously considered in connection with the "Final Environmental Statement Related to the Operation of the Brunswick Steam-Electric Plant, Units 1 and 2," dated January 1974.

Agencies and Persons Consulted:

The NRC staff reviewed the licensee's request and did not consult other agencies or persons.

FINDING OF NO SIGNIFICANT IMPACT

The Commission has determined not to prepare an environmental impact statement for the proposed exemption.

Based on the foregoing environmental assessment, the staff concludes that the proposed action will not have a significant effect on the quality of the human environment.

For further information with respect to this action, see the application for exemption previously listed, which is available for public inspection at the Commission's Public Document Room, 1717 H Street, N.W., Washington, D.C. 20555 and at the University of North Carolina at Wilmington, William Madison Randall Library, 601 S. College Road, Wilmington, North Carolina 28403-3297.

Dated at Bethesda, Maryland this 14th day of January 1988.

FOR THE NUCLEAR REGULATORY COMMISSION

13/
Bart C. Buckley, Acting Director
Project Directorate II-1
Division of Reactor Projects - I/II

*See previous concurrence

LA:PD21:DRPR	PE:PD21:DRPR	PM:PD21:DRPR	OGC-B	D:PD21:DRPR
PAnderson/dsf*	BMOzafari*	ESylvester*	SHLewis*	EAdensam
12/22/87	12/31/87	12/31/87	1/11/88	1/14/88

Beb for

Mr. E. E. Utley
Carolina Power & Light Company

Brunswick Steam Electric Plant
Units 1 and 2

cc:

Mr. P. W. Howe
Vice President
Brunswick Nuclear Project
Box 10429
Southport, North Carolina 28461

Mr. C. R. Dietz
Plant General Manager
Brunswick Nuclear Project
Box 10429
Southport, North Carolina 28461

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

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

Mr. Mark S. Calvert
Associate General Counsel
Carolina Power & Light Company
Post Office Box 1551
Raleigh, North Carolina 27602

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

Mr. Christopher Chappell, Chairman
Board of Commissioners
Post Office Box 249
Bolivia, North Carolina 28422

Mrs. Chrys Baggett
State Clearinghouse
Budget and Management
116 West Jones Street
Raleigh, North Carolina 27603

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

Regional Administrator, Region II
U. S. Nuclear Regulatory Commission
101 Marjetta Street, Suite 2900
Atlanta, Georgia 30303

Mr. Dayne H. Brown, Chief
Radiation Protection Branch
Division of Facility Services
N. C. Department of Human Resources
701 Barbour Drive
Raleigh, North Carolina 27603-2008