

## UNITED STATES NUCLEAR REGULATORY COMMISSION

REGION II SAM NUNN ATLANTA FEDERAL CENTER 61 FORSYTH STREET, SW, SUITE 23T85 ATLANTA, GEORGIA 30303-8931

May 17, 2005

Carolina Power and Light Company ATTN: Mr. C. J. Gannon Vice President Brunswick Steam Electric Plant P. O. Box 10429 Southport, NC 28461

SUBJECT: NOTICE OF ENFORCEMENT DISCRETION FOR CAROLINA POWER &

LIGHT REGARDING BRUNSWICK STEAM ELECTRIC PLANT UNIT NO. 1

[TAC NO. MC6977, NOED NO. 05-2-001]

By letter dated May 13, 2005, you requested that the NRC exercise discretion to not enforce compliance with the actions required in Brunswick Steam Electric Plant, Unit 1 Technical Specification (TS) Limiting Condition for Operation (LCO) 3.0.3. Entry into this LCO was based on the failure of Unit 1 to meet the requirements of Action Condition D of LCO 3.4.5, "RCS Leakage Detection Instrumentation". Your letter documented information previously discussed with the NRC in a telephone conference on May 12, 2005 at 1050 EDT. The principal NRC staff members who participated in that telephone conference included from Region II, Charles Casto, Director, Division of Reactor Safety, Anne Boland, Acting Deputy, Division of Reactor Projects (DRP), and Paul Fredrickson, Chief, DRP Branch 4, and from the Office of Nuclear Reactor Regulation, Edwin Hackett, Director, Project Directorate II, Herbert Berkow, Project Director, Project Directorate IV, Michael Marshall, Section Chief, Section II-2, Project directorate II and Brenda Mozafari, Sr. Project Manager Brunswick Steam Electric Plant, Project Directorate II. You stated that on May 12, 2005, at 1111, Unit 1 would not be in compliance with LCO 3.0.3., which required the unit be in Mode 2 (Startup/Hot Standby) 7 hours after the Unit failed to meet LCO 3.4.5 at 0411 on May 12. You requested that a Notice of Enforcement Discretion (NOED) be granted pursuant to the NRC's policy regarding exercise of discretion for an operating facility, set out in Section VII.C, of the "General Statement of Policy and Procedures for NRC Enforcement Actions" (Enforcement Policy), NUREG-1600, and be effective for the period from 1111 on May 12, to 0011 on May 13. This letter documents our telephone conversation on May 12 at 1050, when we orally issued this NOED. We understand that the condition causing the need for this NOED was corrected by you causing Unit 1 to exit from LCOs 3.0.3 and 3.4.5 and from this NOED on May 12 at 1740.

At 0411 on May 12, the feeder breaker to emergency bus E1 tripped. Additionally, emergency diesel generator (EDG) 1, which provides emergency power to bus E1, had been taken out of service on May 9, for routine maintenance and surveillance testing. As a result, there was no power to bus E1. Without bus E1, the drywell floor drain sump flow monitoring system, and the primary containment atmosphere particulate and the primary containment atmosphere gaseous RCS leakage monitoring systems were rendered inoperable. This was primarily the result of closure of the containment isolation valves associated with the systems and the inability to reopen the valves due to the inoperable bus E1. With all required leakage detection systems inoperable, Unit 1 entered Condition D of LCO 3.4.5 at 0411 on May 12. Condition D required

immediate entry into LCO 3.0.3. Compliance with LCO 3.0.3, required Unit 1 to be in Mode 2 by 1111 on May 12. We understand from your letter that at 0948, a Unit 1 power reduction, in accordance with LCO 3.0.3 was initiated. However, loss of bus E1 also affected the ability to reduce power using the 1A reactor recirculation (RCR) pump, with the 1A MG set scoop tube being locked due to the loss of control power. In order to achieve Mode 2 by 1111, power needed to be reduced via the 1B RCR pump until limited by RCR pump mismatch requirements at which time power reduction via control rod insertion continued. The time required to either pre-brief and safely perform manual operation of the scoop tube or continue to reduce power via control rod insertion alone, did not support entry into Mode 2 by 1111. Therefore, operations intended to insert a manual scram at 1100 to comply with LCO 3.4.5. It was estimated that Unit 1 would be at approximately 60 percent of rated thermal power at the time the manual scram was required.

Your May 13 letter stated that the proposed NOED would avoid an unnecessary transient as a result of compliance with LCO 3.4.5. If compliance with LCO 3.4.5. was enforced, a relatively high powered unnecessary manual scram (i.e., approximately 60 percent of rated thermal power), complicated by the inoperable bus E1, would have been required. Your letter also stated that the requested NOED would also allow for necessary planning and precautions to be implemented, as appropriate, to conduct an orderly shutdown, given the degraded condition of the electrical distribution system. In the interim, as a compensatory measure, Operations would perform increased monitoring of the narrow range primary containment pressure instrumentation and the primary containment temperature instrumentation—data to be logged every 30 minutes. The drywell temperature and pressure provide the indirect ability to detect increased RCS leakage. Your letter concluded that the proposed NOED would not be of potential detriment to the public health and safety, because it provided additional time to plan and implement, if necessary, a more orderly shutdown of Unit 1. This time was consistent with existing shutdown requirements in TS 3.4.4, for actual RCS leakage conditions in excess of TS requirements, and in TS 3.8.7, for degraded electrical system conditions. The letter also stated that there was no net increase in radiological risk to the public by avoiding the unnecessary transient imposed through compliance with LCO 3.0.3 and safety continued to be assured by the existing LCO requirements of TS 3.8.7 which included more appropriate completion times when dealing with a degraded electrical distribution system

The resident inspectors reviewed the difference in plant response from scrams from high power and lower power. Lower power scrams would result in smaller transient response and, therefore, were less likely to challenge safety systems than high power scrams. The residents also confirmed that with the additional time, the licensee would be better prepared for any problems that might occur from a scram (at any power level) coincident with having an unpowered emergency bus. Based on discussion with the licensee and the reviews conducted by the resident inspectors, the staff determined the request was acceptable.

In the May 13 letter, you committed to submit a follow-up amendment request by May 17, addressing the existing Condition D of LCO 3.4.5. Also, based on our May 12 telephone conference, we understand that this amendment request will permanently align the allowed outage time for the loss of all required leak detection systems closer to that specified in LCO 3.8.7 for the loss of an AC electrical power distribution subsystem, which initiated this loss of all leak detection. We plan to complete our review and disposition of your follow-up license amendment request within 4 weeks of the date of this letter.

On the basis of the staff's evaluation of your request, we have concluded that granting this NOED is consistent with the Enforcement Policy and staff guidance, and has no adverse impact on public health and safety or the environment. Therefore, it is our intention to exercise discretion to not enforce compliance with LCOs 3.0.3 and 3.4.5 for the period from 1111 to 1740 May 12 . Your need for the NOED differed from the approved NOED effective duration because the sample systems were returned to service prior to 0011, May 13.

As stated in the Enforcement Policy, action will be taken, to the extent that violations were involved, for the root cause that led to the noncompliance for which this NOED was necessary.

Sincerely,

/RA/

Loren R. Plisco Deputy Regional Administrator

Docket No.: 50-325

cc: (See page 3)

CC:

T. P. Cleary, Director Site Operations Brunswick Steam Electric Plant Progress Energy Carolinas, Inc. Electronic Mail Distribution

David H. Hinds
Plant Manager
Brunswick Steam Electric Plant
Carolina Power & Light Company
Electronic Mail Distribution

Chris Burton, Manager
Performance Evaluation and
Regulatory Affairs PEB 7
Carolina Power & Light Company
Electronic Mail Distribution

Edward T. O'Neil, Manager Site Support Services Carolina Power & Light Company Brunswick Steam Electric Plant Electronic Mail Distribution

Leonard R. Beller, Supervisor Licensing/Regulatory Programs Brunswick Steam Electric Plant Carolina Power and Light Company Electronic Mail Distribution

David T. Conley
Associate General Counsel II
Legal Dept.
Progress Energy Service Company, LLC
Electronic Mail Distribution

John H. O'Neill, Jr. Shaw, Pittman, Potts & Trowbridge 2300 N. Street, NW Washington, DC 20037-1128

Beverly O. Hall, Acting Director Division of Radiation Protection N. C. Department of Environment and Natural Resources Electronic Mail Distribution Margaret A. Force
Assistant Attorney General
State of North Carolina
Electronic Mail Distribution

Jo. A. Sanford, Chair North Carolina Utilities Commission c/o Sam Watson, Staff Attorney Electronic Mail Distribution

Robert P. Gruber Executive Director Public Staff NCUC 4326 Mail Service Center Raleigh, NC 27699-4326

Public Service Commission State of South Carolina P. O. Box 11649 Columbia, SC 29211

David R. Sandifer, Chairperson Brunswick County Board of Commissioners P. O. Box 249 Bolivia, NC 28422

Warren Lee
Emergency Management Director
New Hanover County Department of
Emergency Management
P. O. Box 1525
Wilmington, NC 28402-1525

## **DISTRIBUTION**:

J. Jolicoeur, OEDO

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C. Casto, DRP, RII

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M. Kotzalas, NRR

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P. Fredrickson, DRP, RII

E. Hackett, NRR

M. Marshall, NRR

B. Mozafari, NRR

E. Dipaolo, DRP, RII

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