



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION II  
245 PEACHTREE CENTER AVENUE NE, SUITE 1200  
ATLANTA, GEORGIA 30303-1257

June 6, 2011

Mr. T. Preston Gillespie, Jr.  
Site Vice President  
Duke Energy Carolinas, LLC  
Oconee Nuclear Station  
7800 Rochester Highway  
Seneca, SC 29672

SUBJECT: NOTICE OF ENFORCEMENT DISCRETION (NOED) FOR DUKE ENERGY CAROLINAS REGARDING OCONEE NUCLEAR STATION UNITS 2 AND 3  
[NOED NO. 11-2-003]

Dear Mr. Gillespie:

By letter dated June 2, 2011, you requested that the NRC exercise discretion to not enforce compliance with the actions required in Oconee Nuclear Station (ONS), Unit 2 and Unit 3, Technical Specification (TS) Limiting Condition for Operation (LCO) 3.6.3, Containment Isolation Valves, Required Action A.1. Your letter documented information previously discussed with the NRC staff in a telephone conference on June 2 at 3:30 p.m. (all times refer to Eastern Time). The principal NRC staff members who participated in the telephone conference are listed in the Enclosure. The NRC staff determined that the information in your letter requesting the NOED was consistent with your oral request.

You stated that, on June 2, 2011, Unit 2 and Unit 3 entered TS 3.6.3 Required Action A.1 at 12:10 p.m. and at approximately 4:10 p.m., Unit 2 and Unit 3 would not be in compliance with TS LCO 3.6.3, Required Action A.1, which would require that the affected penetration flow paths be isolated within four hours. If the affected penetration flow paths were not isolated, then both Unit 2 and Unit 3 must be placed in MODE 3 by June 3 at 4:10 a.m., and MODE 5 by June 4 at 4:10 a.m. Isolating the affected penetration flow paths would have also isolated letdown resulting in a loss of reactor coolant system inventory and chemistry control. Placing both Unit 2 and Unit 3 in MODE 5 would exacerbate an already fragile electrical grid due to extreme demand from hot weather projected during the period needed for necessary repairs. You requested that an NOED be granted for TS LCO 3.6.3, Required Action A.1, for both Unit 2 and Unit 3 pursuant to the NRC's policy regarding exercise of discretion for an operating facility set out in Section 3.8 of NUREG-1600, "General Statement of Policy and Procedures for NRC Enforcement Actions" (Enforcement Policy), for a period not to exceed 14 days or until electrical grid conditions are predicted to return to normal for a period of at least 10 days. This letter documents our decision conveyed to you during the telephone conversation at approximately 6:30 p.m., when we orally granted this NOED request. We understand that the conditions causing the need for this NOED has not yet been corrected and that you will continue to maximize imported power and internal generating capacity to restore Duke Energy's grid to normal conditions.

On January 8, 2011, during Unit 1 required testing, valve 1HP-5 failed to fully close following an inadvertent close signal. A root cause investigation found that improper material selection for the gland ring in a 2003/2004 modification resulted in a loss of margin for the actuator for the valve, as well as similar valves on ONS Unit 2 and Unit 3. On May 31, 2011, discussions with the valve and actuator program vendor identified that the software used in the licensee's operability determination for the Unit 2 and Unit 3 valves may calculate non-conservative torque values resulting in a reduction in the valves' closing margin. Ongoing evaluations indicated the required spring closing forces were inadequate resulting in a negative closing margin at normal reactor coolant system pressure. On June 2, at approximately 12:10 p.m., containment isolation valves 2HP-5, 2HP-21, 3HP-5, and 3HP-21 were declared inoperable. The NRC staff considered the independent entity (SERC Reliability Corporation) in determining placing ONS Unit 2 or Unit 3 in MODE 5 would result in power delivery challenges during a period of significant grid demand which could result in adverse consequences to the health and safety of the public.

To evaluate this NOED request, NRC staff considered your commitments to (1) defer non-essential surveillances and other maintenance activities in the switchyard to reduce the likelihood of a loss of offsite power, (2) defer non-essential surveillances and other maintenance activities on risk-significant equipment including the Keowee Emergency Power System, the emergency feed water turbine-driven pumps, and the standby shutdown facility (SSF), (3) post a dedicated operator located in the SSF for the NOED duration, (4) implement additional procedural steps that, from the control room, manually isolate letdown and valves downstream of HP-5, and (5) monitor grid conditions and ensure the safe and orderly shutdown of one or both units if grid conditions return to normal for a period of at least 10 days. NRC staff also considered that the calculated Incremental Conditional Large Early Release Probability values for Units 2 and 3 did not exceed the threshold guidance provided in Inspection Manual Part 9900 Technical Guidance and were consistent with values calculated by NRC regional analysts; that the noncompliance would not be of potential detriment to the public health and safety; and independent verification of some of these conditions and actions by our inspection staff.

On the basis of the NRC staff's evaluation of your request, we have concluded that granting this NOED is consistent with the Enforcement Policy and NRC staff guidance and has no adverse impact on public health and safety or the environment. This determination was qualitative and based upon balancing the effect on public health and safety of not operating, against the potential radiological or other hazards associated with continued operation (Part 9900, Section B.2.2, (i.e., severe weather NOED)). Therefore, it is our intention to exercise discretion to not enforce compliance with TS LCO 3.6.3, Required Action A.1 for the period from 12:10 p.m., on June 2, 2011, until 12:10 p.m., on June 16, 2011. As stated during the conference call and in your letter, you are still considering a submittal of a TS change.

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/*

Richard P. Croteau, Director  
Division of Reactor Projects

Docket Nos.: 50-270, 50-287  
License Nos.: DPR-47, DPR-55

Enclosure: As Stated

cc w/encl: (See page 4)

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/

Richard P. Croteau, Director  
Division of Reactor Projects

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Enclosure: As Stated

cc w/encl: (See page 4)

PUBLICLY AVAILABLE       NON-PUBLICLY AVAILABLE       SENSITIVE       NON-SENSITIVE  
ADAMS:  Yes      ACCESSION NUMBER: ML111570484       SUNSI REVIEW COMPLETE

|              |              |              |            |    |     |    |     |    |
|--------------|--------------|--------------|------------|----|-----|----|-----|----|
| OFFICE       | RII:DRP      | RII:DRP      | NRR:DORL   |    |     |    |     |    |
| SIGNATURE    | CWR /RA for/ | WBJ /RA for/ | Via email  |    |     |    |     |    |
| NAME         | JBartley     | RCroteau     | JGitter    |    |     |    |     |    |
| DATE         | 06/06/2011   | 06/06/2011   | 06/03/2011 |    |     |    |     |    |
| E-MAIL COPY? | YES          | NO           | YES        | NO | YES | NO | YES | NO |

OFFICIAL RECORD COPY: G:\DRPI\RPB1\NOED\2011\OCONEE\NOED 11-2-003 RESPONSE LETTER.DOCX

cc w/encl:

Division of Radiological Health  
TN Dept. of Environment & Conservation  
401 Church Street  
Nashville, TN 37243-1532

David A. Baxter  
Vice President, Nuclear Engineering  
Duke Energy Carolinas, LLC  
Electronic Mail Distribution

Kent Alter  
Regulatory Compliance Manager  
Oconee Nuclear Station  
Duke Energy Carolinas, LLC  
Electronic Mail Distribution

Sandra Threatt, Manager  
Nuclear Response and Emergency  
Environmental Surveillance  
Bureau of Land and Waste Management  
Department of Health and Environmental  
Control  
Electronic Mail Distribution

Scott L. Batson  
Station Manager  
Oconee Nuclear Station  
Duke Energy Carolinas, LLC  
Electronic Mail Distribution

Terry L. Patterson  
Safety Assurance Manager  
Duke Energy Carolinas, LLC  
Electronic Mail Distribution

Charles Brinkman  
Director  
Washington Operations  
Westinghouse Electric Company, LLC  
Electronic Mail Distribution

Tom D. Ray  
Engineering Manager  
Oconee Nuclear Station  
Duke Energy Carolinas, LLC  
Electronic Mail Distribution

County Supervisor of Oconee County  
415 S. Pine Street  
Walhalla, SC 29691-2145

W. Lee Cox, III  
Section Chief  
Radiation Protection Section  
N.C. Department of Environmental  
Commerce & Natural Resources  
Electronic Mail Distribution

Letter to T. Preston Gillespie, Jr. from Richard P. Croteau dated June 6, 2011

SUBJECT: NOTICE OF ENFORCEMENT DISCRETION (NOED) FOR DUKE ENERGY  
CAROLINAS REGARDING OCONEE NUCLEAR STATION UNITS 2 AND 3  
[NOED NO. 11-2-003]

Distribution w/encl:

C. Evans, RII  
L. Douglas, RII  
OE Mail  
RIDSNRRDIRS  
PUBLIC  
RidsNrrPMOconee Resource

## List of Participants

### NRC REGION II ATTENDEES

R. Croteau, Director, Division of Reactor Projects (DRP), Region II (RII)  
J. Bartley, Chief, Reactor Projects Branch (RPB) 1, DRP, RII  
A. Sabisch, Oconee Senior Resident Inspector, RPB 1, DRP, RII  
R. Bernhard, Senior Risk Analyst, RPB 7, DRP, RII  
W. Rogers, Senior Risk Analyst, RPB 7, DRP, RII

### NRC HQ ATTENDEES

J. Giitter, Director, Division of Operating Reactor Licensing (DORL), Office of Nuclear Reactor Regulation (NRR)  
J. Stang, Senior Project Manager, Plant Licensing Branch II-1, DORL, NRR  
J. Mitman, Senior Reliability and Risk Analyst, PRA Operational Support Branch, Division of Risk Assessment, NRR  
S. Stuchell, Senior Project Manager, Licensing Processes Branch, Division of Policy and Rulemaking, NRR  
A. Howe, Deputy Director, DORL, NRR  
G. Kulesa, Chief, Plant Licensing Branch II-1, DORL, NRR  
G. Wilson, Chief, Instrumentation & Controls Branch, Division of Engineering (DE), NRR  
A. McMurtry, Chief, Component Performance & Testing Branch, Division of Component Integrity, NRR  
L. Lund, Chief, Electrical Engineering Branch, DE, NRR  
F. Ferrante, Risk Analyst, PRA Licensing Branch, Division of Risk Assessment, NRR  
J. Jolicoeur, Chief, Licensing Processes Branch, Division of Policy and Rulemaking, NRR  
R. Dennig, Chief, Containment And Ventilation Branch, Division of Safety Systems, NRR  
R. Mathew, Team Leader, Electrical Engineering Branch, DE, NRR  
J. Thompson, Project Manager, Plant Licensing Branch II-1, DORL, NRR