



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION II  
SAM NUNN ATLANTA FEDERAL CENTER  
61 FORSYTH STREET SW SUITE 23T85  
ATLANTA, GEORGIA 30303-8931**

March 3, 2004

Duke Energy Corporation  
ATTN: Mr. R. A. Jones  
Site Vice President  
Oconee Nuclear Station  
7800 Rochester Highway  
Seneca, SC 29672

**SUBJECT: ANNUAL ASSESSMENT LETTER - OCONEE NUCLEAR STATION  
(NRC INSPECTION REPORT 05000269/2004001, 05000270/2004001,  
AND 05000287/2004001)**

Dear Mr. Jones:

On February 3, 2004, the NRC staff completed its end-of-cycle plant performance assessment of the Oconee Nuclear Station. The end-of-cycle review for Oconee involved the participation of all technical divisions in evaluating performance indicators (PIs) for the most recent quarter and inspection results for the period from January 1 through December 31, 2003. The purpose of this letter is to inform you of our assessment of your safety performance during this period and our plans for future inspections at your facility so you will have an opportunity to prepare for these inspections and to inform us of any planned inspections that may conflict with your plant activities.

Overall, Oconee Units 1 and 2 operated in a manner that preserved public health and safety and fully met all cornerstone objectives. Plant performance for the most recent quarter, as well as for the third quarter of the assessment period, was within the Regulatory Response Column of the NRC's Action Matrix. This was due to a third quarter 2003 Mitigating Systems cornerstone finding of low to moderate safety significance (White) involving inadequate corrective actions to address a condition adverse to quality. The condition involved pressurizer ambient heat losses in all three Units that exceeded the capacity of heaters powered from the standby shutdown facility (SSF).

Unit 1 performance during the first quarter of the assessment period was also within Regulatory Response Column of the NRC's Action Matrix. This was reflective of a second quarter 2002 White Barrier Integrity finding involving a problem with the abnormal operating procedure for maintaining and/or restoring containment integrity during reduced inventory conditions. The White Barrier Integrity finding was closed for action matrix consideration at the end of the first quarter 2003. During the second quarter of the assessment period, Unit 1 performance was within the Licensee Response Column of the NRC's Action Matrix based on all associated inspection findings being classified as having very low safety significance (Green) and all associated performance indicators (PIs) reflecting performance at a level requiring no additional NRC oversight (Green). For similar reasons (i.e., Green inspection findings and PIs), Unit 2 performance during the first two quarters of the assessment period was also within the Licensee Response Column of the NRC's Action Matrix.

Overall Unit 3 operated in an overall manner that preserved public health and safety and met all cornerstone objectives with moderate degradation in safety performance. Although Unit 3 performance for the most recent quarter of the assessment period was within the Regulatory Response Column of the NRC's Action Matrix due to the White SSF pressurizer heater finding discussed above, performance during the third quarter of the assessment period was within the Degraded Cornerstone Column. This was the result of two Mitigating Systems cornerstone White findings; the White SSF pressurizer heater finding and a fourth quarter 2002 White finding involving the inadequate installation of electrical connectors on the pre-staged Unit 3 high pressure injection (HPI) pump emergency power supply cable from the auxiliary service water switchgear. This fourth quarter 2002 White finding also caused Unit 3 performance to be within the Regulatory Response Column of the NRC's Action Matrix in the first two quarters of the assessment period. In response to the Degraded Cornerstone performance in the third quarter of the assessment period, a supplemental inspection will be performed under IP 95002. Satisfactory NRC completion of the 95002 inspection is highly dependent on adequate root cause/extent of condition reviews by your staff. We have been discussing the status of these reviews with your staff to determine an appropriate date for the inspection. Our desire is to perform the 95002 inspection in the April 2004 time frame.

Our end-of-cycle performance assessment included an assessment of issues that are still under staff review to determine their safety significance. Although we recognize that you have already taken corrective actions for any operability concerns associated with the following issues, the results of our Significance Determination Process may warrant additional supplemental inspection for issues that are of greater than very low risk significance.

- Licensee Event Report (LER) 50-269/02-03, Unresolved Item (URI) 50-269/02-02-03, and LER 50-287/01-03 (reactor pressure boundary leakage from reactor pressure vessel nozzle penetrations during operation)
- URIs 50-269,270,287/02-03-01 and 02 (fire protection issues regarding standby shutdown facility manning delay and omission of required operator actions)
- URI 50-269,270,287/02-05-05 (improper installation of feedwater line whip-restraints)
- URI 50-269,270,287/03-04-01 (water contamination of the SSF auxiliary service water pump inboard bearing lubrication oil)

In addition, the staff is continuing to review an apparent violation of 10 CFR 50.59 (a)(1) for a change to the facility which involved an unreviewed safety question. The change dealt with the high energy line break analysis and an increase in your response time for a high energy line break in the turbine building. This apparent violation is being reviewed under the NRC Enforcement Program.

The enclosed inspection plan details the inspections scheduled through September 30, 2005. In addition to baseline inspection activities, the plan currently includes: (1) the 95002 Supplemental Inspection discussed above; (2) special inspection activities associated with planned reactor vessel head and steam generator replacements; (3) operator licensing examinations; (4) routine inspections of activities associated with your Independent Spent Fuel Storage Installation; and (5) safety issue inspections concerning the reactor pressure vessel

lower head penetration nozzles (NRC Bulletin 2003-02), the reactor containment sump (NRC Bulletin 2003-01), and spent fuel material control and accounting. The inspection plan is provided to minimize the resource impact on your staff and to allow for scheduling conflicts and personnel availability to be resolved in advance of the inspectors arrival onsite. Routine resident inspections are not listed due to their ongoing and continuous nature. The inspections in the last twelve months of the inspection plan are tentative and may be revised at the mid-cycle review meeting.

As you are aware, the NRC has issued several Orders and threat advisories to enhance security capabilities and improve guard force readiness since the terrorist attacks on September 11, 2001. We have conducted inspections to review your implementation of these requirements and have monitored your actions in response to changing threat conditions. For calendar year 2004, we plan to continue inspections of order implementation combined with newly developed portions of the security baseline inspection program.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be made available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

If circumstances arise which cause us to change our inspection plan, we will contact you to discuss the change as soon as possible. Please contact Mr. Robert Haag at (404) 562-4550 with any questions you may have regarding this letter or the inspection plan.

Sincerely,

**/RA/**

Luis A. Reyes  
Regional Administrator

Docket Nos.: 50-269, 50-270, 50-287, 72-04  
License Nos.: DPR-38, DPR-47, DPR-55

Enclosure: Oconee Inspection/Activity Plan

cc w/encl:  
Compliance Manager (ONS)  
Duke Energy Corporation  
Electronic Mail Distribution

Lisa Vaughn  
Legal Department (PB05E)  
Duke Energy Corporation  
422 South Church Street  
Charlotte, NC 28242

Anne Cottingham  
Winston and Strawn  
Electronic Mail Distribution

Beverly Hall, Acting Director  
Division of Radiation Protection  
N. C. Department of Environmental  
Health & Natural Resources  
Electronic Mail Distribution

cc w/encl: Continued see page 4

cc w/encl: Continued  
Institute of Nuclear Power Operations  
700 Galleria Parkway SE  
Atlanta, GA 30339-5943

Henry J. Porter, Director  
Div. of Radioactive Waste Mgmt.  
S. C. Department of Health and  
Environmental Control  
Electronic Mail Distribution

R. Mike Gandy  
Division of Radioactive Waste Mgmt.  
S. C. Department of Health and  
Environmental Control  
Electronic Mail Distribution

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

Lyle Graber, LIS  
NUS Corporation  
Electronic Mail Distribution

R. L. Gill, Jr., Manager  
Nuclear Regulatory Licensing  
Duke Energy Corporation  
526 S. Church Street  
Charlotte, NC 28201-0006

Peggy Force  
Assistant Attorney General  
N. C. Department of Justice  
Electronic Mail Distribution

Distribution w/encl:  
L. Olshan, NRR  
L. Slack  
RIDSNRRDIPMLIPB  
PUBLIC

PUBLIC DOCUMENT (circle one): YES NO

OFFICE	RII:DRP	RII:DRP	RII:DRP				
SIGNATURE	REC1	RCH	VMM				
NAME	R. Carroll	R. Haag	V. McCree				
DATE	2/18/2004	2/18/2004	2/27/2004				
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO