



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION II  
SAM NUNN ATLANTA FEDERAL CENTER  
61 FORSYTH STREET SW SUITE 23TB5  
ATLANTA, GEORGIA 30303-8931**

March 4, 2002

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

**SUBJECT: ANNUAL ASSESSMENT LETTER - OCONEE NUCLEAR STATION  
(NRC INSPECTION REPORT 50-269/02-01, 50-270/02-01 AND 50-287/02-01)**

Dear Mr. McCollum:

On February 4, 2002, 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) and inspection results for the period from April 1 through December 31, 2001. 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. This will provide you with the opportunity to prepare for these inspections and to inform us of any planned inspections which may conflict with your plant activities.

As discussed in our previous annual assessment letter dated May 31, 2001, this inspection and assessment cycle consisted of three quarters (i.e. the second, third, and fourth calendar quarters of Calendar Year 2001) instead of the usual four quarters. This change was implemented in order to align the inspection and assessment cycle with the calendar year beginning on January 1, 2002.

Overall, Oconee operated in a manner that preserved public health and safety and met all cornerstone objectives with moderate degradation in safety performance. For Unit 1, plant performance during the assessment cycle was within the Degraded Cornerstone Column of the NRC's Action Matrix. For Units 2 and 3, plant performance during the assessment cycle was within the Regulatory Response Column of the NRC's Action Matrix. This was based on two inspection findings of low to moderate safety significance (White) in the mitigating systems cornerstone, with one of the findings only applicable to Unit 1.

The first White finding involved a design calculation performance deficiency associated with reduced capability to provide reactor coolant makeup using the spent fuel pool (SFP) as a suction source for a high pressure injection pump following certain tornadoes. While this performance deficiency involved all three units, the White safety significance only applied to Unit 1 based on that unit having older style reactor coolant pump (RCP) seals versus Units 2 and 3 having high temperature RCP seals. The second White finding was for an inadequate procedure which increased the likelihood that station auxiliary service water (ASW) flow to the steam generators could not be established within 40 minutes following certain tornado events.

In October 2001, the NRC conducted a supplemental inspection of the aforementioned White findings per Inspection Procedure 95002. The inspection determined that your overall root cause evaluations and extent of condition review of both findings were adequate. While your planned corrective actions appeared to address problems identified with your tornado mitigation strategy, your corrective actions were not sufficiently developed at the time of the inspection to close the White finding associated with the SFP. The White finding associated with ASW was closed because your corrective actions addressed the specific issues associated with that finding.

Because the White finding associated with the SFP remains open, we plan to perform a followup inspection to the 95002 supplemental inspection to verify that your corrective actions have addressed the finding. In addition, the inspection will assess the adequacy of your corrective actions to address the contributing cause for both White findings and the contributing cause for other problems with your tornado mitigation strategy.

As you are aware, the following issues are still under review as part of the Significance Determination Process and supplemental inspections may also be warranted if these issues are determined to be of greater than very low safety significance (Green):

- Unresolved Item (URI) 50-269/00-05-11 (Unit 1 mid-loop operations while relying on a temporary cover on the inner emergency personnel hatch to meet the requirements for containment closure)
- URI 50-269,270,287/00-08-01 (potential high temperatures in the low pressure injection and high pressure injection pump rooms following loss of coolant accident scenarios)
- URI 50-269,270,287/00-08-02 (potential flooding problem from non-safety related lines in the auxiliary building)
- URI 50-269,270,287/00-08-04 (uncontrolled design changes to penetration room blowout panels)

The enclosed inspection plan details the inspections scheduled through March 31, 2003. In addition to baseline inspection activities, the plan includes safety issue inspections conducted in accordance with Temporary Instruction 2515/145, "Circumferential Cracking of Reactor Pressure Vessel Head Penetration Nozzles (NRC Bulletin 2001-01)" and routine inspections of activities associated with your Independent Spent Fuel Storage Installation. 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 inspector arrival onsite. Routine resident inspections are not listed due to their ongoing and continuous nature. The last six months of the inspection plan are tentative and may be revised at the mid-cycle review meeting.

With respect to the terrorist attacks on the World Trade Center and the Pentagon, immediately following the attacks, the NRC issued safeguards advisories recommending that nuclear power plant licensees go to the highest level of security, and all promptly did so. With continued uncertainty about the possibility of additional terrorist activities, the Nation's nuclear power plants, including Oconee, remain at a high level of security. On February 25, 2002, the NRC

issued an Order to all nuclear power plant licensees, requiring them to take certain additional interim compensatory measures to address the generalized high-level threat environment. These additional compensatory requirements will provide the NRC with reasonable assurance that public health and safety and the common defense and security continue to be adequately protected in the current generalized high-level threat environment. These requirements will remain in effect pending notification from the Commission that a significant change in the threat environment occurs, or until the Commission determines that other changes are needed following a more comprehensive re-evaluation of current safeguards and security programs. To date, we have monitored Duke Energy Corporation's actions in response to the terrorist attacks through a series of audits. With the issuance of the Order, in addition to the inspections described in the enclosed plan, we will evaluate Oconee's compliance with these interim requirements.

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 Robert Haag at (404) 562-4550 with any questions you may have regarding this letter or the inspection plan.

Sincerely,

**/RA Bruce Mallett for/**

Luis A. Reyes  
Regional Administrator

Docket Nos.: 50-269, 50-270, 50-287, 72-04  
License Nos.: DPR-38, DPR-47, DPR-55, SNM-2503

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

cc: Continued see page 4

DEC

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cc: Continued  
Anne Cottingham  
Winston and Strawn  
Electronic Mail Distribution

Mel Fry, Director  
Division of Radiation Protection  
N. C. Department of Environmental  
Health & Natural Resources  
Electronic Mail Distribution

Henry J. Porter, Assistant Director  
Div. of 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

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

**Oconee**  
**Inspection / Activity Plan**  
**03/01/2002 - 03/31/2003**

Unit Number	Inspection Activity	Title	No. of Staff on Site	Planned Dates		Inspection Type
				Start	End	
	<b>PB1-PI&amp;R - PROBLEM IDENTIFICATION AND RESOLUTION</b>		<b>3</b>			
1, 2, 3	IP 71152	Identification and Resolution of Problems		02/25/2002	03/22/2002	Baseline Inspections
	<b>EB2 ISI - ISI</b>		<b>1</b>			
1	IP 7111108	Inservice Inspection Activities		04/01/2002	04/05/2002	Baseline Inspections
	<b>CRDM TI - CRDM TI</b>		<b>1</b>			
1	IP 2515/145	Circumferential Cracking of Reactor Pressure Vessel Head Penetration Nozzles (NRC Bulletin .		04/15/2002	04/19/2002	Safety Issues
	<b>EB2SGISI - SG ISI</b>		<b>2</b>			
1	IP 7111108	Inservice Inspection Activities		04/15/2002	04/19/2002	Baseline Inspections
	<b>ISFSI - ISFSI</b>		<b>1</b>			
1, 2, 3	IP 60855	Operation Of An ISFSI		05/28/2002	05/31/2002	Other Routine
	<b>SSDI - SSDI PRE-INSPECTION VISIT</b>		<b>1</b>			
1, 2, 3	IP 7111121	Safety System Design and Performance Capability		05/28/2002	05/31/2002	Baseline Inspections
	<b>EB2-HS - EB2-HS</b>		<b>1</b>			
1, 2, 3	IP 7111107B	Heat Sink Performance		06/24/2002	06/28/2002	Baseline Inspections
	<b>EB1-SSDI - SSDI - INSPECTION</b>		<b>5</b>			
1, 2, 3	IP 7111121	Safety System Design and Performance Capability		07/15/2002	07/19/2002	Baseline Inspections
	<b>PS-SEC - SECURITY</b>		<b>1</b>			
1, 2, 3	IP 7113001	Access Authorization Program (Behavior Observation Only)		07/22/2002	07/26/2002	Baseline Inspections
1, 2, 3	IP 7113002	Access Control (Search of Personnel, Packages, and Vehicles: Identification and Authorizatio		07/22/2002	07/26/2002	Baseline Inspections
1, 2, 3	IP 71151	Performance Indicator Verification		07/22/2002	07/26/2002	Baseline Inspections
	<b>EB1-SSDI - SSDI - INSPECTION</b>		<b>5</b>			
1, 2, 3	IP 7111121	Safety System Design and Performance Capability		07/29/2002	08/02/2002	Baseline Inspections
	<b>OL EP - EMERGENCY EXERCISE</b>		<b>2</b>			
1, 2, 3	IP 7111401	Exercise Evaluation		09/16/2002	09/19/2002	Baseline Inspections
1, 2, 3	IP 7111404	Emergency Action Level and Emergency Plan Changes		09/16/2002	09/19/2002	Baseline Inspections
1, 2, 3	IP 71151	Performance Indicator Verification		09/16/2002	09/19/2002	Baseline Inspections
	<b>PS-RP - RADIATION PROTECTION</b>		<b>3</b>			
1, 2, 3	IP 60855	Operation Of An ISFSI		10/15/2002	10/18/2002	Other Routine
1, 2, 3	IP 7112101	Access Control to Radiologically Significant Areas		10/15/2002	10/18/2002	Baseline Inspections
1, 2, 3	IP 7112102	ALARA Planning and Controls		10/15/2002	10/18/2002	Baseline Inspections
1, 2, 3	IP 7112202	Radioactive Material Processing and Transportation		10/15/2002	10/18/2002	Baseline Inspections
1, 2, 3	IP 71151	Performance Indicator Verification		10/15/2002	10/18/2002	Baseline Inspections
	<b>EB2-ISI - CRDM TI</b>		<b>1</b>			
2	IP 2515/145	Circumferential Cracking of Reactor Pressure Vessel Head Penetration Nozzles (NRC Bulletin .		10/24/2002	10/31/2002	Safety Issues

This report does not include INPO and OUTAGE activities.  
This report shows only on-site and announced inspection procedures.

**Oconee**  
**Inspection / Activity Plan**  
**03/01/2002 - 03/31/2003**

Unit Number	Inspection Activity	Title	No. of Staff on Site	Planned Dates		Inspection Type
				Start	End	
	<b>EB2-ISI</b>	<b>- CRDM TI</b>	<b>1</b>			
2	IP 7111108	Inservice Inspection Activities		10/24/2002	10/31/2002	Baseline Inspections
	<b>PS-RP</b>	<b>- RADIATION PROTECTION</b>	<b>3</b>			
1, 2, 3	IP 60855	Operation Of An ISFSI		11/04/2002	11/08/2002	Other Routine
1, 2, 3	IP 7112101	Access Control to Radiologically Significant Areas		11/04/2002	11/08/2002	Baseline Inspections
1, 2, 3	IP 7112102	ALARA Planning and Controls		11/04/2002	11/08/2002	Baseline Inspections
1, 2, 3	IP 7112202	Radioactive Material Processing and Transportation		11/04/2002	11/08/2002	Baseline Inspections
1, 2, 3	IP 71151	Performance Indicator Verification		11/04/2002	11/08/2002	Baseline Inspections
	<b>EB2-ISI</b>	<b>- EB2-ISI S/G</b>	<b>1</b>			
2	IP 7111108	Inservice Inspection Activities		12/09/2002	12/11/2002	Baseline Inspections
	<b>PS-RP</b>	<b>- RADIATION PROTECTION</b>	<b>1</b>			
1, 2, 3	IP 7112203	Radiological Environmental Monitoring Program		01/08/2003	01/10/2003	Baseline Inspections
	<b>PS-SEC</b>	<b>- SECURITY</b>	<b>1</b>			
1, 2, 3	IP 7113001	Access Authorization Program (Behavior Observation Only)		03/03/2003	03/07/2003	Baseline Inspections
1, 2, 3	IP 7113002	Access Control (Search of Personnel, Packages, and Vehicles: Identification and Authorizatio		03/03/2003	03/07/2003	Baseline Inspections
1, 2, 3	IP 71151	Performance Indicator Verification		03/03/2003	03/07/2003	Baseline Inspections

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