



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

March 4, 2009

Mr. Bruce H. Hamilton  
Vice President  
Duke Power Company, LLC  
d/b/a Duke Energy Carolinas, LLC  
McGuire Nuclear Station  
12700 Hagers Ferry Road  
Huntersville, NC 28078-8985

**SUBJECT: ANNUAL ASSESSMENT LETTER - MCGUIRE NUCLEAR STATION  
(NRC INSPECTION REPORT 05000369/2009001 AND 05000370/2009001)**

Dear Mr. Hamilton:

On February 10, 2009, the NRC staff completed its performance review of the McGuire Nuclear Station. Our technical staff reviewed performance indicators (PIs) for the most recent quarter and inspection results for the period from January 1 through December 31, 2008. 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 performance review and the enclosed inspection plan do not include security information. A separate letter designated and marked as "Official Use Only – Security Related Information" will include the Security Cornerstone performance review and resultant inspection plan.

Overall, McGuire Units 1 and 2 operated in a manner that preserved public health and safety and fully met all cornerstone objectives. Plant performance for the third and fourth quarters of the assessment cycle, for Units 1 and 2, was within the Regulatory Response Column of the NRC's Action Matrix. This was the result of a third quarter 2008 Mitigating Systems Cornerstone finding of low to moderate safety significance (White). The third quarter White finding involved a failure to take adequate corrective action related to implementation of a safety-related nuclear service water (RN) strainer backwash system. As a result of the Regulatory Response performance during the third and fourth quarters of the assessment period, a supplemental inspection will be performed under Inspection Procedure (IP) 95001.

Plant performance for McGuire Units 1 and 2, for the first and second quarters of the assessment cycle, was within the Licensee Response Column of the NRC's Action Matrix, based on the associated inspection findings being classified as having very low safety significance (Green) and all PIs indicating performance at a level requiring no additional NRC oversight (Green).

Based on conversations with your staff, we tentatively plan to perform the aforementioned supplemental inspection in the Fall 2009 time frame. However, satisfactory NRC completion of the supplemental inspection is highly dependent on adequate root cause/extent of condition reviews by your staff and the final RN strainer backwash resolution. In addition to the supplemental inspection and reactor oversight process (ROP) baseline inspection activities, we also plan on conducting several non-ROP inspections, which involve: (1) operator licensing examinations; (2) the Independent Spent Fuel Storage Installation; (3) emergency response organization drill/exercise performance indicator program review (Temporary Instruction (TI)-2515/175); (4) reactor coolant system dissimilar metal butt welds (TI-2515/172); and (5) review of the implementation of the industry groundwater protection voluntary initiative (TI-2515/173).

The enclosed inspection plan details the inspections, less those related to security, scheduled through June 30, 2010. The inspection plan is provided to minimize the resource impact on your staff and to allow for the resolution of any scheduling conflicts and personnel availability issues well in advance of inspector arrival onsite. Routine resident inspections are not listed due to their ongoing and continuous nature. The inspections in the last nine months of the inspection plan are tentative and may be revised at the mid-cycle review meeting.

In accordance with 10 CFR 2.390 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 the inspection plan, we will contact you to discuss the change as soon as possible. Please contact Jonathan Bartley at (404) 562-4607 with any questions you may have regarding this letter or the inspection plan.

Sincerely,

*/RA/*

Leonard D. Wert, Jr., Director  
Division of Reactor Projects

Docket Nos.: 50-369, 50-370, 72-038  
License Nos.: NPF-9, NPF-17

Enclosure: McGuire Inspection/Activity Plan

cc w/encl: (See page 3)

cc w/encls:

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Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
			<b>ISFSI - ISFSI ROUTING LOADING</b>		<b>2</b>
1,2	01/01/2009	03/30/2009	IP 60855.1	Operation of an Independent Spent Fuel Storage Installation at Operating Plants	
			<b>TFPI 805 - TRIENNIEL FIRE PROTECTION INSPECTION</b>		<b>7</b>
1,2	03/09/2009	03/13/2009	IP 7111105T	Fire Protection [Triennial]	
1,2	03/23/2009	03/27/2009	IP 7111105T	Fire Protection [Triennial]	
			<b>EB3HS - HEAT SINK</b>		<b>1</b>
1,2	04/20/2009	04/24/2009	IP 7111107T	Heat Sink Performance	
			<b>OL EXAM - INITIAL EXAM PREP</b>		<b>7</b>
1	04/20/2009	04/24/2009	V23306	MCGUIRE/MAY 2009 EXAM AT POWER FACILITIES	
			<b>EB1-CDBI - COMPONENT DESIGN BASES INSPECTION</b>		<b>9</b>
1,2	05/04/2009	05/08/2009	IP 7111121	Component Design Bases Inspection	
1,2	05/18/2009	05/22/2009	IP 7111121	Component Design Bases Inspection	
1,2	06/01/2009	06/05/2009	IP 7111121	Component Design Bases Inspection	
1,2	06/15/2009	06/19/2009	IP 7111121	Component Design Bases Inspection	
			<b>OL EXAM - INITIAL EXAM - WEEK 1</b>		<b>7</b>
1	05/11/2009	05/15/2009	V23306	MCGUIRE/MAY 2009 EXAM AT POWER FACILITIES	
			<b>OL EXAM - INITIAL EXAM - WEEK 2</b>		<b>7</b>
1	05/18/2009	05/22/2009	V23306	MCGUIRE/MAY 2009 EXAM AT POWER FACILITIES	
			<b>PSB1-RP - RADIATION PROTECTION PUBLIC BASELINE INS</b>		<b>4</b>
1,2	07/27/2009	07/31/2009	IP 60855.1	Operation of an Independent Spent Fuel Storage Installation at Operating Plants	
1,2	07/27/2009	07/31/2009	IP 7112101	Access Control to Radiologically Significant Areas	
1,2	07/27/2009	07/31/2009	IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment	
1,2	07/27/2009	07/31/2009	IP 7112201	Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems	
1,2	07/27/2009	07/31/2009	IP 7112203	Radiological Environmental Monitoring Program (REMP) And Radioactive Material Control Program	
1,2	07/27/2009	07/31/2009	IP 71151	Performance Indicator Verification	
			<b>PSB1EP - EMERGENCY PREPAREDNESS EXERCISE</b>		<b>3</b>
1,2	08/17/2009	08/21/2009	IP 7111401	Exercise Evaluation	
1,2	08/17/2009	08/21/2009	IP 7111404	Emergency Action Level and Emergency Plan Changes	
1,2	08/17/2009	08/21/2009	IP 71151	Performance Indicator Verification	
			<b>EB3ISI - UNIT 2 INSERVICE INSPECTION</b>		<b>1</b>
2	09/14/2009	09/18/2009	IP 7111108P	Inservice Inspection Activities - PWR	
			<b>EB3TI172 - TI-172 RCS DM BUTT WELDS</b>		<b>1</b>
2	09/14/2009	09/18/2009	IP 2515/172	Reactor Coolant System Dissimilar Metal Butt Welds	
			<b>EB3SGISI - U2 STEAM GENERATOR ISI</b>		<b>1</b>
2	09/21/2009	09/25/2009	IP 7111108P	Inservice Inspection Activities - PWR	

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

Enclosure

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
<b>PSB1-RP - RP GROUNDWATER PROTECTION</b>					<b>1</b>
1,2	02/22/2010	02/26/2010	IP 2515/173	Review of the Implementation of the Industry Ground Water Protection Voluntary Initiative	
<b>PSB1-RP - RP OCCUPATIONAL BASELINE WEEK 1</b>					<b>2</b>
1,2	03/29/2010	04/02/2010	IP 7112101	Access Control to Radiologically Significant Areas	
1,2	03/29/2010	04/02/2010	IP 7112102-7112102R	ALARA - Required	
1,2	03/29/2010	04/02/2010	IP 7112202	Radioactive Material Processing and Transportation	
1,2	03/29/2010	04/02/2010	IP 71151	Performance Indicator Verification	
<b>PSB1-RP - RP OCCUPATIONAL BASELINE WEEK 2</b>					<b>2</b>
1,2	04/12/2010	04/16/2010	IP 7112101	Access Control to Radiologically Significant Areas	
1	04/12/2010	04/16/2010	IP 7112102-7112102R	ALARA - Required	
1,2	04/12/2010	04/16/2010	IP 7112202	Radioactive Material Processing and Transportation	
1,2	04/12/2010	04/16/2010	IP 71151	Performance Indicator Verification	
<b>OL RQ - REQUAL INSPECTION</b>					<b>2</b>
1,2	06/07/2010	06/11/2010	IP 7111111B	Licensed Operator Requalification Program	