



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

March 3, 2010

Mr. Regis T. Repko
Vice President
Duke Power Company, LLC
d/b/a Duke Energy Carolinas, LLC
McGuire Nuclear Station
MG01VP/12700 Hagers Ferry Road
Huntersville, NC 28078

**SUBJECT: ANNUAL ASSESSMENT LETTER - MCGUIRE NUCLEAR STATION
(NRC INSPECTION REPORT 05000369/2010001 AND 05000370/2010001)**

Dear Mr. Repko:

On February 9, 2010, 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, 2009. 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 most recent quarter, as well as the previous three quarters of the assessment cycle, was within the Regulatory Response column of the NRC's Action Matrix, based on a third quarter 2008 Mitigating Systems Cornerstone finding of low to moderate safety significance (White) which involved a failure to take adequate corrective action related to implementation of a safety-related nuclear service water (RN) strainer backwash system.

On January 11, 2010, we were notified of your readiness for the NRC to conduct this supplemental inspection to review the actions taken to address the White finding. As a result, we initiated supplemental inspection 95001 on March 1, 2010.

In addition to ROP baseline inspections and the 95001 supplemental inspection, we also plan on conducting several infrequently performed inspections, which include: Inspection Procedure 60855.1, Operation of an Independent Spent Fuel Storage Installation (ISFSI); dry run inspections (to include welding demonstration) and initial loading inspections of the new MAGNASTOR ISFSI casks at Operating Plants; Temporary Instruction (TI) 2515/172, "Reactor Coolant System Dissimilar Metal Butt Welds;" operator licensing examinations; and TI 2515/177, "Managing Gas Accumulation in Emergency Core Cooling, Decay Heat Removal and Containment Spray Systems." Additionally, we will be conducting a traditional enforcement follow-up inspection as required by IMC 0305, "Operating Reactor Assessment Program," using

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IP 92723 once you have notified us of your readiness. This follow-up inspection is related to multiple Severity Level IV violations that were identified during the assessment period.

The enclosed inspection plan details the inspections, less those related to physical protection, scheduled through June 30, 2011. The inspection plan is provided 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 listed in the last nine months of the inspection plan are tentative and may be revised at the mid-cycle review.

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

Enclosures: 1. McGuire Inspection/Activity Plan for 07200038
2. McGuire Inspection/Activity Plan for 05000369 and 05000370
cc w/encls: (See page 3)

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cc w/encl:
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McGuire
Inspection / Activity Plan
03/01/2010 - 06/30/2011

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
			PB1-INSP - SUPPLEMENTAL FOR WHITE RN FOULING		1
1,2	03/01/2010	03/05/2010	IP 95001	Supplemental Inspection For One Or Two White Inputs In A Strategic Performance Area	
			PSB1-RP - RP OCCUPATIONAL BASELINE WEEK 1		2
1,2	03/15/2010	03/19/2010	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1,2	03/15/2010	03/19/2010	IP 71124.02	Occupational ALARA Planning and Controls	
1,2	03/15/2010	03/19/2010	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1,2	03/15/2010	03/19/2010	IP 71124.04	Occupational Dose Assessment	
1,2	03/15/2010	03/19/2010	IP 71124.08	Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation	
1,2	03/15/2010	03/19/2010	IP 71151	Performance Indicator Verification	
			EB3ISI - UNIT 1 ISI		1
1	03/22/2010	03/26/2010	IP 7111108P	Inservice Inspection Activities - PWR	
			EB3TI172 - EB3 TI-172 RCS DM BUTT WELDS		1
1,2	03/22/2010	03/26/2010	IP 2515/172	Reactor Coolant System Dissimilar Metal Butt Welds	
			PSB1-RP - RP OCCUPATIONAL BASELINE WEEK 2		3
1,2	03/29/2010	04/02/2010	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1,2	03/29/2010	04/02/2010	IP 71124.02	Occupational ALARA Planning and Controls	
1,2	03/29/2010	04/02/2010	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1,2	03/29/2010	04/02/2010	IP 71124.04	Occupational Dose Assessment	
1,2	03/29/2010	04/02/2010	IP 71124.08	Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation	
1,2	03/29/2010	04/02/2010	IP 71151	Performance Indicator Verification	
			OL RQ - REQUAL INSPECTION		2
1,2	06/07/2010	06/11/2010	IP 7111111B	Licensed Operator Requalification Program	
			OL EXAM - INITIAL PREP EXAM		5
1	07/05/2010	07/09/2010	V23332	MCGUIRE/AUGUST 2010 EXAM AT POWER FACILITIES	
			OL EXAM - INITIAL EXAM WEEK		5
1	08/02/2010	08/06/2010	V23332	MCGUIRE/AUGUST 2010 EXAM AT POWER FACILITIES	
			PSB1EP - EMERGENCY PREPAREDNESS INSPECTION		1
1,2	08/16/2010	08/20/2010	IP 7111402	Alert and Notification System Evaluation	
1,2	08/16/2010	08/20/2010	IP 7111403	Emergency Response Organization Augmentation Testing	
1,2	08/16/2010	08/20/2010	IP 7111404	Emergency Action Level and Emergency Plan Changes	
1,2	08/16/2010	08/20/2010	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies	
1,2	08/16/2010	08/20/2010	IP 71151	Performance Indicator Verification	
			EB1-MODS - MODIFICATIONS - 10CFR50.59		4
1,2	08/30/2010	09/03/2010	IP 7111117T	Evaluations of Changes, Tests, or Experiments and Permanent Plant Modifications	
1,2	09/13/2010	09/17/2010	IP 7111117T	Evaluations of Changes, Tests, or Experiments and Permanent Plant Modifications	

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

McGuire
Inspection / Activity Plan
03/01/2010 - 06/30/2011

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
			PI&R - PROBLEM IDENTIFICATION AND RESOLUTION		5
1,2	10/04/2010	10/08/2010	IP 71152B	Identification and Resolution of Problems	
1,2	10/18/2010	10/22/2010	IP 71152B	Identification and Resolution of Problems	
			EB3ISI - UNIT 2 INSERVICE INSPECTION		1
2	03/14/2011	03/18/2011	IP 7111108P	Inservice Inspection Activities - PWR	
			PSB1-RP - RP RADIOLOGICAL HAZARD ASSESSMENT		1
1,2	04/04/2011	04/08/2011	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
			TI-177 - TI-177 GAS INTRUSION		2
1,2	05/02/2011	05/06/2011	IP 2515/177	Managing Gas Accumulation In Emergency Core Cooling, Decay Heat Removal & Containment Spray System	
			OL EXAM - INITIAL EXAM PREP		3
1	05/23/2011	05/27/2011	V23350	MCGUIRE/MAY 2011 EXAM AT POWER FACILITIES	
			OL EXAM - INITIAL EXAM - WEEK 1		3
1	06/13/2011	06/17/2011	V23350	MCGUIRE/MAY 2011 EXAM AT POWER FACILITIES	
			OL EXAM - INITIAL EXAM - WEEK 2		3
1	06/20/2011	06/24/2011	V23350	MCGUIRE/MAY 2011 EXAM AT POWER FACILITIES	
			PSB1-RP - RP PUBLIC RADIATION PROTECTION INSP		3
1,2	06/27/2011	07/01/2011	IP 71124.05	Radiation Monitoring Instrumentation	
1,2	06/27/2011	07/01/2011	IP 71124.06	Radioactive Gaseous and Liquid Effluent Treatment	
1,2	06/27/2011	07/01/2011	IP 71124.07	Public Radiation Safety	
1,2	06/27/2011	07/01/2011	IP 71151	Performance Indicator Verification	

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07200038 - DUKE POWER CO.

Inspection / Activity Plan

03/01/2010 - 06/30/2011

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
			ISFSI	- MCGUIRE MAGNASTORE WELDING DEMONSTRATION	2
1	07/12/2010	07/16/2010	IP 60854	Preoperational Testing Of An ISFSI	
			ISFSI	- MCGUIRE MAGNASTORE DRY RUN	5
1	08/09/2010	08/13/2010	IP 60854	Preoperational Testing Of An ISFSI	
			ISFSI	- MCGUIRE MAGNASTORE FIRST CAMPIAGN	5
1	08/23/2010	08/23/2010	IP 60855	Operation Of An ISFSI	

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