



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

September 1, 2011

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

**SUBJECT: MID-CYCLE LETTER FOR MCGUIRE NUCLEAR STATION UNIT 1 AND UNIT 2  
(NRC INSPECTION REPORT 05000369/2011006 AND 05000370/2011006)**

Dear Mr. Repko:

On August 9, 2011, the NRC completed its mid-cycle performance review of McGuire Nuclear Station, Unit 1 and Unit 2. The NRC reviewed the most recent quarterly performance indicators (PIs) in addition to inspection results and enforcement actions from July 1, 2010, through June 30, 2011. This letter informs you of the NRC's assessment of your facility during this period and its plans for future inspections at your facility. This performance review and enclosed inspection plan do not include security information. A separate letter will include the NRC's assessment of your performance in the Security Cornerstone and its security-related inspection plan.

The NRC determined the performance at McGuire Unit 1 and Unit 2 during the most recent quarter was within the Licensee Response Column of the NRC's Reactor Oversight Process (ROP) Action Matrix because all inspection findings had very low (i.e., Green) safety significance, and all PIs indicated that your performance was within the nominal, expected range (i.e., Green). Therefore, the NRC plans to conduct ROP baseline inspections at your facility.

The enclosed inspection plan lists the inspections scheduled through December 31, 2012. Routine inspections performed by resident inspectors are not included in the inspection plan. The NRC will also conduct inspection of dry run and initial loading campaign for MAGNASTOR casks and initial reactor operator licensing examinations. The inspections listed during the last nine months of the inspection plan are tentative and may be revised at the end-of-cycle performance review. The NRC provides the inspection plan to allow for the resolution of any scheduling conflicts and personnel availability issues. The NRC will contact you as soon as possible to discuss changes to the inspection plan should circumstances warrant any changes.

As discussed in the 201 Annual Assessment Letter dated March 4, 2011, the NRC evaluated the need to conduct IP 92723, "Follow Up Inspection for Three or More Severity Level IV Traditional Enforcement Violations in the Same Area in a 12-Month Period." At that time the NRC decided not to schedule an IP 92723 inspection, but would re-evaluate the need for conducting this inspection during the mid-cycle assessment meeting in August 2011. Although

additional SL IV violations were identified during the first two quarters of 2011, the NRC decided not to schedule an IP 92723 inspection because there has not been sufficient time to evaluate the effectiveness of your corrective actions. We will again re-evaluate the need for this inspection during the 2011 annual assessment meeting in February 2012.

In the days following the Fukushima Daiichi nuclear accident in Japan, the Commission directed the staff to establish a senior-level agency task force to conduct a methodical and systematic review of the NRC's processes and regulations to determine whether the agency should make additional improvements to its regulatory system. The NRC has since completed Temporary Instruction (TI) 183, "Follow-up to Fukushima Daiichi Nuclear Station Fuel Damage Event," and TI-184, "Availability and Readiness Inspection of Severe Accident Management Guidelines (SAMGs)" at your facility. Results of these inspections can be found here: <http://www.nrc.gov/japan/japan-activities.html>. Additionally, on May 11, 2011, the agency issued NRC Bulletin 2011-01, "Mitigating Strategies," to confirm compliance with Order EA-02-026, subsequently imposed license conditions, and 10 CFR 50.54(hh)(2), and to determine the status of licensee mitigating strategies programs. On July 12, 2011, the NRC's Task Force made its recommendations to the Commission in its report, "Recommendations for Enhancing Reactor Safety in the 21<sup>st</sup> Century: The Near-Term Task Force Review of Insights from the Fukushima Daiichi Accident." The NRC is currently reviewing the Task Force's recommendations to determine what additional actions may be warranted.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter will be 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).

Please contact me at 404-997-4607 with any questions you have regarding this letter.

Sincerely,

*/RA/*

George A. Hutto, Acting Chief  
Reactor Projects Branch 1  
Division of Reactor Projects

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

Enclosure: McGuire Inspection/Activity Plan (09/01/2011 – 12/31/2012)

cc w/encl: (See page3)

DEC

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cc w/encl:  
Steven D. Capps  
Station Manager  
Duke Energy Carolinas, LLC  
Electronic Mail Distribution

Peter Schuerger  
Training Manager  
Duke Energy Carolinas, LLC  
Electronic Mail Distribution

C. Jeff Thomas  
Fleet Regulatory Compliance & Licensing  
Manager  
Duke Energy Carolinas, LLC  
Electronic Mail Distribution

Kenneth L. Ashe  
Regulatory Compliance Manager  
Duke Energy Carolinas, LLC  
Electronic Mail Distribution

Lara Nichols  
Associate General Counsel  
Duke Energy Corporation  
Electronic Mail Distribution

Kathryn B. Nolan  
Senior Counsel  
Duke Energy Corporation  
526 South Church Street-EC07H  
Charlotte, NC 28202

David A. Repka  
Winston Strawn LLP  
Electronic Mail Distribution

County Manager of Mecklenburg County  
720 East Fourth Street  
Charlotte, NC 28202

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

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

Dhiaa M. Jamil  
Group Executive and Chief Nuclear Officer  
Duke Energy Carolinas, LLC  
Electronic Mail Distribution

**McGuire**  
**Inspection / Activity Plan**  
**09/01/2011 - 12/31/2012**

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
			<b>EB3 ISI - UNIT 1 IN-SERVICE INSPECTION</b>		<b>1</b>
1	09/26/2011	09/30/2011	IP 7111108P	Inservice Inspection Activities - PWR	
			<b>ISFSI - MC GUIRE ISFSI - DRY RUN</b>		<b>4</b>
1, 2	12/12/2011	12/16/2011	IP 60854	Preoperational Testing Of An ISFSI	
			<b>ISFSI - ISFSI FIRST LOADING CAMPAIGN (MAGNASTOR)</b>		<b>2</b>
1, 2	01/16/2012	01/20/2012	IP 60855.1	Operation of an Independent Spent Fuel Storage Installation at Operating Plants	
			<b>CDBI - COMPONENT DESIGN BASES INSPECTION</b>		<b>6</b>
1, 2	02/13/2012	02/17/2012	IP 7111121	Component Design Bases Inspection	
1, 2	03/05/2012	03/09/2012	IP 7111121	Component Design Bases Inspection	
1, 2	03/19/2012	03/23/2012	IP 7111121	Component Design Bases Inspection	
1, 2	04/02/2012	04/06/2012	IP 7111121	Component Design Bases Inspection	
			<b>EB3 HS - TRIENNIAL HEAT SINK INSPECTION</b>		<b>1</b>
1, 2	03/05/2012	03/09/2012	IP 7111107T	Heat Sink Performance	
			<b>OL RQ - REQUAL INSPECTION</b>		<b>2</b>
1, 2	06/11/2012	06/15/2012	IP 7111111B	Licensed Operator Requalification Program	
			<b>OL EXAM - INITIAL EXAM PREP</b>		<b>3</b>
1	07/30/2012	08/03/2012	V23375	MCGUIRE / AUGUST 2012 EXAM AT POWER FACILITIES	
			<b>PI&amp;R - PROBLEM IDENTIFICATION AND RESOLUTION</b>		<b>5</b>
1, 2	08/13/2012	08/17/2012	IP 71152B	Problem Identification and Resolution	
1, 2	08/27/2012	08/31/2012	IP 71152B	Problem Identification and Resolution	
			<b>OL EXAM - INITIAL EXAM - WEEK 1</b>		<b>3</b>
1	08/20/2012	08/24/2012	V23375	MCGUIRE / AUGUST 2012 EXAM AT POWER FACILITIES	
			<b>OL EXAM - INITIAL EXAM - WEEK 2</b>		<b>3</b>
1	08/27/2012	08/31/2012	V23375	MCGUIRE / AUGUST 2012 EXAM AT POWER FACILITIES	
			<b>PSB1-RP - OCCUPATIONAL RP BASELINE WK1</b>		<b>3</b>
1, 2	09/17/2012	09/21/2012	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1, 2	09/17/2012	09/21/2012	IP 71124.02	Occupational ALARA Planning and Controls	
1, 2	09/17/2012	09/21/2012	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1, 2	09/17/2012	09/21/2012	IP 71124.04	Occupational Dose Assessment	
1, 2	09/17/2012	09/21/2012	IP 71124.05	Radiation Monitoring Instrumentation	
1, 2	09/17/2012	09/21/2012	IP 71151	Performance Indicator Verification	
			<b>EB3 ISI - UNIT 2 INSERVICE INSPECTION &amp; RPVH EXAMS</b>		<b>2</b>
2	09/24/2012	09/28/2012	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

**McGuire**  
**Inspection / Activity Plan**  
**09/01/2011 - 12/31/2012**

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
<b>EB3SGISI - UNIT 2 SGISI</b>					<b>1</b>
2	10/01/2012	10/05/2012	IP 7111108P	Inservice Inspection Activities - PWR	
<b>PSB1-RP - OCCUPATIONAL RP BASELINE WK2</b>					<b>3</b>
1, 2	10/01/2012	10/05/2012	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1, 2	10/01/2012	10/05/2012	IP 71124.02	Occupational ALARA Planning and Controls	
1, 2	10/01/2012	10/05/2012	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1, 2	10/01/2012	10/05/2012	IP 71124.04	Occupational Dose Assessment	
1, 2	10/01/2012	10/05/2012	IP 71124.05	Radiation Monitoring Instrumentation	
1, 2	10/01/2012	10/05/2012	IP 71151	Performance Indicator Verification	
<b>PSB1EP - EMERGENCY PREPAREDNESS INSPECTION</b>					<b>1</b>
1, 2	11/05/2012	11/09/2012	IP 7111402	Alert and Notification System Testing	
1, 2	11/05/2012	11/09/2012	IP 7111403	Emergency Preparedness Organization Staffing and Augmentation System	
1, 2	11/05/2012	11/09/2012	IP 7111404	Emergency Action Level and Emergency Plan Changes	
1, 2	11/05/2012	11/09/2012	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies	
1, 2	11/05/2012	11/09/2012	IP 71151	Performance Indicator Verification	

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Enclosure