



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

REGION II  
SAM NUNN ATLANTA FEDERAL CENTER  
61 FORSYTH STREET, SW, SUITE 23T85  
ATLANTA, GEORGIA 30303-8931

August 31, 2006

Duke Power Company, LLC d/b/a  
Duke Energy Carolinas, LLC (Duke)  
ATTN: Mr. G. R. Peterson  
Vice President  
McGuire Nuclear Station  
12700 Hagers Ferry Road  
Huntersville, NC 28078-8985

SUBJECT: MID-CYCLE PERFORMANCE REVIEW AND INSPECTION PLAN - MCGUIRE  
NUCLEAR STATION

Dear Mr. Peterson:

On August 2, 2006, the NRC staff completed its performance review of the McGuire Nuclear Station for the first half of the calendar year 2006 assessment cycle. Our technical staff reviewed performance indicators (PIs) for the most recent quarter and inspection results over the previous twelve months. 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 physical protection information. A separate letter designated and marked as "Exempt from Public Disclosure in Accordance with 10 CFR 2.390" will include the physical protection review and a 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 McGuire Units 1 and 2 for the most recent quarter was in the Licensee Response Column of the NRC's Action Matrix, based on all 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). Therefore, we plan to conduct reactor oversight process baseline inspections at your facility. In addition to the baseline inspections, we plan to conduct non-ROP inspections involving containment sump blockage, Mitigating System Performance Index, Reactor Pressure Vessel Penetration Nozzles, and Independent Spent Fuel Storage Installation.

The enclosed inspection plan details the inspections, less those related to physical protection, scheduled through March 31, 2008. 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 twelve months of the inspection plan are tentative and may be revised at the end-of-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 me at (404) 562-4540 with any questions you may have regarding this letter or the inspection plan.

Sincerely,

**/RA/**

Michael E. Ernstes, Chief  
Reactor Projects Branch 1  
Division of Reactor Projects

Docket Nos.: 50-369, 50-370, and 72-38  
License Nos.: NPF-9, NPF-17

Enclosure: McGuire Inspection/Activity Plan

cc w/encl: (See page 3)

cc w/encl:  
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**McGuire**  
**Inspection / Activity Plan**  
**09/01/2006 - 03/31/2008**

Unit Number	Inspection Activity	Title	No. of Staff on Site	Planned Dates Start	Planned Dates End	Inspection Type
	<b>2515/169 - TI 2515/169 - MSPI VERIFICATION</b>		<b>1</b>			
1,2	IP 2515/169	Mitigating Systems Performance Index Verification		08/01/2006	12/31/2006	Safety Issues
	<b>PSB1-RP - RP BASELINE OCCUPATIONAL WK1</b>		<b>2</b>			
1,2	IP 7112101	Access Control to Radiologically Significant Areas		09/18/2006	09/22/2006	Baseline Inspections
1,2	IP 7112102	ALARA Planning and Controls		09/18/2006	09/22/2006	Baseline Inspections
1,2	IP 7112202	Radioactive Material Processing and Transportation		09/18/2006	09/22/2006	Baseline Inspections
1,2	IP 71151	Performance Indicator Verification		09/18/2006	09/22/2006	Baseline Inspections
	<b>EB3TI150 - 2515/150 U-2: RPV &amp; VHP NOZZLES</b>		<b>1</b>			
2	IP 2515/150	Reactor Pressure Vessel Head and Vessel Head Penetration Nozzles (NRC ORDER EA-03-		09/25/2006	09/29/2006	Safety Issues
	<b>EB3-ISI - UNIT 2 INSERVICE INSPECTION</b>		<b>1</b>			
2	IP 7111108P	Inservice Inspection Activities - PWR		09/27/2006	10/06/2006	Baseline Inspections
	<b>PSB1-RP - RP BASELINE OCCUPATIONAL WK2</b>		<b>2</b>			
1,2	IP 7112101	Access Control to Radiologically Significant Areas		10/02/2006	10/06/2006	Baseline Inspections
1,2	IP 7112102	ALARA Planning and Controls		10/02/2006	10/06/2006	Baseline Inspections
1,2	IP 7112202	Radioactive Material Processing and Transportation		10/02/2006	10/06/2006	Baseline Inspections
1,2	IP 71151	Performance Indicator Verification		10/02/2006	10/06/2006	Baseline Inspections
	<b>PS2-EP - EMERGENCY PREPAREDNESS INSPECTION</b>		<b>1</b>			
1,2	IP 7111402	Alert and Notification System Testing		10/23/2006	10/27/2006	Baseline Inspections
1,2	IP 7111403	Emergency Response Organization Augmentation Testing		10/23/2006	10/27/2006	Baseline Inspections
1,2	IP 7111404	Emergency Action Level and Emergency Plan Changes		10/23/2006	10/27/2006	Baseline Inspections
1,2	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies		10/23/2006	10/27/2006	Baseline Inspections
1,2	IP 71151	Performance Indicator Verification		10/23/2006	10/27/2006	Baseline Inspections
	<b>EB2-TFP - FIRE PROTECTION-TRIENNIAL PRE INSP VISIT</b>		<b>6</b>			
1,2	IP 7111105T	Fire Protection [Triennial]		10/31/2006	11/02/2006	Baseline Inspections
	<b>EB2-TFP - FIRE PROTECTION-TRIENNIAL</b>		<b>5</b>			
1,2	IP 7111105T	Fire Protection [Triennial]		11/27/2006	12/01/2006	Baseline Inspections
1,2	IP 7111105T	Fire Protection [Triennial]		12/11/2006	12/15/2006	Baseline Inspections
	<b>PB1-PI&amp;R - BIENNIAL PI&amp;R INSPECTION</b>		<b>4</b>			
1,2	IP 71152B	Identification and Resolution of Problems		01/22/2007	01/26/2007	Baseline Inspections
1,2	IP 71152B	Identification and Resolution of Problems		02/05/2007	02/09/2007	Baseline Inspections
	<b>EB1-MODS - MODIFICATIONS-10CFR50.59</b>		<b>3</b>			
1,2	IP 7111102	Evaluation of Changes, Tests, or Experiments		02/12/2007	02/16/2007	Baseline Inspections
1,2	IP 7111117B	Permanent Plant Modifications		02/12/2007	02/16/2007	Baseline Inspections
	<b>OL PREP - INITIAL EXAM PREPARATION</b>		<b>3</b>			
1	V23263	MCGUIRE/MARCH 2007 EXAM AT POWER FACILITIES		02/26/2007	03/02/2007	Not Applicable

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

Enclosure

**McGuire**  
**Inspection / Activity Plan**  
**09/01/2006 - 03/31/2008**

Unit Number	Inspection Activity	Title	No. of Staff on Site	Planned Dates Start	Planned Dates End	Inspection Type
	<b>OL EXAM - INITIAL EXAM</b>		<b>4</b>			
1	V23263	MCGUIRE/MARCH 2007 EXAM AT POWER FACILITIES		03/19/2007	03/30/2007	Not Applicable
	<b>EB3-ISI - UNIT 1 INSERVICE INSPECTION</b>		<b>1</b>			
1	IP 7111108P	Inservice Inspection Activities - PWR		03/26/2007	03/30/2007	Baseline Inspections
	<b>EB3TI150 - 2515/150 U-1: RPV &amp; VHP NOZZLES</b>		<b>1</b>			
1	IP 2515/150	Reactor Pressure Vessel Head and Vessel Head Penetration Nozzles (NRC ORDER EA-03-		04/02/2007	04/06/2007	Safety Issues
	<b>EB1-SUMP - PWR CONTAINMENT SUMP BLOCKAGE TI (U-1)</b>		<b>1</b>			
1	IP 2515/166	Pressurized Water Reactor Containment Sump Blockage [NRC GENERIC LETTER 2004-02		04/08/2007	04/13/2007	Safety Issues
	<b>EB3-HS - HEAT SINK</b>		<b>2</b>			
1,2	IP 7111107B	Heat Sink Performance		05/07/2007	05/11/2007	Baseline Inspections
	<b>EB3-MR - MAINTENANCE RULE EFFECTIVENESS</b>		<b>2</b>			
1,2	IP 7111112B	Maintenance Effectiveness		06/04/2007	06/08/2007	Baseline Inspections
	<b>60855.1 - OPERATIONAL ISFSI INSP. BY RESIDENT</b>		<b>1</b>			
1	IP 60855.1	Operation of an Independent Spent Fuel Storage Installation at Operating Plants		07/09/2007	07/13/2007	Other Routine
	<b>PS2-EP - EMERGENCY PREPAREDNESS EXERCISE</b>		<b>3</b>			
1,2	IP 7111401	Exercise Evaluation		10/15/2007	10/19/2007	Baseline Inspections
1,2	IP 7111404	Emergency Action Level and Emergency Plan Changes		10/15/2007	10/19/2007	Baseline Inspections
1,2	IP 71151	Performance Indicator Verification		10/15/2007	10/19/2007	Baseline Inspections
	<b>PSB1-RP - RP PUBLIC PRE-INSP/ISFSI</b>		<b>1</b>			
1,2	IP 7112101	Access Control to Radiologically Significant Areas		11/05/2007	11/07/2007	Baseline Inspections
	<b>PSB1-RP - RP PUBLIC BASELINE INSPECTION</b>		<b>4</b>			
1,2	IP 7112101	Access Control to Radiologically Significant Areas		11/26/2007	11/30/2007	Baseline Inspections
1,2	IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment		11/26/2007	11/30/2007	Baseline Inspections
1,2	IP 7112201	Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems		11/26/2007	11/30/2007	Baseline Inspections
1,2	IP 7112203	Radiological Environmental Monitoring Program (REMP) And Radioactive Material Control P		11/26/2007	11/30/2007	Baseline Inspections
1,2	IP 71151	Performance Indicator Verification		11/26/2007	11/30/2007	Baseline Inspections