



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

September 1, 2015

Steven D. Capps  
Site Vice President  
Duke Energy Carolinas, LLC  
McGuire Nuclear Station  
12700 Hagers Ferry Road  
Huntersville, NC 28078-8985

**SUBJECT: MID-CYCLE ASSESSMENT LETTER FOR MCGUIRE NUCLEAR STATION UNITS  
1 AND 2 (NRC INSPECTION REPORT 05000369/2015005 AND  
05000370/2015005)**

Dear Mr. Capps:

On August 11, 2015, the NRC completed its mid-cycle performance review of the McGuire Nuclear Station, Units 1 and 2. The NRC reviewed the most recent quarterly performance indicators (PIs) in addition to inspection results and enforcement actions from July 1, 2014 through June 30, 2015. This letter informs you of the NRC's assessment of your facility during this period and its plans for future inspections at your facility.

The NRC determined that overall, McGuire Nuclear Station was operated in a manner that preserved public health and safety and met all cornerstone objectives. The NRC determined the performance at McGuire Units 1 and 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 June 30, 2017. Routine inspections performed by resident inspectors are not included in the inspection plan. The inspections listed during the second half 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. This inspection plan does not include security related inspections which will be sent via separate, non-publicly available correspondence.

In response to the accident at Fukushima, the Commission issued Order EA-12-049, "Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events." The order requires licensees to develop, implement, and maintain guidance and strategies to maintain or restore core cooling, containment, and spent fuel pool cooling capabilities following a beyond-design-basis external event. Additionally, the

Commission issued Order EA-12-051, "Order Modifying Licenses with Regard to Reliable Spent Fuel Pool Instrumentation." The order requires licensees to have a reliable means of remotely monitoring wide-range spent fuel pool levels to support effective prioritization of event mitigation and recovery actions in the event of a beyond-design-basis external event. The NRC is conducting audits of licensee efforts towards compliance with these orders. The audit was completed for the McGuire Nuclear Station, and the information gathered will aid staff in development of the ultimate safety evaluation for the site. After the NRC staff receives the final compliance letter for the site, the final safety evaluation will be issued. Then, the NRC staff will confirm through inspections the full implementation of the orders mentioned above by performing TI 191: "Inspection of the Implementation of Mitigation Strategies and Spent Fuel Pool Instrumentation Orders and Emergency Preparedness Communication/Staffing/Multi-Unit Dose Assessment Plans."

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>.

Please contact me at 404-997-4611 with any questions you have regarding this letter.

Sincerely,

*/RA/*

Frank Ehrhardt, 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  
(09/01/2015 – 06/30/2017)

cc: distribution via ListServ

S. Capps

2

Commission issued Order EA-12-051, "Order Modifying Licenses with Regard to Reliable Spent Fuel Pool Instrumentation." The order requires licensees to have a reliable means of remotely monitoring wide-range spent fuel pool levels to support effective prioritization of event mitigation and recovery actions in the event of a beyond-design-basis external event. The NRC is conducting audits of licensee efforts towards compliance with these orders. The audit was completed for the McGuire Nuclear Station, and the information gathered will aid staff in development of the ultimate safety evaluation for the site. After the NRC staff receives the final compliance letter for the site, the final safety evaluation will be issued. Then, the NRC staff will confirm through inspections the full implementation of the orders mentioned above by performing TI 191: "Inspection of the Implementation of Mitigation Strategies and Spent Fuel Pool Instrumentation Orders and Emergency Preparedness Communication/Staffing/Multi-Unit Dose Assessment Plans."

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>.

Please contact me at 404-997-4611 with any questions you have regarding this letter.

Sincerely,

*/RA/*

Frank Ehrhardt, 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  
(09/01/2015 – 06/30/2017)

cc: distribution via ListServ

PUBLICLY AVAILABLE       NON-PUBLICLY AVAILABLE       SENSITIVE       NON-SENSITIVE  
ADAMS: Yes      ACCESSION NUMBER: ML15244B034       SUNSI REVIEW COMPLETE       FORM 665 ATTACHED

OFFICE	RII:DRP	RII:DRP					
SIGNATURE	JGW1	FJE					
NAME	J. Worosilo	F. Ehrhardt					
DATE	8/17/2015	8/31/2015	9/ /2015	9/ /2015	9/ /2015	9/ /2015	9/ /2015
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

OFFICIAL RECORD COPY      DOCUMENT NAME: S:\DRP\PERIODIC ASSESSMENTS & REPORTS\EOC & MID-CYCLE\2015\MID-CYCLE\INPUT\RPB1\MID CYCLE LETTER FINAL\MCGUIRE 2015 MC LETTER.DOCX

S. Capps

3

Letter to Steven D. Capps from Frank Ehrhardt dated September 1, 2015

SUBJECT: MID-CYCLE ASSESSMENT LETTER FOR MCGUIRE NUCLEAR STATION UNITS  
1 AND 2 (NRC INSPECTION REPORT 05000369/2015005 AND  
05000370/2015005)

DISTRIBUTION:

D. Gamberoni, RII

L. Gibson, RII

OE Mail

RIDSNNRRDIRS

PUBLIC

RidsNrrPMMcGuire Resource

ROP Assessment

ROP Reports

Institute of Nuclear Power Operations (INPO)

**McGuire**  
**Inspection / Activity Plan**  
**09/01/2015 - 06/30/2017**

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
			<b>ISI - UNIT 2 IN-SERVICE INSPECTION</b>		<b>1</b>
2	09/21/2015	09/25/2015	IP 7111108P	Inservice Inspection Activities - PWR	
			<b>RP - RAD HAZARDS ANALYSIS AND TRANSPORTATION</b>		<b>2</b>
1, 2	09/21/2015	09/25/2015	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1, 2	09/21/2015	09/25/2015	IP 71124.08	Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation	
1, 2	09/21/2015	09/25/2015	IP 71151	Performance Indicator Verification	
			<b>TFPI - TRIENNIAL FIRE PROTECTION INSP</b>		<b>4</b>
1, 2	11/16/2015	11/20/2015	IP 7111105X	Fire Protection - NFPA 805 (Triennial)	
1, 2	12/07/2015	12/11/2015	IP 7111105X	Fire Protection - NFPA 805 (Triennial)	
			<b>OL EXAM - INITIAL LICENSE EXAM PREP</b>		<b>3</b>
1	03/07/2016	03/11/2016	V23467	MCGUIRE MARCH 2016 INITIAL EXAM AT POWER FACILITIES	
			<b>RP - RP OCCUPATIONAL INSPECTION WEEK 1</b>		<b>2</b>
1, 2	03/21/2016	03/25/2016	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1, 2	03/21/2016	03/25/2016	IP 71124.02	Occupational ALARA Planning and Controls	
1, 2	03/21/2016	03/25/2016	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1, 2	03/21/2016	03/25/2016	IP 71124.04	Occupational Dose Assessment	
1, 2	03/21/2016	03/25/2016	IP 71124.05	Radiation Monitoring Instrumentation	
1, 2	03/21/2016	03/25/2016	IP 71151	Performance Indicator Verification	
			<b>ISI - UNIT 1 IN-SERVICE INSPECTION</b>		<b>1</b>
1	03/28/2016	04/01/2016	IP 7111108P	Inservice Inspection Activities - PWR	
			<b>RP - RP OCCUPATIONAL INSPECTION WEEK 2</b>		<b>3</b>
1, 2	04/04/2016	04/08/2016	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1, 2	04/04/2016	04/08/2016	IP 71124.02	Occupational ALARA Planning and Controls	
1, 2	04/04/2016	04/08/2016	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1, 2	04/04/2016	04/08/2016	IP 71124.04	Occupational Dose Assessment	
1, 2	04/04/2016	04/08/2016	IP 71124.05	Radiation Monitoring Instrumentation	
1, 2	04/04/2016	04/08/2016	IP 71151	Performance Indicator Verification	
			<b>OL EXAM - INITIAL LICENSE EXAM</b>		<b>3</b>
1	04/04/2016	04/15/2016	V23467	MCGUIRE MARCH 2016 INITIAL EXAM AT POWER FACILITIES	
			<b>PI&amp;R - PROBLEM IDENTIFICATION AND RESOLUTION</b>		<b>4</b>
1, 2	05/02/2016	05/06/2016	IP 71152B	Problem Identification and Resolution	
1, 2	05/16/2016	05/20/2016	IP 71152B	Problem Identification and Resolution	

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

Enclosure

**McGuire**  
**Inspection / Activity Plan**  
**09/01/2015 - 06/30/2017**

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
			<b>OL RQ - REQUAL INSP</b>		<b>2</b>
1, 2	06/20/2016	06/24/2016	IP 7111111B	Licensed Operator Requalification Program	
			<b>EP - EP PROGRAM INSPECTION</b>		<b>4</b>
1, 2	08/08/2016	08/12/2016	IP 7111402	Alert and Notification System Testing	
1, 2	08/08/2016	08/12/2016	IP 7111403	Emergency Preparedness Organization Staffing and Augmentation System	
1, 2	08/08/2016	08/12/2016	IP 7111404	Emergency Action Level and Emergency Plan Changes	
1, 2	08/08/2016	08/12/2016	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies	
1, 2	08/08/2016	08/12/2016	IP 71151	Performance Indicator Verification	
			<b>MODS - PLANT MODIFICATIONS INSPECTION</b>		<b>3</b>
1, 2	09/12/2016	09/16/2016	IP 7111117T	Evaluations of Changes, Tests, and Experiments and Permanent Plant Modifications	
1, 2	09/26/2016	09/30/2016	IP 7111117T	Evaluations of Changes, Tests, and Experiments and Permanent Plant Modifications	
			<b>ISI - UNIT 2 IN-SERVICE INSPECTION</b>		<b>1</b>
2	04/03/2017	04/07/2017	IP 7111108P	Inservice Inspection Activities - PWR	
			<b>RP - RAD HAZARDS AND PIV</b>		<b>1</b>
1, 2	04/03/2017	04/07/2017	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1, 2	04/03/2017	04/07/2017	IP 71151	Performance Indicator Verification	
			<b>SGISI - UNIT 2 SG IN-SERVICE INSPECTION</b>		<b>1</b>
2	04/10/2017	04/14/2017	IP 7111108P	Inservice Inspection Activities - PWR	
			<b>RP - RP PUBLIC RAD SAFETY BASELINE</b>		<b>3</b>
1, 2	06/05/2017	06/09/2017	IP 71124.06	Radioactive Gaseous and Liquid Effluent Treatment	
1, 2	06/05/2017	06/09/2017	IP 71124.07	Radiological Environmental Monitoring Program	
1, 2	06/05/2017	06/09/2017	IP 71124.08	Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation	

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

Enclosure