



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

August 31, 2016

Benjamin C. Waldrep  
Site Vice President  
Shearon Harris Nuclear Power Plant  
5413 Shearon Harris Rd.  
M/C HNP01  
New Hill, NC 27562-0165

**SUBJECT: MID-CYCLE ASSESSMENT LETTER FOR SHEARON HARRIS NUCLEAR  
POWER PLANT – NRC INSPECTION REPORT 05000400/2016005**

Dear Mr. Waldrep:

On August 10, 2016, the Nuclear Regulatory Commission (NRC) completed its mid-cycle performance review of the Shearon Harris Nuclear Power Plant. The NRC reviewed the most recent quarterly performance indicators (PIs) in addition to inspection results and enforcement actions from July 1, 2015, through June 30, 2016. 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, the Shearon Harris Nuclear Power Plant operated in a manner that preserved public health and safety and met all cornerstone objectives. The NRC determined the performance at Shearon Harris Nuclear Power Plant 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, 2018. 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.

The NRC staff received the Harris Final Compliance letter for Order EA-12-049, "Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events," and Order EA-12-051, "Order Modifying Licenses with Regard to Reliable Spent Fuel Pool Instrumentation." The NRC staff issued the Harris Safety Evaluation on August 30, 2016, and will confirm full implementation of the orders mentioned above by performing Temporary Instruction 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 Staff Requirements Memorandum – SECY 16-0009, "Recommendations Resulting from the Integrated Prioritization and Re-Baselining of Agency Activities," the Commission approved the NRC staff recommendation to discontinue the formal mid-cycle assessment process beginning in calendar year 2017. This will be the final mid-cycle assessment letter. The staff will continue to conduct quarterly assessment meetings and communicate changes in the assessment of licensee performance in accordance with the guidance in Inspection Manual Chapter 0305, "Operating Reactor Assessment Program."

In accordance with Title 10 of the *Code of Federal Regulations* (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 404-997-4645 with any questions you have regarding this letter.

Sincerely,

**/RA/**

George T. Hopper, Chief  
Reactor Projects Branch 4  
Division of Reactor Projects

Docket Nos.: 50-400  
License Nos.: NPF-63

Enclosure:  
Harris Inspection/Activity Plan  
(09/01/2016 – 06/30/2018)

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B. Waldrep

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PUBLICLY AVAILABLE     NON-PUBLICLY AVAILABLE                       SENSITIVE     NON-SENSITIVE  
ADAMS:  Yes    ACCESSION NUMBER: ML16244A086     SUNSI REVIEW COMPLETE     FORM 665 ATTACHED

OFFICE	RII:DRP	RII:DRP	RII:DRP			
SIGNATURE	DXW4	JSD	GTH			
NAME	DJackson	JDodson	GHopper			
DATE	8/24/2016	8/25/2016	8/29/2016			
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

OFFICIAL RECORD COPY DOCUMENT NAME: S:\DRP NEW\RPB7\PERIODIC ASSESSMENTS & REPORTS\IEOC & MID-CYCLE\2016\ADMIN WORKING FOLDER\LETTERS\HAR 2016 MID-CYCLE ASSESSMENT LETTER.DOCX

B. Waldrep

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Letter to Benjamin C. Waldrep from George T. Hopper dated August 31, 2016.

SUBJECT: MID-CYCLE ASSESSMENT LETTER FOR SHEARON HARRIS NUCLEAR  
POWER PLANT - NRC INSPECTION REPORT 05000400/2016005

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Institute of Nuclear Power Operations (INPO)

**Harris**  
**Inspection / Activity Plan**  
**09/01/2016 - 06/30/2018**

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
			<b>ASM EP - 2016 EP ASM &amp; RES BASELINE</b>		<b>3</b>
1	01/01/2016	12/31/2016	IP 7111406	Drill Evaluation	
			<b>ISI - UNIT 1 IN-SERVICE INSPECTION &amp; RVH EXAM</b>		<b>2</b>
1	10/17/2016	10/21/2016	IP 7111108P	Inservice Inspection Activities - PWR	
			<b>RP - RP OCCUPATIONAL INSPECTION WEEK 1</b>		<b>2</b>
1	10/17/2016	10/21/2016	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1	10/17/2016	10/21/2016	IP 71124.02	Occupational ALARA Planning and Controls	
1	10/17/2016	10/21/2016	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1	10/17/2016	10/21/2016	IP 71124.04	Occupational Dose Assessment	
1	10/17/2016	10/21/2016	IP 71124.05	Radiation Monitoring Instrumentation	
1	10/17/2016	10/21/2016	IP 71151	Performance Indicator Verification	
			<b>RP - RP OCCUPATIONAL INSPECTION WEEK 2</b>		<b>3</b>
1	10/31/2016	11/04/2016	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1	10/31/2016	11/04/2016	IP 71124.02	Occupational ALARA Planning and Controls	
1	10/31/2016	11/04/2016	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1	10/31/2016	11/04/2016	IP 71124.04	Occupational Dose Assessment	
1	10/31/2016	11/04/2016	IP 71124.05	Radiation Monitoring Instrumentation	
1	10/31/2016	11/04/2016	IP 71151	Performance Indicator Verification	
			<b>TI-191 - MITIGATING STRATEGIES</b>		<b>4</b>
1	12/12/2016	12/16/2016	IP 2515/191	Inspection of Licensee's Responses to Order EA-12-049, EA-12-051 & EP Info Request March 12, 2012	
			<b>CDBI - COMPONENT DESIGN BASIS INSPECTION</b>		<b>7</b>
1	01/30/2017	02/03/2017	IP 7111121	Component Design Bases Inspection	
1	02/27/2017	03/03/2017	IP 7111121	Component Design Bases Inspection	
1	03/13/2017	03/17/2017	IP 7111121	Component Design Bases Inspection	
1	03/27/2017	03/31/2017	IP 7111121	Component Design Bases Inspection	
			<b>EP - EP EXERCISE</b>		<b>6</b>
1	04/24/2017	04/28/2017	IP 7111401	Exercise Evaluation	
1	04/24/2017	04/28/2017	IP 7111404	Emergency Action Level and Emergency Plan Changes	
1	04/24/2017	04/28/2017	IP 7111408	Exercise Evaluation – Scenario Review	
1	04/24/2017	04/28/2017	IP 71151	Performance Indicator Verification	
			<b>RP - RP PUBLIC RAD SAFETY BASELINE</b>		<b>4</b>
1	07/17/2017	07/21/2017	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1	07/17/2017	07/21/2017	IP 71124.06	Radioactive Gaseous and Liquid Effluent Treatment	

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

Enclosure

**Harris**  
**Inspection / Activity Plan**  
**09/01/2016 - 06/30/2018**

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
			<b>RP - RP PUBLIC RAD SAFETY BASELINE</b>		<b>4</b>
1	07/17/2017	07/21/2017	IP 71124.07	Radiological Environmental Monitoring Program	
1	07/17/2017	07/21/2017	IP 71124.08	Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation	
1	07/17/2017	07/21/2017	IP 71151	Performance Indicator Verification	
			<b>OL RQ - REQUAL INSPECTION</b>		<b>2</b>
1	08/07/2017	08/11/2017	IP 7111111B	Licensed Operator Requalification Program	
			<b>PI&amp;R - PROBLEM IDENTIFICATION AND RESOLUTION</b>		<b>5</b>
1	09/11/2017	09/15/2017	IP 71152B	Problem Identification and Resolution	
1	09/25/2017	09/29/2017	IP 71152B	Problem Identification and Resolution	
			<b>TFPI - TRIENNIAL FIRE PROTECTION INSPECTION</b>		<b>5</b>
1	01/22/2018	01/26/2018	IP 7111105X	Fire Protection - NFPA 805 (Triennial)	
1	02/05/2018	02/09/2018	IP 7111105X	Fire Protection - NFPA 805 (Triennial)	
			<b>EP - EP PROGRAM INSPECTION</b>		<b>3</b>
1	03/26/2018	03/30/2018	IP 7111402	Alert and Notification System Testing	
1	03/26/2018	03/30/2018	IP 7111403	Emergency Preparedness Organization Staffing and Augmentation System	
1	03/26/2018	03/30/2018	IP 7111404	Emergency Action Level and Emergency Plan Changes	
1	03/26/2018	03/30/2018	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies	
1	03/26/2018	03/30/2018	IP 71151	Performance Indicator Verification	
			<b>ISI - UNIT 1 IN-SERVICE INSPECTION</b>		<b>1</b>
1	04/16/2018	04/20/2018	IP 7111108P	Inservice Inspection Activities - PWR	
			<b>RP - RP OCCUPATIONAL - WEEK 1</b>		<b>2</b>
1	04/16/2018	04/20/2018	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1	04/16/2018	04/20/2018	IP 71124.02	Occupational ALARA Planning and Controls	
1	04/16/2018	04/20/2018	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1	04/16/2018	04/20/2018	IP 71124.04	Occupational Dose Assessment	
1	04/16/2018	04/20/2018	IP 71124.05	Radiation Monitoring Instrumentation	
1	04/16/2018	04/20/2018	IP 71151-OR01	Occupational Exposure Control Effectiveness	
1	04/16/2018	04/20/2018	IP 71151-PR01	RETS/ODCM Radiological Effluent Occurrences	
			<b>SGISI - UNIT 1 SG IN-SERVICE INSPECTION</b>		<b>1</b>
1	04/23/2018	04/27/2018	IP 7111108P	Inservice Inspection Activities - PWR	
			<b>RP - RP OCCUPATIONAL - WEEK 2</b>		<b>3</b>
1	05/14/2018	05/18/2018	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1	05/14/2018	05/18/2018	IP 71124.02	Occupational ALARA Planning and Controls	

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1	05/14/2018	05/18/2018	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	3
1	05/14/2018	05/18/2018	IP 71124.04	Occupational Dose Assessment	
1	05/14/2018	05/18/2018	IP 71124.05	Radiation Monitoring Instrumentation	
1	05/14/2018	05/18/2018	IP 71151-OR01	Occupational Exposure Control Effectiveness	
1	05/14/2018	05/18/2018	IP 71151-PR01	RETS/ODCM Radiological Effluent Occurrences	

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