



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

March 2, 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: ANNUAL ASSESSMENT LETTER FOR SHEARON HARRIS NUCLEAR
POWER PLANT – NRC INSPECTION REPORT 05000400/2015006**

Dear Mr. Waldrep:

On February 10, 2016, the NRC completed its end-of-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 January 1, 2015 through December 31, 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, 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 December 31, 2017. Routine inspections performed by resident inspectors are not included in the inspection plan. The inspections listed during the last nine months of the inspection plan are tentative and may be revised at the mid-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." This 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." This 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 Shearon Harris Nuclear Power Plant, and the information gathered will aid staff in development of the safety evaluation for the site. The NRC staff has received the final compliance letter for the site. Once the final safety evaluation is issued, the NRC staff will confirm through inspections the full implementation of the orders mentioned above by performing TI 191: Inspection of the Licensee's Responses to Mitigation Strategies Order EA-12-049, Spent Fuel Pool Instrumentation Order EA-12-051 and Emergency Preparedness Information requested by NRC in March 12, 2012.

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 404-997-4645 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
(3/1/2016 – 12/31/2017)

cc Distribution via ListServ

B. Waldrep

2

Additionally, the Commission issued Order EA-12-051, "Order Modifying Licenses with Regard to Reliable Spent Fuel Pool Instrumentation." This 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 Shearon Harris Nuclear Power Plant, and the information gathered will aid staff in development of the safety evaluation for the site. The NRC staff has received the final compliance letter for the site. Once the final safety evaluation is issued, the NRC staff will confirm through inspections the full implementation of the orders mentioned above by performing TI 191: Inspection of the Licensee's Responses to Mitigation Strategies Order EA-12-049, Spent Fuel Pool Instrumentation Order EA-12-051 and Emergency Preparedness Information requested by NRC in March 12, 2012.

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 404-997-4645 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
(3/1/2016 – 12/31/2017)

cc Distribution via ListServ

PUBLICLY AVAILABLE NON-PUBLICLY AVAILABLE SENSITIVE NON-SENSITIVE
ADAMS: Yes ACCESSION NUMBER: ML16062A158 SUNSI REVIEW COMPLETE FORM 665 ATTACHED

OFFICE	RII:DRP	RII:DRP	RII:DRP			
SIGNATURE	DXW4	JSD	GTH			
NAME	D. Jackson	J. Dodson	G. Hopper			
DATE	2/24/2016	2/25/2016	2/29/2016			
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

OFFICIAL RECORD COPY DOCUMENT NAME: S:\DRP\PERIODIC ASSESSMENTS & REPORTS\IEOC & MID-CYCLE\2015\END OF CYCLE\INPUT\RPB4\HARRIS\HAR 2015 ANNUAL ASSESSMENT LETTER.DOCX

B. Waldrep

3

Letter to Benjamin C. Waldrep from George T. Hopper dated March 2, 2016

SUBJECT: ANNUAL ASSESSMENT LETTER FOR SHEARON HARRIS NUCLEAR
POWER PLANT – NRC INSPECTION REPORT 05000400/2015006

DISTRIBUTION:

D. Gamberoni, RII

S. Price, RII

L. Gibson, RII

OE MAIL

RIDSNRRDIRS

PUBLIC

RidsNrrPMShearonHarris Resource

ROPassessment Resource

ROPreports Resource

Institute of Nuclear Power Operations (INPO)

Harris
Inspection / Activity Plan
03/01/2016 - 12/31/2017

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
			ASM EP - 2016 EP ASM & RES BASELINE		3
1	01/01/2016	12/31/2016	IP 7111406	Drill Evaluation	
			TI-191 - MITIGATING STRATEGIES		1
1	05/09/2016	05/13/2016	IP 2515/191	Inspection of Licensee's Responses to Order EA-12-049, EA-12-051 & EP Info Request March 12, 2012	
			EP - EP PROGRAM INSPECTION		3
1	05/23/2016	05/27/2016	IP 7111402	Alert and Notification System Testing	
1	05/23/2016	05/27/2016	IP 7111403	Emergency Preparedness Organization Staffing and Augmentation System	
1	05/23/2016	05/27/2016	IP 7111404	Emergency Action Level and Emergency Plan Changes	
1	05/23/2016	05/27/2016	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies	
1	05/23/2016	05/27/2016	IP 71151	Performance Indicator Verification	
			HS - TRIENNIAL HEAT SINK PERFORMANCE		1
1	06/13/2016	06/17/2016	IP 7111107T	Heat Sink Performance	
			OL EXAM - INITIAL LICENSE EXAM PREP		3
1	06/13/2016	06/17/2016	V23474	HARRIS JULY 2016 INITIAL EXAM AT POWER FACILITIES	
			OL EXAM - INITIAL LICENSE EXAM		3
1	07/11/2016	07/22/2016	V23474	HARRIS JULY 2016 INITIAL EXAM AT POWER FACILITIES	
			ISI - UNIT 1 IN-SERVICE INSPECTION & RVH EXAM		2
1	10/17/2016	10/21/2016	IP 7111108P	Inservice Inspection Activities - PWR	
			RP - RP OCCUPATIONAL INSPECTION WEEK 1		2
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	
			RP - RP OCCUPATIONAL INSPECTION WEEK 2		3
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	

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

Enclosure

Harris
Inspection / Activity Plan
03/01/2016 - 12/31/2017

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
CDBI - COMPONENT DESIGN BASIS INSPECTION					7
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	
EP - EP EXERCISE					6
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	
RP - RP PUBLIC RAD SAFETY BASELINE					4
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	
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	
OL RQ - REQUAL INSPECTION					2
1	08/07/2017	08/11/2017	IP 7111111B	Licensed Operator Requalification Program	
PI&R - PROBLEM IDENTIFICATION AND RESOLUTION					5
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	

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