



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

August 31, 2016

Mr. David A. Heacock  
President and Chief Nuclear Officer  
Virginia Electric and Power Company  
Dominion Nuclear  
Innsbrook Technical Center  
5000 Dominion Boulevard  
Glen Allen, VA 23060-6711

**SUBJECT: MID-CYCLE ASSESSMENT LETTER FOR SURRY POWER STATION, UNITS 1  
AND 2 – NRC INSPECTION REPORT 05000280, 281/2016005**

Dear Mr. Heacock:

On August 10, 2016, the Nuclear Regulatory Commission (NRC) completed its mid-cycle performance review of Surry Power 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, 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, Surry Power Station, Units 1 and 2, were operated in a manner that preserved public health and safety and met all cornerstone objectives. The NRC determined that the performance at Surry Power Station, 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, 2018. Routine inspections performed by resident inspectors are not included in the inspection plan. The inspections listed during the second half of the inspection schedule 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.

Additionally, the NRC plans on conducting non-ROP baseline inspections which include two Operating License Initial Examinations and Temporary Instruction 2515/191, Revision 1, "Inspection of the Implementation of Mitigation Strategies and Spent Fuel Instrumentation Orders and Emergency Preparedness Communications/Staffing/Multi-Unit Dose Assessment Plans."

The NRC staff received the Surry Power Station, Units 1 and 2, 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 Surry Power Station, Units 1 and 2, Safety Evaluation on August 4, 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 Agencywide Document Access and Management 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 404-997-4609 with any questions you may have regarding this letter.

Sincerely,

**/RA/**

Steven D. Rose, Chief  
Reactor Projects Branch 5  
Division of Reactor Projects

Docket Nos.: 50-280, 50-281  
License Nos.: DPR-32, DPR-37

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

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The NRC staff received the Surry Power Station, Units 1 and 2, 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 Surry Power Station, Units 1 and 2, Safety Evaluation on August 4, 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."

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PUBLICLY AVAILABLE       NON-PUBLICLY AVAILABLE       SENSITIVE       NON-SENSITIVE  
 ADAMS:  Yes      ACCESSION NUMBER: ML16244A126       SUNSI REVIEW COMPLETE       FORM 665 ATTACHED

OFFICE	RII:DRP	RII:DRP	RII:DRP			
SIGNATURE	BDB2	SON via email	SDR2			
NAME	BBishop	SNinh	SRose			
DATE	8/30/2016	8/30/2016	8/30/2016			
E-MAIL COPY?	YES NO	YES NO	YES NO			

OFFICIAL RECORD COPY DOCUMENT NAME: S:\DRP NEW\RPB7\PERIODIC ASSESSMENTS & REPORTS\EOC & MID-CYCLE\2016\ADMIN WORKING FOLDER\LETTERS\SURRY MID-CYCLE LTR 2016.DOCX

D. Heacock

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Letter to David A Heacock from Steven D. Rose dated August 31, 2016

SUBJECT: MID-CYCLE ASSESSMENT LETTER FOR SURRY POWER STATION, UNITS 1  
AND 2 – NRC INSPECTION REPORT 05000280, 281/2016005

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ROP Assessment

ROP Reports

Institute of Nuclear Power Operations (INPO)

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

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
			<b>OL EXAM - INITIAL LICENSE EXAM</b>		<b>3</b>
1	09/19/2016	09/30/2016	V23477	SURRY SEPTEMBER 2016 INITIAL EXAM AT POWER FACILITIES	
			<b>ISI - UNIT 1 IN-SERVICE INSPECTION</b>		<b>1</b>
1	10/24/2016	10/28/2016	IP 7111108P	Inservice Inspection Activities - PWR	
			<b>RP - RP OCCUPATIONAL INSPECTION WEEK 1</b>		<b>2</b>
1, 2	10/31/2016	11/04/2016	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1, 2	10/31/2016	11/04/2016	IP 71124.02	Occupational ALARA Planning and Controls	
1, 2	10/31/2016	11/04/2016	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1, 2	10/31/2016	11/04/2016	IP 71124.04	Occupational Dose Assessment	
1, 2	10/31/2016	11/04/2016	IP 71124.05	Radiation Monitoring Instrumentation	
1, 2	10/31/2016	11/04/2016	IP 71151	Performance Indicator Verification	
			<b>SGISI - UNIT 1 SG IN-SERVICE INSPECTION</b>		<b>1</b>
1	10/31/2016	11/04/2016	IP 7111108P	Inservice Inspection Activities - PWR	
			<b>RP - RP OCCUPATIONAL INSPECTION WEEK 2</b>		<b>3</b>
1, 2	11/28/2016	12/02/2016	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1, 2	11/28/2016	12/02/2016	IP 71124.02	Occupational ALARA Planning and Controls	
1, 2	11/28/2016	12/02/2016	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1, 2	11/28/2016	12/02/2016	IP 71124.04	Occupational Dose Assessment	
1, 2	11/28/2016	12/02/2016	IP 71124.05	Radiation Monitoring Instrumentation	
1, 2	11/28/2016	12/02/2016	IP 71151	Performance Indicator Verification	
			<b>OL RQ - REQUAL INSPECTION</b>		<b>2</b>
1, 2	01/23/2017	01/27/2017	IP 7111111B	Licensed Operator Requalification Program	
			<b>PI&amp;R - PROBLEM IDENTIFICATION AND RESOLUTION</b>		<b>5</b>
1, 2	01/30/2017	02/03/2017	IP 71152B	Problem Identification and Resolution	
1, 2	02/13/2017	02/17/2017	IP 71152B	Problem Identification and Resolution	
			<b>TI-191 - MITIGATING STRATEGIES</b>		<b>4</b>
1, 2	03/13/2017	03/17/2017	IP 2515/191	Inspection of Licensee's Responses to Order EA-12-049, EA-12-051 & EP Info Request March 12, 2012	
			<b>ISI - UNIT 2 IN-SERVICE INSPECTION &amp; RVH EXAM</b>		<b>1</b>
2	05/15/2017	05/19/2017	IP 7111108P	Inservice Inspection Activities - PWR	
			<b>RP - RAD HAZARDS AND TRANSPORTATION</b>		<b>2</b>
1, 2	05/15/2017	05/19/2017	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1, 2	05/15/2017	05/19/2017	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

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

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
			<b>SGISI - UNIT 2 SG IN-SERVICE INSPECTION</b>		<b>1</b>
2	05/22/2017	05/26/2017	IP 7111108P	Inservice Inspection Activities - PWR	
			<b>EP - EXERCISE INSPECTION</b>		<b>3</b>
1, 2	07/24/2017	07/28/2017	IP 7111401	Exercise Evaluation	
1, 2	07/24/2017	07/28/2017	IP 7111404	Emergency Action Level and Emergency Plan Changes	
1, 2	07/24/2017	07/28/2017	IP 7111408	Exercise Evaluation – Scenario Review	
1, 2	07/24/2017	07/28/2017	IP 711151	Performance Indicator Verification	
			<b>CDBI - COMPONENT DESIGN BASIS INSPECTION</b>		<b>7</b>
1, 2	07/24/2017	07/28/2017	IP 7111121	Component Design Bases Inspection	
1, 2	08/14/2017	08/18/2017	IP 7111121	Component Design Bases Inspection	
1, 2	08/28/2017	09/01/2017	IP 7111121	Component Design Bases Inspection	
1, 2	09/18/2017	09/22/2017	IP 7111121	Component Design Bases Inspection	
			<b>HS - TRIENNIAL HEAT SINK PERFORMANCE</b>		<b>1</b>
1, 2	08/07/2017	08/11/2017	IP 7111107T	Heat Sink Performance	
			<b>OL EXAM - INITIAL LICENSE EXAM PREP</b>		<b>3</b>
1	10/02/2017	10/06/2017	V23502	SURRY OCTOBER 2017 INITIAL EXAM AT POWER FACILITIES	
			<b>OL EXAM - INITIAL LICENSE EXAM</b>		<b>3</b>
1	10/30/2017	11/17/2017	V23502	SURRY OCTOBER 2017 INITIAL EXAM AT POWER FACILITIES	
			<b>RP - RP PUBLIC BASELINE INSPECTION</b>		<b>2</b>
1, 2	11/27/2017	12/01/2017	IP 71124.06	Radioactive Gaseous and Liquid Effluent Treatment	
1, 2	11/27/2017	12/01/2017	IP 71124.07	Radiological Environmental Monitoring Program	
1, 2	11/27/2017	12/01/2017	IP 711151	Performance Indicator Verification	
			<b>TFPI - TRIENNIAL FIRE PROTECTION INSPECTION</b>		<b>5</b>
1, 2	02/26/2018	03/01/2018	IP 7111105T	Fire Protection [Triennial]	
1, 2	03/12/2018	03/16/2018	IP 7111105T	Fire Protection [Triennial]	
			<b>EP - EP PROGRAM INSPECTION</b>		<b>3</b>
1, 2	04/09/2018	04/13/2018	IP 7111402	Alert and Notification System Testing	
1, 2	04/09/2018	04/13/2018	IP 7111403	Emergency Preparedness Organization Staffing and Augmentation System	
1, 2	04/09/2018	04/13/2018	IP 7111404	Emergency Action Level and Emergency Plan Changes	
1, 2	04/09/2018	04/13/2018	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies	
1, 2	04/09/2018	04/13/2018	IP 711151	Performance Indicator Verification	
			<b>ISI - UNIT 1 IN-SERVICE INSPECTION</b>		<b>1</b>
1	04/30/2018	05/04/2018	IP 7111108P	Inservice Inspection Activities - PWR	

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