



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**

REGION I  
2100 RENAISSANCE BLVD., SUITE 100  
KING OF PRUSSIA, PA 19406-2713

September 1, 2015

Mr. Eric A. Larson  
Site Vice President  
FirstEnergy Nuclear Operating Company  
Beaver Valley Power Station  
P.O. Box 4  
Shippingport, PA 15077-0004

**SUBJECT: MID-CYCLE ASSESSMENT LETTER FOR BEAVER VALLEY POWER  
STATION, UNIT NOS. 1 AND 2 (REPORT 05000334/2015005 AND  
05000412/2015005)**

Dear Mr. Larson:

On August 13, 2015, the U. S. Nuclear Regulatory Commission (NRC) completed its mid-cycle performance review of Beaver Valley Power Station, Unit Nos. 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, Beaver Valley Power Station, Unit Nos. 1 and 2 operated in a manner that preserved public health and safety and met all cornerstone objectives. The NRC determined the performance at Beaver Valley Power Station Unit Nos. 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 last nine months of the inspection plan are tentative and may be revised at the end-of-cycle performance review. In addition to baseline inspections, the NRC will perform IP 71003, "Post Approval Site Inspection for License Renewal," and Temporary Instruction (TI) 2515-191, "Inspection of the Implementation of Mitigation Strategies and Spent Fuel Pool Instrumentation Orders and Emergency Preparedness Communications/ Staffing/Multi-Unit Dose Assessment Plans." 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," which 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," which 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 on-site portion of the audit was completed at Beaver Valley Power Station, Unit Nos. 1 and 2, and the information gathered will aid staff in development of the Final 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 Communications/Staffing/Multi-Unit Dose Assessment Plans."

In accordance with Title 10 of the *Code of Federal Regulations*, Part 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 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 (610) 337-5046 with any questions you have regarding this letter.

Sincerely,

*/RA/*

Silas R. Kennedy, Chief  
Projects Branch 6  
Division of Reactor Projects

Docket Nos. 50-334, 50-412  
License Nos. DPR-66, NPF-73

Enclosure: Beaver Valley Power Station Inspection/Activity Plan

cc w/encl: Distribution via ListServ

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Sincerely,  
**/RA/**  
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Docket Nos. 50-334, 50-412  
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Enclosure: Beaver Valley Power Station Inspection/Activity Plan

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**Beaver Valley**  
**Inspection / Activity Plan**  
**07/01/2015 - 06/30/2017**

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
<b>EP - EP PROGRAM INSPECTION</b>					<b>1</b>
1,2	06/29/2015	07/02/2015	IP 7111402	Alert and Notification System Testing	
1,2	06/29/2015	07/02/2015	IP 7111403	Emergency Preparedness Organization Staffing and Augmentation System	
1,2	06/29/2015	07/02/2015	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies	
<b>TRI FI - TRIENNIAL FIRE PROTECTION INSPECTION</b>					<b>5</b>
1,2	08/03/2015	08/07/2015	IP 7111105T	Fire Protection [Triennial]	
1,2	08/17/2015	08/21/2015	IP 7111105T	Fire Protection [Triennial]	
<b>12/7EXAM - U2 INITIAL OL EXAM</b>					<b>3</b>
2	11/09/2015	11/13/2015	U01906	FY16-BV2 INITIAL OPERATOR LICENSING EXAM	
2	12/07/2015	12/18/2015	U01906	FY16-BV2 INITIAL OPERATOR LICENSING EXAM	
<b>71003 - LR COMMITMENTS PHASE II TEAM INSP</b>					<b>5</b>
1	08/31/2015	09/04/2015	IP 71003	Post-Approval Site Inspection for License Renewal	
1	09/14/2015	09/18/2015	IP 71003	Post-Approval Site Inspection for License Renewal	
<b>7111108P - U2 INSERVICE INSPECTION</b>					<b>1</b>
2	10/05/2015	10/16/2015	IP 7111108P	Inservice Inspection Activities - PWR	
<b>71124 - RAD SAFETY INSP</b>					<b>1</b>
1,2	10/19/2015	10/23/2015	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1,2	10/19/2015	10/23/2015	IP 71124.02	Occupational ALARA Planning and Controls	
1,2	10/19/2015	10/23/2015	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1,2	10/19/2015	10/23/2015	IP 71124.04	Occupational Dose Assessment	
1,2	10/19/2015	10/23/2015	IP 71124.05	Radiation Monitoring Instrumentation	
<b>71124.07 - RAD SAFETY INSPECTION</b>					<b>1</b>
1,2	11/30/2015	12/04/2015	IP 71124.07	Radiological Environmental Monitoring Program	
1,2	11/30/2015	12/04/2015	IP 71151-OR01	Occupational Exposure Control Effectiveness	
1,2	11/30/2015	12/04/2015	IP 71151-PR01	RETS/ODCM Radiological Effluent Occurrences	
<b>71124 - RAD SAFETY INSP</b>					<b>1</b>
1,2	12/14/2015	12/18/2015	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1,2	12/14/2015	12/18/2015	IP 71124.02	Occupational ALARA Planning and Controls	
1,2	12/14/2015	12/18/2015	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1,2	12/14/2015	12/18/2015	IP 71124.04	Occupational Dose Assessment	
1,2	12/14/2015	12/18/2015	IP 71151	Performance Indicator Verification	
<b>71124 - RAD SAFETY INSPECTION</b>					<b>1</b>
1,2	03/07/2016	03/11/2016	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1,2	03/07/2016	03/11/2016	IP 71124.02	Occupational ALARA Planning and Controls	

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

**Beaver Valley**  
**Inspection / Activity Plan**  
**07/01/2015 - 06/30/2017**

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
			<b>71124 - RAD SAFETY INSPECTION</b>		<b>1</b>
1,2	03/07/2016	03/11/2016	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1,2	03/07/2016	03/11/2016	IP 71124.04	Occupational Dose Assessment	
			<b>EP - EP EXERCISE EVALUATION</b>		<b>4</b>
1,2	06/13/2016	06/17/2016	IP 7111401	Exercise Evaluation	
			<b>7111107T - TRIENNIAL HEAT SINK</b>		<b>1</b>
1,2	05/16/2016	05/20/2016	IP 7111107T	Heat Sink Performance	
			<b>EXM10/3 - BEAVER VALLEY 1 INITIAL EXAM</b>		<b>6</b>
1	10/03/2016	10/07/2016	U01922	FY17-BV1 INITIAL OPERATOR LICENSING EXAM	
1	10/31/2016	11/11/2016	U01922	FY17-BV1 INITIAL OPERATOR LICENSING EXAM	
			<b>7111117T - PERMANENT PLANT MODIFICATIONS</b>		<b>3</b>
1,2	06/06/2016	06/10/2016	IP 7111117T	Evaluations of Changes, Tests, and Experiments and Permanent Plant Modifications	
1,2	06/20/2016	06/24/2016	IP 7111117T	Evaluations of Changes, Tests, and Experiments and Permanent Plant Modifications	
			<b>7111111B - BV1 REQUAL INSP W/ P/F RESULTS</b>		<b>2</b>
1	08/15/2016	08/19/2016	IP 7111111B	Licensed Operator Requalification Program	
			<b>71124 - RAD SAFETY INSPECTION</b>		<b>3</b>
1,2	07/11/2016	07/15/2016	IP 71124.05	Radiation Monitoring Instrumentation	
1,2	07/11/2016	07/15/2016	IP 71124.06	Radioactive Gaseous and Liquid Effluent Treatment	
1,2	07/11/2016	07/15/2016	IP 71124.07	Radiological Environmental Monitoring Program	
1,2	07/11/2016	07/15/2016	IP 71151-PR01	RETS/ODCM Radiological Effluent Occurrences	
			<b>71124 - RAD SAFETY INSPECTION</b>		<b>1</b>
1,2	10/03/2016	10/07/2016	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1,2	10/03/2016	10/07/2016	IP 71124.02	Occupational ALARA Planning and Controls	
1,2	10/03/2016	10/07/2016	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1,2	10/03/2016	10/07/2016	IP 71124.04	Occupational Dose Assessment	
			<b>7111108P - BV U1 INSERVICE INSPECTION</b>		<b>1</b>
1	10/03/2016	10/14/2016	IP 7111108P	Inservice Inspection Activities - PWR	
			<b>71124 - RAD SAFETY INSPECTION</b>		<b>1</b>
1,2	12/12/2016	12/16/2016	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1,2	12/12/2016	12/16/2016	IP 71124.02	Occupational ALARA Planning and Controls	
1,2	12/12/2016	12/16/2016	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1,2	12/12/2016	12/16/2016	IP 71124.04	Occupational Dose Assessment	
1,2	12/12/2016	12/16/2016	IP 71151-OR01	Occupational Exposure Control Effectiveness	

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	Start	End			
			<b>71124.08 - RADWASTE</b>		<b>1</b>
1,2	12/05/2016	12/09/2016	IP 71124.08	Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation	
			<b>71124 - HP INSPECTION</b>		<b>1</b>
1,2	04/10/2017	04/14/2017	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1,2	04/10/2017	04/14/2017	IP 71124.02	Occupational ALARA Planning and Controls	
1,2	04/10/2017	04/14/2017	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
			<b>7111108P - U2 INSERVICE INSPECTION</b>		<b>1</b>
2	04/10/2017	04/21/2017	IP 7111108P	Inservice Inspection Activities - PWR	
			<b>7111111B - BV2 REQUAL INSP WITH P/F RESULTS</b>		<b>2</b>
2	06/19/2017	06/23/2017	IP 7111111B	Licensed Operator Requalification Program	
			<b>TI-191 - FUKUSHIMA LESSONS-LEARNED</b>		<b>1</b>
1,2	05/15/2017	05/19/2017	IP 2515/191	Inspection of Licensee's Responses to Order EA-12-049, EA-12-051 & EP Info Request March 12, 2012	
			<b>71124 - HP INSPECTION</b>		<b>1</b>
1,2	06/05/2017	06/09/2017	IP 71124.04	Occupational Dose Assessment	
1,2	06/05/2017	06/09/2017	IP 71124.05	Radiation Monitoring Instrumentation	
			<b>71152B - PI&amp;R BIENNIAL</b>		<b>2</b>
1,2	06/01/2017	06/05/2017	IP 71152B	Problem Identification and Resolution	
1,2	06/15/2017	06/19/2017	IP 71152B	Problem Identification and Resolution	

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