

**Eric A. Larson**  
Site Vice President724-682-5234  
Fax: 724-643-8069August 18, 2015  
L-15-200

10 CFR 50.55a(g)

ATTN: Document Control Desk  
U. S. Nuclear Regulatory Commission  
Washington, DC 20555-0001SUBJECT:  
Beaver Valley Power Station, Unit No. 1  
Docket No. 50-334, License No. DPR-66  
Twenty-Third Refueling Outage Inservice Inspection Report

Enclosed please find the inservice inspection (ISI) summary report on American Society of Mechanical Engineers (ASME) Class 1, 2, 3, and Subsection IWE examinations performed prior to and during the twenty-third refueling outage at Beaver Valley Power Station, Unit No. 1 (BVPS-1). The ASME Boiler and Pressure Vessel Code, Section XI, Subsubarticle IWA-6240 requires an inservice inspection summary report to be submitted to the regulatory and enforcement authorities having jurisdiction at the plant site within ninety calendar days after completion of each refueling outage. The inservice inspection term covered by this report includes the period from November 5, 2013 to May 22, 2015.

The Class 1, 2, 3, and Subsection IWE examinations are part of Interval 4, Period 3 of the BVPS-1 ISI schedule and were performed in accordance with Section XI of the ASME Boiler and Pressure Vessel Code, 2001 Edition, 2003 Addenda.

There are no regulatory commitments contained in this letter. If there are any questions or if additional information is required, please contact Mr. Thomas A. Lentz, Manager - Fleet Licensing, at 330-315-6810.

Sincerely,



Eric A. Larson

Enclosure:  
FirstEnergy Nuclear Operating Company, Beaver Valley Power Station, Unit No. 1,  
Twenty-Third Refueling Outage Inservice Inspection ReportA047  
NRR

Beaver Valley Power Station, Unit No. 1  
L-15-200  
Page 2

cc: NRC Region I Administrator  
NRC Resident Inspector  
NRC Project Manager  
Director BRP/DEP  
Site BRP/DEP Representative

**FirstEnergy Nuclear Operating Company  
Beaver Valley Power Station, Unit No. 1  
Twenty-Third Refueling Outage Inservice Inspection Report**

BEAVER VALLEY POWER STATION, UNIT 1  
Route 168, Shippingport, PA

Outage 23, Year 2015

Inspection Term: 11/5/2013 to 5/22/2015


Issue date: 7-17-15

Owner: FirstEnergy Nuclear Operating Company (FENOC)  
76 South Main St.  
Akron, OH 44308

NRC Docket Number: 50-334

Reactor Supplier: Westinghouse Electric Corporation  
Commercial Service Date: September 30, 1976

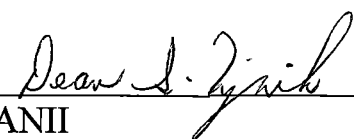
Reviewed by:

 C. O'NEILL  
Supv, Nuclear Programs

Date:

7/13/15

Reviewed by:

 Dean S. Zirk  
ANII

Date:

7-17-15

Approved by:

 Pat Paulinich  
Manager, Technical Services Engineering

Date:

7/12/15

90-DAY REPORT  
TABLE OF CONTENTS

<u>Item</u>	<u>Page Number</u>
Cover Page	1
Table of Contents	2
Form NIS-1	3 - 4
Outage Summary	5
ASME XI Vessel, Piping and Support Examinations	
1. Class 1	5
2. Class 2	5
3. Class 3	5
4. IWE	5
IWE Examinations	6
Pressure Testing	6
Deficiency Resolution	6
NIS-2 Forms	6
Appendix I - Completed Code Examinations	AI-1 thru AI-10
Appendix II - Repair/Replacement Abstract and NIS-2 Forms	

# FORM NIS-1 OWNER'S REPORT FOR INSERVICE INSPECTIONS

As required by the Provisions of the ASME Code Rules

1. Owner FirstEnergy Nuclear Operating Company (FENOC), 76 South Main St. Akron, OH 44308  
(Name and Address of Owner)  
2. Plant Beaver Valley Power Station, P.O. Box 4, Shippingport, PA, 15077  
(Name and Address of Plant)  
3. Plant Unit 1 4. Owner Certificate of Authorization (if required) N/A  
5. Commercial Service Date 9/30/76 6. National Board Number for Unit N/A

## 7. Components Inspected

Component or Appurtenance	Manufacturer or Installer	Manufacturer or Installer Serial No.	State or Province No.	National Board No.
Reactor Vessel	Combustion Engineering	69103	105642B	21011
Pressurizer	Westinghouse	1311	434676V	68-50
1B Steam Generator	Westinghouse	NP030651/2MB2	591602V	83
RHR Heat Exchanger RH-E-1A	Joseph Oat	1832-1	434682V	368
RHR Heat Exchanger RH-E-1B	Joseph Oat	1832-2	434683V	369
Boron Injection Tank	Struthers Wells	SI-TK-2	434783V	133314
Reactor Coolant Piping	Southwest Fabricating	N/A	N/A	N/A
Auxiliary Piping	Schneider Power	N/A	N/A	N/A
Component Supports	Various	N/A	N/A	N/A
Containment	N/A	N/A	4630	N/A

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 in. x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

This form (E0029) may be obtained from the ASME Order Dept., 22 Law Drive, Box 2300, Fairfield, NJ 07008-2300

**FORM NIS-1 (Back)**

8. Examination Dates: 11/5/2013 to 5/22/2015
9. Inspection Period Identification: 12/3/2014 to 3/31/2018 (3<sup>rd</sup> Inspection Period of 4<sup>th</sup> Interval)
10. Inspection Interval Identification: 4/1/2008 to 3/31/2018 (4<sup>th</sup> 10-Year Inspection Interval)
11. Applicable Edition of Section XI 2001 Addenda 2003
12. Date/Revision of Inspection Plan: 1/2-ADM-2039; Revision 14
13. Abstract of Examination and Tests. Include a list of examinations and tests and a statement concerning status of work required for the Inspection Plan. See Appendix I (Code Exams) for exams performed during 1R23. 1R23 was the first outage in the 3<sup>rd</sup> Period of the 4<sup>th</sup> Ten-Year Interval. The 3<sup>rd</sup> Period ASME XI examination percentage requirements will be completed during the next BV1 refueling outage (1R24).
14. Abstract of Results of Examination and Tests. See text of summary report.
15. Abstract of Corrective Measures. Corrective measures were required based on discovery of boric acid leakage on pipe flange and valve bolting. The Boric Acid Corrosion Control (BACC) Team evaluated each condition and determined the necessary corrective action to resolve the UNSAT condition.

We certify that a) the statements made in this report are correct, b) the examinations and tests meet the Inspection Plan as required by the ASME Code, Section XI, and c) corrective measures taken conform to the rules of the ASME Code, Section XI.

Certificate of Authorization No: (if applicable) N/A Expiration Date N/A  
 Date 7-16-15 Signed FirstEnergy Nuclear Operating Company (FENOC) By [Signature]  
 (Owner)

**CERTIFICATE OF INSERVICE INSPECTION**

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB Global Standards of Connecticut have inspected the components described in this Owner's Report during the period 11/5/2013 to 5/22/2015 and state that to the best of my knowledge and belief, the Owner has performed examinations and tests and taken corrective measures described in this Owner's Report in accordance with the Inspection Plan and as required by the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer make any warranty, expressed or implied, concerning the examinations, tests, and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions NB 9428 ANIB, PA 2384  
 Inspector's Signature National Board, State, Province and Endorsements  
 Date 7-17-15

## OUTAGE SUMMARY

During the Twenty-third Refueling Outage (1R23) at the Beaver Valley Power Station Unit 1, Inservice Inspection (ISI) examinations were performed on Class 1, 2, 3 and the containment liner components. This was the first outage in the third period of the fourth ten-year interval.

### ASME XI Class 1, 2, 3 and IWE Credited Exams (See Appendix I)

1. One-hundred sixteen (116) Class 1 exams were performed and are divided as follows:
  - a. Welds (vessels, piping, and attachments)

Ultrasonic Exams	-	11
Surface Exams	-	11
Visual Exams	-	4
  - b. Class 1 bolting

Visual Exams	-	39
Ultrasonic Exams	-	2
  - c. Pipe Supports (VT-3)
  - d. RI-ISI piping VT-2 Exams
2. One-hundred forty-eight (148) Class 2 exams were performed and are divided as follows:
  - a. Welds (vessels, pumps, piping, and attachments)

Ultrasonic Exams	-	26
Surface Exams	-	19
Visual Exams	-	16
  - b. Class 2 bolting

Visual Exams	-	5
Ultrasonic Exams	-	6
  - c. Pipe Supports (VT-3)
  - d. RI-ISI piping VT-2 exams
3. Fifty-seven (57) visual exams of Class 3 components were performed and are divided as follows:
  - a. Supports, visual exams
  - b. Attachments, visual exam
4. Seven (7) IWE exams were performed as follows:
  - a. Bolting (VT-1, GV)
  - b. Liner/Moisture Barrier (GV)
  - b. Liner UTT exam followup

Examinations were performed by FirstEnergy Nuclear Operating Company (FENOC) NDE Technicians, supplemented with contracted NDE technicians from IDDEAL Concepts, International Quality Consultants (IQC), and Wesdyne. Appendix I compiles the examinations that have been credited toward fulfilling the Ten-Year Plan requirements.



### **IWE Examinations**

The 1R23 IWE examination included a general visual of the accessible areas of the liner plate, penetrations, and moisture barrier. All of the reported liner deficiencies were documented and resolved in the corrective action program. None of the reported deficiencies challenged the structural integrity of the containment liner. No liner plate repairs were necessary.

### **Pressure Testing**

The Class 1 piping System Leakage Test was performed prior to plant start-up from 1R23. All Class 1 and 2 bolted connections associated with insulated components were examined during 1R23. Boric Acid leakage was evident on eleven components. See deficiency resolution paragraph below. Also, Class 2 and 3 system functional and system inservice tests were performed in accordance with 40-month pressure testing requirements.

### **Deficiency Resolution**

The boric acid deficiencies associated with the pressure testing of bolted connections were documented on Condition Reports and evaluated and resolved by the Boric Acid Corrosion Control Team.

### **NIS-2 Forms**

Included as Appendix II are the NIS-2 Forms associated with ASME XI repairs and replacements performed since the last 90-Day ISI Summary Report.

APPENDIX I  
1R23 COMPLETED CODE EXAMS

Sum No	Comp ID	Description	Class	Category	Item No.	Method	Iso
001800	CH-98-PS-17	SUPPORT	1	F-A	F1.10A	VT-3	0190A-4
003400	CH-98-R-PS-10	SUPPORT	1	F-A	F1.10R	VT-3	0190A-4
004600	CH-98-R-PS-3	SUPPORT	1	F-A	F1.10R	VT-3	0190A-4
020650	CH-047	RI-ISI SEGMENT	1	R-A	R1.12	VT-2	0242A-3
028600	CH-141-PS-4	SUPPORT	1	F-A	F1.10V	VT-3	0244A-2
033350	CH-102	RI-ISI SEGMENT	1	R-A	R1.12	VT-2	0246A-3
036750	CH-103	RI-ISI SEGMENT	1	R-A	R1.12	VT-2	0247A-3
038000	CH-98-PS-1	SUPPORT	1	F-A	F1.10A	VT-3	0248A-3
040050	CH-104	RI-ISI SEGMENT	1	R-A	R1.12	VT-2	0248A-3
044800	CH-23-PS-5	SUPPORT	1	F-A	F1.10S	VT-3	0254A-4
045200	CH-23-PS-4	SUPPORT	1	F-A	F1.10R	VT-3	0254A-4
046500	CH-23-PS-8	SUPPORT	1	F-A	F1.10R	VT-3	0254A-4
051300	DG-50-R-PS-27	SUPPORT	1	F-A	F1.10R	VT-3	0197A-3
051500	DG-50-R-PS-26	SUPPORT	1	F-A	F1.10R	VT-3	0197A-3
052600	DG-50-PS-20	SUPPORT	1	F-A	F1.10R	VT-3	0197A-3
053400	DG-50-5D-A-02	W/ATT SUPPORT A-PS-18	1	B-K	B10.20	PT	0197A-3
053500	DG-50-A-PS-18	SUPPORT	1	F-A	F1.10A	VT-3	0197A-3
054100	DG-50-R-PS-14	SUPPORT	1	F-A	F1.10R	VT-3	0197A-3
055500	DG-50-VS-PS-9	SUPPORT	1	F-A	F1.10V	VT-3	0197A-3
055600	DG-50-R-PS-8	SUPPORT	1	F-A	F1.10R	VT-3	0197A-3
069650	CH-043	RI-ISI SEGMENT	1	R-A	R1.12	VT-2	0254A-4
077900	RC-71-8-S-02	BUTT WELD	1	R-A	R1.11	UT	0348B-2
091300	RC-107-SH-45	SUPPORT	1	F-A	F1.10S	VT-3	0350A-4
091400	RC-107-R-45A	SUPPORT	1	F-A	F1.10R	VT-3	0350A-4
096300	RC-97-H-36	VALVE SUPPORT	1	F-A	F1.40X	VT-3	0350B-3
099130	RC-99-1-A-12	W/ATT SUPPORT H-40	1	B-K	B10.40	PT	0350B-3
100010	BC-MOV-1RH-700	BOLTED CONNECTION	1	Boltcon	Bolt1	VT-2	074A-3
100012	BC-FE-1RC-480	BOLTED CONNECTION	1	Boltcon	Bolt1	VT-2	0354A-1
100013	BC-FE-1RC-481	BOLTED CONNECTION	1	Boltcon	Bolt1	VT-2	0354B-1
100014	BC-FE-1RC-482	BOLTED CONNECTION	1	Boltcon	Bolt1	VT-2	0354C-1
100015	BC-MOV-1RC-590	BOLTED CONNECTION	1	Boltcon	Bolt1	VT-2	L-001A-5
100016	BC-MOV-1RC-591	BOLTED CONNECTION	1	Boltcon	Bolt1	VT-2	L-001A-5
100017	BC-MOV-1RC-592	BOLTED CONNECTION	1	Boltcon	Bolt1	VT-2	L-002A-5

APPENDIX I  
1R23 COMPLETED CODE EXAMS

Sum No	Comp ID	Description	Class	Category	Item No.	Method	Iso
100018	BC-MOV-1RC-593	BOLTED CONNECTION	1	Boltcon	Bolt1	VT-2	L-002A-5
100019	BC-MOV-1RC-594	BOLTED CONNECTION	1	Boltcon	Bolt1	VT-2	L-003A-5
100020	BC-MOV-1RC-595	BOLTED CONNECTION	1	Boltcon	Bolt1	VT-2	L-003A-5
100021	BC-1SI-20	BOLTED CONNECTION	1	Boltcon	Bolt1	VT-2	0222B-5
100022	BC-1SI-21	BOLTED CONNECTION	1	Boltcon	Bolt1	VT-2	0220C-5
100023	BC-1SI-22	BOLTED CONNECTION	1	Boltcon	Bolt1	VT-2	0223B-5
100024	BC-1SI-23	BOLTED CONNECTION	1	Boltcon	Bolt1	VT-2	0375E-5
100025	BC-1SI-24	BOLTED CONNECTION	1	Boltcon	Bolt1	VT-2	0375F-7
100026	BC-1SI-25	BOLTED CONNECTION	1	Boltcon	Bolt1	VT-2	0375C-5
100030	BC-LCV-1CH-460A	BOLTED CONNECTION	1	Boltcon	Bolt1	VT-2	0242A-3
100031	BC-LCV-1CH-460B	BOLTED CONNECTION	1	Boltcon	Bolt1	VT-2	0242A-3
100032	BC-1CH-32	BOLTED CONNECTION	1	Boltcon	Bolt1	VT-2	0253A-4
100033	BC-RC-E-1A-Pri Manways	BOLTED CONNECTION	1	Boltcon	Bolt1	VT-2	E-001N
100034	BC-RC-E-1B-Pri Manways	BOLTED CONNECTION	1	Boltcon	Bolt1	VT-2	E-001N
100035	BC-RC-E-1C-Pri Manways	BOLTED CONNECTION	1	Boltcon	Bolt1	VT-2	E-001N
100038	BC-1SI-51	BOLTED CONNECTION	1	Boltcon	Bolt1	VT-2	0106A-5
100039	BC-1SI-52	BOLTED CONNECTION	1	Boltcon	Bolt1	VT-2	0107B-3
100040	BC-1SI-53	BOLTED CONNECTION	1	Boltcon	Bolt1	VT-2	0108B-5
100052	BC-RV-1RC-551A	BOLTED CONNECTION	1	Boltcon	Bolt1	VT-2	0350B-3
100053	BC-RV-1RC-551B	BOLTED CONNECTION	1	Boltcon	Bolt1	VT-2	0350B-3
100054	BC-RV-1RC-551C	BOLTED CONNECTION	1	Boltcon	Bolt1	VT-2	0350B-3
100055	BC-MOV-1RC-535	BOLTED CONNECTION	1	Boltcon	Bolt1	VT-2	0350A-3
100056	BC-MOV-1RC-536	BOLTED CONNECTION	1	Boltcon	Bolt1	VT-2	0350A-3
100057	BC-MOV-1RC-537	BOLTED CONNECTION	1	Boltcon	Bolt1	VT-2	0350A-3
100058	BC-PCV-1RC-456	BOLTED CONNECTION	1	Boltcon	Bolt1	VT-2	0350A-3
100059	BC-PCV-1RC-455C	BOLTED CONNECTION	1	Boltcon	Bolt1	VT-2	0350A-3
100060	BC-PCV-1RC-455D	BOLTED CONNECTION	1	Boltcon	Bolt1	VT-2	0350A-3
100061	BC-PZR Manway bolts	BOLTED CONNECTION	1	Boltcon	Bolt1	VT-2	E-001P-3
100062	BC-RV Main Flg Bolts	BOLTED CONNECTION	1	Boltcon	Bolt1	VT-2	E-001L-1
100082	BC-CH-E-4	BOLTED CONNECTION	2	Boltcon	Bolt2	VT-2	E-003D-2
100084	BC-HCV-1CH-389	BOLTED CONNECTION	2	Boltcon	Bolt2	VT-2	0380A-2
100110	BC-TV-1CH-200A	BOLTED CONNECTION	2	Boltcon	Bolt2	VT-2	1254A-4
100111	BC-TV-1CH-200B	BOLTED CONNECTION	2	Boltcon	Bolt2	VT-2	1254A-4

APPENDIX I  
1R23 COMPLETED CODE EXAMS

Sum No	Comp ID	Description	Class	Category	Item No.	Method	Iso
100112	BC-TV-1CH-200C	BOLTED CONNECTION	2	Boltcon	Bolt2	VT-2	1254A-4
100199	PT-1-Leakage Package 49	Mode 3 Walkdown	1	Press	Test	VT-2	various
130950	RC-026	RI-ISI SEGMENT	1	R-A	R1.12	VT-2	0354A-1
133050	RC-027	RI-ISI SEGMENT	1	R-A	R1.12	VT-2	0354B-1
135050	RC-028	RI-ISI SEGMENT	1	R-A	R1.12	VT-2	0354C-1
136450	RC-017	RI-ISI SEGMENT	1	R-A	R1.12	VT-2	0375A-5
137250	RC-018	RI-ISI SEGMENT	1	R-A	R1.12	VT-2	0358A-5
138650	RC-019	RI-ISI SEGMENT	1	R-A	R1.12	VT-2	0359A-5
152200	RC-R-1-CRDM-SUPP-1	CRDM SHROUD SUPPORT	1	F-A	F1.40E	VT-3	E-001A-3
152210	RC-R-1-CRDM-SUPP-2	CRDM SHROUD SUPPORT	1	F-A	F1.40E	VT-3	E-001A-3
152220	RC-R-1-CRDM-SUPP-3	CRDM SHROUD SUPPORT	1	F-A	F1.40E	VT-3	E-001A-3
152300	RC-R-1-CAVLIN-A	CAVITY LINER LUG "A"	1	F-A	F1.40E	VT-3	E-001A-3
152400	RC-R-1-CAVLIN-E	CAVITY LINER LUG "E"	1	F-A	F1.40E	VT-3	E-001A-3
152500	RC-R-1-CAVLIN-C	CAVITY LINER LUG "C"	1	F-A	F1.40E	VT-3	E-001A-3
152600	RC-R-1-CAVLIN-F	CAVITY LINER LUG "F"	1	F-A	F1.40E	VT-3	E-001A-3
152700	RC-R-1-CAVLIN-B	CAVITY LINER LUG "B"	1	F-A	F1.40E	VT-3	E-001A-3
152800	RC-R-1-CAVLIN-D	CAVITY LINER LUG "D"	1	F-A	F1.40E	VT-3	E-001A-3
163202	RC-R-1-CRD-44	CRD WELD	1	B-O	B14.10	PT	E-001U-1
163203	RC-R-1-CRD-51	CRD WELD	1	B-O	B14.10	PT	E-001U-1
163204	RC-R-1-CRD-63	CRD WELD	1	B-O	B14.10	PT	E-001U-1
163660	RC-R-1-STUD-39 TO 58	BOLTING	1	B-G-1	B6.20	UT	E-001L-1
169460	RC-R-1-NUT-39 TO 58	BOLTING	1	B-G-1	B6.10	VT-1	E-001L-1
175260	RC-R-1-WASHER-39 TO 58	BOLTING	1	B-G-1	B6.50	VT-1	E-001L-1
180950	1RV-HEAD-OD	VESSEL HEAD OD SURFACE	1	N-729	B4.30	VE	E-001D-2
187900	RC-E-1B-SUPP	LOWER SUPPORT	1	F-A	F1.40E	VT-3	E-001M-3
192000	RC-TK-1-L-3	LONGITUDINAL WELD	1	B-B	B2.12	UT	E-001P-3
192400	RC-TK-1-C-7	CIRCUMFERENTIAL WELD	1	B-B	B2.11	UT	E-001P-3
193100	RC-TK-1-RADIUS-6	NOZZLE INSIDE RADIUS	1	B-D	B3.120	VT-2	E-001P-3
193150	RC-TK-1-HTR-SLEEVES	PZR HEATER SLEEVE	1	WCAP	OG09140	VT-2	E-001P-3
197300	RC-P-1A-B(F)-1 TO 24	BOLTING	1	B-G-1	B6.180	UT	E-001R-1
224200	MOV-RC-595-NUTS	NUTS, WASHERS	1	B-G-1	B6.230	VT-1	E-002A-1
259600	DLW-LOOP2-2-F-15	BUTT WELD	1	R-A	R1.11	UT	L-002A-5
260050	DLW-LOOP2-2-F-16A	BUTT WELD	1	R-A	R1.11	UT	L-002A-5

APPENDIX I  
1R23 COMPLETED CODE EXAMS

Sum No	Comp ID	Description	Class	Category	Item No.	Method	Iso
266500	DLW-LOOP3-4-F-30	BUTT WELD	1	R-A	R1.11	UT	L-003A-5
267200	DLW-LOOP3-6-F-33	BUTT WELD	1	R-A	R1.11	UT	L-003A-5
267600	DLW-LOOP3-6-F-34	BUTT WELD	1	R-A	R1.11	UT	L-003A-5
272300	RH-1-2-S-02	BUTT WELD	1	R-A	R1.11	UT	0074A-3
294300	SI-111-4-A-03	W/ATT SUPPORT A-15	1	B-K	B10.20	PT	0108B-5
294400	SI-111-A-15	SUPPORT	1	F-A	F1.10A	VT-3	0108B-5
296300	SI-111-5-S-06	BUTT WELD	1	R-A	R1.11	UT	0108B-5
308300	SI-29-R-213	SUPPORT	1	F-A	F1.10R	VT-3	0220C-5
308500	SI-29-R-214	SUPPORT	1	F-A	F1.10R	VT-3	0220C-5
309900	SI-20-DS-1	SUPPORT	1	F-A	F1.10D	VT-3	0222B-5
310600	SI-20-R-72A	SUPPORT	1	F-A	F1.10R	VT-3	0222B-5
311400	SI-20-VS-74A	SUPPORT	1	F-A	F1.10V	VT-3	0222B-5
311700	SI-20-8-A-03 TO 04	W/ATT SUPPORT R-75A	1	B-K	B10.20	PT	0222B-5
311800	SI-20-R-75A	SUPPORT	1	F-A	F1.10R	VT-3	0222B-5
315700	SI-30-3-A-01 TO 04	W/ATT SUPPORT R49	1	B-K	B10.20	PT	0223B-5
315800	SI-30-R-49	SUPPORT	1	F-A	F1.10R	VT-3	0223B-5
316200	SI-30-3-A-05	W/ATT SUPPORT SH-52A	1	B-K	B10.20	PT	0223B-5
316300	SI-30-SH-52A	SUPPORT	1	F-A	F1.10S	VT-3	0223B-5
322500	SI-74-6-S-01	BUTT WELD	1	R-A	R1.11	UT	0375C-5
327000	SI-73-R-305A	SUPPORT	1	F-A	F1.10R	VT-3	0375F-7
363900	RVCH-LUG-A	RV HEAD LIFTING LUG	1	B-K	B10.10	MT	E-001A-3
364100	RVCH-LUG-C	RV HEAD LIFTING LUG	1	B-K	B10.10	MT	E-001A-3
365600	WFPD-22-1-F-03	PIPE WELD	2	R-A	R1.11	UT	0062A-5
375800	WFPD-24-5-A-03 TO 06	W/ATT SUPPORT R11,209,210	2	C-C	C3.20	MT	0062C-8
375900	WFPD-24-R-11	SUPPORT	2	F-A	F1.20R	VT-3	0062C-8
376300	WFPD-24-SH-10	SUPPORT	2	F-A	F1.20S	VT-3	0062C-8
382200	SI-164-R-36	SUPPORT	2	F-A	F1.20R	VT-3	0115A-6
391500	SI-81-11-S-01	PIPE WELD	2	R-A	R1.11	UT	0192A-6
392600	SI-81-12-A-02	W/ATT SUPPORT R-89A	2	C-C	C3.20	PT	0192A-6
396200	SI-140-3-S-03	PIPE WELD	2	R-A	R1.11	UT	0192A-6
397000	SI-82-PS-1	SUPPORT	2	F-A	F1.20R	VT-3	0192A-6
397750	SI-051A	RI-ISI SEGMENT	2	R-A	R1.12	VT-2	0192A-6
414900	SI-134-1-S-02	PIPE WELD	2	R-A	R1.11	UT	0200C-4

APPENDIX I  
1R23 COMPLETED CODE EXAMS

Sum No	Comp ID	Description	Class	Category	Item No.	Method	Iso
420150	CH-021C	RI-ISI SEGMENT	2	R-A	R1.12	VT-2	0265A-7
420250	CH-021B	RI-ISI SEGMENT	2	R-A	R1.12	VT-2	0265A-7
420500	CH-79-PS-R-10	SUPPORT	2	F-A	F1.20R	VT-3	0265A-7
422650	CH-020B	RI-ISI SEGMENT	2	R-A	R1.12	VT-2	0265A-7
422750	CH-020C	RI-ISI SEGMENT	2	R-A	R1.12	VT-2	0265A-7
422900	CH-78-PS-R-6	SUPPORT	2	F-A	F1.20R	VT-3	0265A-7
425050	CH-019B	RI-ISI SEGMENT	2	R-A	R1.12	VT-2	0265A-7
425250	CH-019C	RI-ISI SEGMENT	2	R-A	R1.12	VT-2	0265A-7
425300	CH-77-PS-R-2	SUPPORT	2	F-A	F1.20R	VT-3	0265A-7
436050	CH-121	RI-ISI SEGMENT	2	R-A	R1.12	VT-2	0267A-5
439400	CH-70-1-S-03	PIPE WELD	2	R-A	R1.11	UT	0267A-5
440050	CH-122	RI-ISI SEGMENT	2	R-A	R1.12	VT-2	0267A-5
440900	CH-74-1-S-08	PIPE WELD	2	R-A	R1.11	UT	0267A-5
443850	CH-123	RI-ISI SEGMENT	2	R-A	R1.12	VT-2	0267A-5
450800	CH-81-2-F-4A	PIPE WELD	2	R-A	R1.11	UT	0267A-5
470350	CH-130	RI-ISI SEGMENT	2	R-A	R1.12	VT-2	0268A-5
495100	SI-75-R-66	SUPPORT	2	F-A	F1.20R	VT-3	0272A-5
495800	SI-75-R-67	SUPPORT	2	F-A	F1.20R	VT-3	0272A-5
496100	SI-75-R-68	SUPPORT	2	F-A	F1.20R	VT-3	0272A-5
496700	SI-75-SH-230	SUPPORT	2	F-A	F1.20S	VT-3	0272A-5
498800	SI-60-R-230A	SUPPORT	2	F-A	F1.20R	VT-3	0272A-5
502800	SI-60-R-71	SUPPORT	2	F-A	F1.20R	VT-3	0272A-5
504000	CH-124-PS-2	SUPPORT	2	F-A	F1.20R	VT-3	0273A-3
509250	CH-028	RI-ISI SEGMENT	2	R-A	R1.12	VT-2	0273A-3
509900	CH-140-1B-PS-1	SUPPORT	2	F-A	F1.20R	VT-3	0273A-3
519800	SI-81-R-304	SUPPORT	2	F-A	F1.20R	VT-3	0273B-7
521300	SI-81-R-303A	SUPPORT	2	F-A	F1.20R	VT-3	0273B-7
527000	SI-130-R-265	SUPPORT	2	F-A	F1.20R	VT-3	0275A-4
530600	SI-140-R-97	SUPPORT	2	F-A	F1.20R	VT-3	0275A-4
531600	SI-140-R-99	SUPPORT	2	F-A	F1.20R	VT-3	0275A-4
532200	SI-140-R-100	SUPPORT	2	F-A	F1.20R	VT-3	0275A-4
533100	SI-40-R-20	SUPPORT	2	F-A	F1.20R	VT-3	0276A-3
540100	SI-44-R-32	SUPPORT	2	F-A	F1.20R	VT-3	0277A-3

APPENDIX I  
1R23 COMPLETED CODE EXAMS

Sum No	Comp ID	Description	Class	Category	Item No.	Method	Iso
554700	SI-40-R-10	SUPPORT	2	F-A	F1.20R	VT-3	0279A-4
569200	SI-133-5-S-04	PIPE WELD	2	R-A	R1.11	UT	0367A-3
570500	SI-133-A-103	SUPPORT	2	F-A	F1.20A	VT-3	0367A-3
571500	SI-133-7-A-01	W/ATT SUPPORT SH-101A	2	C-C	C3.20	PT	0367A-3
571600	SI-133-SH-101A	SUPPORT	2	F-A	F1.20S	VT-3	0367A-3
572500	SI-133-8-S-03	PIPE WELD	2	R-A	R1.11	UT	0367A-3
578900	SI-PSR-006	SUPPORT	2	F-A	F1.20R	VT-3	0727A-2
587101	BN52799-01-WS-1	PUMP SUPPORT	2	F-A	F1.40P	VT-3	E-003H-4
587111	BN52799-01-WS-2	PUMP SUPPORT	2	F-A	F1.40P	VT-3	E-003H-4
587121	BN52799-01-WS-3	PUMP SUPPORT	2	F-A	F1.40P	VT-3	E-003H-4
587131	BN52799-01-WS-4	PUMP SUPPORT	2	F-A	F1.40P	VT-3	E-003H-4
588300	SI-TK-2-C-2	CIRCUMFERENTIAL BUTT WELD	2	C-A	C1.20	UT	E-005B-5
588500	SI-TK-2-N-4	NOZZLE-TO-VESSEL WELD	2	C-B	C2.21	UT, MT	E-005B-5
588650	SI-TK-2-WS-1	SUPPORT	2	F-A	F1.40E	VT-3	E-005B-5
588750	SI-TK-2-WS-2	SUPPORT	2	F-A	F1.40E	VT-3	E-005B-5
588850	SI-TK-2-WS-3	SUPPORT	2	F-A	F1.40E	VT-3	E-005B-5
588900	SI-TK-2-A-4	W/ATT WS-4	2	C-C	C3.10	PT	E-005B-5
588950	SI-TK-2-WS-4	SUPPORT	2	F-A	F1.40E	VT-3	E-005B-5
590000	SI-TK-2-STUD-11	BOLTING	2	C-D	C4.10	UT	E-005B-5
590100	SI-TK-2-STUD-12	BOLTING	2	C-D	C4.10	UT	E-005B-5
590200	SI-TK-2-STUD-13	BOLTING	2	C-D	C4.10	UT	E-005B-5
590300	SI-TK-2-STUD-14	BOLTING	2	C-D	C4.10	UT	E-005B-5
590400	SI-TK-2-STUD-15	BOLTING	2	C-D	C4.10	UT	E-005B-5
590500	SI-TK-2-STUD-16	BOLTING	2	C-D	C4.10	UT	E-005B-5
623950	SI-16-6-L-81	LONG WELD	2	R-A	R1.11	UT	0109A-5
624300	SI-16-7-F-34	PIPE WELD	2	R-A	R1.11	UT	0109A-5
631300	SI-26-3-S-02	PIPE WELD	2	R-A	R1.11	UT	0114A-6
637400	SI-32-R-103	SUPPORT	2	F-A	F1.20R	VT-3	0220A-3
640600	SI-29-VS-1	SUPPORT	2	F-A	F1.20V	VT-3	0220B-3
641400	SI-29-2A-DS-1	SUPPORT	2	F-A	F1.20D	VT-3	0220B-3
641600	SI-29-R-6D-4	SUPPORT	2	F-A	F1.20R	VT-3	0220B-3
642300	SI-29-R-10D-4	SUPPORT	2	F-A	F1.20R	VT-3	0220B-3
648690	SI-145-1-F-14	PIPE WELD	2	R-A	R1.11	UT	0360A-4

APPENDIX I  
1R23 COMPLETED CODE EXAMS

Sum No	Comp ID	Description	Class	Category	Item No.	Method	Iso
654800	SI-P-1B-1	PUMP CASING WELD	2	C-G	C6.10	PT	E-005C-3
654900	SI-P-1B-2	PUMP CASING WELD	2	C-G	C6.10	PT	E-005C-3
655000	SI-P-1B-3	PUMP CASING WELD	2	C-G	C6.10	PT	E-005C-3
655100	SI-P-1B-4	PUMP CASING WELD	2	C-G	C6.10	PT	E-005C-3
655150	SI-P-1B-SUP	PUMP SUPPORT	2	F-A	F1.40P	VT-3	E-005C-3
670700	SHP-58-7-L-05	LONG WELD	2	R-A	R1.11	UT	0001C-3
670800	SHP-58-7-L-06	LONG WELD	2	R-A	R1.11	UT	0001C-3
670900	SHP-58-7-F-09	PIPE WELD	2	R-A	R1.11	UT	0001C-3
671000	SHP-56-10-F-12	PIPE WELD	2	R-A	R1.11	UT	0002A-1
671100	SHP-56-10-S-44	LOWER SADDLE WELD	2	C-C	C3.20	MT	0002A-1
671200	SHP-56-10-S-49	LOWER SADDLE WELD	2	C-C	C3.20	MT	0002A-1
671300	SHP-56-10-S-16	UPPER SADDLE WELD	2	C-C	C3.20	MT	0002A-1
671400	SHP-56-10-S-15	UPPER SADDLE WELD	2	C-C	C3.20	MT	0002A-1
671800	SHP-56-10-S-48	PIPE WELD	2	R-A	R1.11	UT	0002A-1
671900	SHP-56-10-S-13	INNER SADDLE	2	C-C	C3.20	MT	0002A-1
672000	SHP-56-10-S-14	OUTER SADDLE WELD	2	C-C	C3.20	MT	0002A-1
689700	RH-18-1-A-01	W/ATT SNUBBER	2	C-C	C3.20	PT	0074B-3
691600	RH-2-R-30	SUPPORT	2	F-A	F1.20R	VT-3	0074B-3
704400	RH-10-2-S-04	PIPE WELD	2	R-A	R1.11	UT	0075A-5
704450	RH-10-2-L-41	LONGITUDINAL WELD	2	R-A	R1.11	UT	0075A-5
705900	RH-9-1-S-12	PIPE WELD	2	R-A	R1.11	UT	0075A-5
705950	RH-9-1-L-44	LONGITUDINAL WELD	2	R-A	R1.11	UT	0075A-5
706400	RH-9-1-S-07	PIPE WELD	2	R-A	R1.11	UT	0075A-5
706450	RH-9-1-L-47	LONGITUDINAL WELD	2	R-A	R1.11	UT	0075A-5
707550	RH-009	RI-ISI SEGMENT	2	R-A	R1.12	VT-2	0075A-5
708000	RH-9-1-A-04	W/ATT SUPPORT A-27	2	C-C	C3.20	PT	0075A-5
708100	RH-9-A-27	SUPPORT	2	F-A	F1.20A	VT-3	0075A-5
709250	RH-004	RI-ISI SEGMENT	2	R-A	R1.12	VT-2	0075A-5
710500	RH-12-R-5	SUPPORT	2	F-A	F1.20R	VT-3	0075B-3
711650	RH-13-1-F-02	PIPE WELD	2	R-A	R1.12	VT-2	0075B-3
713850	RH-024	RI-ISI SEGMENT	2	R-A	R1.12	VT-2	0207A-3
719300	RH-16-R-1A	SUPPORT	2	F-A	F1.20R	VT-3	0208A-3
720700	RH-16-VS-10	SUPPORT	2	F-A	F1.20V	VT-3	0208A-3



APPENDIX I  
1R23 COMPLETED CODE EXAMS

Sum No	Comp ID	Description	Class	Category	Item No.	Method	Iso
721400	RH-E-1A-C-1	CIRC BUTT WELD	2	C-A	C1.20	VT-2	E-004A-3
721500	RH-E-1A-C-2	CIRC BUTT WELD	2	C-A	C1.10	VT-2	E-004A-3
721600	RH-E-1A-N-3	NOZZLE-TO-VESSEL WELD	2	C-B	C2.33	VT-2	E-004A-3
721700	RH-E-1A-N-4	NOZZLE-TO-VESSEL WELD	2	C-B	C2.33	VT-2	E-004A-3
721710	RH-E-1A-N-5	Relnf Plate to Nozzle Weld	2	C-B	C2.31	VT-2	E-004A-3
721720	RH-E-1A-N-7	Relnf Plate to Vessel Weld	2	C-B	C2.31	VT-2	E-004A-3
721730	RH-E-1A-N-8	Relnf Plate to Vessel Weld	2	C-B	C2.31	VT-2	E-004A-3
721740	RH-E-1A-N-6	Relnf Plate to Nozzle Weld	2	C-B	C2.31	VT-2	E-004A-3
722200	RH-E-1B-C-1	CIRC BUTT WELD	2	C-A	C1.20	VT-2	E-004A-3
722300	RH-E-1B-C-2	CIRC BUTT WELD	2	C-A	C1.10	VT-2	E-004A-3
722400	RH-E-1B-N-3	NOZZLE-TO-VESSEL WELD	2	C-B	C2.33	VT-2	E-004A-3
722500	RH-E-1B-N-4	NOZZLE-TO-VESSEL WELD	2	C-B	C2.33	VT-2	E-004A-3
722510	RH-E-1B-N-5	Relnf Plate to Nozzle Weld	2	C-B	C2.31	VT-2	E-004A-3
722520	RH-E-1B-N-7	Relnf Plate to Vessel Weld	2	C-B	C2.31	VT-2	E-004A-3
722530	RH-E-1B-N-8	Relnf Plate to Vessel Weld	2	C-B	C2.31	VT-2	E-004A-3
722540	RH-E-1B-N-6	Relnf Plate to Nozzle Weld	2	C-B	C2.31	VT-2	E-004A-3
793800	RS-10-1-A-01 TO 02	W/ATT SUPPORT SH-28	2	C-C	C3.20	PT	0112B-3
800850	RS-P-2A-SUP	PUMP SUPPORT	2	F-A	F1.40P	VT-3	E-007C-3
802750	FW-P-2-CS-1	PUMP SUPPORT	3	F-A	F1.40P	VT-3	E-010A-1
802751	FW-P-2-CS-2	PUMP SUPPORT	3	F-A	F1.40P	VT-3	E-010A-1
802752	FW-P-2-CS-3	PUMP SUPPORT	3	F-A	F1.40P	VT-3	E-010A-1
802753	FW-P-2-CS-4	PUMP SUPPORT	3	F-A	F1.40P	VT-3	E-010A-1
804420	FW-P-3A-CS-1	PUMP SUPPORT	3	F-A	F1.40P	VT-3	E-010A-1
804421	FW-P-3A-CS-2	PUMP SUPPORT	3	F-A	F1.40P	VT-3	E-010A-1
804422	FW-P-3A-CS-3	PUMP SUPPORT	3	F-A	F1.40P	VT-3	E-010A-1
804423	FW-P-3A-CS-4	PUMP SUPPORT	3	F-A	F1.40P	VT-3	E-010A-1
809800	CC-83-4-A-06	W/ATT SUPPORT SH-122	3	D-A	D1.20	VT-1	0049A-1
809900	CC-470-SH-122	SUPPORT	3	F-A	F1.30S	VT-3	0049A-1
810200	CC-323-3A-A-05	W/ATT SUPPORT A-95	3	D-A	D1.20	VT-1	0049A-1
810300	CC-323-A-95	SUPPORT	3	F-A	F1.30A	VT-3	0049A-1
811300	CC-102-2-A-08 TO 13	W/ATT SUPPORT VS-15B	3	D-A	D1.20	VT-1	0049B-2
811400	CC-102-VS-15B	SUPPORT	3	F-A	F1.30V	VT-3	0049B-2
814200	CC-513-RH-48	SUPPORT	3	F-A	F1.30H	VT-3	0050A-2

APPENDIX I  
1R23 COMPLETED CODE EXAMS

Sum No	Comp ID	Description	Class	Category	Item No.	Method	Iso
815450	CC-P-1A-CS-1	PUMP SUPPORT	3	F-A	F1.40P	VT-3	E-010A-1
815451	CC-P-1A-CS-2	PUMP SUPPORT	3	F-A	F1.40P	VT-3	E-010A-1
815452	CC-P-1A-CS-3	PUMP SUPPORT	3	F-A	F1.40P	VT-3	E-010A-1
815453	CC-P-1A-CS-4	PUMP SUPPORT	3	F-A	F1.40P	VT-3	E-010A-1
815600	CC-1-VS-71	SUPPORT	3	F-A	F1.30V	VT-3	0051A-1
816100	CC-2-RH-70A	SUPPORT	3	F-A	F1.30H	VT-3	0051A-1
816500	CC-2-R-68	SUPPORT	3	F-A	F1.30R	VT-3	0051A-1
817900	CC-3-1B-A-08	W/ATT SUPPORT SH-65A	3	D-A	D1.20	VT-1	0051B-1
818000	CC-3-SH-65A	SUPPORT	3	F-A	F1.30S	VT-3	0051B-1
818400	CC-58-6B-A-05 TO 06	W/ATT SUPPORT R-43	3	D-A	D1.20	VT-1	0054A-1
818500	CC-58-R-43	SUPPORT	3	F-A	F1.30R	VT-3	0054A-1
821100	CC-48-1-A-03 TO 06	W/ATT SUPPORT R-35	3	D-A	D1.20	VT-1	0057A-1
821200	CC-46-R-35	SUPPORT	3	F-A	F1.30R	VT-3	0057A-1
826800	CC-130-R-7C-4	SUPPORT	3	F-A	F1.30R	VT-3	0164A-3
827300	CC-130-8-A-12 TO 15	W/ATT SUPPORT R-12C-4	3	D-A	D1.20	VT-1	0164A-3
827400	CC-130-R-12C-4	SUPPORT	3	F-A	F1.30R	VT-3	0164A-3
830200	CC-116-LST-405A	SUPPORT	3	F-A	F1.30L	VT-3	0164A-3
839600	CC-265-VS-8C-3	SUPPORT	3	F-A	F1.30V	VT-3	0178A-4
839900	CC-259-R-11C-3	SUPPORT	3	F-A	F1.30R	VT-3	0178A-4
859000	WD-22-4A-A-01	W/ATT SUPPORT SH-14	3	D-A	D1.20	VT-1	0063A-1
859100	WD-22-SH-14	SUPPORT	3	F-A	F1.30S	VT-3	0063A-1
860200	WD-23-4-A-09	W/ATT SUPPORT R-21	3	D-A	D1.20	VT-1	0063A-1
860300	WD-23-R-21	SUPPORT	3	F-A	F1.30R	VT-3	0063A-1
861200	WD-24-RH-33	SUPPORT	3	F-A	F1.30H	VT-3	0063A-1
865150	FC-P-1A-CS-1	PUMP SUPPORT	3	F-A	F1.40P	VT-3	E-010A-1
865151	FC-P-1A-CS-2	PUMP SUPPORT	3	F-A	F1.40P	VT-3	E-010A-1
865810	FC-E-1A-A-01	W/ATT SUPPORT WS-1	3	D-A	D1.10	VT-1	0071A-1
865811	FC-E-1A-WS-1	SUPPORT	3	F-A	F1.40E	VT-3	0071A-1
865812	FC-E-1A-A-02	W/ATT SUPPORT WS-2	3	D-A	D1.10	VT-1	0071A-1
865813	FC-E-1A-WS-2	SUPPORT	3	F-A	F1.40E	VT-3	0071A-1
867300	FC-1-SH-25A	SUPPORT	3	F-A	F1.30S	VT-3	0150A-2
873500	WR-19-VS-29A	SUPPORT	3	F-A	F1.30V	VT-3	0068A-3
888100	WR-53-RH-94	SUPPORT	3	F-A	F1.30H	VT-3	0224A-3

APPENDIX I  
1R23 COMPLETED CODE EXAMS

Sum No	Comp ID	Description	Class	Category	Item No.	Method	Iso
892835	WR-670-PSST-3	SUPPORT	3	F-A	F1.30T	VT-3	8084A-1
892860	WR-P-6A-MS-1	PUMP SUPPORT	3	F-A	F1.40P	VT-3	E-010A-1
893000	WR-5-R-298	SUPPORT	3	F-A	F1.30R	VT-3	0801A-4
893750	WR-P-1A-RSTR-1	PUMP SUPPORT	3	F-A	F1.40P	VT-3	E-010A-1
893900	WR-1-R-294	SUPPORT	3	F-A	F1.30R	VT-3	0801A-4
894500	WR-99-R-291	SUPPORT	3	F-A	F1.30R	VT-3	0803A-3
895030	WR-172-1-A-06	W/ATT SUPPORT R-275	3	D-A	D1.20	VT-1	0804A-4
895031	WR-172-R-275	SUPPORT	3	F-A	F1.30R	VT-3	0804A-4
895125	WR-676-PSR-4	SUPPORT	3	F-A	F1.30R	VT-3	8085A-1
903910	QS-4-11C-A-01 TO 02	W/ATT SUPPORT RH-406	2	C-C	C3.20	PT	0111A-9
903915	QS-4-RH-406	SUPPORT	2	F-A	F1.20H	VT-3	0111A-9
903985	QS-4-A-10	SUPPORT	2	F-A	F1.20A	VT-3	0111A-9
907220	QS-1-RH-49	SUPPORT	2	F-A	F1.20H	VT-3	0113A-10
908110	QS-P-1A-MS-1	PUMP SUPPORT	2	F-A	F1.40P	VT-3	E-006F-1
908120	QS-P-1A-MS-2	PUMP SUPPORT	2	F-A	F1.40P	VT-3	E-006F-1
908130	QS-P-1A-MS-3	PUMP SUPPORT	2	F-A	F1.40P	VT-3	E-006F-1
908140	QS-P-1A-MS-4	PUMP SUPPORT	2	F-A	F1.40P	VT-3	E-006F-1
913870	CH-120	RI-ISI SEGMENT	2	R-A	R1.12	VT-2	0170B-3
914850	CH-051	RI-ISI SEGMENT	2	R-A	R1.12	VT-2	1254A-4
916250	CH-050A	RI-ISI SEGMENT	2	R-A	R1.12	VT-2	1254A-4
929500	CH-095	RI-ISI SEGMENT	2	R-A	R1.12	VT-2	1518A-1
929600	CH-096	RI-ISI SEGMENT	2	R-A	R1.12	VT-2	1538A-1
929700	CH-097	RI-ISI SEGMENT	2	R-A	R1.12	VT-2	1510A-1
930000	1CNMT-LINER	CONTAINMENT LINER	MC	E-A	E1.11	GV	
930020	1CNMT-LINER-1R22	1R22 THROUGH WALL	MC	N/A	N/A	UTT	
930100	1CNMT-MOISTBARR	MOISTURE BARRIER	MC	E-A	E1.30	GV	
930200	1CNMT-BLDFLG	FUEL CANAL BLIND FLANGE BOLTING	MC	E-A	E1.11	VT-1	3.071
930300	1CNMT-EQUHATCH	EQUIPMENT HATCH BOLTING	MC	E-A	E1.11	VT-1	
930310	1CNMT-EMERHATCH	EMERGENCY HATCH W/IN EQU HATCH	MC	E-A	E1.11	VT-1	
930350	1CNMT-SPARE-PENE-BLTG	SPARE PENETRATION BOLTING	MC	E-A	E1.11	GV	

**APPENDIX II**

**REPAIR / REPLACEMENT ABSTRACT**  
**AND**  
**NIS-2 FORMS**

## NIS-2 ABSTRACT

<u>FORM NO.</u>	<u>FUNCTIONAL LOCATION</u>	<u>ORDER NO.</u>	<u>COMMENTS</u>
3369	1RW-25	200427628	Corrected
3469	1RW-58	200487896	Installed
3516	1EE-P-1C	200471373	Installed
3568	MOV-1RH-720B	200514347	Corrected
3586	1RW-57	200539269	Corrected
3603	1WR-P-1C	200395849	Corrected
3675	2"-CH-96-1502-Q1	200557766	Corrected
3683	1RW-61	200022283	Installed
3695	REJ-1RW-6C	200520018	Installed
3726	1WR-P-1C (Spare)	200594284	Corrected
3726	1WR-P-1C (Spare)	200594285	Corrected
3746	1RW-138	200504116	Corrected
3747	1RW-143	200504119	Corrected
3748	1CH-P-1C (Lube Oil)	200394537	Corrected
3749	2"-WR-67-151-Q3	200454934	Corrected
3753	SV-1MS-101C	200589718	Installed
3754	SV-1MS-102C	200589719	Installed
3755	SV-1MS-103C	200508021	Installed
3756	SV-1MS-104C	200508050	Installed
3757	SV-1MS-105C	200508051	Installed
3758	1RW-163	200504136	Corrected
3759	1RW-164	200504138	Corrected
3760	1RW-165	200504141	Corrected
3764	MOV-1QS-101B	200501639	Corrected
3765	1CCR-303	200374810	Corrected
3766	1CCR-304	200508055	Corrected
3768	1RS-E-1A	200587680	Corrected
3770	1RS-E-1C	200587680	Corrected
3771	1RS-E-1D	200587681	Corrected
3772	CH-186-8-HPV	200581664	Corrected
3776	LCV-1CH-115A	200586778	Corrected
3780	1RW-187	200553513	Installed
3782	REJ-1RW-27B	200590915	Installed
3784	SHP-HSS-201	200591898	Installed
3785	SHP-HSS-202	200591901	Installed
3786	SHP-HSS-203	200591902	Installed
3787	SHP-HSS-204	200591903	Installed
3788	MOV-1SI-850B	200579463	Corrected
3789	RV-1CH-382B	200489073	Installed
3791	1MS-523	200532645	Installed
3791	3"-SDHV-1-601-Q2	200532645	Corrected
3792	1MS-524	200532646	Installed
3792	3"-SDHV-2-601-Q2	200532646	Corrected
3793	1MS-525	200532584	Installed
3793	3"-SDHV-3-601-Q2	200532584	Corrected

## NIS-2 ABSTRACT

<u>FORM NO.</u>	<u>FUNCTIONAL LOCATION</u>	<u>ORDER NO.</u>	<u>COMMENTS</u>
3795	30"-WR-17-151-Q3	200615382	Corrected
3796	1RW-107	200587371	Installed
3796	1RW-107	200499026	Installed
3797	RV-1RC-551A	200479092	Installed
3797	RV-1RC-551A	55119843	Installed
3800	8"-WR-754-151-Q3	200571939	Corrected
3800	6"-WR-755-151-Q3	200571939	Installed
3800	6"-WR-756-151-Q3	200571939	Installed
3800	1RW-980	200571939	Installed
3800	1RW-98	200571939	Installed
3800	1RW-990	200571939	Installed
3800	1RW-99	200571939	Installed
3807	6"-FC-9-152-Q3	200589783	Corrected
3807	1PC-103	200589783	Installed
3807	2"-FC-22-152-Q3	200589783	Installed
3807	PSR-001	200589783	Installed
3807	PSR-002	200589783	Installed
3809	4"-WAPD-5-601-Q3	200589777	Corrected
3809	1FW-208	200589777	Installed
3810	6"-WD-24-151-Q3	200592266	Corrected
3810	4"-WD-37-151-Q3	200592266	Installed
3810	1WT-38	200592266	Installed
3810	1WT-39	200592266	Installed
3810	PSR-040	200592266	Installed
3817	24"-WR-20-151-Q3	200623134	Corrected
3818	1CC-E-1A	200557834	Corrected
3825	1CC-E-1B	200558672	Corrected
3826	1RH-E-1B	200589385	Corrected
3827	WFPD-HSS-228	200632318	Installed
3829	RV-1RC-551B	200640265	Installed
3829	RV-1RC-551B	55119843	Installed
3830	RV-1RC-551C	200640328	Corrected

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 33691. Owner FirstEnergy Nuclear Operating Company  
(NAME)76 South Main Street – Akron, OH 44308  
(ADDRESS)2. Plant Beaver Valley Power Station (BVPS)  
(NAME)P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)3. Work Performed By BVPS Construction Services  
(NAME)P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)Date 05/21/2015Sheet 1 of 1Unit No. 1Order #200427628

Repair/Replacement Organization P.O. No., Job No., etc.

Type Code Symbol Stamp N/AAuthorization No. N/AExpiration Date N/A4. Identification of System River Water (Q3)5. (a) Applicable Construction Code ANSI B31.1 1967 Edition, S'71 Addenda, Code Case N/A(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 2001E-2003A(c) Applicable Section XI Code Case(s): N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Ball Valve	BNL Industries	B021016-1-11	N/A	1RW-125	2003	Corrected	No
End Piece	BNL Industries	D6772-01	N/A	Lot #108008	2011	Installed	No
End Piece	BNL Industries	D6772-02	N/A	Lot #108008	2011	Installed	No
Pipe, 6"	Energy & Process	N/A	N/A	Ht. #811818M01	2004	Installed	No
Flange, 6"	Dubose National Energy	N/A	N/A	Ht. #773B	2002	Installed	No

7. Description of Work Replaced valve end pieces, pipe and flange.8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐  
Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

# FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3369

9. Remarks No Code Data Reports available. Previous NIS-2 Data Report No. 1832.

Applicable Manufacturer's Data Reports to be attached

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Expiration Date N/A

Signed Thomas White  
Owner or Owner's Designee, Title

Engineer V Date June 1, 20 15

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by HSB Global Standards of Hartford, CT have inspected the components described in this Owner's Report during the period 11-4-13 to 5-24-15, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Dean S. Smith  
Inspector's Signature

Commission 289428 A2IB  
National Board Number and Endorsement

Date 6-2-, 20 15



**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3469

1. Owner FirstEnergy Nuclear Operating Company  
(NAME)76 South Main Street – Akron, OH 44308

(ADDRESS)

Date 06/03/2015Sheet 1 of 1Unit No. 12. Plant Beaver Valley Power Station (BVPS)  
(NAME)P.O. Box 4, Shippingport, PA 15077

(ADDRESS)

Order #200487896

Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By BVPS Maintenance  
(NAME)P.O. Box 4, Shippingport, PA 15077

(ADDRESS)

Type Code Symbol Stamp N/AAuthorization No. N/AExpiration Date N/A4. Identification of System River Water (Q3)5. (a) Applicable Construction Code ANSI B31.1 1967 Edition, S'71 Addenda, Code Case N/A(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 2001E-2003A(c) Applicable Section XI Code Case(s): N/A

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Check Valve	Crane Nuclear	D0757	N/A	1RW-58	2002	Removed	No
Check Valve	Crane Nuclear	D0756	N/A	1RW-58	2002	Installed	No

7. Description of Work Replaced valve with spare.8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐  
Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

# FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3469

9. Remarks No Code Data Report available. Previous NIS-2 Data Report No. 3023.

Applicable Manufacturer's Data Reports to be attached

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed Thomas White  Engineer V Date June 11, 20 15  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by HSB Global Standards of Hartford, CT have inspected the components described in this Owner's Report during the period 11-4-13 to 5-24-15 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

  
Inspector's Signature

Commission NB 9428 ANIB  
National Board Number and Endorsement

Date 6-15-, 20 15

# FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 01

Report Number 3516

1. Owner FirstEnergy Nuclear Operating Co.  
(NAME)

76 South Main Street – Akron, OH 44308  
(ADDRESS)

2. Plant Beaver Valley Power Station (BVPS)  
(NAME)

PO Box 4, Shippingport, PA 15077  
(ADDRESS)

3. Work Performed By BVPS Maintenance  
(NAME)

PO Box 4, Shippingport, PA 15077  
(ADDRESS)

Date 04/17/2015

Sheet 1 of 1

Unit No. 1

Order #200471373

Repair/Replacement Organization P.O. No., Job No., etc.

Type Code Symbol Stamp N/A

Authorization No. N/A

Expiration Date "

4. Identification of System Emergency Diesel Fuel Oil (Q3)

5. (a) Applicable Construction Code ANSI B31.1 1967 Edition, S'67, Addenda, Code Case N/A

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 2001E-2003A

(c) Applicable Section XI Code Case(s): N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Pump	Sier-Bath Hydrex	Skid: P17666-A-3 Pump: B040170-1	N/A	1EE-P-1C	1976	Removed	No
Pump	Sier-Bath Hydrex	See Remarks	N/A	1EE-P-1C	1976	Installed	No
Union, 2"	Energy & Process	N/A	N/A	See Remarks	2012	Installed	No
Pipe, 2"	Energy & Process	N/A	N/A	Ht. #00A050856	2006	Installed	No

7. Description of Work Replaced pump, pipe union and pipe nipple.

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐  
Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

# FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 01

Report Number 3516

\*Record test pressure and temperature

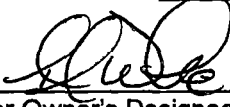
9. Remarks No Code Data Report available. Union Lot Number: Male 9684 (4428), Female 9718 (4502), Nut 9707  
Applicable Manufacturer's Data Reports to be attached  
(4487). The spare pump installed was refurbished by Flowserve under purchase Order 55106502. The original  
nameplate was missing and Flowserve assigned the spare pump serial number P17666-1/2/3/4 & B7984016-1  
The skid serial number remains P17666-A-3

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed T. White  Engineer V Date April 22, 20 15  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB Global Standards of Hartford, CT have inspected the components described in this Owner's Report during the period 11-4-13 to 4-23-15, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

  
Inspector's Signature

Commissions NB9428 ANIB PA 2384  
National Board, State, Province, and Endorsements

Date 4-23-, 20 15

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 35681. Owner FirstEnergy Nuclear Operating Co.  
(NAME)76 South Main Street – Akron, OH 44308  
(ADDRESS)2. Plant Beaver Valley Power Station (BVPS)  
(NAME)PO Box 4, Shippingport, PA 15077  
(ADDRESS)3. Work Performed By BVPS Maintenance  
(NAME)PO Box 4, Shippingport, PA 15077  
(ADDRESS)Date 5-15-15Sheet 1 of 1Unit No. #1Order # 200514347

Repair/Replacement Organization P.O. No., Job No., etc.

Type Code Symbol Stamp N/AAuthorization No. N/AExpiration Date N/A4. Identification of System Residual Heat Removal System; BV-1-10-System (Q1)5. (a) Applicable Construction Code ANSI B31.1 Edition, 1967 Addenda, S'71 Code Case N/A(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 2001 Ed to 2003 Ad(c) Applicable Section XI Code Case(s): N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Valve	Darling Valve & Mfg Co.	N/A	N/A	BV-MOV-1RH-720B	1976	Corrected	No

7. Description of Work Order 200514347 was to inspect and repair leak-by in MOV-1RH-720B. The seal weld between the valve body and bonnet was partially removed, then this order was cancelled. A new seal weld was installed where the old one was removed. Body to bonnet bolt removal is required per the seal weld removal procedure; 4 bolts were removed and reinstalled. Since the bolts were not replaced a VT-1 is not required; additionally pressure testing of seal welds is not required per ASME XI, IWA 4540 (b)(8). Therefore this work is exempt from testing.

# FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3568

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☐ Exempt ☒  
Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F  
\*Record test pressure and temperature

9. Remarks Code data report not available; no prior NIS-2 data reports.

Applicable Manufacturer's Data Reports to be attached

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed Thomas M Calko, Engineer III [Signature] Date May 15, 20 15  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by HJB Global Standards of Hartford, CT have inspected the components described in this Owner's Report during the period 11-4-13 to 5-24-15, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Dean J. Grib Commission NB 9428 ANFB  
Inspector's Signature National Board Number and Endorsement

Date 6-22-, 20 15

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 35861. Owner FirstEnergy Nuclear Operating Company  
(NAME)76 South Main Street – Akron, OH 44308  
(ADDRESS)2. Plant Beaver Valley Power Station (BVPS)  
(NAME)P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)3. Work Performed By BVPS Maintenance  
(NAME)P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)Date 06/03/2015Sheet 1 of 1Unit No. 1Order #200539269

Repair/Replacement Organization P.O. No., Job No., etc.

Type Code Symbol Stamp N/AAuthorization No. N/AExpiration Date N/A4. Identification of System River Water (Q3)5. (a) Applicable Construction Code ANSI B31.1 1967 Edition, S'71 Addenda, Code Case N/A(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 2001E-2003A(c) Applicable Section XI Code Case(s): N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Check Valve	Crane Nuclear	D8081	N/A	1RW-57	2008	Corrected	Yes
Stud, 1-1/8"	Nova Machine	N/A	N/A	Trace Code: 0B14	2013	Installed	No
Stud, 1-1/8"	Nova Machine	N/A	N/A	Trace Code: 8B30	2013	Installed	No
Nut, 1-1/8"	Nova Machine	N/A	N/A	Trace Code: 7X12	2012	Installed	No

7. Description of Work Replaced flange studs & nuts.8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☐ Exempt ☒  
Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

# FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3586

9. Remarks Code Data Report attached to previous NIS-2 Data Report No. 2063. An ASME Section III Class 3,  
Applicable Manufacturer's Data Reports to be attached  
valve is installed in an ANSI B31.1 system.

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Expiration Date N/A

Signed Thomas White  
Owner or Owner's Designee, Title

Engineer V Date June 3, 20 15

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by HSB Global Standards of Hartford, CT have inspected the components described in this Owner's Report during the period 11-4-13 to 5-24-15, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Dean L. Zink  
Inspector's Signature

Commission NB 9428 A NIB  
National Board Number and Endorsement

Date 6-15-, 20 15



**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 01

Report Number 36031. Owner FirstEnergy Nuclear Operating Co.  
(NAME)76 South Main Street – Akron, OH 44308  
(ADDRESS)2. Plant Beaver Valley Power Station (BVPS)  
(NAME)PO Box 4, Shippingport, PA 15077  
(ADDRESS)3. Work Performed By BVPS Maintenance  
(NAME)P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)Date 03/30/2015Sheet 1 of 2Unit No. 1Order #200395849

Repair/Replacement Organization P.O. No., Job No., etc.

Type Code Symbol Stamp N/AAuthorization No. N/AExpiration Date "4. Identification of System River Water (Q3)5. (a) Applicable Construction Code ANSI B31.1 1971 Edition, S'71 Addenda, Code Case N/A(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 2001E-2003A(c) Applicable Section XI Code Case(s): N/A

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Pump	Johnston Pump	01JC1703S	N/A	1WR-P-1C	2002	Corrected	No
Discharge Bowl	Johnston Pump	N/A	N/A	N/A	2002	Installed	No
Suction Bell	Johnston Pump	N/A	N/A	N/A	2002	Installed	No
Bottom Column	Sulzer Pump	10662698	N/A	Mfg: 10434N-1	2013	Installed	No
Intermediate Column	Sulzer Pump	10663102	N/A	Mfg: 10435N-4	2013	Installed	No
Intermediate Column	Sulzer Pump	10663104	N/A	Mfg: 10435N-3	2013	Installed	No
Intermediate Column	Sulzer Pump	10663108	N/A	Mfg: 10435N-6	2013	Installed	No

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 01

Report Number 3603

Intermediate Column	Sulzer Pump	10663109	N/A	Mfg: 10435N-1	2013	Installed	No
Intermediate Column	Sulzer Pump	10663110	N/A	Mfg: 10435N-5	2013	Installed	No
Intermediate Column	Sulzer Pump	10663111	N/A	Mfg: 10435N-2	2013	Installed	No
Intermediate Column	Sulzer Pump	10663112	N/A	Mfg: 10435N-7	2013	Installed	No
Top Column	Sulzer Pump	10663113	N/A	Mfg: 10436N-1	2013	Installed	No
Seal Box	Sulzer Pump	10655892	N/A	Ht. #585013	2013	Installed	
7/8" x 2-1/2" Capscrew	Trust Manufacturing	N/A	N/A	Ht. #M37482	2012	Installed	No
1/2" x 1-1/2" Capscrew	Nova Machine	N/A	N/A	Ht. #CR206060	2011	Installed	No
Seal Gland	Sulzer Pump	N/A	N/A	N/A	2012	Installed	No
1" Nut	Nova Machine	N/A	N/A	Trace Code 5V96	2011	Installed	No
1" Nut	Nova Machine	N/A	N/A	Trace Code 2K45	2009	Installed	No
1" Nut	Nova Machine	N/A	N/A	Trace Code 8K57	2013	Installed	No
1" x 4" Bolt	Nova Machine	N/A	N/A	Trace Code 8K55	2013	Installed	No
1" x 4" Bolt	Nova Machine	N/A	N/A	Trace Code 1R78	2008	Installed	No
1" x 4" Bolt	Trust Manufacturing	N/A	N/A	Ht. #5170811	2013	Installed	No
1-1/8" Stud	Trust Manufacturing	N/A	N/A	Ht. #SS15	2012	Installed	No

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 01

Report Number 3603

1-1/8" Stud	Trust Manufacturing	N/A	N/A	Ht. #HH04	2010	Installed	No
1-1/8" Nut	Nova Machine	N/A	N/A	Trace Code 7X12	2012	Installed	No
1-1/8" Nut	Nova Machine	N/A	N/A	Trace Code 4T10	2010	Installed	No
3/4" Nuts	Nova Machine	N/A	N/A	Trace Code 8D46	2013	Installed	No
3/4" x 2-1/2" Bolt	Trust Manufacturing	N/A	N/A	Ht. #10087950	2011	Installed	No
3/4" x 2-1/2" Bolt	Nova Machine	N/A	N/A	Trace Code 0C72	2013	Installed	No
1" Stud	Nova Machine	N/A	N/A	Trace Code P997	2005	Installed	No
1" x 2-3/4" Bolt	Nova Machine	N/A	N/A	Ht. #87071	2000	Installed	No

7. Description of Work Replaced Discharge Bowl, Suction Bell, Columns, Seal Box, Seal Gland, Studs & Nuts.

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐  
Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

9. Remarks No Code Data Reports available. Discharge Bowl and Suction Bell were removed from 1WR-P-1A

Applicable Manufacturer's Data Reports to be attached

(serial #01JC1701S) and were weld repaired by Sulzer Pump under Order 45428079 to correct localized corrosion.

# FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 01

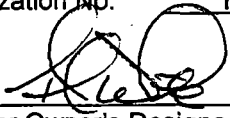
Report Number 3603

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

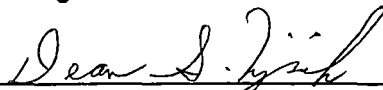
Certificate of Authorization No. N/A Expiration Date N/A

Signed T. White  Engineer V Date April 01, 20 15  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB Global Standards of Hartford, CT have inspected the components described in this Owner's Report during the period 11-4-13 to 4-1-15, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

  
Inspector's Signature

Commissions NB9428 ANIB PA 2384  
National Board, State, Province, and Endorsements

Date 4-1-, 20 15

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 36751. Owner FirstEnergy Nuclear Operating Company  
(NAME)76 South Main Street – Akron, OH 44308  
(ADDRESS)Date 05/27/2015Sheet 1 of 2Unit No. # 12. Plant Beaver Valley Power Station (BVPS)  
(NAME)P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)Order #200557766

Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By BVPS Construction Services  
(NAME)P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)Type Code Symbol Stamp N/AAuthorization No. N/AExpiration Date N/A4. Identification of System Chemical and Volume Control System, BV-1-07-System (Q1)5. (a) Applicable Construction Code ANSI B31.1 1967 Edition, S'71 Addenda, Code Case N/A(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 2001E-2003A(c) Applicable Section XI Code Case(s): N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Pipeline	Stone and Webster	N/A	N/A	2"-CH-96-1502-Q1	1976	Corrected	No
Elbow, 2 in	Stone and Webster	N/A	N/A	2"-CH-96-1502-Q1	1976	Removed	No
Tee, 2 in, 6000 #, SA 182 F316	Gibson Products	N/A	N/A	Heat # 60958	2005	Installed	No
Reducing Insert, 2 x 3/4 in, 6000#, SA182 F316	CGP Mfg	N/A	N/A	Heat # 420689	2013	Installed	No
Pipe, 3/4 in, Sch 160, SA 312 Tp 316	Pexco	N/A	N/A	Heat # 5333033	2014	Installed	No

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3675

Valve, Globe, ¾ in	Flow Serve	80BVZ	N/A	1CH-368	2013	Installed	No
Pipe Coupling, Reducing, ¾ x ½ in, 6000#, SA182 F316	Gibson Products	N/A	N/A	Heat # 60958	2005	Installed	No
Tube Connector, ½ x ½ in, SA 182 F316	Swagelok	N/A	N/A	N/A	2009	Installed	No
Tube Plug, ½ in	Swagelok	N/A	N/A	N/A	2014	Installed	No

7. Description of Work Pipeline 2"-CH-96-1502-Q1 was modified to add a new drain line per ECP 13-0193-001.

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐  
Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

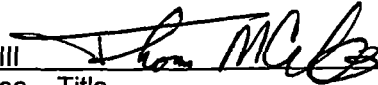
9. Remarks No Code Data Report available; no prior NIS-2 data reports.

Applicable Manufacturer's Data Reports to be attached

**CERTIFICATE OF COMPLIANCE**

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/A

Signed Thomas M Calko, Engineer III  Date May 27, 20 15  
Owner or Owner's Designee, Title

# FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3675

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by HSB Global Standards of Hartford, CT have inspected the components described in this Owner's Report during the period 11-4-13 to 5-24-15, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Dean S. Zwick  
Inspector's Signature

Commission NB 9428 A-1B  
National Board Number and Endorsement

Date 5-28-, 20 15

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 36831. Owner FirstEnergy Nuclear Operating Co.  
(NAME)76 South Main Street – Akron, OH 44308  
(ADDRESS)2. Plant Beaver Valley Power Station (BVPS)  
(NAME)PO Box 4, Shippingport, PA 15077  
(ADDRESS)3. Work Performed By BVPS Construction Services  
(NAME)PO Box 4, Shippingport, PA 15077  
(ADDRESS)Date 05-22-15Sheet 1 of 1Unit No. #1Order number 200022283

Repair/Replacement Organization P.O. No., Job No., etc.

Type Code Symbol Stamp N/AAuthorization No. N/AExpiration Date N/A4. Identification of System River Water System, BV-1-30-System (Q3)5. (a) Applicable Construction Code ANSI B31.1 Edition, 1967 Addenda, S '71 Code Case N/A(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 2001 Ed to 2003 Ad

(c) Applicable Section XI Code Case(s):

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Valve, Butterfly	Allis Chalmers	67744	N/A	1RW-61	1976	Removed	No
Valve, Butterfly	Wyle Laboratories	1	N/A	1RW-61	2003	Installed	No
Studs, 7/8"	Nova Machine Products	N/A	N/A	X213	2005	Installed	No
Nuts, 7/8"	Nova Machine Products	N/A	N/A	0J97	2014	Installed	No

7. Description of Work Replaced valve and flange studs and nuts in accordance with ECP 05-0319-001.



# FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3683

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐  
Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

9. Remarks No code data report available; previous NIS-2 data report #1296.

Applicable Manufacturer's Data Reports to be attached

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed  Engineer III Date May 21, 20 15  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by HSB Global Standards of Hartford, CT have inspected the components described in this Owner's Report during the period 11-4-13 to 5-24-15, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

 Commission JB9428 ANIB  
Inspector's Signature National Board Number and Endorsement

Date 5-28-, 20 15

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 01

Report Number 3695

1. Owner FirstEnergy Nuclear Operating Co.  
(NAME)76 South Main Street – Akron, OH 44308  
(ADDRESS)2. Plant Beaver Valley Power Station (BVPS)  
(NAME)P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)3. Work Performed By BVPS Maintenance  
(NAME)P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)Date 11/24/2014Sheet 1 of 1Unit No. 1Order #200520018

Repair/Replacement Organization P.O. No., Job No., etc.

Type Code Symbol Stamp N/AAuthorization No. N/AExpiration Date "4. Identification of System River Water (Q3)5. (a) Applicable Construction Code B31.1 1967 Edition, S'71 Addenda, Code Case —(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 2001E-2003A(c) Applicable Section XI Code Case(s): N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Expansion Joint	Garlock	02-2440-2	N/A	REJ-1RW-6C	2002	Removed	No
Expansion Joint	Garlock	14-1782550-01	N/A	REJ-1RW-6C	2014	Installed	No

7. Description of Work Replaced rubber expansion joint.8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐Other ☐ Pressure — psi Test Temp. — °F

\*Record test pressure and temperature

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 01

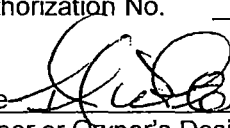
Report Number 36959. Remarks No Code Data Reports available. Previous NIS-2 Data Report No. 1553.

Applicable Manufacturer's Data Reports to be attached

**CERTIFICATE OF COMPLIANCE**

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

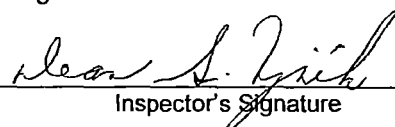
Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/A

Signed T. White  Nuclear Engineer V Date November 24, 20 14  
Owner or Owner's Designee, Title

**CERTIFICATE OF INSERVICE INSPECTION**

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB Global of Standards HARTFORD, CT have inspected the components described in this Owner's Report during the period 11-4-13 to 11-24-14, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

  
Inspector's SignatureCommissions NB9428 AWIS PA2384  
National Board, State, Province, and EndorsementsDate 11-24-, 20 14

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 01

Report Number 37261. Owner FirstEnergy Nuclear Operating Co.  
(NAME)76 South Main Street – Akron, OH 44308  
(ADDRESS)2. Plant Beaver Valley Power Station (BVPS)  
(NAME)PO Box 4, Shippingport, PA 15077  
(ADDRESS)3. Work Performed By Construction Services  
(NAME)PO Box 4, Shippingport, PA 15077  
(ADDRESS)Date 02/16/2015Sheet 1 of 1Unit No. 1Order numbers 200594284, 200594285

Repair/Replacement Organization P.O. No., Job No., etc.

Type Code Symbol Stamp N/AAuthorization No. N/AExpiration Date "4. Identification of System River Water (Q3)5. (a) Applicable Construction Code ANSI B31.1 1971 Edition, S71 Addenda, Code Case N/A(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 2001E-2003A(c) Applicable Section XI Code Case(s): N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Pump	Johnston Pump	01JC1703S	N/A	1WR-P-1C (spare)	2002	Corrected	No

7. Description of Work Weld repaired corrosion on bottom and intermediate pump columns.8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☐ Exempt ☒  
Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

# FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 01

Report Number 3726

9. Remarks No Code Data Reports available.

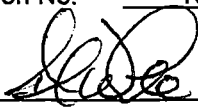
Applicable Manufacturer's Data Reports to be attached

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed T. White  Engineer V Date March 27, 20 15  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB Global Standards of Hartford, CT have inspected the components described in this Owner's Report during the period 11-4-13 to 3-31-15, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

  
Inspector's Signature

Commissions NB9428 A2IB Pt 2384  
National Board, State, Province, and Endorsements

Date 3-31-, 20 15

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3746

1. Owner FirstEnergy Nuclear Operating Co.  
(NAME)76 South Main Street – Akron, OH 44308  
(ADDRESS)Date 7-14-2015Sheet 1 of 1Unit No. #12. Plant Beaver Valley Power Station (BVPS)  
(NAME)PO Box 4, Shippingport, PA 15077  
(ADDRESS)Order # 200504116

Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By BVPS Construction Services  
(NAME)PO Box 4, Shippingport, PA 15077  
(ADDRESS)Type Code Symbol Stamp N/AAuthorization No. N/AExpiration Date N/A4. Identification of System River Water System, BV-1-30-System (Q3)5. (a) Applicable Construction Code ANSI B31.1 Edition, 1967 Addenda, S '71 Code Case N/A(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 2001 Edition to 2003 Addenda(c) Applicable Section XI Code Case(s): N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Spool	Stone and Webster	N/A	N/A	Pipe Line 3"-WR-45-157W-Q3	1976	Corrected	No
Pipe, 3 in, Sch 40	Bristol Metals (Rolled Alloys)	N/A	N/A	Heat # 812008	2003	Installed	No
Valve End Piece	Flow Serve	N/A	N/A	1RW-138 Heat # 9154	2014	Installed	No
Valve End Piece	Flow Serve	N/A	N/A	1RW-138 Heat # N/A	2014	Installed	No
Flange, 3 in, 150#, RF	Newman Flange & Fitting	N/A	N/A	Heat # AL-42	2010	Installed	No

# FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3746

7. Description of Work Ball valve 1RW-138 is a 3 piece ball valve; the valve was installed with stainless steel valve end pieces. This order replaced the stainless steel end pieces with AL6XN end pieces. A flange and short section of pipe were also replaced with AL6XN components as part of this work order.

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐  
Other ☐ Pressure --- psi Test Temp. --- °F

\*Record test pressure and temperature

9. Remarks No code data reports available for these valve end pieces. Prior NIS-2 report is # 905.

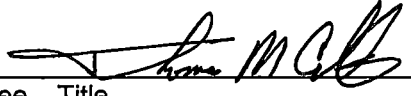
Applicable Manufacturer's Data Reports to be attached

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A


Certificate of Authorization No. N/A Expiration Date N/A

Signed Thomas M Calko, Engineer III  Date July 14, 20 15  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by HSB Global Standards of Hartford, CT have inspected the components described in this Owner's Report during the period 11-4-13 to 5-24-15, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

  
Inspector's Signature

Commission NB9428 AVEB  
National Board Number and Endorsement

Date 7-15-, 20 15

# FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 01

Report Number 3747

1. Owner FirstEnergy Nuclear Operating Co.  
(NAME)

Date 01/14/2015

76 South Main Street – Akron, OH 44308  
(ADDRESS)

Sheet 1 of 1

Unit No. 1

2. Plant Beaver Valley Power Station (BVPS)  
(NAME)

P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)

Order #200504119

Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By BVPS Construction Services  
(NAME)

Type Code Symbol Stamp N/A

P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)

Authorization No. N/A

Expiration Date "

4. Identification of System River Water (Q3)

5. (a) Applicable Construction Code ANSI B31.1 1967 Edition, S'71 Addenda, Code Case N/A

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 2001E-2003A

(c) Applicable Section XI Code Case(s): N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Ball Valve	Anchor-Darling	EZ603-1-4	N/A	1RW-143	1995	Corrected	No
End Piece	Flowserve	N/A	N/A	Trace Code: 9154	2014	Installed	No
End Piece	Flowserve	N/A	N/A	Trace Code: 9154	2014	Installed	No
3" NPS Pipe	Energy & Process	N/A	N/A	Ht. #812008	2003	Installed	No
3" NPS Tee	Energy & Process	N/A	N/A	Ht. #NORL-1	2014	Installed	No

7. Description of Work Replaced valve end pieces, pipe tee, and pipe nipple.

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐  
Other ☐ Pressure --- psi Test Temp. --- °F



# FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 01

Report Number 3747

\*Record test pressure and temperature

9. Remarks No Code Data Report available. Previous NIS-2 Data Report No. 905.

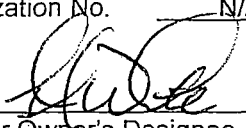
Applicable Manufacturer's Data Reports to be attached

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed T. White  Engineer V Date February 16, 20 15  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by H&B Global of STANFORD HARTFORD, CT have inspected the components described in this Owner's Report during the period 11-4-13 to 2-18-15, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Dean S. Smith Commissions SB9428 ANEB PA0384  
Inspector's Signature National Board, State, Province, and Endorsements

Date 2-18-, 20 15

# FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 01

Report Number 3748

1. Owner FirstEnergy Nuclear Operating Co.  
(NAME)

76 South Main Street – Akron, OH 44308  
(ADDRESS)

2. Plant Beaver Valley Power Station (BVPS)  
(NAME)

P. O. Box 4, Shippingport, PA 15077  
(ADDRESS)

3. Work Performed By BVPS Maintenance  
(NAME)

P. O. Box 4, Shippingport, PA 15077  
(ADDRESS)

Date 11/26/2014

Sheet 1 of 1

Unit No. 2

Order #200394537

Repair/Replacement Organization P.O. No., Job No., etc.

Type Code Symbol Stamp N/A

Authorization No. N/A

Expiration Date "

4. Identification of System Chemical and Volume Control (Class Q3)

5. (a) Applicable Construction Code ANSI B31.1 1967 Edition, S'71 Addenda, Code Case ---

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 2001E-2003A

(c) Applicable Section XI Code Case(s): N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Piping	Pacific Pumps	N/A	N/A	1CH-P-1C (Lube Oil)	1976	Corrected	No
1-1/2" Reducing Insert	Tioga Steel	N/A	N/A	Ht. #1G5556	2013	Installed	No

7. Description of Work Replaced reducing insert pipe fitting to TC-1CH-101C on pump lube oil system.

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐  
Other ☐ Pressure                      psi Test Temp.                      °F

# FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 01

Report Number 3748

\*Record test pressure and temperature

9. Remarks No Code Data Reports available.

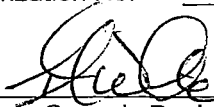
Applicable Manufacturer's Data Reports to be attached

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

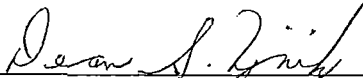
Signed T. White  Nuclear Engineer V Date November 26, 20 14  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by ASB Global of HARTFORD, CT. have inspected the components described in this

Owner's Report during the period 5-24-14 to 12-2-14, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

  
Inspector's Signature

Commissions NB9428 A NIB PA 2384  
National Board, State, Province, and Endorsements

Date 12-2-, 20 14

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3749

1. Owner FirstEnergy Nuclear Operating Co.  
(NAME)  
76 South Main Street – Akron, OH 44308  
(ADDRESS)
2. Plant Beaver Valley Power Station (BVPS)  
(NAME)  
PO Box 4, Shippingport, PA 15077  
(ADDRESS)
3. Work Performed By BVPS Construction Services  
(NAME)  
PO Box 4, Shippingport, PA 15077  
(ADDRESS)

Date 6-3-2015

Sheet 1 of 1

Unit No. #1

Order # 200454934  
Repair/Replacement Organization P.O. No., Job No., etc.

Type Code Symbol Stamp N/A

Authorization No. N/A

Expiration Date N/A

4. Identification of System River Water System, BV-1-30-system (Q3)
5. (a) Applicable Construction Code ANSI B31.1 Edition, 1967 Addenda, S '71 Code Case N/A  
(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 2001 Edition to 2003 Addenda  
(c) Applicable Section XI Code Case(s): N/A

**6. Identification of Components**

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Spool	Stone and Webster	N/A	N/A	Pipe Line # 2"-WR-67-151-Q3	1976	Corrected	No
Pipe, 2 in, Sch 80	Michigan Seamless Tube	N/A	N/A	Heat # 00A115309	2011	Installed	No
Pipe Cap, 2 in, 3000#, A105	Ladish Co	N/A	N/A	Heat # AY7WI	1992	Installed	No

7. Description of Work Line 2"-WR-67-151-Q3 is a dead leg and was cut and capped per ECP 14-0122-001.

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐  
Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

# FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3749

9. Remarks Code data report not available. Prior NIS-2 data report # 1152.

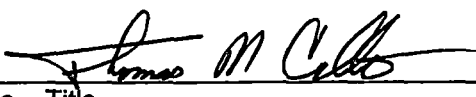
Applicable Manufacturer's Data Reports to be attached

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed Thomas M Calko, Engineer III  Date June 3, 20 15  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by HSB Global Standards of Hartford, CT have inspected the components described in this Owner's Report during the period 11-4-13 to 5-24-15, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

 Commission 189428A-118  
Inspector's Signature National Board Number and Endorsement

Date 6-15-15, 20 15

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3753

1. Owner FirstEnergy Nuclear Operating Company  
(NAME)76 South Main Street – Akron, OH 44308  
(ADDRESS)2. Plant Beaver Valley Power Station (BVPS)  
(NAME)P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)3. Work Performed By BVPS Construction Services  
(NAME)P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)Date 05/27/2015Sheet 1 of 2Unit No. 1Order Nos.: 200589718

Repair/Replacement Organization P.O. No., Job No., etc.

Type Code Symbol Stamp N/AAuthorization No. N/AExpiration Date N/A4. Identification of System Main Steam (Q2)5. (a) Applicable Construction Code ASME Section III 1968 Edition, N/A Addenda, Code Case N/A(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 2001E-2003A(c) Applicable Section XI Code Case(s): N/A

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Safety Valve	Dresser	BM-07758	N/A	SV-1MS-101C	1968	Removed	Yes
Safety Valve	Dresser	BM-07757	N/A	SV-1MS-101C	1968	Installed	Yes
Stud, 1-3/8"	Nova Machine	N/A	N/A	Trace Code: 13R4	2015	Installed	No
Nut, 1-3/8"	Nova Machine	N/A	N/A	Trace Code: 6X20	2012	Installed	No
Nut, 1-3/8"	Nova Machine	N/A	N/A	Trace Code: 05M8	2014	Installed	No

7. Description of Work Replaced valve with rebuilt spare, and studs & nuts.8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐  
Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

# FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3753


9. Remarks Code Data Report attached. Previous NIS-2 Data Report No. 1871. NWS Technologies, LLC rebuilt  
Applicable Manufacturer's Data Reports to be attached  
S/N BM-07757 and replaced the disc and two body/cap studs & nuts (see attached NVR-1 report).

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed Thomas White  Engineer V Date May 27, 20 15  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by HSB Global Standards of Hartford, CT have inspected the components described in this Owner's Report during the period 11-4-13 to 5-24-15, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Dean S. Iyil  Commission 189428 ANIB  
Inspector's Signature National Board Number and Endorsement

Date 5-28-, 20 15

**FORM NVR-1 REPORT OF REPAIR ☒ OR REPLACEMENT ☒  
OF NUCLEAR PRESSURE RELIEF DEVICES**

1. Work performed by: NWS Technologies, LLC 55119843  
(name of certificate holder)  
131 Venture Boulevard, Spartanburg, SC 29306  
(address)
2. Work performed for: First Energy Corporation, Beaver Valley Power Station  
(name)
3. Owner: First Energy Corporation, Beaver Valley Power Station  
(name)  
P.O. Box 4, Shippingport, PA 15077  
(address)
4. Name, address, and identification of nuclear power plant: Beaver Valley Power Station  
Route 168, Shippingport, PA 15077
5. a: Repaired pressure relief device: Main Steam Safety Valve  
b: Name of manufacturer: Consolidated / Dresser  
c: Identifying nos.
- |                                      |   |   |  |  |  |
|--------------------------------------|---|---|--|--|--|
| <u>3787</u><br><small>(type)</small> | <u>BM07757</u><br><small>(mfr's S/N)</small>                    | <u>n/a</u><br><small>(NBS)</small>      | <u>Steam</u><br><small>(service)</small> | <u>6"</u><br><small>(size)</small>           | <u>n/a</u><br><small>(yr. built)</small>           |
| d: Construction Code:                | <u>ASME / III / 1</u><br><small>(name/section/division)</small> | <u>1968</u><br><small>(edition)</small> | <u>n/a</u><br><small>(addenda)</small>   | <u>n/a</u><br><small>(Code Cases(s))</small> | <u>A, Article 9</u><br><small>(Code Class)</small> |
6. ASME Code Section XI applicable for inservice inspection: 2001 2003 n/a  
(edition) (addenda) (Code Case(s))
7. ASME Code Section XI used for repairs, replacements: 2001 2003 n/a  
(edition) (addenda) (Code Case(s))
8. Construction Code used for repairs, replacements: 1968 n/a n/a  
(edition) (addenda) (Code Case(s))
9. Design responsibilities: n/a
10. Opening pressure: 1075 psig Blowdown (if applicable) n/a %. Set pressure and blowdown adjustment made at: NWS Technologies, LLC using steam
11. Description of work (include name and identifying number of replacement parts): Disassembled, inspected, installed pre-oxidized disc, replaced two body to cap studs / nuts, replaced disc holder, disc collar, and spindle, measured spring, lapped and passivated nozzle seat, cleaned, lubricated, assembled. Certified set-pressure and seat tightness using steam.
12. Remarks: NWS Traveler # 15-61. ASME Section XI parts replaced: Disc s/n ADW94, (2) Studs ID: A/ B7, (2) Nuts ID: 05M7.

**CERTIFICATE OF COMPLIANCE**

I, Jason C. Gibson certify that to the best of my knowledge and belief the statements made in this report are correct and the repair or replacement of the pressure relief devices described above conforms to Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

National Board Certificate of Authorization No. 632 to use the "VR" stamp expires April 3, 2018.  
National Board Certificate of Authorization No. 81 to use the "NR" stamp expires April 9, 2018.

4/22/15 NWS Technologies, LLC [Signature] QA Manager  
Date Repair Organization Authorized representative Title

**CERTIFICATE OF INSPECTION**

I, Charles F. Toegel holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of North Carolina and employed by HSB Global Standards of Hartford, CT have inspected the repair or replacement described in this report on 22 APRIL 2015 and state that to the best of my knowledge and belief, this repair or replacement has been completed in accordance with Section XI of the of the ASME Code and the National Board Inspection Code "VR" and "NR" rules. By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning this repair or replacement described in this report. Furthermore, neither the undersigned nor my employer shall be liable in any manner for any personal injury, property damage or loss of any kind arising from or connected with this inspection.

4/22/15 [Signature] NB # 8462, A, N, I NC # 1073  
Date Inspector's Signature (National Board and jurisdiction no.)



**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 37541. Owner FirstEnergy Nuclear Operating Company  
(NAME)76 South Main Street – Akron, OH 44308  
(ADDRESS)2. Plant Beaver Valley Power Station (BVPS)  
(NAME)P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)3. Work Performed By BVPS Construction Services  
(NAME)P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)Date 05/27/2015Sheet 1 of 2Unit No. 1Order Nos.: 200589719

Repair/Replacement Organization P.O. No., Job No., etc.

Type Code Symbol Stamp N/AAuthorization No. N/AExpiration Date N/A4. Identification of System Main Steam (Q2)5. (a) Applicable Construction Code ASME Section III 1968 Edition, N/A Addenda, Code Case N/A(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 2001E-2003A(c) Applicable Section XI Code Case(s): N/A

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Safety Valve	Dresser	BM-07761	N/A	SV-1MS-102C	1968	Removed	Yes
Safety Valve	Dresser	BM-07760	N/A	SV-1MS-102C	1968	Installed	Yes
Stud, 1-3/8"	Nova Machine	N/A	N/A	Trace Code: 13R4	2015	Installed	No
Stud, 1-3/8"	Nova Machine	N/A	N/A	Trace Code: 05P0	2014	Installed	No
Nut, 1-3/8"	Nova Machine	N/A	N/A	Trace Code: 6X20	2012	Installed	No
Nut, 1-3/8"	Nova Machine	N/A	N/A	Trace Code: 05M8	2014	Installed	No

7. Description of Work Replaced valve with rebuilt spare, and studs & nuts.

# FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3754

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐  
Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

9. Remarks Code Data Report attached. Previous NIS-2 Data Report No. 1872. NWS Technologies, LLC rebuilt  
Applicable Manufacturer's Data Reports to be attached  
S/N BM-07760 and replaced the disc (see attached NVR-1 report).

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed Thomas White  Engineer V Date May 27, 20 15  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by HSB Global Standards of Hartford, CT have inspected the components described in this Owner's Report during the period 11-4-13 to 5-24-15, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Dean S. Lynch Commission NB9428 A NIB  
Inspector's Signature National Board Number and Endorsement

Date 5-28-, 20 15

# FORM NVR-1 REPORT OF REPAIR ☒ OR REPLACEMENT ☒ OF NUCLEAR PRESSURE RELIEF DEVICES

1. Work performed by: NWS Technologies, LLC 55119843  
(name of certificate holder)  
131 Venture Boulevard, Spartanburg, SC 29306  
(address)
2. Work performed for: First Energy Corporation, Beaver Valley Power Station  
(name)
3. Owner: First Energy Corporation, Beaver Valley Power Station  
(name)  
P.O. Box 4, Shippingport, PA 15077  
(address)
4. Name, address, and identification of nuclear power plant: Beaver Valley Power Station  
Route 168, Shippingport, PA 15077
5. a: Repaired pressure relief device: Main Steam Safety Valve  
 b: Name of manufacturer: Consolidated / Dresser  
 c: Identifying nos.
- |                       |                            |                      |                          |                       |                            |
|-----------------------|----------------------------|----------------------|--------------------------|-----------------------|----------------------------|
| <u>3707R</u>          | <u>BM07760</u>             | <u>n/a</u>           | <u>Steam</u>             | <u>6"</u>             | <u>n/a</u>                 |
| <small>(type)</small> | <small>(mfr's S/N)</small> | <small>(NB#)</small> | <small>(service)</small> | <small>(size)</small> | <small>(yr. built)</small> |
- d: Construction Code: ASME / III / 1 1968 n/a n/a A, Article 9  
(name/section/division) (edition) (addenda) (Code Cases(s)) (Code Class)
6. ASME Code Section XI applicable for inservice inspection: 2001 2003 n/a  
(edition) (addenda) (Code Case(s))
7. ASME Code Section XI used for repairs, replacements: 2001 2003 n/a  
(edition) (addenda) (Code Case(s))
8. Construction Code used for repairs, replacements: 1968 n/a n/a  
(edition) (addenda) (Code Case(s))
9. Design responsibilities: n/a
10. Opening pressure: 1085 psig Blowdown (if applicable) n/a %. Set pressure and blowdown adjustment made at: NWS Technologies, LLC using steam
11. Description of work (include name and identifying number of replacement parts): Disassembled, inspected, installed pre-oxidized disc and spindle, measured spring, lapped and passivated nozzle seat, cleaned, lubricated, assembled. Certified set-pressure and seat tightness using steam.
12. Remarks: NWS Traveler # 15-62. ASME Section XI parts replaced: Disc s/n AJV48.

## CERTIFICATE OF COMPLIANCE

I, Jason C. Gibson certify that to the best of my knowledge and belief the statements made in this report are correct and the repair or replacement of the pressure relief devices described above conforms to Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

National Board Certificate of Authorization No. 632 to use the "VR" stamp expires April 3, 2018.

National Board Certificate of Authorization No. 81 to use the "NR" stamp expires April 9, 2018.

4/22/15 NWS Technologies, LLC [Signature] QA Manager  
Date Repair Organization Authorized representative Title

## CERTIFICATE OF INSPECTION

I, Charles F. Toegel holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of North Carolina and employed by HSB Global Standards of Hartford, CT have inspected the repair or replacement described in this report on 22 APRIL 2015 and state that to the best of my knowledge and belief, this repair or replacement has been completed in accordance with Section XI of the of the ASME Code and the National Board Inspection Code "VR" and "NR" rules. By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning this repair or replacement described in this report. Furthermore, neither the undersigned nor my employer shall be liable in any manner for any personal injury, property damage or loss of any kind arising from or connected with this inspection.

4/22/15 [Signature] NB # 8462, A, N, I NC # 1073  
Date Inspector's Signature (National Board and jurisdiction no.)

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 37551. Owner FirstEnergy Nuclear Operating Company  
(NAME)Date 05/27/201576 South Main Street – Akron, OH 44308  
(ADDRESS)Sheet 1 of 2Unit No. 12. Plant Beaver Valley Power Station (BVPS)  
(NAME)P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)Order Nos.: 200508021

Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By BVPS Construction Services  
(NAME)Type Code Symbol Stamp N/AP.O. Box 4, Shippingport, PA 15077  
(ADDRESS)Authorization No. N/AExpiration Date N/A4. Identification of System Main Steam (Q2)5. (a) Applicable Construction Code ASME Section III 1968 Edition, N/A Addenda, Code Case N/A(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 2001E-2003A(c) Applicable Section XI Code Case(s): N/A

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Safety Valve	Dresser	BM-07764	N/A	SV-1MS-103C	1968	Removed	Yes
Safety Valve	Dresser	BM-07763	N/A	SV-1MS-103C	1968	Installed	Yes
Stud, 1-3/8"	Nova Machine	N/A	N/A	Trace Code: 13R4	2015	Installed	No
Nut, 1-3/8"	Nova Machine	N/A	N/A	Trace Code: 6X20	2012	Installed	No
Nut, 1-3/8"	Nova Machine	N/A	N/A	Trace Code: 6Y98	2012	Installed	No

7. Description of Work Replaced valve with rebuilt spare, and studs & nuts:8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐  
Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

# FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3755

9. Remarks Code Data Report attached. Previous NIS-2 Data Report No. 1873. NWS Technologies, LLC rebuilt  
Applicable Manufacturer's Data Reports to be attached  
S/N BM-07763 and replaced the disc (see attached NVR-1 report).

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed Thomas White  Engineer V Date May 27, 20 15  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by HSB Global Standards of Hartford, CT have inspected the components described in this Owner's Report during the period 11-4-13 to 5-24-15, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Dean J. Zink Commission NB9428 ANFB  
Inspector's Signature National Board Number and Endorsement

Date 5-28-, 20 15


**FORM NVR-1 REPORT OF REPAIR ☒ OR REPLACEMENT ☒  
OF NUCLEAR PRESSURE RELIEF DEVICES**

1. Work performed by: NWS Technologies, LLC 55119843  
(name of certificate holder)  
131 Venture Boulevard, Spartanburg, SC 29306  
(address)
2. Work performed for: First Energy Corporation, Beaver Valley Power Station  
(name)
3. Owner: First Energy Corporation, Beaver Valley Power Station  
(name)  
P.O. Box 4, Shippingport, PA 15077  
(address)
4. Name, address, and identification of nuclear power plant: Beaver Valley Power Station  
Route 168, Shippingport, PA 15077
5. a: Repaired pressure relief device: Main Steam Safety Valve  
b: Name of manufacturer: Consolidated / Dresser  
c: Identifying nos.
- |                       |                            |                      |                          |                       |                            |
|-----------------------|----------------------------|----------------------|--------------------------|-----------------------|----------------------------|
| <u>3707R</u>          | <u>BM07763</u>             | <u>n/a</u>           | <u>Steam</u>             | <u>6"</u>             | <u>n/a</u>                 |
| <small>(type)</small> | <small>(mfr's S/N)</small> | <small>(NB#)</small> | <small>(service)</small> | <small>(size)</small> | <small>(yr. built)</small> |
- d: Construction Code: ASME / III / 1 1968 n/a n/a A, Article 9  
(name/section/division) (edition) (addenda) (Code Cases(s)) (Code Class)
6. ASME Code Section XI applicable for inservice inspection: 2001 2003 n/a  
(edition) (addenda) (Code Case(s))
7. ASME Code Section XI used for repairs, replacements: 2001 2003 n/a  
(edition) (addenda) (Code Case(s))
8. Construction Code used for repairs, replacements: 1968 n/a n/a  
(edition) (addenda) (Code Case(s))
9. Design responsibilities: n/a
10. Opening pressure: 1095 psig Blowdown (if applicable) n/a %. Set pressure and blowdown adjustment made at: NWS Technologies, LLC using steam
11. Description of work (include name and identifying number of replacement parts): Disassembled, inspected, installed pre-oxidized disc and spindle, measured spring, lapped and passivated nozzle seat, cleaned, lubricated, assembled. Certified set-pressure and seat tightness using steam.
12. Remarks: NWS Traveler # 15-63. ASME Section XI parts replaced: Disc s/n AJV46.

**CERTIFICATE OF COMPLIANCE**

I, Jason C. Gibson certify that to the best of my knowledge and belief the statements made in this report are correct and the repair or replacement of the pressure relief devices described above conforms to Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

National Board Certificate of Authorization No. 632 to use the "VR" stamp expires April 3, 2018.  
National Board Certificate of Authorization No. 81 to use the "NR" stamp expires April 9, 2018.

4/22/15 NWS Technologies, LLC  QA Manager  
Date Repair Organization Authorized representative Title

**CERTIFICATE OF INSPECTION**

I, Charles F. Toegel holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of North Carolina and employed by HSB Global Standards of Hartford, CT have inspected the repair or replacement described in this report on 22 APRIL 2015 and state that to the best of my knowledge and belief, this repair or replacement has been completed in accordance with Section XI of the of the ASME Code and the National Board Inspection Code "VR" and "NR" rules. By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning this repair or replacement described in this report. Furthermore, neither the undersigned nor my employer shall be liable in any manner for any personal injury, property damage or loss of any kind arising from or connected with this inspection.

4/22/15  NB # 8462, A, N, I NC # 1073  
Date Inspector's Signature (National Board and Jurisdiction no.)

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 37561. Owner FirstEnergy Nuclear Operating Company  
(NAME)Date 05/28/201576 South Main Street – Akron, OH 44308  
(ADDRESS)Sheet 1 of 2Unit No. 12. Plant Beaver Valley Power Station (BVPS)  
(NAME)P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)Order Nos.: 200508050

Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By BVPS Construction Services  
(NAME)Type Code Symbol Stamp N/AP.O. Box 4, Shippingport, PA 15077  
(ADDRESS)Authorization No. N/AExpiration Date N/A4. Identification of System Main Steam (Q2)5. (a) Applicable Construction Code ASME Section III 1968 Edition, N/A Addenda, Code Case N/A(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 2001E-2003A(c) Applicable Section XI Code Case(s): N/A

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Safety Valve	Dresser	BM-07767	N/A	SV-1MS-104C	1968	Removed	Yes
Safety Valve	Dresser	BM-07766	N/A	SV-1MS-104C	1968	Installed	Yes
Stud, 1-3/8"	Nova Machine	N/A	N/A	Trace Code: 13R4	2015	Installed	No
Nut, 1-3/8"	Nova Machine	N/A	N/A	Trace Code: 6X20	2012	Installed	No
Nut, 1-3/8"	Nova Machine	N/A	N/A	Trace Code: 6Y98	2012	Installed	No

7. Description of Work Replaced valve with rebuilt spare, and studs & nuts.8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

# FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3756

9. Remarks Code Data Report attached. Previous NIS-2 Data Report No. 1874. NWS Technologies, LLC rebuilt  
Applicable Manufacturer's Data Reports to be attached  
S/N BM-07766 and replaced the disc, and body to cap stud & nut (see attached NVR-1 report).

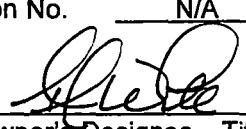
## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Expiration Date N/A

Signed Thomas White   
Owner or Owner's Designee, Title

Engineer V Date May 28, 20 15

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by HSB Global Standards of Hartford, CT have inspected the components described in this Owner's Report during the period 11-4-13 to 5-24-15 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

  
Inspector's Signature

Commission NB9428 ANEB  
National Board Number and Endorsement

Date 6-2-, 20 15



**FORM NVR-1 REPORT OF REPAIR ☒ OR REPLACEMENT ☒  
OF NUCLEAR PRESSURE RELIEF DEVICES**

1. Work performed by: NWS Technologies, LLC 55119843  
(name of certificate holder)  
131 Venture Boulevard, Spartanburg, SC 29306  
(address)
2. Work performed for: First Energy Corporation, Beaver Valley Power Station  
(name)
3. Owner: First Energy Corporation, Beaver Valley Power Station  
(name)  
P.O. Box 4, Shippingport, PA 15077  
(address)
4. Name, address, and identification of nuclear power plant: Beaver Valley Power Station  
Route 168, Shippingport, PA 15077
5. a: Repaired pressure relief device: Main Steam Safety Valve  
b: Name of manufacturer: Consolidated / Dresser  
c: Identifying nos.
- | <u>3707R</u>   | <u>BM07766</u>                        | <u>n/a</u>  | <u>Steam</u>                   | <u>6"</u>                   | <u>n/a</u>                 |
|--|---------------------------------------|---|--------------------------------|-----------------------------|----------------------------|
| <small>(type)</small>  | <small>(mfr's S/N)</small>            | <small>(NB#)</small>  | <small>(service)</small>       | <small>(size)</small>       | <small>(yr. built)</small> |
| d: Construction Code: <u>ASME / III / 1</u>  | <u>1968</u>                           | <u>n/a</u>  | <u>n/a</u>                     | <u>A, Article 9</u>         |                            |
| <small>(name/section/division)</small>   | <small>(edition)</small>              | <small>(addenda)</small>  | <small>(Code Cases(s))</small> | <small>(Code Class)</small> |                            |
| 6. ASME Code Section XI applicable for inservice inspection:   | <u>2001</u>                           | <u>2003</u>   | <u>n/a</u>                     |                             |                            |
|  | <small>(edition)</small>              | <small>(addenda)</small>  | <small>(Code Case(s))</small>  |                             |                            |
| 7. ASME Code Section XI used for repairs, replacements:  | <u>2001</u>                           | <u>2003</u>   | <u>n/a</u>                     |                             |                            |
|  | <small>(edition)</small>              | <small>(addenda)</small>  | <small>(Code Case(s))</small>  |                             |                            |
| 8. Construction Code used for repairs, replacements:   | <u>1968</u>                           | <u>n/a</u>  | <u>n/a</u>                     |                             |                            |
|  | <small>(edition)</small>              | <small>(addenda)</small>  | <small>(Code Case(s))</small>  |                             |                            |
| 9. Design responsibilities: <u>n/a</u>   |                                       |   |                                |                             |                            |
| 10. Opening pressure: <u>1110 psig</u>   | Blowdown (if applicable) <u>n/a</u> % | Set pressure and blowdown adjustment made at: <u>NWS Technologies, LLC</u> using <u>steam</u> |                                |                             |                            |
| 11. Description of work (include name and identifying number of replacement parts): <u>Disassembled, inspected, installed pre-oxidized disc, replaced one body to cap stud / nut, replaced disc holder, disc collar, and spindle, measured spring, lapped and passivated nozzle seat, cleaned, lubricated, assembled. Certified set-pressure and seat tightness using steam.</u> |                                       |   |                                |                             |                            |
| 12. Remarks: <u>NWS Traveler # 15-64. ASME Section XI parts replaced: Disc s/n AJV47, (1) Stud ID: A B7, (1) Nut ID: 05M7.</u>   |                                       |   |                                |                             |                            |

**CERTIFICATE OF COMPLIANCE**

I, Jason C. Gibson certify that to the best of my knowledge and belief the statements made in this report are correct and the repair or replacement of the pressure relief devices described above conforms to Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

National Board Certificate of Authorization No. 632 to use the "VR" stamp expires April 3, 2018.

National Board Certificate of Authorization No. 81 to use the "NR" stamp expires April 9, 2018.

4/22/15  
Date

NWS Technologies, LLC  
Repair Organization

[Signature]  
Authorized representative

QA Manager  
Title

**CERTIFICATE OF INSPECTION**

I, Charles F. Toegel holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of North Carolina and employed by HSB Global Standards of Hartford, CT have inspected the repair or replacement described in this report on 22 APRIL 2015 and state that to the best of my knowledge and belief, this repair or replacement has been completed in accordance with Section XI of the of the ASME Code and the National Board Inspection Code "VR" and "NR" rules. By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning this repair or replacement described in this report. Furthermore, neither the undersigned nor my employer shall be liable in any manner for any personal injury, property damage or loss of any kind arising from or connected with this inspection.

4/22/15  
Date

[Signature]  
Inspector's Signature

NB # 8462, A, N, I NC # 1073  
(National Board and jurisdiction no.)

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 37571. Owner FirstEnergy Nuclear Operating Company  
(NAME)76 South Main Street – Akron, OH 44308  
(ADDRESS)2. Plant Beaver Valley Power Station (BVPS)  
(NAME)P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)3. Work Performed By BVPS Construction Services  
(NAME)P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)Date 05/27/2015Sheet 1 of 2Unit No. 1Order Nos.: 200508051

Repair/Replacement Organization P.O. No., Job No., etc.

Type Code Symbol Stamp N/AAuthorization No. N/AExpiration Date N/A4. Identification of System Main Steam (Q2)5. (a) Applicable Construction Code ASME Section III 1968 Edition, N/A Addenda, Code Case N/A(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 2001E-2003A(c) Applicable Section XI Code Case(s): N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Safety Valve	Dresser	BM-07770	N/A	SV-1MS-105C	1968	Removed	Yes
Safety Valve	Dresser	BM-07769	N/A	SV-1MS-105C	1968	Installed	Yes
Stud, 1-3/8"	Nova Machine	N/A	N/A	Trace Code: 13R4	2015	Installed	No
Stud, 1-3/8"	Nova Machine	N/A	N/A	Trace Code: 05P0	2014	Installed	No
Stud, 1-3/8"	Nova Machine	N/A	N/A	Trace Code: RR06	2012	Installed	No
Stud, 1-3/8"	Nova Machine	N/A	N/A	Trace Code: PP18	2012	Installed	No
Stud, 1-3/8"	Nova Machine	N/A	N/A	Trace Code: RR20	2012	Installed	No
Nut, 1-3/8"	Nova Machine	N/A	N/A	Trace Code: 14M4	2015	Installed	No

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3757

Nut, 1-3/8"	Nova Machine	N/A	N/A	Trace Code: 6Y98	2012	Installed	No
Nut, 1-3/8"	Nova Machine	N/A	N/A	Trace Code: 05M8	2014	Installed	No

7. Description of Work Replaced valve with rebuilt spare, and studs & nuts.

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐  
Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

9. Remarks Code Data Report attached. Previous NIS-2 Data Report No. 1875. NWS Technologies, LLC rebuilt

Applicable Manufacturer's Data Reports to be attached

S/N BM-07769 and replaced the disc and two body to cap studs & nuts. (see attached NVR-1 report).**CERTIFICATE OF COMPLIANCE**

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/A

Signed Thomas White [Signature] Engineer V Date June 1, 20 15  
Owner or Owner's Designee, Title

**CERTIFICATE OF INSERVICE INSPECTION**

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by HSB Global Standards of Hartford, CT have inspected the components described in this Owner's Report during the period 11-4-13 to 5-24-15, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature]  
Inspector's Signature

Commission NB 9428 A NIB  
National Board Number and Endorsement

Date 6-2-, 20 15

**FORM NVR-1 REPORT OF REPAIR ☒ OR REPLACEMENT ☒  
OF NUCLEAR PRESSURE RELIEF DEVICES**

1. Work performed by: NWS Technologies, LLC 55119843  
(name of certificate holder)  
131 Venture Boulevard, Spartanburg, SC 29306  
(address)
2. Work performed for: First Energy Corporation, Beaver Valley Power Station  
(name)
3. Owner: First Energy Corporation, Beaver Valley Power Station  
(name)  
P.O. Box 4, Shippingport, PA 15077  
(address)
4. Name, address, and identification of nuclear power plant: Beaver Valley Power Station  
Route 168, Shippingport, PA 15077
5. a: Repaired pressure relief device: Main Steam Safety Valve  
b: Name of manufacturer: Consolidated / Dresser  
c: Identifying nos.
- |   |                            |                          |                                |                               |                             |
|---|----------------------------|--------------------------|--------------------------------|-------------------------------|-----------------------------|
| <u>3707R</u>                                | <u>BM07769</u>             | <u>n/a</u>               | <u>Steam</u>                   | <u>6"</u>                     | <u>n/a</u>                  |
| <small>(type)</small>                       | <small>(mfr's S/N)</small> | <small>(NB#)</small>     | <small>(service)</small>       | <small>(size)</small>         | <small>(yr. built)</small>  |
| d: Construction Code: <u>ASME / III / 1</u> | <u>1968</u>                | <u>n/a</u>               | <u>n/a</u>                     | <u>n/a</u>                    | <u>A, Article 9</u>         |
| <small>(name/section/division)</small>      | <small>(edition)</small>   | <small>(addenda)</small> | <small>(Code Cases(s))</small> | <small>(Code Case(s))</small> | <small>(Code Class)</small> |
6. ASME Code Section XI applicable for inservice inspection: 2001 2003 n/a  
(edition) (addenda) (Code Case(s))
7. ASME Code Section XI used for repairs, replacements: 2001 2003 n/a  
(edition) (addenda) (Code Case(s))
8. Construction Code used for repairs, replacements: 1968 n/a n/a  
(edition) (addenda) (Code Case(s))
9. Design responsibilities: n/a
10. Opening pressure: 1125 psig Blowdown (if applicable) n/a % Set pressure and blowdown  
adjustment made at: NWS Technologies, LLC using steam
11. Description of work (include name and identifying number of replacement parts): Disassembled, inspected, installed  
pre-oxidized disc, replaced two body to cap studs / nuts, replaced disc holder, disc collar, and spindle,  
measured spring, lapped and passivated nozzle seat, cleaned, lubricated, assembled. Certified set-  
pressure and seat tightness using steam.
12. Remarks: NWS Traveler # 15-65. ASME Section XI parts replaced: Disc s/n AJV49, (2) Studs ID: A B7,  
(2) Nuts ID: 05M7.

**CERTIFICATE OF COMPLIANCE**

I, Jason C. Gibson certify that to the best of my knowledge and belief the statements made in this report are correct and the repair or replacement of the pressure relief devices described above conforms to Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

National Board Certificate of Authorization No. 632 to use the "VR" stamp expires April 3, 2018.

National Board Certificate of Authorization No. 81 to use the "NR" stamp expires April 9, 2018.

4/22/15 NWS Technologies, LLC  QA Manager  
Date Repair Organization Authorized representative Title

**CERTIFICATE OF INSPECTION**

I, Charles F. Toegel holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of North Carolina and employed by HSB Global Standards of Hartford, CT have inspected the repair or replacement described in this report on 22 April 2015 and state that to the best of my knowledge and belief, this repair or replacement has been completed in accordance with Section XI of the of the ASME Code and the National Board Inspection Code "VR" and "NR" rules. By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning this repair or replacement described in this report. Furthermore, neither the undersigned nor my employer shall be liable in any manner for any personal injury, property damage or loss of any kind arising from or connected with this inspection.

4/22/15  NB # 8462, A, N, I NC # 1073  
Date Inspector's Signature (National Board and jurisdiction no.)

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3758

1. Owner FirstEnergy Nuclear Operating Company  
(NAME)76 South Main Street – Akron, OH 44308  
(ADDRESS)Date 05/21/2015Sheet 1 of 1Unit No. 12. Plant Beaver Valley Power Station (BVPS)  
(NAME)P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)Order #200504136

Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By BVPS Construction Services  
(NAME)P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)Type Code Symbol Stamp N/AAuthorization No. N/AExpiration Date N/A4. Identification of System River Water (Q3)5. (a) Applicable Construction Code ANSI B31.1 1967 Edition, S'71 Addenda, Code Case N/A(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 2001E-2003A(c) Applicable Section XI Code Case(s): N/A

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Ball Valve	Anchor Darling	V2393-002	N/A	1RW-163	1995	Corrected	No
End Piece	Flowserve	6	N/A	Trace Code: 47448	2015	Installed	No
End Piece	Flowserve	5	N/A	Trace Code: 47448	2015	Installed	No
Pipe, 2"	Energy & Process	N/A	N/A	Ht. #897297	2003	Installed	No

7. Description of Work Replaced valve end pieces, and pipe.8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 37589. Remarks No Code Data Reports available. Previous NIS-2 Data Report No. 906.

Applicable Manufacturer's Data Reports to be attached

**CERTIFICATE OF COMPLIANCE**

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/A

Signed Thomas White [Signature] Engineer V Date May 26, 20 15  
Owner or Owner's Designee, Title

**CERTIFICATE OF INSERVICE INSPECTION**

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by HSB Global Standards of Hartford, CT have inspected the components described in this Owner's Report during the period 11-4-13 to 5-24-15, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commission SB 9428 ANIB  
Inspector's Signature National Board Number and Endorsement

Date 5-26-, 20 15

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 37591. Owner FirstEnergy Nuclear Operating Company  
(NAME)76 South Main Street – Akron, OH 44308  
(ADDRESS)2. Plant Beaver Valley Power Station (BVPS)  
(NAME)P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)3. Work Performed By BVPS Construction Services  
(NAME)P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)Date 05/23/2015Sheet 1 of 1Unit No. 1Order #200504138

Repair/Replacement Organization P.O. No., Job No., etc.

Type Code Symbol Stamp N/AAuthorization No. N/AExpiration Date N/A4. Identification of System River Water (Q3)5. (a) Applicable Construction Code ANSI B31.1 1967 Edition, S'71 Addenda, Code Case N/A(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 2001E-2003A(c) Applicable Section XI Code Case(s): N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Ball Valve	Anchor Darling	V2393-003	N/A	1RW-164	1995	Corrected	No
End Piece	Flowserve	1	N/A	Trace Code: 47448	2015	Installed	No
End Piece	Flowserve	4	N/A	Trace Code: 47448	2015	Installed	No
Pipe, 2"	Energy & Process	N/A	N/A	Ht. #897297	2003	Installed	No

7. Description of Work Replaced valve end pieces, and pipe.8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐  
Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

# FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3759

9. Remarks No Code Data Reports available. Previous NIS-2 Data Report No. 906.

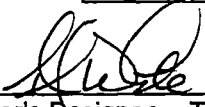
Applicable Manufacturer's Data Reports to be attached

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

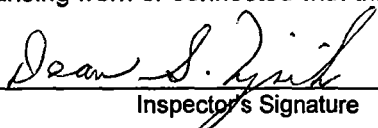
Certificate of Authorization No. N/A Expiration Date N/A

Signed Thomas White  Engineer V Date May 26, 20 15  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by HSB Global Standards of Hartford, CT have inspected the components described in this Owner's Report during the period 11-4-13 to 5-24-15, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

  
Inspector's Signature

Commission NB 9428 AWIB  
National Board Number and Endorsement

Date 5-26-, 20 15



**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 37601. Owner FirstEnergy Nuclear Operating Company  
(NAME)76 South Main Street – Akron, OH 44308  
(ADDRESS)2. Plant Beaver Valley Power Station (BVPS)  
(NAME)P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)3. Work Performed By BVPS Construction Services  
(NAME)P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)Date 05/23/2015Sheet 1 of 1Unit No. 1Order #200504141

Repair/Replacement Organization P.O. No., Job No., etc.

Type Code Symbol Stamp N/AAuthorization No. N/AExpiration Date N/A4. Identification of System River Water (Q3)5. (a) Applicable Construction Code ANSI B31.1 1967 Edition, S'71 Addenda, Code Case N/A(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 2001E-2003A(c) Applicable Section XI Code Case(s): N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Ball Valve	Anchor Darling	V2393-004	N/A	1RW-165	1995	Corrected	No
End Piece	Flowserve	2	N/A	Trace Code: 47448	2015	Installed	No
End Piece	Flowserve	3	N/A	Trace Code: 47448	2015	Installed	No
Pipe, 2"	Energy & Process	N/A	N/A	Ht. #897297	2003	Installed	No

7. Description of Work Replaced valve end pieces, and pipe.8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐  
Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02


Report Number 37609. Remarks No Code Data Reports available. Previous NIS-2 Data Report No. 906.

Applicable Manufacturer's Data Reports to be attached

**CERTIFICATE OF COMPLIANCE**

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/A

Signed Thomas White  Engineer V Date May 26, 20 15  
Owner or Owner's Designee, Title

**CERTIFICATE OF INSERVICE INSPECTION**

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by HSB Global Standards of Hartford, CT have inspected the components described in this Owner's Report during the period 11-4-13 to 5-24-15, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

  
Inspector's Signature

Commission NB 9428 ANIB  
National Board Number and Endorsement

Date 5-26-, 20 15

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 37641. Owner FirstEnergy Nuclear Operating Company  
(NAME)Date 05/21/201576 South Main Street – Akron, OH 44308  
(ADDRESS)Sheet 1 of 1Unit No. 12. Plant Beaver Valley Power Station (BVPS)  
(NAME)P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)Order #200501639

Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By BVPS Valve Team  
(NAME)Type Code Symbol Stamp N/AP.O. Box 4, Shippingport, PA 15077  
(ADDRESS)Authorization No. N/AExpiration Date N/A4. Identification of System Quench Spray (Q2)5. (a) Applicable Construction Code ANSI B31.1 1967 Edition, S'71 Addenda, Code Case N/A(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 2001E-2003A

(c) Applicable Section XI Code Case(s):

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Gate Valve	Pacific Valve	164052	N/A	MOV-1QS-101B	1976	<del>Corrected</del> <del>Removed</del> 8/21/15	No
Stud, 5/8"	Nova Machine	N/A	N/A	Trace Code: 13U0	2015	Installed	No
Nut, 5/8"	Nova Machine	N/A	N/A	Trace Code: 9T71	2014	Installed	No

7. Description of Work Replaced studs and nuts..8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☐ Exempt ☒  
Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

# FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3764

\*Record test pressure and temperature

9. Remarks No Code Data Report available. Previous NIS-2 Data Report No. 3518.

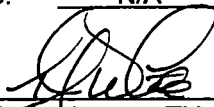
Applicable Manufacturer's Data Reports to be attached

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed Thomas White  Nuclear Engineer V Date May 21, 20 15  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by HSB Global Standards of Hartford, CT have inspected the components described in this Owner's Report during the period 11-4-13 to 5-21-15, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Dean S. Lynch Commission NB9428 ANIB  
Inspector's Signature National Board Number and Endorsement

Date 5-21-, 20 15

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 37651. Owner FirstEnergy Nuclear Operating Co.  
(NAME)76 South Main Street – Akron, OH 44308  
(ADDRESS)2. Plant Beaver Valley Power Station (BVPS)  
(NAME)PO Box 4, Shippingport, PA 15077  
(ADDRESS)3. Work Performed By BVPS Maintenance  
(NAME)PO Box 4, Shippingport, PA 15077  
(ADDRESS)Date 6-8-2015Sheet 1 of 1Unit No. #1Order # 200374810

Repair/Replacement Organization P.O. No., Job No., etc.

Type Code Symbol Stamp N/AAuthorization No. N/AExpiration Date N/A4. Identification of System Primary Component Cooling Water System; BV-1-15-System (Q3)5. (a) Applicable Construction Code ANSI B31.1 Edition, 1967 Addenda, 1971 Code Case N/A(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 2001 Edition to 2003 Addenda(c) Applicable Section XI Code Case(s): N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Valve	Crane Nuclear Inc	245320	N/A	1CCR-303	1976	Corrected	No
Studs	Nova Machine	N/A	N/A	Heat # 0B13	2013	Installed	No
Nuts	Nova Machine	N/A	N/A	Heat # 10Z2	2015	Installed	No

7. Description of Work An internal inspection was performed on check valve 1CCR-303. Body to cap studs and nuts were replaced during the reassembly of the valve.8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☐ Exempt ☒  
Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

# FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3765

9. Remarks No Code data report available; no prior NIS-2 data report.


Applicable Manufacturer's Data Reports to be attached

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

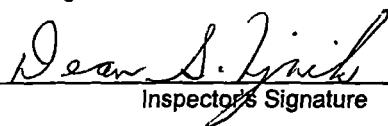
Certificate of Authorization No. N/A Expiration Date N/A

Signed Thomas M Calko, Engineer III  Date June 8, 20 15  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by HSB Global Standards of Hartford, CT have inspected the components described in this Owner's Report during the period 11-4-13 to 5-24-15, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

  
Inspector's Signature

Commission NB 9428A NIB  
National Board Number and Endorsement

Date 6-22-, 20 15

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 37661. Owner FirstEnergy Nuclear Operating Company  
(NAME)76 South Main Street – Akron, OH 44308  
(ADDRESS)2. Plant Beaver Valley Power Station (BVPS)  
(NAME)P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)3. Work Performed By BVPS Maintenance  
(NAME)P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)Date 05/26/2015Sheet 1 of 1Unit No. # 1Order #200508055

Repair/Replacement Organization P.O. No., Job No., etc.

Type Code Symbol Stamp N/AAuthorization No. N/AExpiration Date N/A4. Identification of System Primary Component Cooling Water System – BV-1-15-System (Q3)5. (a) Applicable Construction Code ANSI B31.1 1967 Edition, S'71 Addenda, Code Case N/A(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 2001 Edition – 2003 Addenda(c) Applicable Section XI Code Case(s): N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Valve, Check 4 in	Pacific Valve	24633x	N/A	1CCR-304	1974	Corrected	No
Studs, 5/8 in	Nova Machine Products	N/A	N/A	Heat # 0B13	2013	Installed	No
Nuts, 5/8 in	Nova Machine Products	N/A	N/A	Heat # 10Z2	2015	Installed	No

7. Description of Work Performed internal inspection of check valve. Installed new body to bonnet studs and nuts after inspection was completed.8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☐ Exempt ☒  
Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

# FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3766

9. Remarks No Code Data Report available. No prior NIS-2 data report.  
Manufacturer serial number 24633x given above was used because specific serial number was not known. From  
original check valve purchase order, three valves were purchased with the following serial numbers: 246335, 246336,  
246337.

Applicable Manufacturer's Data Reports to be attached

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI:

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed Tom Calko, Engineer III [Signature] Date May 26, 20 15  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by HSB Global Standards of Hartford, CT have inspected the components described in this Owner's Report during the period 11-4-13 to 5-24-15, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commission NB 9428 A-IB  
Inspector's Signature National Board Number and Endorsement

Date 6-2-, 20 15



**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3768

1. Owner FirstEnergy Nuclear Operating Company  
(NAME)76 South Main Street – Akron, OH 44308  
(ADDRESS)Date 6/3/2015Sheet 1 of 1Unit No. #12. Plant Beaver Valley Power Station (BVPS)  
(NAME)P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)Order #200587680

Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By BVPS Construction Services  
(NAME)P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)Type Code Symbol Stamp N/AAuthorization No. N/AExpiration Date N/A4. Identification of System Recirculation Spray (Class C / 3)5. (a) Applicable Construction Code ASME Section III 1968 Edition, W68 Addenda, Code Case N/A(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 2001 Edition – 2003 Addenda(c) Applicable Section XI Code Case(s): N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Heat Exchanger	Industrial Process Eng.	6301-1	3179	1RS-E-1A	1971	Corrected	Yes

7. Description of Work Replaced seal welded diaphragms after cleaning and inspection of the HX tubes.8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☐ Exempt ☒  
Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

# FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3768

9. Remarks Copy of original Data Report in NIS-2 # 1577. Previous NIS-2 Data Report # 3546.

Applicable Manufacturer's Data Reports to be attached

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

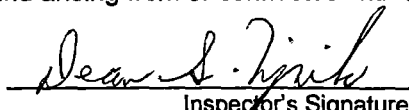
Certificate of Authorization No. N/A Expiration Date N/A

Signed Thomas M Calko, Engineer III  Date June 3, 20 15  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by HSB Global Standards of Hartford, CT have inspected the components described in this Owner's Report during the period 11-4-13 to 5-24-15, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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Inspector's Signature

Commission NB9428 ANFB  
National Board Number and Endorsement

Date 6-15-, 20 15

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3770

1. Owner FirstEnergy Nuclear Operating Company  
(NAME)76 South Main Street – Akron, OH 44308  
(ADDRESS)2. Plant Beaver Valley Power Station (BVPS)  
(NAME)P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)3. Work Performed By BVPS Construction Services  
(NAME)P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)Date 05/21/2015Sheet 1 of 1Unit No. 1Order #200587680

Repair/Replacement Organization P.O. No., Job No., etc.

Type Code Symbol Stamp N/AAuthorization No. N/AExpiration Date N/A4. Identification of System Recirculation Spray (Class C / 3)5. (a) Applicable Construction Code ASME Section III 1968 Edition, W'68 Addenda, Code Case N/A(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 2001E-2003A(c) Applicable Section XI Code Case(s): N/A

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Heat Exchanger	Industrial Process Eng.	6301-3	3181	1RS-E-1C	1971	Corrected	Yes

7. Description of Work Replaced seal welded diaphragms after cleaning and inspection of the HX tubes.8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☐ Exempt ☒Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

# FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3770

9. Remarks 1578 smc 6-8-15  
Copy of original Data Report in NIS-2 # 1577. Previous NIS-2 Data Report # 3547.


Applicable Manufacturer's Data Reports to be attached

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed Thomas M Calko, Engineer III  Date May 21, 20 15  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by HSB Global Standards of Hartford, CT have inspected the components described in this Owner's Report during the period 11-4-13 to 5-24-15, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Dea S. Smith Commission NB 9428 AIEB  
Inspector's Signature National Board Number and Endorsement

Date 5-28-, 20 15

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 37711. Owner FirstEnergy Nuclear Operating Company  
(NAME)76 South Main Street – Akron, OH 44308  
(ADDRESS)2. Plant Beaver Valley Power Station (BVPS)  
(NAME)P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)3. Work Performed By BVPS Construction Services  
(NAME)P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)Date 05/21/2015Sheet 1 of 1Unit No. 1Order #200587681

Repair/Replacement Organization P.O. No., Job No., etc.

Type Code Symbol Stamp N/AAuthorization No. N/AExpiration Date N/A4. Identification of System Recirculation Spray (Class C / 3)5. (a) Applicable Construction Code ASME Section III 1968 Edition, W'68 Addenda, Code Case N/A(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 2001E-2003A(c) Applicable Section XI Code Case(s): N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Heat Exchanger	Senior Engineering	14007-02	8146	1RS-E-1D	1993	Corrected	Yes
Plug, 5/8"	Joseph Oat Corp.	N/A	N/A	Ht. #D89473A	2011	Installed	No

7. Description of Work Plugged and seal welded one tube.8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☐ Exempt ☒  
Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

# FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3771

9. Remarks Heat Exchanger Code Data Report attached to previous NIS-2 Data Report No. 3381.


Applicable Manufacturer's Data Reports to be attached

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed Thomas White  Engineer V Date May 22, 20 15  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by HSB Global Standards of Hartford, CT have inspected the components described in this Owner's Report during the period 11-4-13 to 5-22-15, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

 Commission NB 9428 AMIB  
Inspector's Signature National Board Number and Endorsement

Date 5-22-, 20 15

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 37721. Owner FirstEnergy Nuclear Operating Company  
(NAME)76 South Main Street – Akron, OH 44308  
(ADDRESS)2. Plant Beaver Valley Power Station (BVPS)  
(NAME)P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)3. Work Performed By BVPS Valve Team  
(NAME)P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)Date 06/15/2015Sheet 1 of 1Unit No. 1Order #200581664

Repair/Replacement Organization P.O. No., Job No., etc.

Type Code Symbol Stamp N/AAuthorization No. N/AExpiration Date N/A4. Identification of System Chemical and Volume Control (Q1)5. (a) Applicable Construction Code ANSI B31.1 1967 Edition, S71 Addenda, Code Case N/A(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 2001E-2003A(c) Applicable Section XI Code Case(s): N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Pipeline	Stone & Webster	N/A	N/A	CH-186-8-HPV	1976	Corrected	No
Stud, 3/4"	Nova Machine	N/A	N/A	Trace Code: 8D44	2013	Installed	No
Nut, 3/4"	Nova Machine	N/A	N/A	Trace Code: 05M7	2014	Installed	No

7. Description of Work Replaced pipe flange studs & nuts.8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☐ Exempt ☒  
Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

# FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3772

## 9. Remarks No Code Data Report available.

Applicable Manufacturer's Data Reports to be attached

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed Thomas M Calko, Engineer III Date June 15, 20 15  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by HSB Global Standards of Hartford, CT have inspected the components described in this Owner's Report during the period 11-4-13 to 5-24-15 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Dean L. Zisik  
Inspector's Signature

Commission NB9428 ANEB  
National Board Number and Endorsement

Date 6-15-, 20 15



**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3776

1. Owner FirstEnergy Nuclear Operating Company  
(NAME)Date 05/28/201576 South Main Street – Akron, OH 44308  
(ADDRESS)Sheet 1 of 1Unit No. 12. Plant Beaver Valley Power Station (BVPS)  
(NAME)P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)Order #200586778

Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By BVPS Valve Team  
(NAME)Type Code Symbol Stamp N/AP.O. Box 4, Shippingport, PA 15077  
(ADDRESS)Authorization No. N/AExpiration Date N/A4. Identification of System Chemical and Volume Control (Q2)5. (a) Applicable Construction Code ANSI B31.1 1967 Edition, S'71 Addenda, Code Case N/A(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 2001E-2003A(c) Applicable Section XI Code Case(s): N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Globe Valve	Masoneilan	H40689-1-1	N/A	LCV-1CH-115A	1976	Corrected	No
Stud, 1/2"	Nova Machine	N/A	N/A	Trace Code: 08P3	2015	Installed	No
Nut, 1/2"	Nova Machine	N/A	N/A	Trace Code: 9V98	2014	Installed	No
Stud, 5/8"	Nova Machine	N/A	N/A	Trace Code: 04H5	2014	Installed	No
Nut, 5/8"	Nova Machine	N/A	N/A	Trace Code: 10Z2	2015	Installed	No

7. Description of Work Replaced valve body to bonnet studs & nuts, and piping flange studs & nuts.8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☐ Exempt ☒  
Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

# FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3776

9. Remarks No Code Data Report available. Previous NIS-2 Data Report No. 308.

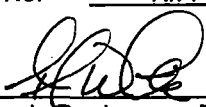
Applicable Manufacturer's Data Reports to be attached

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed Thomas White  Engineer V Date May 28, 20 15  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by HSB Global Standards of Hartford, CT have inspected the components described in this Owner's Report during the period 11-4-13 to 5-24-15, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Dean J. Smith Commission NB 9428 A-NIB  
Inspector's Signature National Board Number and Endorsement

Date 6-2-, 20 15

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3780

1. Owner FirstEnergy Nuclear Operating Company  
(NAME)Date 05/23/201576 South Main Street – Akron, OH 44308  
(ADDRESS)Sheet 1 of 1Unit No. 12. Plant Beaver Valley Power Station (BVPS)  
(NAME)P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)Order #200553513

Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By BVPS Construction Services  
(NAME)Type Code Symbol Stamp N/AP.O. Box 4, Shippingport, PA 15077  
(ADDRESS)Authorization No. N/AExpiration Date N/A4. Identification of System River Water (Q3)5. (a) Applicable Construction Code ANSI B31.1 1967 Edition, S'71 Addenda, Code Case N/A(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 2001E-2003A(c) Applicable Section XI Code Case(s): N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Butterfly Valve	Allis Chalmers	04/81	N/A	1RW-187	1976	Removed	No
Butterfly Valve	Velan	606678-1	N/A	1RW-187	2013	Installed	No
Stud, 1-1/8"	Nova Machine	N/A	N/A	Trace Code: 9R09	2014	Installed	No
Nut, 1-1/8"	Nova Machine	N/A	N/A	Trace Code: 7N06	2013	Installed	No

7. Description of Work Replaced valve, and flange studs & nuts.

TMC 7-22-15

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3780

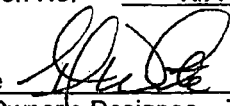
\*Record test pressure and temperature

9. Remarks No Code Data Reports available.

Applicable Manufacturer's Data Reports to be attached

**CERTIFICATE OF COMPLIANCE**

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/ASigned Thomas White  Engineer V Date May 23, 20 15  
Owner or Owner's Designee, Title**CERTIFICATE OF INSERVICE INSPECTION**

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by HSB Global Standards of Hartford, CT have inspected the components described in this Owner's Report during the period 11-4-13 to 5-24-15 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

  
Inspector's SignatureCommission NB9428 ANIB  
National Board Number and EndorsementDate 5-26-, 20 15

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 37821. Owner FirstEnergy Nuclear Operating Company  
(NAME)Date 05/23/201576 South Main Street – Akron, OH 44308  
(ADDRESS)Sheet 1 of 1Unit No. 12. Plant Beaver Valley Power Station (BVPS)  
(NAME)P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)Order #200590915

Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By BVPS Maintenance  
(NAME)Type Code Symbol Stamp N/AP.O. Box 4, Shippingport, PA 15077  
(ADDRESS)Authorization No. N/AExpiration Date N/A4. Identification of System River Water (Q3)5. (a) Applicable Construction Code ANSI B31.1 1967 Edition, S'71 Addenda, Code Case N/A(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 2001E-2003A(c) Applicable Section XI Code Case(s): N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Expansion Joint	Garlock	4-3533	N/A	REJ-1RW-27B	1995	Removed	No
Expansion Joint	Garlock	14-1881508-01	N/A	REJ-1RW-27B	2015	Installed	No
Stud, 1-1/4"	Nova Machine	N/A	N/A	Trace Code: 9N44	2014	Installed	No
Stud, 1-1/4"	Trust Manuf.	N/A	N/A	Trace Code: RR05	2012	Installed	No
Nut, 1-1/4"	Nova Machine	N/A	N/A	Trace Code: 9P56	2014	Installed	No

7. Description of Work Replaced rubber expansion joint, and flange studs & nuts.8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐  
Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

# FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3782

9. Remarks No Code Data Reports available. Previous NIS-2 Data Report No. 1582.

Applicable Manufacturer's Data Reports to be attached

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Expiration Date N/A

Signed Thomas White  
Owner or Owner's Designee, Title

Engineer V Date May 23, 20 15

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by HSB Global Standards of Hartford, CT have inspected the components described in this Owner's Report during the period 11-4-13 to 5-24-15, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Dean A. Zinn  
Inspector's Signature

Commission NB9428ANIB  
National Board Number and Endorsement

Date 5-26-, 20 15

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 37841. Owner FirstEnergy Nuclear Operating Company  
(NAME)76 South Main Street – Akron, OH 44308  
(ADDRESS)Date 05/20/2015Sheet 1 of 1Unit No. 12. Plant Beaver Valley Power Station (BVPS)  
(NAME)P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)Order #200591898

Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By BVPS Construction Services  
(NAME)P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)Type Code Symbol Stamp N/AAuthorization No. N/AExpiration Date N/A4. Identification of System Main Steam (Q2)5. (a) Applicable Construction Code ANSI B31.1 1967 Edition, S71 Addenda, Code Case N/A(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 2001E-2003A

(c) Applicable Section XI Code Case(s):

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Snubber	Lisega	61274/89	N/A	SHP-HSS-201	1976	Removed	No
Snubber	Lisega	31400554/001	N/A	SHP-HSS-201	2014	Installed	No

7. Description of Work Replaced snubber.8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☐ Exempt ☒Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

# FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3784

9. Remarks No Code Data Report available.

Applicable Manufacturer's Data Reports to be attached

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed Thomas White [Signature] Nuclear Engineer V Date May 20, 20 15  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by HSB Global Standards of Hartford, CT have inspected the components described in this Owner's Report during the period 11-4-13 to 5-20-15, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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[Signature] Commission JB9428ANIB  
Inspector's Signature National Board Number and Endorsement

Date 5-20-, 20 15



**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3785

1. Owner FirstEnergy Nuclear Operating Company  
(NAME)76 South Main Street – Akron, OH 44308

(ADDRESS)

2. Plant Beaver Valley Power Station (BVPS)  
(NAME)P.O. Box 4, Shippingport, PA 15077

(ADDRESS)

3. Work Performed By BVPS Construction Services  
(NAME)P.O. Box 4, Shippingport, PA 15077

(ADDRESS)

Date 05/20/2015Sheet 1 of 1Unit No. 1Order #200591901

Repair/Replacement Organization P.O. No., Job No., etc.

Type Code Symbol Stamp N/AAuthorization No. N/AExpiration Date N/A4. Identification of System Main Steam (Q2)5. (a) Applicable Construction Code ANSI B31.1 1967 Edition, S'71 Addenda, Code Case N/A(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 2001E-2003A

(c) Applicable Section XI Code Case(s):

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Snubber	Lisega	61274/91	N/A	SHP-HSS-202	1976	Removed	No
Snubber	Lisega	31400554/008	N/A	SHP-HSS-202	2014	Installed	No

7. Description of Work Replaced snubber.8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☐ Exempt ☒Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

# FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3785

9. Remarks No Code Data Report available.


Applicable Manufacturer's Data Reports to be attached

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed Thomas White  Nuclear Engineer V Date May 20, 20 15  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by HSB Global Standards of Hartford, CT have inspected the components described in this Owner's Report during the period 11-4-13 to 5-20-15, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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Inspector's Signature

Commission NB9428 AWF B  
National Board Number and Endorsement

Date 5-20-, 20 15

# FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3786

1. Owner FirstEnergy Nuclear Operating Company  
(NAME)

76 South Main Street – Akron, OH 44308  
(ADDRESS)

2. Plant Beaver Valley Power Station (BVPS)  
(NAME)

P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)

3. Work Performed By BVPS Construction Services  
(NAME)

P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)

Date 05/19/2015

Sheet 1 of 1

Unit No. 1

Order #200591902

Repair/Replacement Organization P.O. No., Job No., etc.

Type Code Symbol Stamp N/A

Authorization No. N/A

Expiration Date N/A

4. Identification of System Main Steam (Q2)

5. (a) Applicable Construction Code ANSI B31.1 1967 Edition, S'71 Addenda, Code Case N/A

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 2001E-2003A

(c) Applicable Section XI Code Case(s):

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Snubber	Lisega	61274/92	N/A	SHP-HSS-203	1976	Removed	No
Snubber	Lisega	31400554/009	N/A	SHP-HSS-203	2014	Installed	No

7. Description of Work Replaced snubber.

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☐ Exempt ☒  
Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

# FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3786

9. Remarks No Code Data Report available.

Applicable Manufacturer's Data Reports to be attached

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed Thomas White Nuclear Engineer V Date May 19, 20 15  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by HSB Global Standards of Hartford, CT have inspected the components described in this Owner's Report during the period 11-4-13 to 5-20-15, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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Dean L. Smith  
Inspector's Signature

Commission NB 9428 AWIB  
National Board Number and Endorsement

Date 5-20-, 20 15

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 37871. Owner FirstEnergy Nuclear Operating Company  
(NAME)76 South Main Street – Akron, OH 44308  
(ADDRESS)Date 05/20/2015Sheet 1 of 1Unit No. 12. Plant Beaver Valley Power Station (BVPS)  
(NAME)P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)Order #200591903

Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By BVPS Construction Services  
(NAME)P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)Type Code Symbol Stamp N/AAuthorization No. N/AExpiration Date N/A4. Identification of System Main Steam (Q2)5. (a) Applicable Construction Code ANSI B31.1 1967 Edition, S'71 Addenda, Code Case N/A(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 2001E-2003A

(c) Applicable Section XI Code Case(s):

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Snubber	Lisega	61274/90	N/A	SHP-HSS-204	1976	Removed	No
Snubber	Lisega	31400554/014	N/A	SHP-HSS-204	2014	Installed	No

7. Description of Work Replaced snubber.8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☐ Exempt ☒  
Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

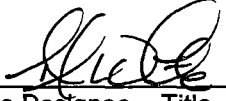
Report Number 37879. Remarks No Code Data Report available.

Applicable Manufacturer's Data Reports to be attached

**CERTIFICATE OF COMPLIANCE**

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/A

Signed Thomas White  Nuclear Engineer V Date May 20, 20 15  
Owner or Owner's Designee, Title

**CERTIFICATE OF INSERVICE INSPECTION**

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by HSB Global Standards of Hartford, CT have inspected the components described in this Owner's Report during the period 11-4-13 to 5-20-15, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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Inspector's Signature

Commission NB9428 A.I.B  
National Board Number and Endorsement

Date 5-20-, 20 15

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 37881. Owner FirstEnergy Nuclear Operating Company  
(NAME)Date 06/01/201576 South Main Street – Akron, OH 44308  
(ADDRESS)Sheet 1 of 1Unit No. # 12. Plant Beaver Valley Power Station (BVPS)  
(NAME)P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)Order #200579463

Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By BVPS Maintenance  
(NAME)Type Code Symbol Stamp N/AP.O. Box 4, Shippingport, PA 15077  
(ADDRESS)Authorization No. N/AExpiration Date N/A4. Identification of System Safety Injection System – BV-1-11-System (Q1)5. (a) Applicable Construction Code ANSI B31.1 1967 Edition, S'71 Addenda, Code Case N/A(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 2001 Edition – 2003 Addenda(c) Applicable Section XI Code Case(s): N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Valve, Globe, 3/4 in	Masoneilan International	H-20682-3	N/A	MOV-1SI-850B	1976	Corrected	No
Plug, 3/4 in	Consolidated Power Supply	N/A	N/A	Heat # 239688	2010	Installed	No

7. Description of Work Replaced bent valve stem and installed new valve plug.8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☐ Exempt ☒  
Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

# FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3788

9. Remarks No Code Data Reports available. Prior NIS-2 data report #1274.

Applicable Manufacturer's Data Reports to be attached

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed Tom Calko, Engineer III  Date June 01, 20 15  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by HSB Global Standards of Hartford, CT have inspected the components described in this Owner's Report during the period 11-4-13 to 5-24-15, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

 Commission NB9428 ANIB  
Inspector's Signature National Board Number and Endorsement

Date 6-2, 20 15



**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 37891. Owner FirstEnergy Nuclear Operating Company  
(NAME)76 South Main Street – Akron, OH 44308  
(ADDRESS)2. Plant Beaver Valley Power Station (BVPS)  
(NAME)P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)3. Work Performed By BVPS Maintenance  
(NAME)P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)Date 06/02/2015Sheet 1 of 2Unit No. # 1Order #200489073

Repair/Replacement Organization P.O. No., Job No., etc.

Type Code Symbol Stamp N/AAuthorization No. N/AExpiration Date N/A4. Identification of System Chemical and Volume Control System – BV-1-7-System (Q2)5. (a) Applicable Construction Code ANSI B31.1 1967 Edition, S'71 Addenda, Code Case N/A(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 2001 Edition – 2003 Addenda(c) Applicable Section XI Code Case(s): N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Relief Valve	Crosby	N56900-00-0029	N/A	RV-1CH-382B	1976	Removed	Yes
Relief Valve	Crosby	N76753-01	N/A	RV-1CH-382B	1991	Installed	Yes
Spring	Crosby	NX2605-0139	N/A	RV-1CH-382B	1992	Installed	Yes
Washers (2)	Crosby	N91729-79-0316 N91729-79-0317	N/A	RV-1CH-382B	1992	Installed	Yes
Valve Disc	Crosby	N90448-09-0377	N/A	N/A	2009	Installed	Yes
Studs, 5/8 in	Nova Machine Products	N/A	N/A	Heat # NF12205111	2013	Installed	No

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3789

Nuts, 5/8 in	Nova Machine Products	N/A	N/A	Heat # 5092414	2014	Installed	No
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7. Description of Work Spare Crosby relief valve N76753-01 had new valve disc and new spring/washer assembly installed and was swapped with Crosby relief valve N56900-00-0029. New studs and nuts were installed with the relief valve.

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐  
Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

9. Remarks Code Data Report for new valve disc is attached. Code data report for Crosby Valve N56900-00-0029 attached to prior NIS-2 data report # 3305. No Code Data Report available for Crosby valve N76753-01. No Code Data Report available for Spring and Washer Set (ASME VIII).

Applicable Manufacturer's Data Reports to be attached

**CERTIFICATE OF COMPLIANCE**

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/A

Signed Tom Calko, Engineer III  Date June 2, 20 15  
Owner or Owner's Designee, Title

**CERTIFICATE OF INSERVICE INSPECTION**

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by HSB Global Standards of Hartford, CT have inspected the components described in this Owner's Report during the period 11-4-13 to 5-24-15, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

  
Inspector's Signature

Commission NB 9428 ANIB  
National Board Number and Endorsement

Date 6-22-, 20 15

**FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL  
NUCLEAR PARTS AND APPURTENANCES\***

As required by the Provisions of the ASME Code, Section III, Division 1 - Not to Exceed One Day's Production

1. Manufactured and certified by Anderson Greenwood Crosby, 43 Kendrick St., Wrentham, MA 02093  
(Name and Address of N Certificate Holder)
2. Manufactured for FIRST ENERGY CORP.- JOHNSTOWN, PA  
(Name and Address of Purchaser or Owner)
3. Location of Installation BEAVER VALLEY NUCLEAR PWR PLT- SHIPPINGPORT, PA  
(Name and Address)
4. Type DS-C-56900 REV. C ASTM A479 TYPE 316 N/A -- 2009  
(drawing no.) (mat'l. spec. no.) (tensile strength) (CRN) (year built)
5. ASME Code, Section III, Division 1: 1971 WINTER 1972 2 --  
(edition) (addenda date) (class) (Code Case No.)
6. Fabricated in accordance with Const. Spec. (Div. 2 only) -- Revision -- Date --  
(no.)
7. Remarks \_\_\_\_\_
8. Nom. thickness (in.) -- Min. design thickness (in.) -- Dia. ID (ft & in.) -- Length overall (ft & in.) --
9. When applicable, Certificate Holders' data reports are attached for each item of this report.

Part or Appurtenance Serial Number	National Board No. in Numerical Order	Part or Appurtenance Serial Number	National Board No. in Numerical Order
(1) <u>N90448-09-0377</u>		(26)	
(2)		(27)	
(3)		(28)	
(4)		(29)	
(5)		(30)	
(6)		(31)	
(7)		(32)	
(8)		(33)	
(9)		(34)	
(10)		(35)	
(11)		(36)	
(12)		(37)	
(13)		(38)	
(14)		(39)	
(15)		(40)	
(16)		(41)	
(17)		(42)	
(18)		(43)	
(19)		(44)	
(20)		(45)	
(21)		(46)	
(22)		(47)	
(23)		(48)	
(24)		(49)	
(25)		(50)	

10. Design pressure -- psi. Temp. -- ° F Hydro. test pressure 425 PSIG at temp. 70 ° F  
(when applicable)

\* Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8-1/2 x 11, (2) information in items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

This form (E00040) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300

Certificate Holder's Serial No. N90448-09-0377**CERTIFICATE OF DESIGN**Design specifications certified by H.P. LEONARD P.E. State PA Reg. no. 23938-E  
(when applicable)Design report\* certified by N/A P.E. State N/A Reg. no. N/A  
(when applicable)**CERTIFICATE OF COMPLIANCE**We certify that the statements made in this report are correct and that this (these)  
conforms to the rules of construction of the ASME Code, Section III, Division 1.DISCNPT Certificate of Authorization No. N-1877 Expires Sept. 30, 2010Anderson Greenwood CrosbyDate 24-APR-09 SignedWrentham, MA

by

(NPT Certificate Holder)

D. E. T. W.  
(Authorized Representative)**CERTIFICATE OF INSPECTION**I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and  
the State or Province of MA and employed by HSB-CT  
of Hartford-CThave inspected these items described in this Data Report on  
4-24, 2009 and state that to the best of my knowledge and belief, the Certificate Holder  
has fabricated these parts or appurtenances in accordance with the ASME Code, Section III, Division 1. Each part listed has  
been authorized for stamping on the date shown above.By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning  
the equipment described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any  
manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.Date April 24, 2009

Signed

[Signature]  
(Authorized Inspector)

Commissions

MA - 1420 A. N. I.

(Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 37911. Owner FirstEnergy Nuclear Operating Co.  
(NAME)76 South Main Street – Akron, OH 44308  
(ADDRESS)Date 6-2-2015Sheet 1 of 1Unit No. #12. Plant Beaver Valley Power Station (BVPS)  
(NAME)PO Box 4, Shippingport, PA 15077  
(ADDRESS)Order # 200532645

Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By BVPS Construction Services  
(NAME)PO Box 4, Shippingport, PA 15077  
(ADDRESS)Type Code Symbol Stamp N/AAuthorization No. N/AExpiration Date N/A4. Identification of System Main Steam System; BV-1-21-System (Q2)5. (a) Applicable Construction Code ANSI B31.1 Edition, 1967 Addenda, 1971 Code Case N/A(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 2001 Edition to 2003 Addenda(c) Applicable Section XI Code Case(s): N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Spool	Stone and Webster	N/A	N/A	3"-SDHV-1-601-Q2	1976	Corrected	No
Valve	Crane Nuclear Inc	E5501	N/A	1MS-523	2015	Installed	No

7. Description of Work Line 3"-SDHV-1-601-Q2 was modified by removing a short section of pipe and installing a new Crane gate valve.8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐  
Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

# FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3791

9. Remarks No Code data report available; no prior NIS-2 data report.

Applicable Manufacturer's Data Reports to be attached

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

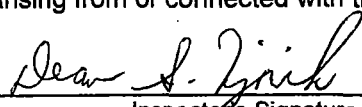
Certificate of Authorization No. N/A Expiration Date N/A

Signed Thomas M Calko, Engineer III  Date June 2, 20 15  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by HSB Global Standards of Hartford, CT have inspected the components described in this Owner's Report during the period 11-4-13 to 5-24-15, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

  
Inspector's Signature

Commission NB 9428 A-IB  
National Board Number and Endorsement

Date 6-22-, 20 15

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 37921. Owner FirstEnergy Nuclear Operating Co.  
(NAME)76 South Main Street – Akron, OH 44308  
(ADDRESS)Date 5-28-2015Sheet 1 of 1Unit No. #12. Plant Beaver Valley Power Station (BVPS)  
(NAME)PO Box 4, Shippingport, PA 15077  
(ADDRESS)Order # 200532646

Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By BVPS Construction Services  
(NAME)PO Box 4, Shippingport, PA 15077  
(ADDRESS)Type Code Symbol Stamp N/AAuthorization No. N/AExpiration Date N/A4. Identification of System Main Steam System; BV-1-21-System (Q2)5. (a) Applicable Construction Code ANSI B31.1 Edition, 1967 Addenda, 1971 Code Case N/A(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 2001 Edition to 2003 Addenda(c) Applicable Section XI Code Case(s): N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Spool	Stone and Webster	N/A	N/A	3"-SDHV-2-601-Q2	1976	Corrected	No
Valve	Crane Nuclear Inc	E5499	N/A	1MS-524	2015	Installed	No

7. Description of Work Line 3"-SDHV-2-601-Q2 was modified by removing a short section of pipe and installing a new Crane gate valve.8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐  
Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

# FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3792

9. Remarks No Code data report available; no prior NIS-2 data report.

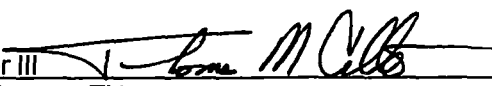
Applicable Manufacturer's Data Reports to be attached

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed Thomas M Calko, Engineer III  Date May 28, 20 15  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by HSB Global Standards of Hartford, CT have inspected the components described in this Owner's Report during the period 11-4-13 to 5-24-15, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

 Commission NB 9425 ANIB  
Inspector's Signature National Board Number and Endorsement

Date 5-28-, 20 15



**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 37931. Owner FirstEnergy Nuclear Operating Co.  
(NAME)76 South Main Street – Akron, OH 44308  
(ADDRESS)Date 5-28-2015Sheet 1 of 1Unit No. #12. Plant Beaver Valley Power Station (BVPS)  
(NAME)PO Box 4, Shippingport, PA 15077  
(ADDRESS)Order # 200532584

Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By BVPS Construction Services  
(NAME)PO Box 4, Shippingport, PA 15077  
(ADDRESS)Type Code Symbol Stamp N/AAuthorization No. N/AExpiration Date N/A4. Identification of System Main Steam System; BV-1-21-System (Q2)5. (a) Applicable Construction Code ANSI B31.1 Edition, 1967 Addenda, 1971 Code Case N/A(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 2001 Edition to 2003 Addenda(c) Applicable Section XI Code Case(s): N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Spool	Stone and Webster	N/A	N/A	3"-SDHV-3-601-Q2	1976	Corrected	No
Valve	Crane Nuclear Inc	E5500	N/A	1MS-525	2015	Installed	No

7. Description of Work Line 3"-SDHV-3-601-Q2 was modified by removing a short section of pipe and installing a new Crane gate valve.8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐  
Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

# FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3793

9. Remarks No Code data report available; no prior NIS-2 data report.


Applicable Manufacturer's Data Reports to be attached

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed Thomas M Calko, Engineer III  Date May 28, 20 15  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by HSB Global Standards of Hartford, CT have inspected the components described in this Owner's Report during the period 11-4-13 to 5-24-15, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

 Commission NB 9428 ANIB  
Inspector's Signature National Board Number and Endorsement

Date 5-28-, 20 15

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3795

1. Owner FirstEnergy Nuclear Operating Company  
(NAME)76 South Main Street -- Akron, OH 44308  
(ADDRESS)2. Plant Beaver Valley Power Station (BVPS)  
(NAME)P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)3. Work Performed By BVPS Construction Services  
(NAME)P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)Date 05/24/2015Sheet 1 of 1Unit No. 1Order #200615382

Repair/Replacement Organization P.O. No., Job No., etc.

Type Code Symbol Stamp N/AAuthorization No. N/AExpiration Date N/A4. Identification of System River Water (Q3)5. (a) Applicable Construction Code ANSI B31.1 1967 Edition, S'71 Addenda, Code Case N/A(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 2001E-2003A(c) Applicable Section XI Code Case(s): N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Pipeline	Bechtel	N/A	N/A	30"-WR-17-151-Q3	1993	Corrected	No

7. Description of Work Ground open pinhole leak between pipeline WR-17 and WR-16 and weld repaired.8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐  
Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

# FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3795

9. Remarks No Code Data Report available. Previous NIS-2 No. 3158.

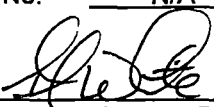
Applicable Manufacturer's Data Reports to be attached

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed Thomas White  Engineer V Date May 26, 20 15  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by HSB Global Standards of Hartford, CT have inspected the components described in this Owner's Report during the period 11-4-13 to 5-24-15, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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Inspector's Signature

Commission NB9428 A NIB  
National Board Number and Endorsement

Date 6-15-, 20 15

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3796

1. Owner FirstEnergy Nuclear Operating Company  
(NAME)Date 05/29/201576 South Main Street – Akron, OH 44308  
(ADDRESS)Sheet 1 of 1Unit No. 12. Plant Beaver Valley Power Station (BVPS)  
(NAME)P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)Order Nos. 200587371, 200499026

Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By BVPS Maintenance  
(NAME)Type Code Symbol Stamp N/AP.O. Box 4, Shippingport, PA 15077  
(ADDRESS)Authorization No. N/AExpiration Date N/A4. Identification of System River Water (Q3)5. (a) Applicable Construction Code ANSI B31.1 1967 Edition, S'71 Addenda, Code Case N/A(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 2001E-2003A(c) Applicable Section XI Code Case(s): N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Check Valve	C & S Valve	89-0929-01(Q)-02	N/A	1RW-107	2000	Removed	No
Check Valve	Crane Nuclear	E5341	N/A	1RW-107	2015	Installed	No
Stud, 1-1/4"	Trust Manuf.	N/A	N/A	Trace Code: MM99	2012	Installed	No
Stud, 1-1/4"	Trust Manuf.	N/A	N/A	Trace Code: RR05	2012	Installed	No
Nut, 1-1/4"	Nova Machine	N/A	N/A	Trace Code: 9P56	2014	Installed	No
Plate, 3/8"	Energy & Process	2	N/A	Ht. #B3T7215	2013	Installed	No

7. Description of Work Replaced valve with spare and studs & nuts. Installed two spacer plates.

# FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3796

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐  
Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F  
\*Record test pressure and temperature

9. Remarks No Code Data Report available. Previous NIS-2 Data Report No. 3397.

Applicable Manufacturer's Data Reports to be attached

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed Thomas White  Engineer V Date May 29, 20 15  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by HSB Global Standards of Hartford, CT have inspected the components described in this Owner's Report during the period 11-4-13 to 5-24-15, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Dean L. Lipp Commission NB 9428 ANIB  
Inspector's Signature National Board Number and Endorsement

Date 6-2-, 20 15

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 37971. Owner FirstEnergy Nuclear Operating Company  
(NAME)Date 06/01/201576 South Main Street – Akron, OH 44308  
(ADDRESS)Sheet 1 of 2Unit No. 12. Plant Beaver Valley Power Station (BVPS)  
(NAME)P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)Order Nos.: 200479092, 55119843

Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By BVPS Maintenance  
(NAME)Type Code Symbol Stamp N/AP.O. Box 4, Shippingport, PA 15077  
(ADDRESS)Authorization No. N/AExpiration Date N/A4. Identification of System Reactor Coolant (Class A)5. (a) Applicable Construction Code ASME Section III 1968 Edition, S'68 Addenda, Code Case N/A(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 2001E-2003A(c) Applicable Section XI Code Case(s): N/A

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Relief Valve	Target Rock	0569C-001-1-1	N/A	RV-1RC-551A	2005	Removed	Yes
Pilot Valve	Target Rock	1	N/A	RV-1RC-551A	2005	Removed	Yes
Relief Valve	Target Rock	0569C-001-1-3	N/A	RV-1RC-551A	2005	Installed	Yes
Pilot Valve	Target Rock	6	N/A	RV-1RC-551A	2007	Installed	Yes
Stud, 1-3/8"	Nova Machine	N/A	N/A	Trace Code: O5P0	2014	Installed	No
Stud, 1-3/8"	Nova Machine	N/A	N/A	Trace Code: O9U4	2015	Installed	No
Nut, 1-3/8"	Nova Machine	N/A	N/A	Lot #50447573	2015	Installed	No
Nut, 1-3/8"	Nova Machine	N/A	N/A	Trace Code: 14M4	2015	Installed	No

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 37977. Description of Work Replaced valve with spare, and studs & nuts.8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐  
Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

9. Remarks Code Data Report (NVR-1) attached for valve serial number 0569C-001-1-3/pilot-6 from previous  
Applicable Manufacturer's Data Reports to be attached  
repair. Previous NIS-2 Data Report No. 3164.**CERTIFICATE OF COMPLIANCE**

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/ASigned Thomas White 05/26/2015 Date June 2, 20 15  
Owner or Owner's Designee, Title**CERTIFICATE OF INSERVICE INSPECTION**

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by HSB Global Standards of Hartford, CT have inspected the components described in this Owner's Report during the period 11-4-13 to 5-24-15, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Dean S. Jirish  
Inspector's SignatureCommission NB9428 ANIB  
National Board Number and EndorsementDate 6-2-, 20 15



**FORM NVR-1 REPORT OF REPAIR ☒ REPLACEMENT ☐**  
**OF NUCLEAR PRESSURE RELIEF DEVICES**

1. Work performed by: NWS Technologies, LLC Purchase Order # 55115381  
131 Venture Boulevard, Spartanburg, SC 29306
2. Work performed for: First Energy Corporation, Beaver Valley Power Station
- 3/4. Owner - name, address and identification of nuclear power plant: Beaver Valley Power Station,  
P.O. Box 4, Shippingport, PA 15077
5. a: Repaired pressure relief device: Pressurizer Safety Valve  
b: Name of manufacturer: Target Rock Corporation  
c: Identifying nos.
- | <u>0569C</u><br>(type)   | <u>Pilot 6 Main 3</u><br>(mfr's S/N) | <u>n/a</u><br>(NB#)       | <u>steam</u><br>(service)     | <u>6 x 6</u><br>(size)   | <u>2005</u><br>(yr.built) |
|--|--------------------------------------|---------------------------|-------------------------------|--------------------------|---------------------------|
| d: Construction Code: <u>ASME / III / 1</u><br>(name/section/division)   | <u>1968</u><br>(edition)             | <u>S '68</u><br>(addenda) | <u>n/a</u><br>(Code Cases(s)) | <u>A</u><br>(Code Class) |                           |
| 6. ASME Code Section XI applicable for inservice inspection:   | <u>2001</u><br>(edition)             | <u>2003</u><br>(addenda)  | <u>n/a</u><br>(Code Case(s))  |                          |                           |
| 7. ASME Code Section XI used for repairs, replacements:  | <u>2001</u><br>(edition)             | <u>2003</u><br>(addenda)  | <u>n/a</u><br>(Code Case(s))  |                          |                           |
| 8. Construction Code used for repairs, replacements:   | <u>1968</u><br>(edition)             | <u>S '68</u><br>(addenda) | <u>n/a</u><br>(Code Case(s))  |                          |                           |
| 9. Design responsibilities: <u>n/a</u>   |                                      |                           |                               |                          |                           |
| 10. Opening pressure: <u>2485 psig</u><br>Set-pressure adjustment made at: <u>NWS Technologies, LLC</u> using <u>steam</u>   |                                      |                           |                               |                          |                           |
| 11. Description of work (include name and identifying number of replacement parts): <u>Received 2 assemblies; one loosely from another facility and one from Site. Disassembled, inspected, pilots and mains swapped, cleaned, lapped, machined main disc shoulder, and reassembled. Certified set pressure and seat tightness using steam. Post certification N2 tightness and bellows integrity tests sat.</u> |                                      |                           |                               |                          |                           |
| 12. Remarks: <u>NWS Traveler # 13-235 &amp; 13-310. No code parts replaced.</u>  |                                      |                           |                               |                          |                           |

**CERTIFICATE OF COMPLIANCE**

I, Jason C. Gibson certify that to the best of my knowledge and belief the statements made in this report are correct and the repair, modification or replacement of the pressure relief devices described above conforms to Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

National Board Certificate of Authorization No. 632 to use the "VR" stamp expires April 3, 2015.  
National Board Certificate of Authorization No. 81 to use the "NR" stamp expires April 9, 2015.

10/6/13 NWS Technologies, LLC J.C.G. Manager, QA  
Date Repair Organization Authorized representative Title

**CERTIFICATE OF INSPECTION**

I, Charles F. Toegel Jr. holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of North Carolina and employed by Hartford Steam Boiler of CT of Hartford, CT have inspected the repair, modification or replacement described in this report on 6 Oct. 2013 and state that to the best of my knowledge and belief, this repair, modification or replacement has been completed in accordance with Section XI of the of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning this repair, modification or replacement described in this report. Furthermore, neither the undersigned nor my employer shall be liable in any manner for any personal injury, property damage or loss of any kind arising from or connected with this inspection.

10/6/13 Charles F. Toegel Jr. NB # 8462, A, N, I NC# 1073  
Date Inspector's Signature Commissions (NB (incl endorsements), jurisdiction, & no.)

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3800

1. Owner FirstEnergy Nuclear Operating Co.  
(NAME)76 South Main Street – Akron, OH 44308  
(ADDRESS)2. Plant Beaver Valley Power Station (BVPS)  
(NAME)PO Box 4, Shippingport, PA 15077  
(ADDRESS)3. Work Performed By BVPS Construction Services  
(NAME)PO Box 4, Shippingport, PA 15077  
(ADDRESS)Date 5-22-2015Sheet 1 of 4Unit No. #1Order # 200571939

Repair/Replacement Organization P.O. No., Job No., etc.

Type Code Symbol Stamp N/AAuthorization No. N/AExpiration Date N/A4. Identification of System River Water System, BV-1-30-system (Q3)5. (a) Applicable Construction Code ANSI B31.1 Edition, 1967 Addenda, S '71 Code Case N/A(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 2001 Edition to 2003 Addenda(c) Applicable Section XI Code Case(s): N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Spool	Stone and Webster	N/A	N/A	Pipe Line # 8"-WR-754-151-Q3	1976	Corrected	No
Flange, Blind, 8 in, 150#	Stone and Webster	N/A	N/A	Pipe Line # 8"-WR-754-151-Q3	1976	Removed	No
Flange, Weld Neck, 8 in, 150 #	Coffer Corp.	N/A	N/A	Heat # YVF Pipe Line # 8"-WR-754-151-Q3	2014	Installed	No
Pipe, 8.00 in, Sch 40, Seamless, SA106 Gr B	US Steel	N/A	N/A	Heat # X05072 Pipe Line # 8"-WR-754-151-Q3	2010	Installed	No

# FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3800

Elbow, 8 in, Sch 40, SA234 Gr WPB	WeldBend	N/A	N/A	Heat #CE918 Pipe Line # 8"-WR-754- 151-Q3	2015	Installed	No
Tee, 8", Sch 40, SA 234 Gr WPB	TFA	N/A	N/A	Heat # Y490 Pipe Line # 8"- WR-754-151- Q3	2013	Installed	No
Reducer, 8"x6", Sch Sch 40, SA 234 Gr WPB	Mill Iron Works	N/A	N/A	Heat # 33LN Pipe Line # 8"- WR-754-151- Q3	2013	Installed	No
6"-WR-755- 151-Q3	FirstEnergy	N/A	N/A	N/A	2015	Installed	No
Elbow 90 deg, 6 in, Sch 40, SA 234 Gr WPB	WeldBend	N/A	N/A	Heat # C40348 Pipe Line # 6"-WR-755- 151-Q3	2014	Installed	No
Pipe, 6 in, Sch 40, Seamless, SA106 Gr B	US Steel	N/A	N/A	Heat # C47012 Pipe Line # 6"-WR-755- 151-Q3	2012	Installed	No
Check Valve, 6 in, 150#, SA105	BNL Industries	A141009-22-1	N/A	Functional Location 1RW-980	2015	Installed	Yes
Ball Valve, 6 in, 150#, SA105	BNL Industries	A141009-23-3	N/A	Functional Location 1RW-98	2015	Installed	Yes
6"-WR-756- 151-Q3	FirstEnergy	N/A	N/A	N/A	2015	Installed	No
Elbow 90 deg, 6 in, Sch 40, SA 234 Gr WPB	WeldBend	N/A	N/A	Heat # C20151 Pipe Line # 6"-WR-756- 151-Q3	2014	Installed	No

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3800

Pipe, 6 in, Sch 40, Seamless, SA106 Gr B	US Steel	N/A	N/A	Heat # C47012 Pipe Line # 6"-WR-756-151-Q3	2012	Installed	No
Check Valve, 6 in, 150#, SA105	BNL Industries	A141009-22-2	N/A	Functional Location 1RW-990	2015	Installed	Yes
Ball Valve, 6 in, 150#, SA105	BNL Industries	A141009-23-4	N/A	Functional Location 1RW-99	2015	Installed	Yes

7. Description of Work Line 8"-WR-754-151-Q3 was modified to install a section of FLEX piping. The 8 in blind flange from the original construction was removed and it was replaced with an 8 in weld neck flange, 8 in tee, two 8x6 in reducers, and a 6 in check valve and 6 in ball valve in each 6 in line. Following the class break, a 6 in section of pipe and Storz fitting are installed in each 6 in line. See ECP 13-0418-004.

8. Tests Conducted: Hydrostatic\* ☒ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐  
Other ☐ Pressure 127 psi Test Temp. ambient °F

\*Record test pressure and temperature


9. Remarks A system leak test was performed at nominal operating temperature and pressure on the piping section from the check valves to the existing piping. A hydrostatic test was completed in the shop for the piping section from the check valves to the new Storz fittings. The hydrostatic test conditions are given above.

Code data reports for the two check valves and two ball valves are attached to this NIS-2 report.

Applicable Manufacturer's Data Reports to be attached

**CERTIFICATE OF COMPLIANCE**

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/ASigned Thomas M Calko, Engineer III  Date May 23, 20 15  
Owner or Owner's Designee, Title

# FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3800

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by HSB Global Standards of Hartford, CT have inspected the components described in this Owner's Report during the period 11-4-13 to 5-24-15, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Dean L. Smith  
Inspector's Signature

Commission NB9428 ANIB  
National Board Number and Endorsement

Date 6-29-, 20 15

**Pg. 1 of 2**

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{07/10}

FORM NPV-1 (Back — Pg. 2 of 2)

Certificate Holder's Serial No. A141009-22-(1 thru 2)

8. Design conditions \_\_\_\_\_ (pressure) \_\_\_\_\_ (temperature) or valve pressure class ANSI 150#
9. Cold working pressure 275 PSIG @100°F
10. Hydrostatic test 450 PSIG Disk differential test pressure 320 PSIG
11. Remarks

CERTIFICATION OF DESIGN

Design Specification certified by John W. Dingler P.E. State IL Reg. no. 062-038953

Design Report certified by \_\_\_\_\_ P.E. State \_\_\_\_\_ Reg. no. \_\_\_\_\_

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this pump or valve conforms to the rules for construction of the ASME Code, Section III, Division 1.

N Certificate of Authorization No. N-2882 Expires 11/10/2016

Date 3/31/15 Name BNL INDUSTRIES, INC. Signed [Signature]  
(N Certificate Holder) (Authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by ONECIS INSURANCE COMPANY

of LYNN, MA have inspected the pump, or valve, described in this Data Report on 3/31/15, and state that to the best of my knowledge and belief, the Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III, Division 1.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the component described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 3/31/2015 Signed [Signature] Commission NB 9241 (N, NS)  
(Authorized Nuclear Inspector) (National Board Number and Endorsement)

**Pg. 1 of 2**

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773



## FORM NPV-1 (Back — Pg. 2 of 2)

Certificate Holder's Serial No. A141008-23-(1 thru 4)

8. Design conditions \_\_\_\_\_ (pressure) \_\_\_\_\_ (temperature) or valve pressure class \_\_\_\_\_ ANSI 150#
9. Cold working pressure 275 PSIG @100°F
10. Hydrostatic test 450 PSIG . Disk differential test pressure 320 PSIG
11. Remarks

## CERTIFICATION OF DESIGN

Design Specification certified by John W. Dingler P.E. State IL Reg. no. 062-038953

Design Report certified by \_\_\_\_\_ P.E. State \_\_\_\_\_ Reg. no. \_\_\_\_\_

## CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this pump or valve conforms to the rules for construction of the ASME Code, Section III, Division 1.

N Certificate of Authorization No. N-2882 Expires 11/10/2016

Date 3/31/15 Name BNL INDUSTRIES, INC. Signed Steven Braun  
(N Certificate Holder) (authorized representative)

## CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by ONECIS INSURANCE COMPANY

of LYNN, MA have inspected the pump, or valve, described in this Data Report on 3/31/15, and state that to the best of my knowledge and belief, the Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III, Division 1.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the component described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 3/31/15 Signed Charles J. W... Commission NB9241 (N.N.S.)  
(Authorized Nuclear Inspector) (National Board Number and Endorsement)

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 01

Report Number 38071. Owner FirstEnergy Nuclear Operating Co.  
(NAME)76 South Main Street – Akron, OH 44308  
(ADDRESS)Date 4-21-2015Sheet 1 of 3Unit No. #12. Plant Beaver Valley Power Station (BVPS)  
(NAME)PO Box 4, Shippingport, PA 15077  
(ADDRESS)Order # 200589783

Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By BVPS Construction Services  
(NAME)PO Box 4, Shippingport, PA 15077  
(ADDRESS)Type Code Symbol Stamp N/AAuthorization No. N/AExpiration Date N/A4. Identification of System Spent Fuel Pool Cooling and Purification System, BV-1-20-system (Q3)5. (a) Applicable Construction Code ANSI B31.1 Edition, 1967 Addenda, S-1971 Code Case —(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 2001 Edition to 2003 Addenda

(c) Applicable Section XI Code Case(s):

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Spool	Stone and Webster	N/A	N/A	Pipe Line # 6"-FC-9-152-Q3 (06.024-0070)	1976	Corrected	No
Flange, Blind, 2.00", 150#	Stone and Webster	N/A	N/A	Pipe Line # 6"-FC-9-152-Q3 (06.024-0070)	1976	Removed	No
2"-FC-22-152-Q3	FirstEnergy	N/A	N/A	N/A	2015	Installed	No
Pipe, SMLS, 2", Sch 40, A312 TP 304,	PEXCO	N/A	N/A	Heat # 539575	2015	Installed	No
Tee, 2", A403 WP304, 3000#	Alloy Stainless Products Company	N/A	N/A	Heat # X6D	2001	Installed	No
Elbow, 90-deg, 2", A403 WP304, 3000#	Alloy Stainless Products Co.	N/A	N/A	Heat # G85	2008	Installed	No

# FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 01

Report Number 3807

Flange, 2", RF, A182 F304, 150#	Newman Flange & Fitting Co.	N/A	N/A	Heat # H616	2013	Installed	No
Flange, Blind, 2", RF, A182 F304, 150#	Newman Flange & Fitting Co.	N/A	N/A	Heat # H554	2010	Installed	No
Valve Ball, 2"	BNL Industries Incorporated	A141009-6-1	N/A	Valve ID: 1PC-103	2015	Installed	No
Studs, 5/8"	Curtiss-Wright	N/A	N/A	N/A	2014	Installed	No
Heavy Hex Nuts, 5/8"	Curtiss-Wright	N/A	N/A	N/A	2014	Installed	No
PSR-001 & PSR-002	FirstEnergy	N/A	N/A	N/A	2015	Installed	No
Pipe Strap, 2"	Anvil International	N/A	N/A	Anvil Part # 144C&L0200NB	2005	Installed	No
Plate, 1/2"	SSAB	N/A	N/A	Heat # W4L614-C79	2014	Installed	No
Tube Steel, 4 x 4 x 3/8"	Hanna Steel	N/A	N/A	Coil # A311903-04	2013	Installed	No
Anchor, Concrete, 1/2"	Hilti	N/A	N/A	Hilti Part # 282529	2013	Installed	No
Plate, 3/4"	NUCOR	N/A	N/A	Heat # 1504378 Plate S/N: 03	2011	Installed	No
Plate, 1/4"	NUCOR	N/A	N/A	Heat # B4P6321 Slab # 03	2014	Installed	No

7. Description of Work Line 6"-FC-9-152-Q3 was modified to add a secondary FLEX piping connection to the Fuel Pool Cooling and Purification System. Following the 6"x2" reducer in this line, new piping components including two ball valves (PC-103, Safety and PC-104, Non-Safety) were connected to the existing flange to provide an isolated 4 inch Storz hose connection. A VT2 in-service leakage test was successfully completed following the installation.

8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐  
 Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 01

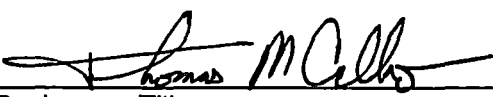
Report Number 38079. Remarks No Data Reports available.

Applicable Manufacturer's Data Reports to be attached

**CERTIFICATE OF COMPLIANCE**

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/A

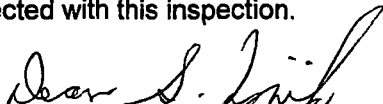
Signed T. Calko, Engineer III  Date Apr 24, 20 15  
Owner or Owner's Designee, Title

**CERTIFICATE OF INSERVICE INSPECTION**

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB Global Standards of Hartford, CT have inspected the components described in this

Owner's Report during the period 11-4-13 to 4-27-15, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

  
Inspector's Signature

Commissions NB9428ANIB PA2384  
National Board, State, Province, and Endorsements

Date 4-27-, 20 15

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 38091. Owner FirstEnergy Nuclear Operating Company  
(NAME)Date 6-2-201576 South Main Street – Akron, OH 44308  
(ADDRESS)Sheet 1 of 2Unit No. # 12. Plant Beaver Valley Power Station (BVPS)  
(NAME)P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)Order #200589777

Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By BVPS Construction Services  
(NAME)Type Code Symbol Stamp N/AP.O. Box 4, Shippingport, PA 15077  
(ADDRESS)Authorization No. N/AExpiration Date N/A4. Identification of System Steam Generator Feedwater System – BV-1-24-System (Q3)5. (a) Applicable Construction Code ANSI B31.1 1967 Edition, S'71 Addenda, Code Case N/A(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 2001E-2003A(c) Applicable Section XI Code Case(s): N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Spool	Stone and Webster	N/A	N/A	Pipe # 4"-WAPD-5- 601-Q3	1976	Corrected	No
Tee, 4x4x3, Extra Strong, SA 234 Gr WPB	Tube Forgings of America	N/A	N/A	Heat: X322X	2014	Installed	No
Pipe, 3 in, Smls, Extra Strong, SA 106 Gr B	US Steel	N/A	N/A	Heat: FA1076	2011	Installed	No
Elbow, 3 in, 90-deg, Extra Strong, SA 234 Gr WPB	Tube Forgings of America	N/A	N/A	Heat: A	2002	Installed	No

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3809

Ball Valve, 3 in, 900#, SA 105	BNL Industries	A141009-11-1	N/A	1FW-208	2015	Installed	Yes
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7. Description of Work Installed tee and FLEX piping components identified above into line 4"-WAPD-5-601-Q3.8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐  
Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

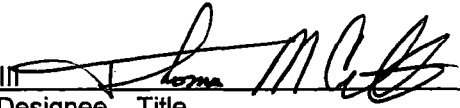
\*Record test pressure and temperature

9. Remarks Code data report attached for ball valve 1FW-208. No prior NIS-2 data reports.

Applicable Manufacturer's Data Reports to be attached

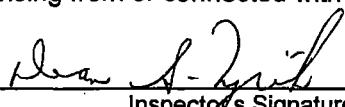
**CERTIFICATE OF COMPLIANCE**

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/A Expiration Date N/ASigned Tom Calko, Engineer III  Date June 2, 20 15  
Owner or Owner's Designee, Title**CERTIFICATE OF INSERVICE INSPECTION**

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by HSB Global Standards of Hartford, CT have inspected the components described in this Owner's Report during the period 11-4-13 to 5-24-15, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

  
Inspector's SignatureCommission 189428A-NIB  
National Board Number and EndorsementDate 6-23-, 20 15

[illegible]

(07/10)

## FORM NPV-1 (Back — Pg. 2 of 2)

Certificate Holder's Serial No. A141009-11-(1)

8. Design conditions \_\_\_\_\_ (pressure) \_\_\_\_\_ (temperature) or valve pressure class ANSI 900#
9. Cold working pressure 2160 PSIG @100°F
10. Hydrostatic test 3350 PSIG . Disk differential test pressure 2460 PSIG
11. Remarks

## CERTIFICATION OF DESIGN

Design Specification certified by John W. Dangler P.E. State IL Reg. no. 062-038953

Design Report certified by \_\_\_\_\_ P.E. State \_\_\_\_\_ Reg. no. \_\_\_\_\_

## CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this pump or valve conforms to the rules for construction of the ASME Code, Section III, Division 1.

N Certificate of Authorization No. N-2882 Expires 11/10/2016

Date 2/2/15 Name BNL INDUSTRIES, INC. Signed Steven Braun  
(N Certificate Holder) (authorized representative)

## CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by ONECIS INSURANCE COMPANY

of LYNN, MA have inspected the pump, or valve, described in this Data Report on 2/2/15, and state that to the best of my knowledge and belief, the Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III, Division 1.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the component described in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 2/2/15 Signed S. V. [Signature] Commission 1/68372 N.B.P.V.S.  
(Authorized Nuclear Inspector) (National Board Number and Endorsement)



# FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3810

1. Owner FirstEnergy Nuclear Operating Co.  
(NAME)

76 South Main Street – Akron, OH 44308  
(ADDRESS)

2. Plant Beaver Valley Power Station (BVPS)  
(NAME)

PO Box 4, Shippingport, PA 15077  
(ADDRESS)

3. Work Performed By BVPS Construction Services  
(NAME)

PO Box 4, Shippingport, PA 15077  
(ADDRESS)

Date 6-2-2015

Sheet 1 of 3

Unit No. #1

Order # 200592266

Repair/Replacement Organization P.O. No., Job No., etc.

Type Code Symbol Stamp N/A

Authorization No. N/A

Expiration Date N/A

4. Identification of System Steam Generator Feedwater System, BV-1-24-system (Q3)

5. (a) Applicable Construction Code ANSI B31.1 Edition, 1967 Addenda, S '71 Code Case N/A

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 2001 Edition to 2003 Addenda

(c) Applicable Section XI Code Case(s): N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Spool	Stone and Webster	N/A	N/A	Pipe Line # 6"-WD-24-151-Q3	1976	Corrected	No
Elbow, 90 deg, 6 in	Weld Bend	N/A	N/A	Heat # B90303	2013	Installed	No
Flange, 6 in, Weld Neck, Raised Face, 150#	Coffer	N/A	N/A	Heat # ZMF	2015	Installed	No
Flange, 6 in, Weld Neck, Flat Face, 150#	Coffer	N/A	N/A	Heat # ZMF	2015	Installed	No
Studs, 3/4 in	Nova Machine Products	N/A	N/A	Heat # M47207	2013	Installed	No

# FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3810

Nuts, ¾ in	Nova Machine Products	N/A	N/A	Heat # 20312020	2015	Installed	No
Elbolet, 6 in x 4 in	WFI	N/A	N/A	Heat # 7109ANR	2014	Installed	No
Pipe line	First Energy	N/A	N/A	Pipe Line # 4"-WD-37-151-Q3	2015	Installed	No
Elbow, 90 deg, 4 in	Weld Bend	N/A	N/A	Heat # 484033	2014	Installed	No
Pipe, 4 in, Smls, Sch 40	US Steel	N/A	N/A	Heat # X22817	2011	Installed	No
Elbow, 45 deg, 4 in	Weld Bend	N/A	N/A	Heat # 487275	2014	Installed	No
Check Valve, 4 in, 150#	BNL Industries	A141009-21-1	N/A	1WT-38	2015	Installed	No
Ball Valve, 4 in, 150#	BNL Industries	A141009-17-1	N/A	1WT-39	2015	Installed	Yes
Pipe Lug	American Alloy	39BA	N/A	Heat # U4457	2015	Installed	No
Support	First Energy	N/A	N/A	Support PSR-040	2015	Installed	No
Pipe Strap, 4 in	Anvil International	N/A	N/A	Fig 144N	2015	Installed	No
Plate, ¾ in	Nucor	U2J	N/A	Heat # 15804378-03	2014	Installed	No
Plate, ½ in	SSAB	U2R	N/A	Heat # W4L614-C79	2014	Installed	No
Tube Steel, 4 x 4 x 3/8 in	Hanna Steel	N/A	N/A	Heat # B406590	2014	Installed	No
Anchor, 0.5 in	Hilti Inc.	N/A	N/A	N/A	2014	Installed	No

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3810

7. Description of Work Line 6"-WD-24-151-Q3 was modified to install a section of FLEX piping in accordance with ECP 13-0418-004.

8. Tests Conducted: Hydrostatic\* ☒ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐  
Other ☐ Pressure 37 psi Test Temp. ambient °F

\*Record test pressure and temperature

9. Remarks A system leak test was performed at nominal operating temperature and pressure on the piping section from the check valve to the existing piping. A hydrostatic test was completed in the shop for the piping section from the check valve to the new Storz fitting. The hydrostatic test conditions are given above.

Code data report for the ball valve is attached to this NIS-2 report; no code data report available for the check valve.


Applicable Manufacturer's Data Reports to be attached

**CERTIFICATE OF COMPLIANCE**

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A


Certificate of Authorization No. N/A Expiration Date N/A

Signed Thomas M Calko, Engineer III  Date June 2, 20 15  
Owner or Owner's Designee, Title

**CERTIFICATE OF INSERVICE INSPECTION**

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by HSB Global Standards of Hartford, CT have inspected the components described in this Owner's Report during the period 11-4-13 to 5-24-15 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

  
Inspector's Signature

Commission NB 9428 A-1B  
National Board Number and Endorsement

Date 6-23-, 20 15

**Pg. 1 of 2**

[illegible]

5047

## FORM NPV-1 (Back — Pg. 2 of 2)

Certificate Holder's Serial No. A141009-17-(1 THRU 2)

8. Design conditions \_\_\_\_\_ (pressure) \_\_\_\_\_ (temperature) or valve pressure class ANSI 150#
9. Cold working pressure 275 PSIG @100°F
10. Hydrostatic test 450 PSIG Disk differential test pressure 320 PSIG
11. Remarks \_\_\_\_\_

## CERTIFICATION OF DESIGN

Design Specification certified by John W. Dingler P.E. State IL Reg. no. 062-038953

Design Report certified by \_\_\_\_\_ P.E. State \_\_\_\_\_ Reg. no. \_\_\_\_\_

## CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this pump or valve conforms to the rules for construction of the ASME Code, Section III, Division 1.

N Certificate of Authorization No. N-2882 Expires 11/10/2018

Date 3/20/15 Name BNL INDUSTRIES, INC. Signed Steven Blum  
(N Certificate Holder) (authorized representative)

## CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by ONECIS INSURANCE COMPANY

of LYNN, MA have inspected the pump, or valve, described in this Data Report on 3/20/15, and state that to the best of my knowledge and belief, the Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III, Division 1.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the component described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 3/20/15 Signed [Signature] Commission NB10961 A N  
(Authorized Nuclear Inspector) (National Board Number and Endorsement)

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3817

1. Owner FirstEnergy Nuclear Operating Company  
(NAME)76 South Main Street – Akron, OH 44308  
(ADDRESS)2. Plant Beaver Valley Power Station (BVPS)  
(NAME)P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)3. Work Performed By BVPS Construction Services  
(NAME)P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)Date 05/24/2015Sheet 1 of 1Unit No. 1Order #200623134

Repair/Replacement Organization P.O. No., Job No., etc.

Type Code Symbol Stamp N/AAuthorization No. N/AExpiration Date N/A4. Identification of System River Water (Q3)5. (a) Applicable Construction Code ANSI B31.1 1967 Edition, S'71 Addenda, Code Case N/A(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 2001E-2003A(c) Applicable Section XI Code Case(s): N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Pipeline	Stone & Webster	N/A	N/A	24"-WR-20-151-Q3	1976	Corrected	No

7. Description of Work Cut open and removed window of pipe, weld repaired from inside pinhole leaks and additional corroded areas, weld re-installed removed window.8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐  
Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

# FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3817

9. Remarks No Code Data Reports available. Previous NIS-2 Data Report No. 3667.

Applicable Manufacturer's Data Reports to be attached

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Expiration Date N/A

Signed Thomas White  
Owner or Owner's Designee, Title

Engineer V Date May 24, 20 15

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by HSB Global Standards of Hartford, CT have inspected the components described in this Owner's Report during the period 11-4-13 to 5-24-15, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Dean S. Litch  
Inspector's Signature

Commission NB 9428 ANIB  
National Board Number and Endorsement

Date 5-28-, 20 15

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 01

Report Number 38181. Owner FirstEnergy Nuclear Operating Co.  
(NAME)Date 04/09/201576 South Main Street – Akron, OH 44308  
(ADDRESS)Sheet 1 of 1Unit No. 12. Plant Beaver Valley Power Station (BVPS)  
(NAME)PO Box 4, Shippingport, PA 15077  
(ADDRESS)Order number 200557834

Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By BVPS Maintenance  
(NAME)Type Code Symbol Stamp N/APO Box 4, Shippingport, PA 15077  
(ADDRESS)Authorization No. N/AExpiration Date "4. Identification of System Reactor Plant Component Cooling (Q3)5. (a) Applicable Construction Code ASME Section VIII 1968 Edition, W'68 Addenda, Code Case N/A(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 2001E-2003A(c) Applicable Section XI Code Case(s): N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Heat Exchanger	Henry Vogt	18649	11792	1CC-E-1A	1971	Corrected	Yes
Channel Cover	Dubose National Energy	N/A	N/A	Ht. #W1A631	2012	Installed	No

7. Description of Work Replaced channel cover with spare..8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐  
Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F



# FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 01

Report Number 3818

\*Record test pressure and temperature

9. Remarks Heat Exchanger Code Data Report copy attached to previous NIS-2 Data Report No. 2028.

Applicable Manufacturer's Data Reports to be attached

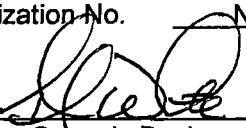
## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Expiration Date N/A

Signed T. White  Engineer V Date April 09, 20 15  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by HSB Global Standards of Hartford, CT have inspected the components described in this

Owner's Report during the period 11-4-13 to 4-14-15, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

  
Inspector's Signature

Commissions NB9428 AJSB PA2384  
National Board, State, Province, and Endorsements

Date 4-14-, 20 15

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 38251. Owner FirstEnergy Nuclear Operating Company  
(NAME)Date 05/19/201576 South Main Street – Akron, OH 44308  
(ADDRESS)Sheet 1 of 1Unit No. 12. Plant Beaver Valley Power Station (BVPS)  
(NAME)P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)Order #200558672

Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By BVPS Maintenance  
(NAME)Type Code Symbol Stamp N/AP.O. Box 4, Shippingport, PA 15077  
(ADDRESS)Authorization No. N/AExpiration Date N/A4. Identification of System Reactor Plant Component Cooling (Q3)5. (a) Applicable Construction Code ASME Section VIII 1968 Edition, W'68A Addenda, Code Case N/A(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 2001E-2003A

(c) Applicable Section XI Code Case(s):

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Heat Exchanger	Henry Vogt	18650	11793	1CC-E-1B	1971	Corrected	Yes
Channel Cover	Dubose National Energy	N/A	N/A	Ht. #W1A631	2012	Installed	No

7. Description of Work Replaced channel cover with spare.8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐  
Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

# FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3825

9. Remarks Heat Exchanger Code Data Report attached to previous NIS-2 Data Report No. 3651.

Applicable Manufacturer's Data Reports to be attached

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed Thomas White [Signature] Nuclear Engineer V Date May 19, 20 15  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by HSB Global Standards of Hartford, CT have inspected the components described in this Owner's Report during the period 11-4-13 to 5-20-15, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature]  
Inspector's Signature

Commission NB9428 ANIB  
National Board Number and Endorsement

Date 5-20-, 20 15

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 38261. Owner FirstEnergy Nuclear Operating Company  
(NAME)76 South Main Street – Akron, OH 44308  
(ADDRESS)2. Plant Beaver Valley Power Station (BVPS)  
(NAME)P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)3. Work Performed By BVPS Maintenance  
(NAME)P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)Date 04/25/2015Sheet 1 of 2Unit No. 1Order #200589385

Repair/Replacement Organization P.O. No., Job No., etc.

Type Code Symbol Stamp N/AAuthorization No. N/AExpiration Date N/A4. Identification of System Residual Heat Removal (Class C)5. (a) Applicable Construction Code ASME Section III 1968 Edition, N/A Addenda, Code Case N/A(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 2001E-2003A

(c) Applicable Section XI Code Case(s):

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Heat Exchanger	Joseph Oat Co.	1832-2	369	1RH-E-1B	1970	Corrected	Yes
Stud, 1-3/8"	Nova Machine	N/A	N/A	Trace Code: 05P0	2014	Installed	No
Nut, 1-3/8"	Nova Machine	N/A	N/A	Trace Code: 05M8	2014	Installed	No

7. Description of Work Replaced one stud and two nuts.8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☐ Exempt ☒Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

# FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3826

\*Record test pressure and temperature


9. Remarks Vessel Code Data Report attached. No Code Data Report available for studs & nuts. Previous NIS-2  
Applicable Manufacturer's Data Reports to be attached  
Data Report No. 3355.

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed Thomas White  Nuclear Engineer V Date May 15, 20 15  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by HSB Global Standards of Hartford, CT have inspected the components described in this Owner's Report during the period 11-4-13 to 5-18-15, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

  
Inspector's Signature

Commission NB 9428 ANIB  
National Board Number and Endorsement

Date 5-18-, 20 15

**FORM U-1 MANUFACTURERS' DATA REPORT FOR UNFIRED PRESSURE VESSELS**  
As required by the Provisions of the ASME Code Rules

1. Manufactured by Jos. Oat & Sons, Inc., Philadelphia, Pa.  
(Name and address of Manufacturer)  
2. Manufactured for Westinghouse Electric Corp., Pittsburgh, Penn.  
(Name and address of Purchaser)

3. Type Vert. Kind Heat Exch. Vessel No. 1832-2 ( ) Natl. Bd. No. 369 Yr. Built 1970  
(Horiz. or Vert.) (Tank, Jacketed, Heat Exch.) (Mfrs. Serial) (State & State No.)

Items 4-9 incl. to be completed for single wall vessels (such as air tanks), jackets of jacketed vessels, or shells of heat exchangers.

4. SHELL: Material SA515 gr. 70 T.S. 70000 Nominal Thickness 7/16 Corrosion Allowance 1/8" In. Diam. 3 Ft. 3-1/8" Length 20.9 In.  
(Kind & Spec. No.) (Fig. or P.B. & Spec. Min. T.S.)

5. SEAMS: Long DBW H.T. no X.R. spot Sectioned no Efficiency 85 %  
(Welded, Dbl., Single, Lap, Butt) (Yes or No) (Spot or Complete) (Yes or No)

If riveted describe seams fully on reverse side of form.

Girth DBW H.T. no X.R. spot Sectioned no No. of Courses 1

6. HEADS (a) Material SA515 gr. 70 T.S. 70,000 (b) Material SA515 gr. 70 T.S. 70,000  
Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Pressure  
(Top, bottom, ends) (a) Top 7/16" 36" 2-3/8" - - - - concave  
(b) - - - - - - - - -

If removable, bolts used SA193-B7, 1-3/8"-8 48 Other fastening -  
(Material, Spec. No., T.S., Size, Number) (Describe or Attach Sketch)

7. STAYBOLTS: (Material) - If hollow (Size of Hole) - Attachment (Type) - Pitch (Horiz.) X (Vert.) - Diam. (Nominal) -

8. JACKET CLOSURE: (Describe as ogee & weld, bay, etc. If lap, give dimensions. If bolted, describe or sketch)

9. Constructed for max. allowable working press. 150 psi at max. temp. 200° F. less than -20° - Min. temp. (when hydrostatic test) 225 psi.  
Test Press 225 psi.

Items 10 and 11 to be completed for tube sections.

10. TUBE SHEETS: Stationary. Material SA240T304 clad on SA515 gr. 70 Diam. 39-1/8" Thickness 5/16" Attachment bolted  
(Subject to Pressure) (Welded, Bolted)

Floating. Material - Diam. - In. Thickness - In. Attachment -

11. TUBES: Material SA213T304 D. 3/4" In. Thickness 18 X Gage Number 592 Type II  
(Kind & Spec. No.) (Straight or U)

Items 12-15 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

12. SHELL: Material SA240T304 T.S. 75000 Nominal Thickness 7/8 Corrosion Allowance 0 In. Diam. 3 Ft. 3-3/4" Length 2 Ft. 5-7/16"  
(Kind & Spec. No.) (Fig. or P.B. & Spec. Min. T.S.)

13. SEAMS: Long DBW H.T. no X.R. complete Sectioned no Efficiency 100 %  
(Welded, Dbl., Single, Lap, Butt) (Yes or No) (Spot or Complete) (Yes or No)

If riveted describe seams fully on reverse side of form.

Girth DBW H.T. no X.R. complete Sectioned no No. of courses 1

14. HEADS (a) Material SA240T304 T.S. 75000 (b) Material SA240T304 T.S. 75000 (c) Material SA240T304 T.S. 75000  
Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Pressure  
(a) Top, bottom, etc. 13/16" - - 2:1 - - - concave  
(b) Channel - - - - - - - - -  
(c) Floating - - - - - - - - -

If removable, bolts used (a) - (b) -  
(Material, Spec. No., T.S., Size, Number)

(c) - Other fastening - (Describe or Attach Sketch)

15. Constructed for max. allowable working press. 600 psi at max. temp. 400° F. less than -20° - Min. temp. (when hydrostatic test) 1130 psi.  
Test Press 1130 psi.

Items below to be completed for all vessels where applicable.

16. SAFETY VALVE OUTLETS: Number - Size - Location -

17. NOZZLES

Purpose (Inlet, Outlet, Drain)	Number	Diam. or Size	Type	Material	Thickness	Reinforcement Material	How Attached
Shell - Inlet & Outlet	2	24"	pipe	SA53 gr. B	1/2"	none	welded
Tube side Inlet & Outlet	2	10"	"	SA312T304	sch. 40	SA240T304	"
Drain & Vent	2	3/4"	cplg.	SA182F304	3000#	none	"
vent	1	"	"	SA181gr. 2	"	"	"

<sup>1</sup> If postweld heat-treated.

<sup>2</sup> List under remarks other internal or external pressures with coincident temperature when applicable.

FORM U-1 (back)

18. INSPECTION Manholes, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_  
 OPENINGS: Handholes, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_  
 Threaded, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

19. SUPPORTS: Skirt \_\_\_\_\_ Lugs \_\_\_\_\_ (Number) \_\_\_\_\_ Legs \_\_\_\_\_ (Number) \_\_\_\_\_ Other \_\_\_\_\_ (Describe) \_\_\_\_\_ Attached \_\_\_\_\_  
 (Yes or No) \_\_\_\_\_

20. REMARKS: Vessel is a Vertical Residual Heat Exchanger built to  
Oat dwgs. 4957 & 4958 and the ASME Code Section VIII for shell side  
& Section III Class C for tube side latest edition.  
WEST. CO. ITEM NO. SPIN: DLWACNRS-2

(Brief description of purpose of the vessel, as Air Tank, After Cooler, Jacketed Cooker, etc. State contents of each part.)

We certify that the statements made in this report are correct and that all details of design, material, construction, and workmanship of this vessel conform to the ASME Code for Unfired Pressure Vessels.

Date 2/25 19 70 Signed Jos. Oat & Sons, Inc. By J. Christensen  
 (Manufacturer)

Certificate of Authorization Expires #184, Dec. 31, 1970

CERTIFICATE OF SHOP INSPECTION

VESSEL MADE BY JOS. OAT & SONS, INC. Philadelphia, Penn.

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State of Penn. and employed by Travelers Indemnity Co. of Penn.

have inspected the pressure vessel described in the manufacturer's data report on 2/26 19 70 and state that to the best of my knowledge and belief, the manufacturer has constructed this pressure vessel in accordance with the applicable sections of the ASME Boiler and Pressure Vessel Code.

(By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the pressure vessel described in this manufacturer's data report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.)

Date 2/26 19 70

J. L. Spill Inspector's Signature 560-13-70 Commission NB-6456, Pa. 2075, Ohio 2-4-69  
 Nat'l Board or State and No.

CERTIFICATE OF FIELD ASSEMBLY INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State of \_\_\_\_\_ and employed by \_\_\_\_\_ of \_\_\_\_\_

have compared the statements in this manufacturer's data report with the described pressure vessel and state that parts referred to as data items \_\_\_\_\_ not included in the certificate of shop inspection have been inspected by me and that to the best of my knowledge and belief the manufacturer has constructed and assembled this pressure vessel in accordance with the applicable sections of the ASME

Boiler and Pressure Vessel Code. The described vessel was inspected and subjected to a hydrostatic test of \_\_\_\_\_ psi.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the pressure vessel described in this manufacturer's data report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date \_\_\_\_\_ 19 \_\_\_\_\_

J. L. Spill Inspector's Signature \_\_\_\_\_ Commission NB-6456, Pa. 2075, Ohio 2-4-69  
 Nat'l Board or State and No.

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 38271. Owner FirstEnergy Nuclear Operating Company  
(NAME)76 South Main Street – Akron, OH 44308  
(ADDRESS)2. Plant Beaver Valley Power Station (BVPS)  
(NAME)P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)3. Work Performed By BVPS Construction Services  
(NAME)P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)Date 05/22/2015Sheet 1 of 1Unit No. 1Order #200632318

Repair/Replacement Organization P.O. No., Job No., etc.

Type Code Symbol Stamp N/AAuthorization No. N/AExpiration Date N/A4. Identification of System Main Feedwater5. (a) Applicable Construction Code ANSI B31.1 1967 Edition, S'71 Addenda, Code Case N/A(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 2001E-2003A

(c) Applicable Section XI Code Case(s):

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Snubber	ITT Grinel	8332	N/A	WFPD-HSS-228	1976	Removed	No
Snubber	Lisega	31400671/037	N/A	WFPD-HSS-228	2014	Installed	No

7. Description of Work Replaced snubber.8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☐ Exempt ☒  
Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature



# FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3827


9. Remarks No Code Data Report available. Previous NIS-2 Data Report No. 1492. This snubber is Non-Q but is  
Applicable Manufacturer's Data Reports to be attached  
within the first anchor.

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed Thomas White  Nuclear Engineer V Date May 22, 20 15  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by HSB Global Standards of Hartford, CT have inspected the components described in this Owner's Report during the period 11-4-13 to 5-22-15, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Dean S. Zirk Commission NB 9428 AWEB  
Inspector's Signature National Board Number and Endorsement

Date 5-22-, 20 15

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 38291. Owner FirstEnergy Nuclear Operating Company  
(NAME)76 South Main Street – Akron, OH 44308  
(ADDRESS)2. Plant Beaver Valley Power Station (BVPS)  
(NAME)P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)3. Work Performed By BVPS Maintenance  
(NAME)P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)Date 05/26/2015Sheet 1 of 6Unit No. 1Order Nos.: 200640265, 55119843

Repair/Replacement Organization P.O. No., Job No., etc.

Type Code Symbol Stamp N/AAuthorization No. N/AExpiration Date N/A4. Identification of System Reactor Coolant (Class A)5. (a) Applicable Construction Code ASME Section III 1968 Edition, S'68 Addenda, Code Case N/A(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 2001E-2003A(c) Applicable Section XI Code Case(s): N/A

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Relief Valve	Target Rock	0569C-001-1-3	N/A	RV-1RC-551B	2005	Removed	Yes
Pilot Valve	Target Rock	6	N/A	RV-1RC-551B	2007	Removed	Yes
Relief Valve	Target Rock	0569C-001-1-7	N/A	RV-1RC-551B	2007	Installed	Yes
Pilot Valve	Target Rock	7	N/A	RV-1RC-551B	2007	Installed	Yes

7. Description of Work Replaced valve with spare.8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☒ Exempt ☐  
Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

# FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 3829

9. Remarks Code Data Reports attached. Previous NIS-2 Data Report No. 3569. NWS Technologies rebuilt  
Applicable Manufacturer's Data Reports to be attached  
Valve S/N 7, removed Pilot S/N 3, and installed Pilot S/N 7.

## CERTIFICATE OF COMPLIANCE

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed Thomas White 05/26/2015 Date May 26, 20 15  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by HSB Global Standards of Hartford, CT have inspected the components described in this Owner's Report during the period 11-4-13 to 5-24-15, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Dean S. Zink  
Inspector's Signature

Commission NB9428 ANIB  
National Board Number and Endorsement

Date 5-28-, 20 15

**FORM NVR-1 REPORT OF REPAIR ☒ REPLACEMENT ☐**  
**OF NUCLEAR PRESSURE RELIEF DEVICES**

1. Work performed by: **NWS Technologies, LLC** Purchase Order # 55115381 / 55119843  
131 Venture Boulevard, Spartanburg, SC 29306
2. Work performed for: First Energy Corporation, Beaver Valley Power Station
- 3/4. Owner - name, address and identification of nuclear power plant: Beaver Valley Power Station,  
P.O. Box 4, Shippingport, PA 15077
5. a: Repaired pressure relief device: Pressurizer Safety Valve  
b: Name of manufacturer: Target Rock Corporation  
c: Identifying nos.
- |   |                            |                          |                                |                             |                           |
|---|----------------------------|--------------------------|--------------------------------|-----------------------------|---------------------------|
| <u>0569C</u>                                | <u>Pilot 7 / Main 7</u>    | <u>n/a</u>               | <u>steam</u>                   | <u>6 x 6</u>                | <u>2007</u>               |
| <small>(type)</small>                       | <small>(mfr's S/N)</small> | <small>(NB#)</small>     | <small>(service)</small>       | <small>(size)</small>       | <small>(yr.built)</small> |
| d: Construction Code: <u>ASME / III / 1</u> | <u>1968</u>                | <u>S '68</u>             | <u>n/a</u>                     | <u>A</u>                    |                           |
| <small>(name/section/division)</small>      | <small>(edition)</small>   | <small>(addenda)</small> | <small>(Code Cases(s))</small> | <small>(Code Class)</small> |                           |
6. ASME Code Section XI applicable for inservice inspection: 2001 2003 n/a  
(edition) (addenda) (Code Case(s))
7. ASME Code Section XI used for repairs, replacements: 2001 2003 n/a  
(edition) (addenda) (Code Case(s))
8. Construction Code used for repairs, replacements: 1968 S '68 n/a  
(edition) (addenda) (Code Case(s))
9. Design responsibilities: n/a
10. Opening pressure: 2485 psig  
Set-pressure adjustment made at: NWS Technologies, LLC using steam
11. Description of work (include name and identifying number of replacement parts): Received one loosely assembled valve from another facility and one new main body from Site. Disassembled, inspected, bellows S/N TR 683 replaced, pilot seat S/N TR4 replaced, cleaned, lapped, machined main disc seat, and reassembled. Certified set pressure and seat tightness using steam. Post certification N2 tightness and bellows integrity tests sat.
12. Remarks: NWS Traveler # 13-235 & 13-352. No ASME Section XI parts replaced.

**CERTIFICATE OF COMPLIANCE**

I, Jason C. Gibson certify that to the best of my knowledge and belief the statements made in this report are correct and the repair, modification or replacement of the pressure relief devices described above conforms to Section XI of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.  
National Board Certificate of Authorization No. 632 to use the "VR" stamp expires April 3, 2018.  
National Board Certificate of Authorization No. 81 to use the "NR" stamp expires April 9, 2018.

4/19/15  
Date

NWS Technologies, LLC  
Repair Organization

[Signature]  
Authorized representative

Manager, QA  
Title

**CERTIFICATE OF INSPECTION**

I, Charles F. Toegel holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of North Carolina and employed by HSB Global Standards of Hartford, CT have inspected the repair, modification or replacement described in this report on APRIL 2015 and state that to the best of my knowledge and belief, this repair, modification or replacement has been completed in accordance with Section XI of the of the ASME Code and the National Board Inspection Code "VR" and "NR" rules.  
By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning this repair, modification or replacement described in this report. Furthermore, neither the undersigned nor my employer shall be liable in any manner for any personal injury, property damage or loss of any kind arising from or connected with this inspection.

4/19/15  
Date

Charles F. Toegel  
Inspector's Signature

NB # 8462, A, N, I NC# 1073  
Commissions (NB (incl endorsements), jurisdiction, & no.)

**FORM NV-1 CERTIFICATE HOLDERS' DATA REPORT FOR PRESSURE OR VACUUM RELIEF VALVES\***  
**As Required by the Provisions of the ASME Code, Section III, Division 1**

**Pg. 1 of 3**

1. Manufactured and certified by Target Rock; 1966E Broadhollow Rd.; E. Farmingdale, NY 11735  
 (name and address of NV Certificate Holder)
2. Manufactured for First Energy; Route 168; Shippingport, PA  
 (name and address of Purchaser)
3. Location of installation Beaver Valley Power Station; Route 168; Shippingport, PA  
 (name and address)
4. Valve 0569C-001-1 Orifice size 2.443 Nom. Inlet size 6 Outlet size 6  
 (Model no., series no.) (in.) (in.) (in.)
5. ASME Code, Section III, Division 1: 1968 Summer 1968 A None  
 (edition) (addenda date) (class) (Code Case no.)
6. Type Pilot Operated 2485 120 650°F 3325 at 100°F max.  
 (spring, pilot or power operated) (set pressure, psig) (blowdown, psi) (rated temp) (hydro test, psig, inlet)
7. Identification 7 N/A 0569C-001 Rev. D N/A 2007  
 (Cert. Holder's serial no.) (CRN) (drawing no.) (Nat'l. Bd. no.) (year built)
8. Control ring settings N/A
9. Pressure retaining items:
 

Serial No. Or Identification	Mat'l. Spec. Including Type or Grade	Tensile Strength
Body	<u>343</u>	<u>SA351 CF8M</u>
Bonnet or Yoke	<u>14</u>	<u>SA105</u>
Support Rods		
Nozzle		
Disk	<u>8</u>	<u>SA 564 630</u>
Spring Washers		
Adjusting Screws		
Spindle		
Spring		
Bolting	<u>See page 2 of 3</u>	
Other Items	<u>See page 2 of 3</u>	
10. Relieving capacity 345,000 lbs/hr overpressure as certified by the National Board (69C) 10/07/2005  
 (date)
11. Remarks: \_\_\_\_\_

**CERTIFICATION OF DESIGN**

Design Specification certified by F.W. Gardner P.E. State PA Reg. No. 036614-E

Design Report certified by Not applicable P.E. State N/A Reg. No. N/A

**CERTIFICATE OF COMPLIANCE**

We certify that the statements made in this report are correct and that this pump or valve conforms to the rules for construction of the ASME Code, Section III, Division 1.

N Certificate of Authorization No. N-1949 Expires 12/12/2007

Date 9/14/07 Name Target Rock Signed J DeBonis  
 (Certificate Holder) (authorized representative)

\* Supplemental information in form of lists, sketches, or drawings may be used provided (1) size is 8½ x 11, (2) information in items 1 through 4 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form

## FORM NV-1 (Pg. 2 of 3)

Certificate Holder's Serial No. 0569C-001-1 s/n 7

1. Manufactured and certified by Target Rock; 1966E Broadhollow Rd.; E. Farmingdale, NY 11735  
(name and address of NV Certificate Holder)
2. Manufactured for First Energy; Route 168; Shippingport, PA  
(name and address of Purchaser)
3. Location of installation Beaver Valley Power Station; Rout 168; Shippingport, PA  
(name and address)
4. Valve 0569C-001-1 Orifice size 2.443 Nom. Inlet size 6 Outlet size 6  
(Model no., series no.) (in.) (in.) (in.)

Pressure Retaining Item		Serial No. or Identification	Material Spec. Including Type or Grade	Tensile Strength
Main Seat	200323-1	29	SA479 304L	70 ksi
Pilot Body	303839-2	8	SA479 304	75 ksi
Bonnet Cap	200324-1	14	SA105	70 ksi
End Cap	303835-1	2	SA479 316	75 ksi
Hex Nut	100-0076	n/a	SA194 2H	n/a
Hex Bolt	100501-1	n/a	SA193 B7	125 ksi
Stud	206189-2	n/a	SA193 B7	125 ksi
Stud	206189-1	n/a	SA193 B7	125 ksi
Stud	100482-2	n/a	SA193 B7	125 ksi
Stud	100482-1	n/a	SA193 B7	125 ksi

Certificate Holder's Serial No. 0569C-001-1 s/n 7

1. Manufactured and certified by Target Rock; 1966E Broadhollow Rd.; E. Farmingdale, NY 11735  
(name and address of NV Certificate Holder)
2. Manufactured for First Energy; Route 168; Shippingport, Pa  
(name and address of Purchaser)
3. Location of installation Beaver Valley Power Station; Route 168; Shippingport, PA  
(name and address)
4. Valve 0569C-001-1 Orifice size 2.443 Nom. Inlet size 6 Outlet size 6  
(Model no., series no.) (in.) (in.) (in.)

**CERTIFICATE OF INSPECTION**

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Province of New York and employed by OneBeacon America Insurance Company of Boston, MA have inspected the pump, or valve, described in this Data Report on 9/4/2007, and state that to the best of my knowledge and belief, the Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III, Division 1.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the component described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 9/4/07 Signed [Signature] Commissions NY 5102  
(Authorized Inspector) (Nat'l. Bd.(incl. endorsements) and state or prov. and no.)

FORM NV-1 CERTIFICATE HOLDERS' DATA REPORT FOR PRESSURE OR VACUUM RELIEF VALVES\*  
As Required by the Provisions of the ASME Code, Section III, Division 1

Pg. 1 of 3

1. Manufactured and certified by Target Rock; 1966E Broadhollow Rd.; E. Farmingdale, NY 11735  
(name and address of NV Certificate Holder)
2. Manufactured for First Energy; Route 168; Shippingport, PA  
(name and address of Purchaser)
3. Location of installation Beaver Valley Power Station; Route 168; Shippingport, PA  
(name and address)
4. Valve 0569C-001-1 Orifice size 2.443 Nom. Inlet size 6 Outlet size 6  
(Model no., series no.) (in.) (in.) (in.)
5. ASME Code, Section III, Division 1: 1968 Summer 1968 A None  
(edition) (addenda date) (class) (Code Case no.)
6. Type Pilot Operated 2485 120 650°F 3325 at 100°F max.  
(spring, pilot or power operated) (set pressure, psig) (blowdown, psi) (rated temp) (hydro test, psig, inlet)
7. Identification 4 N/A 0569C-001 Rev. D N/A 2007  
(Cert. Holder's serial no.) (CRN) (drawing no.) (Natl'l. Bd. no.) (year built)
8. Control ring settings N/A
9. Pressure retaining items:

	Serial No. Or Identification	Mat'l. Spec. Including Type or Grade	Tensile Strength
Body	339	SA351 CF8M	75 ksi
Bonnet or Yoke	11	SA105	70 ksi
Support Rods			
Nozzle			
Disk	5	SA 564 630	140 ksi
Spring Washers			
Adjusting Screws			
Spindle			
Spring			
Bolting	See page 2 of 3		
Other Items	See page 2 of 3		
10. Relieving capacity 345,000 lbs/hr overpressure as certified by the National Board (69C) 10/07/2005  
(date)
11. Remarks:

CERTIFICATION OF DESIGN

Design Specification certified by F.W. Gardner P.E. State PA Reg. No. 036614-E

Design Report certified by Not applicable P.E. State N/A Reg. No. N/A

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this pump or valve conforms to the rules for construction of the ASME Code, Section III, Division 1.

N Certificate of Authorization No. N-1949 Expires 12/12/2007

Date 9/4/07 Name Target Rock Signed J DeBonis  
(Certificate Holder) (authorized representative)

\* Supplemental information in form of lists, sketches, or drawings may be used provided (1) size is 8½ x 11, (2) information in items 1 through 4 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form

(12/88) This form (E00037) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300  
REPRINT 6/93



## FORM NV-1 ( Pg. 2 of 3 )

Certificate Holder's Serial No. 0569C-001-1 s/n 4

1. Manufactured and certified by Target Rock; 1966E Broadhollow Rd.; E. Farmingdale, NY 11735  
(name and address of NV Certificate Holder)
2. Manufactured for First Energy; Route 168; Shippingport, PA  
(name and address of Purchaser)
3. Location of installation Beaver Valley Power Station; Rout 168; Shippingport, PA  
(name and address)
4. Valve 0569C-001-1 Orifice size 2.443 Nom. Inlet size 6 Outlet size 6  
(Model no., series no.) (in.) (in.) (in.)

Pressure Retaining Item		Serial No. or Identification	Material Spec. Including Type or Grade	Tensile Strength
Main Seat	200323-1	26	SA479 304L	70 ksi
Pilot Body	303839-2	7	SA479 304	75 ksi
Bonnet Cap	200324-1	11	SA105	70 ksi
End Cap	303835-1	1	SA479 316	75 ksi
Hex Nut	100-0076	n/a	SA194 2H	n/a
Hex Bolt	100501-1	n/a	SA193 B7	125 ksi
Stud	206189-2	n/a	SA193 B7	125 ksi
Stud	206189-1	n/a	SA193 B7	125 ksi
Stud	100482-2	n/a	SA193 B7	125 ksi
Stud	100482-1	n/a	SA193 B7	125 ksi

Certificate Holder's Serial No. 0569C-001-1 s/n 4

1. Manufactured and certified by Target Rock; 1966E Broadhollow Rd.; E. Farmingdale, NY 11735  
(name and address of NV Certificate Holder)
2. Manufactured for First Energy; Route 168; Shippingport, Pa  
(name and address of Purchaser)
3. Location of installation Beaver Valley Power Station; Route 168; Shippingport, PA  
(name and address)
4. Valve 0569C-001-1 Orifice size 2.443 Nom. Inlet size 6 Outlet size 6  
(Model no., series no.) (in.) (in.) (in.)

**CERTIFICATE OF INSPECTION**

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Province of New York and employed by OneBeacon America Insurance Company of Boston, MA have inspected the pump, or valve, described in this Data Report on 9/4/2007, and state that to the best of my knowledge and belief, the Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III, Division 1.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the component described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 9/4/07 Signed [Signature] Commissions N.Y. 5102  
(Authorized Inspector) (Nat'l. Bd.(incl. endorsements) and state or prov. and no.)

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 38301. Owner FirstEnergy Nuclear Operating Company  
(NAME)76 South Main Street – Akron, OH 44308  
(ADDRESS)Date 05/26/2015Sheet 1 of 1Unit No. 12. Plant Beaver Valley Power Station (BVPS)  
(NAME)P.O. Box 4, Shippingport, PA 15077  
(ADDRESS)Order Nos.: 200640328

Repair/Replacement Organization P.O. No., Job No., etc.

3. Work Performed By BVPS Maintenance  
(NAME)Type Code Symbol Stamp N/AP.O. Box 4, Shippingport, PA 15077  
(ADDRESS)Authorization No. N/AExpiration Date N/A4. Identification of System Reactor Coolant (Class A)5. (a) Applicable Construction Code ASME Section III 1968 Edition, S'68 Addenda, Code Case N/A(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 2001E-2003A(c) Applicable Section XI Code Case(s): N/A

## 6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
Relief Valve	Target Rock	0569C-001-1-6	N/A	RV-1RC-551C	2007	Corrected	Yes
Stud, 1-3/8"	Trust Manuf.	N/A	N/A	Trace Code: PP18	2012	Installed	No
Stud, 1-3/8"	Nova Mach.	N/A	N/A	Trace Code: 6X20	2012	Installed	No
Stud, 1-3/8"	Nova Mach.	N/A	N/A	Trace #8R33	2013	Installed	No
Nut, 1-3/8"	Nova Mach.	N/A	N/A	Lot #50419628	2014	Installed	No

7. Description of Work Removed/reinstalled valve for testing, replaced flange studs & nuts..8. Tests Conducted: Hydrostatic\* ☐ Pneumatic\* ☐ Nominal Operating Pressure ☐ Exempt ☒  
Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

\*Record test pressure and temperature

**FORM NIS-2 OWNER'S REPORT FOR REPAIRS/REPLACEMENT ACTIVITY**

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-02 Rev. 02

Report Number 38309. Remarks Code Data Report attached to previous NIS-2 Data Report No. 3382.

Applicable Manufacturer's Data Reports to be attached

**CERTIFICATE OF COMPLIANCE**

I certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Type Code Symbol Stamp N/ACertificate of Authorization No. N/AExpiration Date N/ASigned Thomas White  
Owner or Owner's Designee, Title05/26/2015 Date May 26, 20 15**CERTIFICATE OF INSERVICE INSPECTION**

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by HSB Global Standards of Hartford, CT have inspected the components described in this Owner's Report during the period 11-4-13 to 5-24-15, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Dean D. Smith  
Inspector's SignatureCommission NB9428 AIB  
National Board Number and EndorsementDate 5-28-, 20 15