

Mark B. Bezilla
Vice President440-280-5382
Fax: 440-280-8029September 1, 2011
L-11-260

10 CFR 50.55a(g)

ATTN: Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

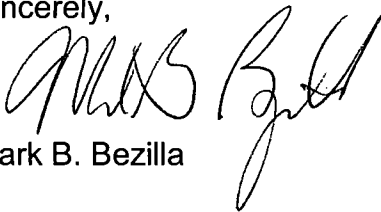
SUBJECT:

Perry Nuclear Power Plant
Docket No. 50-440, License No. NPF-58
Perry Nuclear Power Plant Thirteenth Inservice Inspection Summary Report

In accordance with American Society of Mechanical Engineers Boiler and Pressure Vessel Code, Section XI, "Inservice Inspection," 2001 Edition through 2003 Addenda, Article IWA-6000, enclosed is the thirteenth Form NIS-1 *Owners Report for Inservice Inspections*, including its attached Inservice Inspection Summary Report for the Perry Nuclear Power Plant. This submittal documents the inservice examination activities conducted after the return to commercial operation following the twelfth refueling outage, through completion of the thirteenth refueling outage (May 14, 2009 to June 7, 2011).

There are no regulatory commitments contained in this submittal. 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,



Mark B. Bezilla

Enclosure: Form NIS-1 *Owners Report For Inservice Inspections*, including attached Inservice Inspection Summary Report for the Perry Nuclear Power Plant

cc: NRC Region III Administrator
NRC Resident Inspector
NRC Project Manager
Authorized Nuclear Inservice Inspector
Ohio Department of Commerce, Boiler Inspection Section

A047
NRA

**Form NIS-1 *Owners Report For Inservice Inspections*,
including attached Inservice Inspection Summary Report
for the Perry Nuclear Power Plant**

Consists of Form NIS-1 (two double-sided pages),
and its attached Summary Report P0059-0013 (191 double-sided pages)

FORM NIS-1 OWNERS REPORT FOR INSERVICE INSPECTIONS

As required by the provisions of the ASME Code Rules

1. Owner FirstEnergy Nuclear Generation Corp., 76 South Main Street, Akron, OH 44308
(Name and Address of Owner)
2. Plant Perry Nuclear Power Plant, 10 Center Road, Perry, OH 44081
(Name and Address of Plant)
3. Plant Unit 1 4. Owner Certificate of Authorization (if required) N/A
5. Commercial Service Date 11/18/87 6. National Board Number for Unit N/A
7. Components Inspected (only the systems with Class 1 and 2 components are listed in following table)

Component or Appurtenance	Manufacturer or Installer	Manufacturer or Installer Serial No.	PNPP MPL No.	National Board No.
Rx Vessel	GE/CBIN	T-49	1B13	15
Rx Vessel	GE/A&ES	1B13	1B13	64077
Nuclear Boiler System	GE/A&ES	1B21	1B21	64084
Nuclear Boiler System	Pullman Power Products	1B21	1B21	109
Reactor Recirculation System	GE/A&ES	1B33	1B33	64076
Reactor Recirculation System	Pullman Power Products	1B33	1B33	119
CRD Hydraulic Control System	Pullman Power Products	1C11	1C11	92
Standby Liquid Control System	Pullman Power Products	1C41	1C41	108
Containment Atmosphere Monitoring	Johnson Controls	1D23-0064-F	1D23	008
Residual Heat Removal System	Engineers & Fabricators Company	1E12	1E12	1621
Residual Heat Removal System	Pullman Power Products	1E12	1E12	83
Containment Spray System	Pullman Power Products	1E15	1E15	105
Low Pressure Core Spray System	Pullman Power Products	1E21	1E21	85
High Pressure Core Spray System	Pullman Power Products	1E22	1E22	86
Leak Detection System	Johnson Controls	1E51-0068-F	1E31	15
MSIV Leakage Control System	Pullman Power Products	1E32	1E32	104
Reactor Core Isolation Cooling System	Pullman Power Products	1E51	1E51	84

Note: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8½ 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.

FORM NIS-1 (Back)

8. Examination Dates 5/14/09 to 6/7/11
9. Inspection Period Identification: First Period
10. Inspection Interval Identification: Third
11. Applicable Edition of Section XI 2001 Addenda 2002 & 2003
12. Date/Revision of Inspection Plan: Rev 14, PNPP Inservice Examination Program Plan, dated 11/8/10
13. Abstract of Examinations and tests. Include a list of examinations and tests and a statement concerning status of work required for the Inspection Plan.
See attached summary report P0059-0013*
14. Abstract of Results of Examinations and Tests.
See attached summary report P0059-0013*
15. Abstract of Corrective Measures.
See attached summary report P0059-0013*

* Report is 191 two-sided pages in length.

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 8/24/11 Signed FENOC By Dicula Nassar
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 Ohio and employed by Hartford Steam Boiler of Hartford, CT have inspected the components described in this Owner's Report during the period 5/14/09 to 6/7/11, 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 inspection plan and as required by 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 the 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.

Thomas A. Lape
Inspector's Signature

Commissions NB9330 "N", "I", & "A", Ohio Commission
National Board, State, Province, and Endorsements

Date 8/24/11

1. Owner FirstEnergy Nuclear Generation Corp., 76 South Main Street, Akron, OH 44308
(Name and Address of Owner)
2. Plant Perry Nuclear Power Plant, 10 Center Road, Perry, OH 44081
(Name and Address of Plant)
3. Plant Unit 1 4. Owner Certificate of Authorization (if required) N/A
5. Commercial Service Date 11/18/87 6. National Board Number for Unit N/A
7. Components Inspected (only the systems with Class 1 and 2 components are listed in following table)

Component or Appurtenance	Manufacturer or Installer	Manufacturer or Installer Serial No.	PNPP MPL No.	National Board No.
Integrated Leak Rate System	Pullman Power Products	1E61	1E61	120
Fuel Transfer System	General Electric	1F42	1F42	64079
Reactor Water Cleanup System	GE/A&ES	1G33	1G33	64075
Reactor Water Cleanup System	Pullman Power Products	1G33	1G33	100
Fuel Pool Cleaning System	Pullman Power Products	1G41	1G41	95
Suppression Pool Drain and Cleanup System	Pullman Power Products	1G42	1G42	96
Suppression Pool Makeup System	Johnson Controls	1G43-0065-F	1G43	019
Containment Vessel Purge System	Pullman Power Products	1M14	1M14	113
Drywell Vacuum Relief System	Pullman Power Products	1M16	1M16	115
Containment Vacuum Relief System	Pullman Power Products	1M17	1M17	87
Combustible Gas Control System	Pullman Power Products	1M51	1M51	106
Main Steam System	Pullman Power Products	1N11	1N11	111
Main, Reheat, and Miscellaneous Drains	Pullman Power Products	1N22	1N22	112
Feedwater System	Pullman Power Products	1N27	1N27	89
Condenser Transfer and Storage System	Pullman Power Products	1P11	1P11	102
Mixed Bed Demineralizer Water Sys.	Pullman Power Products	1P22	1P22	73
Nuclear Closed Cooling System	Pullman Power Products	1P43	1P43	101
Containment Chilled Water System	Pullman Power Products	1P50	1P50	103
Service Air System	Fisher Controls	6393471	1P51	6170
Instrument Air System	Pullman Power Products	1P52	1P52	74
Post Accident Sampling System	Johnson Controls	1P87	1P87	034
Containment System	Newport News	NNI-OS-02	1T23	N/A

INSERVICE INSPECTION SUMMARY REPORT

FOR

PERRY NUCLEAR POWER PLANT

(PNPP)

UNIT #1

LOCATED AT: 10 Center Road
Perry, Ohio 44081

OWNER: FirstEnergy Nuclear Generation Corp.
76 South Main Street
Akron, Ohio 44308

REACTOR SUPPLIER: General Electric Corporation
175 Curtner Avenue
San Jose, California 95125

NRC DOCKET NUMBER: 50-440

FACILITY FULL POWER LICENSE: NPF-58

CAPACITY, Mwe: 1305

COMMERCIAL OPERATION DATE: November 18, 1987

INSPECTION INTERVAL: May 18, 2009 - May 17, 2019

INSPECTION PERIOD: First (May 18, 2009 - Mar 18, 2013)

REFUELING OUTAGE: RFO13

DOCUMENT COMPLETED: August 24, 2011

ABSTRACT

Perry Nuclear Power Plant (PNPP) Unit #1 was shutdown for fifty (50) days to refuel the reactor vessel [Refueling Outage 13(RFO13)] and perform plant maintenance commencing April 18, 2011. During this time period, and during the preceding operating cycle, inservice examinations were performed to comply with plant Technical Specifications and the 2001 Edition through the 2003 Addenda of ASME Section XI.

ASME Section XI requires reporting of examination results for Class 1 and 2 pressure retaining components and their supports. This report summarizes the results of Class 1 and 2 examinations, and also Class 3 and Augmented examinations, which were performed in accordance with the schedules within PNPP's Inservice Examination Program Plan (ISEP), Revision 14.

Routine Section XI volumetric, surface and visual examinations were performed on Class 1, 2 and 3 piping systems and pressure retaining components.

Ultrasonic examinations were performed on one third of the Reactor Pressure Vessel (RPV) Head bolting along with the RPV Top Head Meridional welds at 75° & 255° (1B13-DJ & 1B13-DN) as well as the Dollar Plate to Side Plate weld (1B13-AH).

A High Pressure Core Spray mechanical snubber, 1E22-H0034, was found unacceptable during pre-outage examinations which required expanded scope, refer to Condition Report 11-92050. The expanded scope was acceptable as well as the As-Left VT-3 exam on 1E22-H0034.

In-vessel examinations consisted of the required Code visual examinations along with augmented visual examinations of numerous vessel interior components. The augmented visual exams were primarily conducted in accordance with the Boiling Water Reactor Vessel and Internals Project (BWRVIP) inspection guidelines. Jet pump wedge wear was found on jet pump 15 and 16 which required an emergent repair (refer to CR 11-93907). Follow-up exams of Jet Pumps 5 & 6 were performed which found the condition essentially unchanged; refer to CR 11-93979. Follow-up exams of Jet Pumps 13 & 14 were performed which found the condition essentially unchanged; refer to CR 11-94052. Follow-up examinations of the Steam Dryer indications found during RFO12 were performed and the indications were found to be essentially unchanged (refer to CR's 11-93688 & 11-93580). Follow-up examinations were also performed on the SHSAM bolts for the anti-rotation pin wear found in RFO9. A follow-up Condition Report, 11-94984 was written to document the condition going forward into Cycle 14 (also refer to CR's 03-02831 & 05-01794).

RFO13 was the first refueling outage of the first Inspection Period within Perry's third 10-Year Inservice Inspection Interval. The completion of the Cycle 13 and RFO13 examinations, combined with examinations scheduled for Cycle 14 and RFO14, will complete the required minimum percentage of exams for the first period.

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1.0 INTRODUCTION

The information provided herein is supplied to document compliance with ASME B&PV Code, Section XI requirements for reporting inservice inspection results for Class 1 and Class 2 pressure retaining components and their supports. Examination results of Class 3 and Augmented components and their associated supports are included in this report as supplemental information.

This report covers inservice inspection activities performed from Perry Nuclear Power Plant (PNPP)'s return to commercial operation after refueling outage RFO12 through the completion of RFO13.

Included in this report are the following:

- Personnel and Equipment Listings
- Examination Results Summaries
- NIS-2/NR-1 Reports
- Other Pertinent Information

2.0 REFUELING OUTAGE DURATION

The Perry Nuclear Power Plant, Unit #1, was shutdown for RFO13 from April 18, 2011 to June 7, 2011. The plant returned to commercial operation on June 7, 2011, at 00:36. This is noted as the time when the generator was synchronized to the grid.

3.0 CODE REQUIREMENTS

The inservice inspections were conducted in accordance with the requirements of ASME B&PV Code, Section XI, Division 1, 2001 Edition through the 2003 Addenda, with Code Cases N-460, N-498-4, N-513-2, N-526, N-528-1, N-532-4, N-552, N-566-2, N-578, N-586-1, N-599, N-613-1, N-624, N-648-1, N-652-1, N-658, N-663, N-664, N-683, N-685, N-686, N-695, and N-700.

4.0 INSPECTION

Inspection activities were conducted by Authorized Nuclear Inservice Inspection personnel from the Hartford Steam Boiler Company.

5.0 CERTIFICATIONS

Personnel, equipment, and transducer certifications were maintained as required by code and procedures. This section identifies the personnel and equipment utilized in the performance of inservice examinations during Cycle 13 operations and RFO13. Certification records for personnel and equipment are kept on site and are available for review.

5.1 Personnel

Nondestructive Examination (NDE) personnel were qualified and certified to perform specific non-destructive examinations in accordance with PNPP or approved vendor procedures as verified by PNPP personnel and the Authorized Nuclear Inservice Inspector.

The following is a listing of personnel responsible for the performance of the NDE activities related to ISI during Cycle 13 operations and RFO13:

ISI NDE PERSONNEL

Name	UT	PT	MT	VT
Andrie, Bryan	NA	NA	NA	II+
Baird, Kevin	NA	NA	NA	II+
Bowman, Bruce	NA	NA	NA	II+++
Boyett, Nathan	NA	NA	NA	II++
Blood, Eric	NA	NA	NA	II+
Brenner, David	NA	NA	NA	II++
Brenner, Steven	NA	NA	NA	II++
Colacicco, Victor	NA	NA	NA	II+
Culler, Donald	NA	NA	NA	II+
Davis, Joel	NA	NA	NA	II++
Donlon, Eric	IIIL	III	III	NA
Drews, Michael	NA	NA	NA	II++
DuLong, Billy	NA	NA	NA	II++
Erwin, Allan	NA	NA	NA	II++
Erwin, Michelle	NA	NA	NA	II++
Fish, Timothy	IIL	II	II	NA
Franklin, Sean	NA	NA	NA	II+
Fuller, Richard Jr.	III	III	III	III
Gorski, Stan	NA	NA	NA	II+
Hale, Mark	NA	NA	NA	III
Henry, Douglas	NA	NA	NA	III
Higdon, Chas	NA	NA	NA	II+++
Hilbish, Walter	NA	NA	NA	II+
Hoffius, Peter	NA	NA	NA	II++
Holloway, Gary	NA	NA	NA	III++
Holloway, Mark	NA	NA	NA	II++
Horn, John	NA	NA	NA	II++
Jablonski, James	NA	NA	NA	II++
Jopko, Steve	NA	IIL	NA	II
Kastre, Lehard	NA	NA	NA	III
Kazem, Nabil	NA	NA	NA	III++
Kirkendall, Dennis	NA	NA	NA	II++
Kleinjan, Michael	III**	II	II	II
Kostner, Tobias	IIL	II	II	II+
Lancaster, Philip	III**	III	III	III
Lawton, Raymond	I	II	II	II
Messenger, John	NA	NA	NA	III
Michaels, Clint	NA	NA	NA	II++
Milleage, Jim	NA	II	II	IIL
Mohr, George	NA	NA	NA	II+
Morris, William	NA	NA	NA	II
Musgrove, Floyd	NA	NA	NA	II+++
Olderman, David	NA	NA	NA	II+
Patterson, John	NA	NA	NA	II+
Phelps, Antoninette	NA	NA	NA	II+
Pikus, Raymond	NA	NA	NA	II+
Pristov, Judith	NA	NA	NA	II+
Ragan, Joshua	NA	NA	NA	II++
Reisewitz, Jack	II**	I	I	II
Richardt, Joseph	NA	NA	NA	II+
Robinson, Lee	NA	NA	NA	II+
Roth, Scott	NA	NA	NA	II+
Ruggieri, Walter	NA	NA	NA	II++
Schroeder, Daniel	NA	NA	NA	III++
Selz, Matthew	NA	NA	NA	II++

Sippel, Bruce	NA	NA	NA	II+++
Smith, Kenneth	III**	IIL	N/A	II
Smith, Wayne	NA	NA	NA	II++
Still, Colby	NA	NA	NA	II+++
Stine, Russell	NA	NA	NA	II++
Stridde, Lisa	NA	NA	NA	II++
Suchar, Florian	NA	NA	NA	III
Trout, Keith	NA	NA	NA	II++
Van Dillen, Mark	NA	NA	NA	II++
Vidrih, Tomaz	N/A	II	II	II
Wirtz, Charles	NA	NA	IIL	III
Wolf, Ronald	NA	NA	NA	II+
Zaharewicz, Kurt	NA	NA	NA	II+
Zollner, Edward	III**	III	III	III

+ - Limited to VT-2 only

++ - Limited to in-vessel (IVVI) VT-1 and VT-3 examinations only

+++ - Limited to VT-3 only

** - PDI qualified personnel for manual UT

5.2 Equipment and Materials

The equipment and materials used during the performance of the non-destructive examinations were certified and/or calibrated in accordance with site procedures or approved vendor procedures and verified by the Site NDE Level III and the Authorized Nuclear Inservice Inspector.

The following is a listing of NDE equipment and materials used for the performance of the NDE work activities related to ISI during Cycle 13 operations and RFO13:

Thermometers		
Manufacturer	Model No.	Serial Number
Fluke	62 Mini	106680
Raytek	MT2	105224
Meterman	IR 610	105125

Magnetic Particle Equipment		
Manufacturer	Model No.	Serial Number
Parker	B-300	101514
Wesdyne	10 lb Lift Block	105050

Magnetic Particle Materials		
Manufacturer	Type	Batch No.
Magnaflux	Gray Powder	03D064
Magnaflux	Red Powder	94B029

Liquid Penetrant Materials		
Manufacturer	Type	Batch No.
Magnaflux	Cleaner	10K01K
Magnaflux	Penetrant	09L09K
Magnaflux	Developer	06C05K
Magnaflux	Developer	07A03K
Magnaflux	Developer	06L13K

Ultrasonic Couplant		
Manufacturer	Type	Batch No.
Sonotech	Ultragel II	98325

Ultrasonic Flaw Detectors		
Manufacturer	Model	Serial No.
Krautkramer	USN 60 SW	104388
Krautkramer	USN 60 SW	105206
Krautkramer	USN 52R	102282
Krautkramer	USN 52R	102248

Ultrasonic Transducers						
Manufacturer	Serial Number	Type	Size	Frequency	Mode	Angle:
KBA	00YMCN	Benchmark	.50" dia	5.0 MHz	Shear	N/A
KBA	57463-50071	MSEB	3.5 x10 mm	4.0 MHz	Longitudinal	0
KBA	00MTLL	Benchmark	.375" dia	2.25 MHz	Shear	N/A
KBA	SE0816	Benchmark	.50" dia	2.25 MHz	Shear	N/A
KBA	212161	A111S	.50" dia	10.0 MHz	Longitudinal	0
Panametrics	B03805	Gamma	1.0" dia	2.25 MHz	Longitudinal	0
KBA	00YLJK	Benchmark	.375" dia	5.0 MHz	Shear	N/A
KBA	00YMBY	Benchmark	.375" dia	5.0 MHz	Shear	N/A
KBA	10-1224	TRL 2-Aust	2(24x42) mm	2.0 MHz	Refracted Longitudinal	60
RTD	57462-9679	MSEB	3.5 x10 mm	4.0 MHz	Longitudinal	0
KBA	01CYT3	Benchmark	.50" dia	2.25 MHz	Shear	N/A
KBA	0142V1	Benchmark	.375" dia	5.0 MHz	Shear	N/A
KBA	01BXY0	Gamma	.50" dia	2.25 MHz	Longitudinal	0
KBA	002MB6	Benchmark	.50" dia	2.25 MHz	Shear	N/A
KBA	014FV0	Benchmark	.375" dia	2.25 MHz	Shear	N/A
KBA	01BY8P	Benchmark	.50" dia	1.0 MHz	Shear	N/A
KBA	00YFN5	Benchmark	.50" dia	1.0 MHz	Shear	N/A
KBA	01Y2LN	60L	2(.375"x.750")	2.0 MHz	Refracted Longitudinal	60

6.0 CALIBRATION STANDARDS

Ultrasonic calibration standards used for ISI related work activities during Cycle 13 operations and RFO13 are as listed below:

Ultrasonic Calibration Standard Identification Numbers	
PYNSB-0014	104872
PYNSB-0015	104873
PY-STUD-1-RPV-A	104887
PY-NUT-1-RPV-A	0L70Q589E
PY-127-1-RPV	0L70Q589F
PY-128-1-RPV	101370
PY-STUD-MS-2.25-CS-1	104872
PY-12-PEN-CS-2	104873
PYNSB-0005	

7.0 PROCEDURES

The examination procedures and inspection plans used during Cycle 13 operations and RFO13 were as follows:

Perry NDE Procedures:

PROCEDURE #	Rev.	TITLE
NQI-0941	17	Liquid Penetrant Examination
NQI-0942	16	Magnetic Particle Examination
NQI-0944	12	Ultrasonic Examination (General Procedure)
NQI-0952	10	Radiographic Operations and Examinations
NQI-0953	0	Ultrasonic Instrument Linearity
NQI-0954	0	Appendix VIII Procedure For the Examination of Ferritic Pipe Welds
NQI-0955	0	Appendix VIII Procedure For the Straight Beam Examination of Bolting
NQI-0956	0	Procedure for Ultrasonic Examination of Corrosion Resistant Clad (CRC) Piping Welds
NQI-0957	0	Appendix VIII Procedure For the Examination of Austenitic Pipe Welds
NQI-0958	1	Procedure For Ultrasonic Examination of Flued Head Attachment Welds
NQI-0959	0	Procedure For Ultrasonic Examination of The Reactor Vessel Flange Area
NQI-0962	0	Appendix VIII Qualified Equipment Tables for FENOC Appendix VIII Procedures
NQI-0964	0	Appendix VIII Procedure For Ultrasonic Examination of Reactor Pressure Vessel Welds
NQI-0966	0	Fluorescent Penetrant Examination
NQI-1042	14	Visual Examination

Vendor NDE Procedures:

Procedure #	DOCUMENT TITLE	DDR/NOTE S
Westinghouse/WesDyne Written Practice for Qualification of NDE Personnel:		
WDP-2.10 / R1	Qualification and Certification of Personnel in Nondestructive Examination	
WEC 2.10	Qualification, Training and Certification of Nondestructive Testing Personnel	
WEC 2.10.1 / R1	WEC 2.10 Addendum A: Certification of NDE Personnel in Accordance with ASME Section XI, 1992 Edition, 1992 Addendum	
Sonic Systems Written Practice for Qualification of NDE Personnel:		
SSI-A-013 / R3	Qualification and Certification of Ultrasonic Examination Personnel for ASME XI PSI/ISI Inspections	
SSI-A-013 / R3 ICN 01 02	Qualification and Certification of Ultrasonic Examination Personnel for ASME XI PSI/ISI Inspections - Interim Change Notice 01 and 02	
SSI-A-005 / R 23	Qualification and Certification of Nondestructive Examination Personnel	
SSI-A-005 / R ICN 01	Qualification and Certification of Nondestructive Examination Personnel - Interim Change Notice 01	
IHI Southwest Research Written Practice for Qualification of NDE Personnel:		
2 0-NDES-001 / R6	Nondestructive Examination Personnel Qualification and Certification	
Westinghouse Procedure for IVVI & BWRVIP Required Exams		
PRO-ISI-IVVI- 0001-GPRY1/ R.A	Procedure for Invessel Visual Inspection (IVVI) of the Perry BWR 6 RPV Internals	

8.0 RELIEF REQUESTS

Due to geometric, metallurgical, and physical limitations, some of the items scheduled for examination during RFO13 received partial examinations. Within the limitations, examinations were completed to the greatest extent practical.

Additionally, where it has been determined that conformance with any other examination requirements of ASME Section XI is impractical, PNPP has requested relief from the examination requirements.

The following listing summarizes all the relief requests that have been submitted for PNPP's third 10-year Inspection Interval:

RR NO/REV	SYSTEM	TYPE RELIEF	CATEG	ITEM NO
IR-009 R-2	Reactor Pressure Vessel	Partial Exams	B-O	B14.10
IR-013 R-2	High Pressure Core Spray Low Pressure Core Spray Residual Heat Removal	No Exams	C-G	C6.10
IR-027 R-2	Standby & HPCS Diesel Fuel Oil	Alternative Exams	D-A	D1.10
IR-043 R-2	Reactor Water Cleanup Residual Heat Removal Reactor Core Isolation Cooling High Pressure Core Spray Low Pressure Core Spray	No Exams	B-M-1	B12.30 B12.40
IR-054 R-1	Class 1 Piping	Alternate Examination Population	B-D	B3.90 B3.100
IR-056 R-1	Reactor Vessel	Alternate Examination	B-N-1 B-N-2	B13.10 B13.40
PT-001 R-2	Various non-isolable (from the RPV Boundary) Class 2 Components	Alternate System and Inservice Tests	C-H	C7.10

9.0 SCHEDULE CHANGES

Scheduling changes were made during RFO13 to facilitate the examinations, or to account for unforeseen physical or schedule interferences, or radiological conditions. These changes differ from the schedule in Revision 14 of PNPP's Inservice Examination Program (ISEP).

The changes, which will be incorporated in the next revision to the ISEP, are as follows:

MARK NO.	DESCRIPTION AND REASON FOR CHANGE
1E22-H0033 1E22-H0036 1E22-H0037 1E22-H0038	1E22-H0034 is a Class 2, Category F-A, Item F2.SN Mechanical Snubber that was scheduled for examination in RFO13 under Order 200380094. The snubber was found to have a loose middle bolt and was therefore deemed unsat for VT-3 examination. Therefore, ASME Section Code, IWF-2430 requires that the examinations be extended to the adjacent component supports (1E22-H0033 which is downstream and 1E22-H0036 which is upstream) within the current outage and as well as additional supports within the system, equal in number and the same type and function that are equal in number to those scheduled within the current period. There are two (2) E22 mechanical snubbers scheduled within the first (1st) period so the remaining additional exams are 1E22-H0037 and 1E22-H0038.
1B21-F041A-B	1B21-F041A-B is a Class 1 bolted connection, Safety Relief Valve (SRV), which is required for VT-1 examination per approved code case N-652-1. The code case requires one exam among similar, once per ten year interval and only when disassembled or bolting replaced. The SRV's have been changed (USAR Change) to only require a once per six (6) year replacement frequency so therefore 1B21-F041A is not being disassembled and replaced in 1R13. Next scheduled replacement/disassembly which would allow for the once per ten year interval, one among similar bolted connection VT-1 examinations is now 1R15. This exam is being deferred to 1R15.
1B13-N8-B	The RCIC Head Spray Tee flange (1B13-N8-B) is a Class 1 bolted connection, which requires a VT-1 examination per approved code case N-652-1. The code case requires one exam among similar, once per ten year interval and only when disassembled or bolting replaced. This flange is disassembled every outage to remove the RPV head and during the removal this outage a bolt was stuck and had to be cut therefore the bolted connection will be deferred to 1R14.
1B13-SD-LG-180	1B13-SD-LG-180 is the Lower Guide Rod, Guide Bracket at 180 degrees on the Steam Dryer. The bracket was found bent during a 1R12 Exam and subsequent data review identified the need to re-examine as a follow-up in 1R13.

MARK NO.	DESCRIPTION AND REASON FOR CHANGE
1B33-0057 1B33-0057-U 1B33-0057-D	These three (3) UT exams are Category R-A welds, Item R3.ND and R3.LS (for the -U & -D which are the intersecting up and downstream long seam portions) which are being scheduled in place of 1B33-0058, 1B33-0058-U and 1B33-0058-D (which are the same Category and Item numbers) due to interference with the insulation stuck inside the BioShield wall. The -0057 welds were scheduled for the 2nd period and are being switched with the -0058 welds into the 1st period.
1B13-JPWD-15/16	Added scope for JP15 wedge wear issue (CR 11-93839). As-found exam of JPWD-15/16 was in the outage scope but as left exam following repair will be needed. As left exams to include the BWRVIP WD-1 (wedge) and the WD-2a (upper wedge rod nut and tack weld) and WD-2b (lower wedge rod nut and tack weld) inspection points for both pumps.
1B13-JPTW-P15 & 1B13-JPTW-P16	Set screw exams include both as-found and as-left exams of the BWRVIP AS-1 (gap) and AS-2 (tack weld) inspection points.
1B13-CS-H8 1B13-CS-H9 1B13-CS-H10 1B13-CS-H11 1B13-CS-H12	Best effort visual exams of the listed Core Support structure welds from the access provided by removal of the mixers on Jet Pumps 15 and 16 for replacement. Note that H10, H11 and H12 are not shown in the ISEP since they are not routine exams.

10.0 EXAMINATION SUMMARY RESULTS

RFO13 was the first refueling outage of Perry's third 10-Year Inservice Inspection Interval and the first of two outages in the first inspection period. Not including pressure testing VT-2 exams that are completed every period, Cycle 13 and RFO13 account for approximately half of the required ASME Section XI Code required minimum exams to be completed by the end of the first period, or RFO14.

Cycle 13 and RFO13 examinations resulted in a complete and acceptable program in that all indications were evaluated for acceptance in accordance with ASME Section XI, IWA-3000, and all corrective measures or evaluations were completed.

Appendix "A" is a computer-generated summary of the Cycle 13 and RFO13 examination results. Component identifications (Mark Nos.) and order of appearance may differ slightly from that listed in Revision 14 of PNPP's Inservice Examination Program. The differences are to accommodate the database software program. Original examination data reports are on file and available for review at the site.

11.0 NIS-2/NR-1

Repairs, replacements and modifications are carried out in accordance with PNPP's Nuclear Repair & Repair (non-nuclear) Manual, which meets regulatory requirements and quality standards. Compliance of the work is delineated on NIS-2/NR-1 Forms.

The following is a listing of NIS-2/NR-1 forms applicable to this report (Class 1 and 2 only) which have been completed since PNPP's last summary report:

NR-1/NIS-2 FORMS

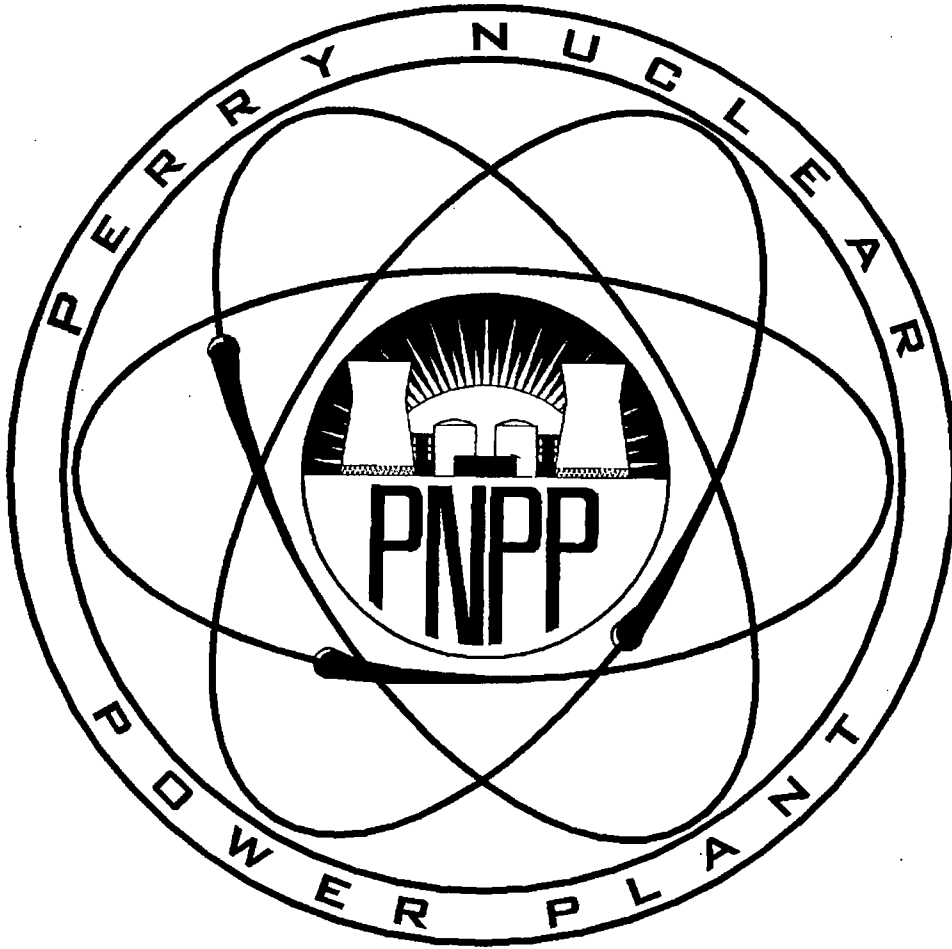
SYS/NO.	MPL NO.	DESCRIPTION/COMMENTS	CLASS	PG
Reactor Pressure Vessel (1B13) Cycle 13 & RFO13 Reports:				
1B13-055	1B13-D0008	Replaced 19 CRD's as well as 8 cap screws on 20 CRD's at locations 10-19, 18-43, 22-39, 06-27, 34-55, 30-47, 38-39, 46-55, 38-47, 14-47, 46-23, 54-47, 30-19, 34-27, 02-31, 34-15, 14-39, 50-35, 14-15, & 50-43.	1	50
1B13-056	1B13D0211	Replaced LPRM Dry tubes at locations 08-33, 24-41, 32-09, 40-09, 40-17, and 48-17.	1	90
Main Steam (1B21) System Cycle 13 & RFO13 Reports:				
1B21-426	1B21-G7072	Replaced hydraulic snubber with like snubber	1	93
1B21-427	1B21-G7070	Replaced hydraulic snubber with like snubber	1	95
1B21-428	1B21-G7080	Replaced hydraulic snubber with like snubber	1	97
1B21-429	1B21-G7090	Replaced hydraulic snubber with like snubber	1	99
1B21-430	1B21-G7087	Replaced hydraulic snubber with like snubber	1	101
1B21-431	1B21-F0032A	Removed and re-welded test fitting	1	103
1B21-432	1B21-G7076	Replaced hydraulic snubber with like snubber	1	104
1B21-433	1B21-H0446	Replaced snubber with like snubber	1	106
1B21-434	1B21-F0032B	Removed and re-welded test fitting	1	107
1B21-435	1B21-F0051B	Replaced metal braided hose and welded on SRV.	1	109
1B21-436	1B21-F0047B	Replaced SRV with like SRV	1	111
1B21-437	1B21-F0041K	Replaced SRV with like SRV	1	113
1B21-438	1B21-F0051B	Replaced SRV with like SRV	1	115
1B21-439	1B21-F0047F	Replaced SRV with like SRV	1	117
1B21-440	1B21-F0041F	Replaced SRV with like SRV	1	119
1B21-441	1B21-F0041B	Replaced SRV with like SRV	1	121
Standby Liquid Control (0&1C41) System Cycle 13 & RFO13 Reports:				
1C41-040	1C41-F0029A	Replaced relief valve with like relief valve	2	123
1C41-041	1C41-F0004B	Replaced trigger/primer on SQUIB valve along with inlet fitting	1	125

NR-1/NIS-2 FORMS CONTINUED

SYS/NO.	MPL NO.	DESCRIPTION/COMMENTS	CLASS	PG
Residual Heat Removal (1E12) System Cycle 13 & RFO13 Reports:				
1E12-312	1E12-F0011A	Replaced disc/stem assembly	2	129
1E12-313	1E12	Welding/modification/component support replacement for the ADHR System tie ins	2	131
1E12-314	1E12-F0055B	Replaced relief valve with like relief valve along with 2" pipe	2	138
1E12-315	1E12-F0063C	Replaced check valve with like check valve	2	140
1E12-316	1E12-H0588	Adjusted support member by grinding and re-welding	2	142
1E12-317	1E12-F0063B	Replaced valve with like valve	2	143
1E12-318	1E12-F0041C	Reworked valve seat and replaced disk	2	145
1E12-319	1E12-F0086	Replaced check valve with like check valve	2	147
1E12-320	1E12-F0041B	Rebuilt valve using new disc	1	149
1E12-321	1E12-F0063A	Replaced valve with like valve	2	151
1E12-322	1E12-C0003	Replaced rotating element in the RHR B & C water leg pump	2	153
Low Pressure Core Spray (1E21) System Cycle 13 & RFO13 Reports:				
1E21-044	1E21 & 1E12 tie in	Re-locations and modification of piping associated with the ADHR system	2	155
1E21-045	1E21-F0006	Replaced valve disc	2	164
High Pressure Core Spray (1E22) System Cycle 13 & RFO13 Reports:				
1E22-077	1E22-F005	Replaced disc with like disc	1	166
1E22-078	1E22-F0035	Replaced relief valve with like relief valve	2	169
Reactor Core Isolation Cooling (1E51) System Cycle 13 & RFO13 Reports:				
1E51-152	1E51-C0003	Replaced the rotating element in the RCIC water leg pump	2	171
1E51-153	1E51-F0022	Replaced valve internals along with 4" welded pipe	2	173
1E51-154	1E51 piping	Replaced 2 rupture discs	2	175
1E51-155	1E51-F0066	Replaced valve disc and bolting	1	177
1E51-156	1E51 piping	Replaced the flange bolting	1	179
Fuel Pool Cooling Drain & Clean-Up (1G41) System Cycle 13 & RFO13 Reports:				
1G41-035	1E51 piping	Replaced check valve with like check vlv	1	180
Main, Reheat, Extraction, & Misc. Drains (1N22) System Cycle 13 & RFO13 Reports:				
1N22-069	1N22-H0146	Replaced snubber with a like snubber	2	182
1N22-070	1N22-H0006	Replaced mechanical snubber with a like snubber	1	184
1N22-071	1N22-H0087	Replaced mechanical snubber with a like snubber	2	185
1N22-072	1N22-H0100	Replaced snubber with a like snubber	2	186
1N22-073	1N22-H0147	Replaced snubber with a like snubber along with 2 rear bracket pins	2	187
Feedwater (1N27) System Cycle 13 & RFO13 Reports:				
1N27-052	1N27-F0559A	Removed and reinstalled 1-3/4" test connection from 20" check valve, also repaired a 1/8" gouge in the valve body	1	189
Service Air (1P51) System Cycle 13 & RFO13 Reports:				
1P51-007	1P51-F0530	Replaced the valve and 2 1/2" x 2" reducer along with 2" sch. 80 pipe	2	190

Copies of the NIS-2/NR-1 forms are contained in Appendix "B" and the corresponding starting page numbers are provided in the above table.

APPENDIX A
"CYCLE 13 & RFO13 EXAMINATION RESULTS SUMMARY"
INSERVICE INSPECTION SUMMARY REPORT
FOR
PERRY NUCLEAR POWER PLANT
(PNPP)
UNIT 1



First Energy Nuclear Operating Company

Perry Nuclear Power Plant

**ISI Summary Report No. P0059-0013
Third Interval, First Period, First Outage (RFO13)
Cycle 13 and RFO13 Inservice Examinations**

Prepared by:  Date: 8/4/11
ISI Engineer

Reviewed by:  Date: 8/15/11
Authorized Nuclear Inservice Inspector

ID of Component Examined Description of Component Size - Sched. - ISI Dwg. No.			ASME Category ASME Item No.	Exam Method	Exam Report No.	Status	Remarks
1B13-02/35-FW CRD HOUSING TO FLANGE WELD			B-O B14.10	PT	0941-11A-001	ACC	None
6" N/A 305-006-110							
1B13-02/35-HW CRD HOUSING TO HOUSING WELD			B-O B14.10	PT	0941-11A-003	ACC	None
6" N/A 305-006-110							
1B13-AH RPV TOP HEAD DOLLAR PLATE TO SIDE PLATES.			B-A B1.21	UT	UT-11-E020	NRI	Zone 1 & Zone 2 on Side Plate Side and Dollar Plate Side.
N/A N/A 305-006-103							
1B13-CG BOTTOM HEAD TO SKIRT			B-K B10.10	MT	0942-11A-009	ACC	None
N/A N/A 305-006-104							
1B13-DJ TOP HEAD MERIDIONAL WELD @ 75 AZ			B-A B1.22	UT	UT-11-E015	NRI	Zone 2 Exam
N/A N/A 305-006-103							
1B13-DN TOP HEAD MERIDIONAL WELD @ 255 AZ			B-A B1.22	UT	UT-11-E016	NRI	Zone 2 Exam
N/A N/A 305-006-103							
1B13-A1-N RPV CLOSURE HEAD NUT			B-G-1 B6.10	VT-1	1042-11-067	SAT	None
5" N/A 305-006-112							
1B13-A1-S RPV CLOSURE HEAD STUD			B-G-1 B6.20	UT	UT-11-E012	NRI	Zone 2 Exam
5" N/A 305-006-112							
1B13-A1-T RPV SHELL, THREADS IN FLANGE AREA			B-G-1 B6.40	UT	1Q800-11-010	SAT	None
5" N/A 305-006-112							
1B13-A1-W RPV CLOSURE HEAD WASHER			B-G-1 B6.50	VT-1	1042-11-066	SAT	None
5" N/A 305-006-112							
1B13-A2-N RPV CLOSURE HEAD NUT			B-G-1 B6.10	VT-1	1Q800-11-085	SAT	None
5" N/A 305-006-112							

ID of Component Examined Description of Component Size - Sched. - ISI Dwg. No.			ASME Category ASME Item No.	Exam Method	Exam Report No.	Status	Remarks
1B13-A2-S RPV CLOSURE HEAD STUD			B-G-1 B6.20	UT	1Q800-11-033	SAT	None
5"	N/A	305-006-112					
1B13-A2-T RPV SHELL, THREADS IN FLANGE AREA			B-G-1 B6.40	UT	UT-11-E013	NRI	None
5"	N/A	305-006-112					
1B13-A2-W RPV CLOSURE HEAD WASHER			B-G-1 B6.50	VT-1	1Q800-11-061	SAT	None
5"	N/A	305-006-112					
1B13-A3-N RPV CLOSURE HEAD NUT			B-G-1 B6.10	VT-1	1Q800-11-086	SAT	None
5"	N/A	305-006-112					
1B13-A3-S RPV CLOSURE HEAD STUD			B-G-1 B6.20	UT	1Q800-11-034	SAT	None
5"	N/A	305-006-112					
1B13-A3-T RPV SHELL, THREADS IN FLANGE AREA			B-G-1 B6.40	UT	1Q800-11-011	SAT	None
5"	N/A	305-006-112					
1B13-A3-W RPV CLOSURE HEAD WASHER			B-G-1 B6.50	VT-1	1Q800-11-062	SAT	None
5"	N/A	305-006-112					
1B13-A4-N RPV CLOSURE HEAD NUT			B-G-1 B6.10	VT-1	1Q800-11-087	SAT	None
5"	N/A	305-006-112					
1B13-A4-S RPV CLOSURE HEAD STUD			B-G-1 B6.20	UT	1Q800-11-035	SAT	None
5"	N/A	305-006-112					
1B13-A4-T RPV SHELL, THREADS IN FLANGE AREA			B-G-1 B6.40	UT	1Q800-11-012	SAT	None
5"	N/A	305-006-112					
1B13-A4-W RPV CLOSURE HEAD WASHERS			B-G-1 B6.50	VT-1	1Q800-11-063	SAT	None
5"	N/A	305-006-112					

ID of Component Examined			ASME Category	Exam Method	Exam Report No.	Status	Remarks
Description of Component	Size -	Sched. -	ASI Dwg. No.				
1B13-A5-N RPV CLOSURE HEAD NUT			B-G-1 B6.10	VT-1	1Q800-11-088	SAT	None
5"	N/A	305-006-112					
1B13-A5-S RPV CLOSURE HEAD STUD			B-G-1 B6.20	UT	1Q800-11-036	SAT	None
5"	N/A	305-006-112					
1B13-A5-T RPV SHELL, THREADS IN FLANGE AREA			B-G-1 B6.40	UT	1Q800-11-013	SAT	None
5"	N/A	305-006-112					
1B13-A5-W RPV CLOSURE HEAD WASHERS			B-G-1 B6.50	VT-1	1Q800-11-064	SAT	None
5"	N/A	305-006-112					
1B13-A6-N RPV CLOSURE HEAD NUT			B-G-1 B6.10	VT-1	1Q800-11-089	SAT	None
5"	N/A	305-006-112					
1B13-A6-S RPV CLOSURE HEAD STUD			B-G-1 B6.20	UT	1Q800-11-037	SAT	None
5"	N/A	305-006-112					
1B13-A6-T RPV SHELL, THREADS IN FLANGE AREA			B-G-1 B6.40	UT	1Q800-11-014	SAT	None
5"	N/A	305-006-112					
1B13-A6-W RPV CLOSURE HEAD WASHERS			B-G-1 B6.50	VT-1	1Q800-11-065	SAT	None
5"	N/A	305-006-112					
1B13-A7-N RPV CLOSURE HEAD NUT			B-G-1 B6.10	VT-1	1Q800-11-090	SAT	None
5"	N/A	305-006-112					
1B13-A7-S RPV CLOSURE HEAD STUD			B-G-1 B6.20	UT	1Q800-11-038	SAT	None
5"	N/A	305-006-112					
1B13-A7-T RPV SHELL, THREADS IN FLANGE AREA			B-G-1 B6.40	UT	1Q800-11-015	SAT	None
5"	N/A	305-006-112					

ID of Component Examined			ASME Category	Exam Method	Exam Report No.	Status	Remarks
Description of Component	Size -	Sched. -	ISI Dwg. No.				
1B13-A7-W RPV CLOSURE HEAD WASHERS			B-G-1 B6.50	VT-1	1Q800-11-066	SAT	None
5"	N/A	305-006-112					
1B13-A8-N RPV CLOSURE HEAD NUT			B-G-1 B6.10	VT-1	1Q800-11-091	SAT	None
5"	N/A	305-006-112					
1B13-A8-S RPV CLOSURE HEAD STUD			B-G-1 B6.20	UT	1Q800-11-039	SAT	None
5"	N/A	305-006-112					
1B13-A8-T RPV SHELL, THREADS IN FLANGE AREA			B-G-1 B6.40	UT	1Q800-11-016	SAT	None
5"	N/A	305-006-112					
1B13-A8-W RPV CLOSURE HEAD WASHER			B-G-1 B6.50	VT-1	1Q800-11-067	SAT	None
5"	N/A	305-006-112					
1B13-A9-N RPV CLOSURE HEAD NUT			B-G-1 B6.10	VT-1	1Q800-11-092	SAT	None
5"	N/A	305-006-112					
1B13-A9-S RPV CLOSURE HEAD STUD			B-G-1 B6.20	UT	1Q800-11-040	SAT	None
5"	N/A	305-006-112					
1B13-A9-T RPV SHELL, THREADS IN FLANGE AREA			B-G-1 B6.40	UT	1Q800-11-017	SAT	None
5"	N/A	305-006-112					
1B13-A9-W RPV CLOSURE HEAD WASHER			B-G-1 B6.50	VT-1	1Q800-11-068	SAT	None
5"	N/A	305-006-112					
1B13-B1-N RPV CLOSURE HEAD NUT			B-G-1 B6.10	VT-1	1Q800-11-093	SAT	None
5"	N/A	305-006-112					
1B13-B1-S RPV CLOSURE HEAD STUD			B-G-1 B6.20	UT	1Q800-11-041	SAT	None
5"	N/A	305-006-112					

ID of Component Examined Description of Component Size - Sched. - ISI Dwg. No.			ASME Category ASME Item No.	Exam Method	Exam Report No.	Status	Remarks
1B13-B1-T RPV SHELL, THREADS IN FLANGE AREA 5" N/A 305-006-112			B-G-1 B6.40	UT	1Q800-11-018	SAT	None
1B13-B1-W RPV CLOSURE HEAD WASHER 5" N/A 305-006-112			B-G-1 B6.50	VT-1	1Q800-11-069	SAT	None
1B13-B2-N RPV CLOSURE HEAD NUT 5" N/A 305-006-112			B-G-1 B6.10	VT-1	1Q800-11-094	SAT	None
1B13-B2-S RPV CLOSURE HEAD STUD 5" N/A 305-006-112			B-G-1 B6.20	UT	1Q800-11-042	SAT	None
1B13-B2-T RPV SHELL, THREADS IN FLANGE AREA 5" N/A 305-006-112			B-G-1 B6.40	UT	1Q800-11-019	SAT	None
1B13-B2-W RPV CLOSURE HEAD WASHER 5" N/A 305-006-112			B-G-1 B6.50	VT-1	1Q800-11-070	SAT	None
1B13-B3-N RPV CLOSURE HEAD NUT 5" N/A 305-006-112			B-G-1 B6.10	VT-1	1Q800-11-095	SAT	None
1B13-B3-S RPV CLOSURE HEAD STUD 5" N/A 305-006-112			B-G-1 B6.20	UT	1Q800-11-043	SAT	None
1B13-B3-T RPV SHELL, THREADS IN FLANGE AREA 5" N/A 305-006-112			B-G-1 B6.40	UT	1Q800-11-020	SAT	None
1B13-B3-W RPV CLOSURE HEAD WASHER 5" N/A 305-006-112			B-G-1 B6.50	VT-1	1Q800-11-071	SAT	None
1B13-B4-N RPV CLOSURE HEAD NUT 5" N/A 305-006-112			B-G-1 B6.10	VT-1	1Q800-11-096	SAT	None

ID of Component Examined Description of Component Size - Sched. - ISI Dwg. No.			ASME Category ASME Item No.	Exam Method	Exam Report No.	Status	Remarks
1B13-B4-S RPV CLOSURE HEAD STUD			B-G-1 B6.20	UT	1Q800-11-044	SAT	None
5"	N/A	305-006-112					
1B13-B4-T RPV SHELL, THREADS IN FLANGE AREA			B-G-1 B6.40	UT	1Q800-11-021	SAT	None
5"	N/A	305-006-112					
1B13-B4-W RPV CLOSURE HEAD WASHER			B-G-1 B6.50	VT-1	1Q800-11-072	SAT	None
5"	N/A	305-006-112					
1B13-B5-N RPV CLOSURE HEAD NUT			B-G-1 B6.10	VT-1	1Q800-11-097	SAT	None
5"	N/A	305-006-112					
1B13-B5-S RPV CLOSURE HEAD STUD			B-G-1 B6.20	UT	1Q800-11-045	SAT	None
5"	N/A	305-006-112					
1B13-B5-T RPV SHELL, THREADS IN FLANGE AREA			B-G-1 B6.40	UT	1Q800-11-022	SAT	None
5"	N/A	305-006-112					
1B13-B5-W RPV CLOSURE HEAD WASHER			B-G-1 B6.50	VT-1	1Q800-11-073	SAT	None
5"	N/A	305-006-112					
1B13-B6-N RPV CLOSURE HEAD NUT			B-G-1 B6.10	VT-1	1Q800-11-098	SAT	None
5"	N/A	305-006-112					
1B13-B6-S RPV CLOSURE HEAD STUD			B-G-1 B6.20	UT	1Q800-11-046	SAT	None
5"	N/A	305-006-112					
1B13-B6-T RPV SHELL, THREADS IN FLANGE AREA			B-G-1 B6.40	UT	1Q800-11-023	SAT	None
5"	N/A	305-006-112					
1B13-B6-W RPV CLOSURE HEAD WASHER			B-G-1 B6.50	VT-1	1Q800-11-074	SAT	None
5"	N/A	305-006-112					

ID of Component Examined			ASME Category	Exam Method	Exam Report No.	Status	Remarks
Description of Component	Size -	Sched. -	ISI Dwg. No.				
1B13-B7-N RPV CLOSURE HEAD NUT			B-G-1 B6.10	VT-1	1Q800-11-099	SAT	None
5"	N/A	305-006-112					
1B13-B7-S RPV CLOSURE HEAD STUD			B-G-1 B6.20	UT	1Q800-11-047	SAT	None
5"	N/A	305-006-112					
1B13-B7-T RPV SHELL, THREADS IN FLANGE AREA			B-G-1 B6.40	UT	1Q800-11-024	SAT	None
5"	N/A	305-006-112					
1B13-B7-W RPV CLOSURE HEAD WASHER			B-G-1 B6.50	VT-1	1Q800-11-075	SAT	None
5"	N/A	305-006-112					
1B13-B8-N RPV CLOSURE HEAD NUT			B-G-1 B6.10	VT-1	1Q800-11-100	SAT	None
5"	N/A	305-006-112					
1B13-B8-S RPV CLOSURE HEAD STUD			B-G-1 B6.20	UT	1Q800-11-048	SAT	None
5"	N/A	305-006-112					
1B13-B8-T RPV SHELL, THREADS IN FLANGE AREA			B-G-1 B6.40	UT	1Q800-11-025	SAT	None
5"	N/A	305-006-112					
1B13-B8-W RPV CLOSURE HEAD WASHER			B-G-1 B6.50	VT-1	1Q800-11-076	SAT	None
5"	N/A	305-006-112					
1B13-B9-N RPV CLOSURE HEAD NUT			B-G-1 B6.10	VT-1	1Q800-11-101	SAT	None
5"	N/A	305-006-112					
1B13-B9-S RPV CLOSURE HEAD STUD			B-G-1 B6.20	UT	1Q800-11-049	SAT	None
5"	N/A	305-006-112					
1B13-B9-T RPV SHELL, THREADS IN FLANGE AREA			B-G-1 B6.40	UT	1Q800-11-026	SAT	None
5"	N/A	305-006-112					

ID of Component Examined			ASME Category	Exam Method	Exam Report No.	Status	Remarks
Description of Component	Size -	Sched. -	ISI Dwg. No.				
1B13-B9-W RPV CLOSURE HEAD WASHER			B-G-1 B6.50	VT-1	1Q800-11-077	SAT	None
5"	N/A	305-006-112					
1B13-D1-N RPV CLOSURE HEAD NUT.			B-G-1 B6.10	VT-1	1Q800-11-102	SAT	None
5"	N/A	305-006-112					
1B13-D1-S RPV CLOSURE HEAD STUD			B-G-1 B6.20	UT	1Q800-11-050	SAT	None
5"	N/A	305-006-112					
1B13-D1-T RPV SHELL, THREADS IN FLANGE AREA			B-G-1 B6.40	UT	1Q800-11-027	SAT	None
5"	N/A	305-006-112					
1B13-D1-W RPV CLOSURE HEAD WASHERS			B-G-1 B6.50	VT-1	1Q800-11-078	SAT	None
5"	N/A	305-006-112					
1B13-D2-N RPV CLOSURE HEAD NUT			B-G-1 B6.10	VT-1	1Q800-11-103	SAT	None
5"	N/A	305-006-112					
1B13-D2-S RPV CLOSURE HEAD STUD			B-G-1 B6.20	UT	1Q800-11-051	SAT	None
5"	N/A	305-006-112					
1B13-D2-T RPV SHELL, THREADS IN FLANGE AREA			B-G-1 B6.40	UT	1Q800-11-028	SAT	None
5"	N/A	305-006-112					
1B13-D2-W RPV CLOSURE HEAD WASHERS			B-G-1 B6.50	VT-1	1Q800-11-079	SAT	None
5"	N/A	305-006-112					
1B13-D3-N RPV CLOSURE HEAD NUT			B-G-1 B6.10	VT-1	1Q800-11-104	SAT	None
5"	N/A	305-006-112					
1B13-D3-S RPV CLOSURE HEAD STUD			B-G-1 B6.20	UT	1Q800-11-052	SAT	None
5"	N/A	305-006-112					

ID of Component Examined			ASME Category	Exam Method	Exam Report No.	Status	Remarks
Description of Component	ASME Item No.						
Size - Sched. - ISI Dwg. No.							
1B13-D3-T RPV SHELL, THREADS IN FLANGE AREA 5" N/A 305-006-112	B-G-1 B6.40	UT	1Q800-11-029	SAT	None		
1B13-D3-W RPV CLOSURE HEAD WASHERS 5" N/A 305-006-112	B-G-1 B6.50	VT-1	1Q800-11-080	SAT	None		
1B13-D4-N RPV CLOSURE HEAD NUT 5" N/A 305-006-112	B-G-1 B6.10	VT-1	1Q800-11-105	SAT	None		
1B13-D4-S RPV CLOSURE HEAD STUD 5" N/A 305-006-112	B-G-1 B6.20	UT	1Q800-11-053	SAT	None		
1B13-D4-T RPV SHELL, THREADS IN FLANGE AREA 5" N/A 305-006-112	B-G-1 B6.40	UT	1Q800-11-030	SAT	None		
1B13-D4-W RPV CLOSURE HEAD WASHERS 5" N/A 305-006-112	B-G-1 B6.50	VT-1	1Q800-11-081	SAT	None		
1B13-D5-N RPV CLOSURE HEAD NUT 5" N/A 305-006-112	B-G-1 B6.10	VT-1	1Q800-11-106	SAT	None		
1B13-D5-S RPV CLOSURE HEAD STUD 5" N/A 305-006-112	B-G-1 B6.20	UT	1Q800-11-054	SAT	None		
1B13-D5-T RPV SHELL, THREADS IN FLANGE AREA 5" N/A 305-006-112	B-G-1 B6.40	UT	1Q800-11-031	SAT	None		
1B13-D5-W RPV CLOSURE HEAD WASHERS 5" N/A 305-006-112	B-G-1 B6.50	VT-1	1Q800-11-082	SAT	None		
1B13-D6-N RPV CLOSURE HEAD NUT 5" N/A 305-006-112	B-G-1 B6.10	VT-1	1Q800-11-107	SAT	None		

ID of Component Examined Description of Component Size - Sched. - ISI Dwg. No.			ASME Category ASME Item No.	Exam Method	Exam Report No.	Status	Remarks
1B13-D6-S RPV CLOSURE HEAD STUD			B-G-1 B6.20	UT	1Q800-11-055	SAT	None
5"	N/A	305-006-112					
1B13-D6-T RPV SHELL, THREADS IN FLANGE AREA			B-G-1 B6.40	UT	1Q800-11-032	SAT	None
5"	N/A	305-006-112					
1B13-D6-W RPV CLOSURE HEAD WASHERS			B-G-1 B6.50	VT-1	1Q800-11-083	SAT	None
5"	N/A	305-006-112					
1B13-CSPT-TGTW CORE SUPPORT STRUCTURE, TOP GUIDE STUD TACK WELDS			X-A X7.10	VT-3	1Q800-11-121	SAT	VT-3, 100% coverage
N/A	N/A	305-006-123					
1B13-CSPT-TGGB CORE SUPPORT STRUCTURE, TOP GUIDE GRID BEAM WELDS & CELLS			X-A X7.20	EVT-1	1Q800-11-122	SAT	100% EVT-1 coverage.
N/A	N/A	305-006-123					
1B13-CSHP-CW-P3a HP CORE SPRAY COUPLING TO HORIZONTAL PIPE			X-A X3.10	EVT-1	1Q800-11-123	SAT	40% EVT-1, 55% total coverage
6"	40	305-006-113					
1B13-CSHP-CW-P5 HP CORE SPRAY UPPER RISER PIPE TO COUPLING			X-A X3.10	EVT-1	1Q800-11-124	SAT	45% EVT-1, 50% total coverage
6"	40	305-006-113					
1B13-CSHP-CCW-P3a HP CORE SPRAY COUPLING TO HORIZONTAL PIPE			X-A X3.10	EVT-1	1Q800-11-125	SAT	40% EVT-1, 55% total coverage
6"	40	305-006-113					
1B13-CSHP-CCW-P5 HP CORE SPRAY UPPER RISER PIPE TO COUPLING			X-A X3.10	EVT-1	1Q800-11-126	SAT	50% EVT-1, 70% total coverage
6"	40	305-006-113					
1B13-CSHP-PB HP CORE SPRAY PIPING BRACKETS (3)			X-A X3.12	EVT-1	1Q800-11-127	SAT	45% EVT-1, 80 % total coverage, 100% EVT-1 & 50% EVT-1 and 100% total coverage.
N/A	N/A	305-006-114					
1B13-CSLP-P1 LP CORE SPRAY THERMAL SLEEVE TO FLOW DIVIDER WELDS (2)			X-A X3.11	EVT-1	1Q800-11-129	SAT	10% EVT-1, 75% total coverage.
10"	120	305-006-113					

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	ASME Item No.					
1B13-CSLP-CW-P2 LP CORE SPRAY FLOW DIVIDER REDUCER WELDS 6" 120/40 305-006-113	X-A X3.11		EVT-1	1Q800-11-135	SAT	40% EVT-1, 60% total coverage
1B13-CSLP-CW-P3b LP CORE SPRAY HORIZONTAL PIPE TO COUPLING 6" 40 305-006-113	X-A X3.11		EVT-1	1Q800-11-136	SAT	40% EVT-1, 55% total coverage
1B13-CSLP-CW-P3a LP CORE SPRAY COUPLING TO HORIZONTAL PIPE 6" 40 305-006-113	X-A X3.10		EVT-1	1Q800-11-137	SAT	40% EVT-1, 55% total coverage
1B13-CSLP-CW-P5 LP CORE SPRAY UPPER RISER PIPE TO COUPLING 6" 40 305-006-113	X-A X3.10		EVT-1	1Q800-11-138	SAT	35% EVT-1, 55% total coverage
1B13-CSLP-CW-P6 LP CORE SPRAY COUPLING TO LOWER RISER PIPE 6" 40 305-006-113	X-A X3.11		EVT-1	1Q800-11-139	SAT	40% EVT-1, 60% total coverage
1B13-CSLP-CW-P4c LP CORE SPRAY LOWER RISER PIPE TO ELBOW 6" 40/120 305-006-113	X-A X3.11		EVT-1	1Q800-11-140	SAT	25% EVT-1, 40% total coverage
1B13-CSLP-CW-P4d LP CORE SPRAY ELBOW TO SHROUD FLANGE 6" 120/40 305-006-113	X-A X3.11		EVT-1	1Q800-11-141	SAT	30% EVT-1, 80% total coverage
1B13-CSLP-CCW-P3a LP CORE SPRAY COUPLING TO HORIZONTAL PIPE 6" 40 305-006-113	X-A X3.10		EVT-1	1Q800-11-142	SAT	40% EVT-1, 50% total coverage
1B13-CSLP-CCW-P5 LP CORE SPRAY UPPER RISER PIPE TO COUPLING 6" 40 305-006-113	X-A X3.10		EVT-1	1Q800-11-143	SAT	40% EVT-1, 60% total coverage
1B13-CSLP-PB LP CORE SPRAY PIPING BRACKETS (3) N/A N/A 305-006-114	X-A X3.12		EVT-1	1Q800-11-144	SAT	80% EVT-1, 100% total coverage
1B13-CSS-173-S2 CORE SPRAY SPARGER TEE TO SPARGER PIPE WELDS (2) 5" 305-006-115	X-A X3.20		EVT-1	1Q800-11-145	SAT	28% EVT-1, 48% total coverage (CCW) & 45% EVT-1, 50% total coverage (CW)

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Description of Component	Size -	Sched. -	ISI Dwg. No.					ASME Item No.
1B13-CSS-173-S4 CORE SPRAY SPARGER PIPE TO END CAP WELDS (2) 5" 305-006-115				X-A X3.20	EVT-1	1Q800-11-146	SAT	35% EVT-1, 50% total coverage (100 deg) & 50% EVT-1, 65% total coverage (261 deg)
1B13-CSS-173-SB CORE SPRAY SPARGER BRACKETS N/A N/A 305-006-116				X-A X3.22	VT-1	1Q800-11-165	SAT	EVT-1 Coverage = 50% where applicable, Total Coverages = 85, 60, 60, 50, 75, 60, 60, 35, 50, 75%
1B13-CSS-187-S2 CORE SPRAY SPARGER TEE TO SPARGER PIPE WELDS (2) 5" 305-006-115				X-A X3.20	EVT-1	1Q800-11-166	SAT	CCW of 187° Azimuth EVT-1 Coverage = 30%, Total Coverage = 60%, CW of 187° Azimuth EVT-1 Coverage = 40%, Total Coverage = 50%
1B13-CSS-187-S3ab CORE SPRAY SPARGER SPRAY NOZZLE WELDS (2 EA NOZZ) 5" 305-006-115				X-A X3.21	VT-1	1Q800-11-167	SAT	EVT-1 Coverage = N/A, Total Coverage = 100%
1B13-CSS-187-S4 CORE SPRAY SPARGER PIPE TO END CAP WELDS (2) 5" 305-006-115				X-A X3.20	EVT-1	1Q800-11-164	SAT	100° Azimuth EVT-1 Coverage = 35%, Total Coverage = 40%, 180° Azimuth EVT-1 Coverage = 55%, Total Coverage = 75%
1B13-CSS-187-SB CORE SPRAY SPARGER BRACKETS N/A N/A 305-006-116				X-A X3.22	VT-1	1Q800-11-163	SAT	EVT-1 Coverage = 35% where applicable, Total Coverages = 35, 50, 50, 100, 60, 75, 75, 60, 55, 75%
1B13-CS-H8 SHROUD SUPPORT CYLINDER TO SHROUD SUPPORT PLATE N/A N/A 305-006-121				X-A X5.21	EVT-1	1Q800-11-162	SAT	0° Azimuth EVT-1 Coverage = 70%, Total Coverage = 100%, 180° Azimuth EVT-1 Coverage = 50%, Total Coverage = 100%
1B13-CS-H9 SHROUD SUPPORT PLATE TO RX VESSEL WALL N/A N/A 305-006-121				X-A X5.20	VT	1Q800-11-175	SAT	100% Best Effort based on access
1B13-FWS FEEDWATER SPARGERS N/A N/A 305-006-118				X-C X11.10	VT-3	1Q800-11-128	SAT	EVT-1 Coverage 0% / Total Coverage 30°-90°-210°-330° = 100%, 120°=75%, 270°=90%
1B13-FWSB-WA FEEDWATER SPARGER BRACKET WELDED ATTACHMENTS N/A N/A 305-006-118				B-N-2 B13.30	VT-3	1Q800-11-130	SAT	EVT1 Coverage 25%-40%, Total Coverage 45%-100%
1B13-FWS-DAM 150 DEGREE FW SPARGER DAMAGE, NOZZ 5-8 FROM CCW N/A N/A 305-006-118				X-A X6.13	VT-1	1Q800-11-131	SAT	EVT-1 Coverage = N/A, Total Coverage = 100%

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Description of Component	ASME Item No.						
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1B13-FWSBP FEEDWATER SPARGER BRACKET PINS N/A N/A 305-006-118	X-C X11.10	VT-3	1Q800-11-132	EVAL	EVT-1 Coverage = N/A, Total Coverage = 100%, Pin Wear Evaluated Under CR 11-94528.		
1B13-INTERIOR REACTOR VESSEL INTERIOR REGION N/A N/A 305-006-101	B-N-1 B13.10	VT-3	1Q800-11-147	SAT	EVT-1 Coverage = N/A, Total Coverage = 100%, FME CR CR 11-94123		
1B13-UPPER-INT VESSEL INTERIOR ABOVE FW SPARGERS N/A N/A 305-006-101	X-A X6.15	VT-3	1Q800-11-148	SAT	EVT-1 Coverage = N/A, Total Coverage = 100%		
1B13-INTERIOR-CRUD VESSEL INTERIOR ABOVE FW SPARGERS N/A N/A 305-006-101	X-A X6.15	VT-3	1Q800-11-148	SAT	EVT-1 Coverage = N/A, Total Coverage = 100%		
1B13-IRM-16/13 IRM INSTRUMENT DRY TUBE B N/A N/A 305-006-117	X-A X2.10	VT-3	1Q800-11-149	SAT	EVT-1 Coverage = N/A, Total Coverage = 100%, Configuration Diff Than Expected - (Appears to be a diff installed part) Dispositioned in CR 11-94538		
1B13-IRM-16/53 IRM INSTRUMENT DRY TUBE A N/A N/A 305-006-117	X-A X2.10	VT-3	1Q800-11-150	SAT	EVT-1 Coverage = N/A, Total Coverage = 100%		
1B13-IRM-24/29 IRM INSTRUMENT DRY TUBE D N/A N/A 305-006-117	X-A X2.10	VT-3	1Q800-11-151	SAT	EVT-1 Coverage = N/A, Total Coverage = 100%		
1B13-IRM-24/37 IRM INSTRUMENT DRY TUBE C N/A N/A 305-006-117	X-A X2.10	VT-3	1Q800-11-152	SAT	EVT-1 Coverage = N/A, Total Coverage = 100%		
1B13-JPA-P3/P4 JET PUMP NOZZLE TO MIXER ASSEMBLY N/A N/A 305-006-126	X-A X1.30	VT-3	1Q800-11-153	SAT	EVT-1 Coverage = 70%, Total Coverage = 100%		
1B13-JPA-P13/P14 JET PUMP NOZZLE TO MIXER ASSEMBLY N/A N/A 305-006-126	X-A X1.30	VT-3	1Q800-11-154	SAT	EVT-1 Coverage = N/A, Total Coverage = 100%		
1B13-JPRS8-P1/P2 JET PUMP RISER PIPE TO RISER BRACE YOKE WELDS (2) N/A N/A 305-006-125	X-A X1.72	EVT-1	1Q800-11-155	SAT	RS8 EVT-1 Coverage = 30%, Total Coverage = 90%, RS9 EVT-1 Coverage = 10%, Total Coverage = 90%		

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1B13-JPRS8-P3/P4 JET PUMP RISER PIPE TO RISER BRACE YOKE WELDS (2) N/A N/A 305-006-125			X-A X1.72	EVT-1	1Q800-11-156	SAT	RS8 EVT-1 Coverage = 40%, Total Coverage = 60%, RS9 EVT-1 Coverage = 35%, Total Coverage = 50%
1B13-JPRS8-P7/P8 JET PUMP RISER PIPE TO RISER BRACE YOKE WELDS (2) N/A N/A 305-006-125			X-A X1.72	EVT-1	1Q800-11-157	SAT	RS8 EVT-1 Coverage = 40%, Total Coverage = 100%, RS9 EVT-1 Coverage = 10%, Total Coverage = 40%
1B13-JPRS8-P9/P10 JET PUMP RISER PIPE TO RISER BRACE YOKE WELDS (2) N/A N/A 305-006-125			X-A X1.72	EVT-1	1Q800-11-158	SAT	RS8 EVT-1 Coverage = 40%, Total Coverage = 50%, RS9 EVT-1 Coverage = 10%, Total Coverage = 25%
1B13-JPRS8-P11/P12 JET PUMP RISER PIPE TO RISER BRACE YOKE WELDS (2) N/A N/A 305-006-125			X-A X1.72	EVT-1	1Q800-11-159	SAT	RS8 EVT-1 Coverage = 50%, Total Coverage = 90%, RS9 EVT-1 Coverage = 50%, Total Coverage = 90%
1B13-JPRS8-P15/P16 JET PUMP RISER PIPE TO RISER BRACE YOKE WELDS (2) N/A N/A 305-006-125			X-A X1.72	EVT-1	1Q800-11-160	SAT	RS8 EVT-1 Coverage = 50%, Total Coverage = 90%, RS9 EVT-1 Coverage = 40%, Total Coverage = 65%
1B13-JPRS8-P17/P18 JET PUMP RISER PIPE TO RISER BRACE YOKE WELDS (2) N/A N/A 305-006-125			X-A X1.72	EVT-1	1Q800-11-161	SAT	RS8 EVT-1 Coverage = 50%, Total Coverage = 75%, RS9 EVT-1 Coverage = 35%, Total Coverage = 50%
1B13-JPRS8-P19/P20 JET PUMP RISER PIPE TO RISER BRACE YOKE WELDS (2) N/A N/A 305-006-125			X-A X1.72	EVT-1	1Q800-11-168	SAT	RS8 EVT-1 Coverage = 30%, Total Coverage = 90%, RS9 EVT-1 Coverage = 30%, Total Coverage = 90%
1B13-JPTW-P05 JET PUMP RESTRAINER ADJUSTING SCREW TACK WELDS N/A N/A 305-006-125			X-A X1.50	VT-3	1Q800-11-169	UNSAT	Set Screw Gap Evaluation; CR 11-93979
1B13-JPTW-P06 JET PUMP RESTRAINER ADJUSTING SCREW TACK WELDS N/A N/A 305-006-125			X-A X1.50	VT-3	1Q800-11-170	UNSAT	Cracked Tack Weld Evaluated; CR 11-93979
1B13-JPTW-P13 JET PUMP RESTRAINER ADJUSTING SCREW TACK WELDS N/A N/A 305-006-125			X-A X1.50	VT-3	1Q800-11-171	UNSAT	Set Screw Gaps Evaluated Under CR 11-94052
1B13-JPTW-P14 JET PUMP RESTRAINER ADJUSTING SCREW TACK WELDS N/A N/A 305-006-125			X-A X1.50	VT-3	1Q800-11-172	UNSAT	90% - 100% (AS-2) & 100% (AS-1), Set Screw gap evaluated on CR 11-94052.

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Description of Component	ASME Item No.						
Size - Sched. - ISI Dwg. No.							
1B13-JPTW-P15 JET PUMP RESTRAINER ADJUSTING SCREW TACK WELDS N/A N/A 305-006-125	X-A X1.50		VT-3	1Q800-11-173	UNSAT	100% coverage, Set screw gap evaluation on CR 11-93907.	
1B13-JPTW-P16 JET PUMP RESTRAINER ADJUSTING SCREW TACK WELDS N/A N/A 305-006-125	X-A X1.50		VT-3	1Q800-11-174	UNSAT	100% coverage, Set screw gap evaluation on CR 11-93907.	
1B13-JPWD-P1/P2 JET PUMP RESTRAINER BRACKET WEDGE BEARING SURFACE N/A N/A 305-006-125	X-A X1.51		VT-1	1Q800-11-177	SAT	100%	
1B13-JPWD-P3/P4 JET PUMP RESTRAINER BRACKET WEDGE BEARING SURFACE N/A N/A 305-006-125	X-A X1.51		VT-1	1Q800-11-178	SAT	100%	
1B13-JPWD-P5/P6 JET PUMP RESTRAINER BRACKET WEDGE BEARING SURFACE N/A N/A 305-006-125	X-A X1.51		VT-1	1Q800-11-180	SAT	100%	
1B13-JPWD-P7/P8 JET PUMP RESTRAINER BRACKET WEDGE BEARING SURFACE N/A N/A 305-006-125	X-A X1.51		VT-1	1Q800-11-181	SAT	100%	
1B13-JPWD-P9/P10 JET PUMP RESTRAINER BRACKET WEDGE BEARING SURFACE N/A N/A 305-006-125	X-A X1.51		VT-1	1Q800-11-182	SAT	100%	
1B13-JPWD-P11/P12 JET PUMP RESTRAINER BRACKET WEDGE BEARING SURFACE N/A N/A 305-006-125	X-A X1.51		VT-1	1Q800-11-183	SAT	100%	
1B13-JPWD-P13/P14 JET PUMP RESTRAINER BRACKET WEDGE BEARING SURFACE N/A N/A 305-006-125	X-A X1.51		VT-1	1Q800-11-179	SAT	EVT-1 Coverage = N/A, Total Coverage = 100%	
1B13-JPWD-P15/P16 JET PUMP RESTRAINER BRACKET WEDGE BEARING SURFACE N/A N/A 305-006-125	X-A X1.51		VT-1	1Q800-11-184	UNSAT	100%, Wedge wear noted on JP15. See CR 11-93839.	
1B13-JPWD-P17/P18 JET PUMP RESTRAINER BRACKET WEDGE BEARING SURFACE N/A N/A 305-006-125	X-A X1.51		VT-1	1Q800-11-185	SAT	100%	

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Description of Component	Size -	Sched. -	ASME Item No.				
1B13-JPWD-P19/P20 JET PUMP RESTRAINER BRACKET WEDGE BEARING SURFACE N/A N/A 305-006-125			X-A X1.51	VT-1	1Q800-11-186	SAT	100%
1B13-LPRM-SAMP LPRM INSTRUMENT DRY TUBES 10% SAMPLE N/A N/A 305-006-117			X-A X2.11	VT-3	1Q800-11-187	SAT	EVT-1 Coverage = N/A, Total Coverage = 100%
1B13-LPCI-C61 LOOP C LPCI COUPLING PIPE WELDS (4) N/A N/A 305-006-124			X-A X8.10	EVT-1	1Q800-11-188	SAT	EVT-1 Coverage = 0%, 30%, 35%, 80%, and 25%, Total Coverage = 60%, 40%, 45%, 100%, and 50%
1B13-LPCI-CST LOOP C LPCI COUPLING STRUT WELDS (3) N/A N/A 305-006-124			X-A X8.20	EVT-1	1Q800-11-189	SAT	EVT-1 Coverage = 25%, 35%, and 50%, Total Coverage = 100%, 70%, and 75%
1B13-LPCI-C66 LOOP C LPCI SHROUD ATTACHMENT RING WELD N/A N/A 305-006-124			X-A X8.30	EVT-1	1Q800-11-190	SAT	EVT-1 Coverage = 80%, Total Coverage = 100%
1B13-SD-LA4 LIFTING ROD TO LIFTING EYE BARREL TACK WELDS N/A N/A 305-006-130			X-A X4.12	VT-1 (89)	1Q800-11-191	EVAL	EVT-1 Coverage = N/A%, Total Coverage = 100%, No Change, Documented Under CR 11-93580
1B13-SD-STRUCT STEAM DRYER CRUD EXAM N/A N/A 305-006-119			X-A X4.11	VT-1 (89)	1Q800-11-192	SAT	EVT-1 Coverage = N/A%, Total Coverage = 100%, No Change in "Stucco" Deposits
1B13-SD-LB3a UPPER BRACE TO BANK A END PANEL WELD, TOP & BOTTOM N/A N/A 305-006-130			X-A X4.12	VT-1 (89)	1Q800-11-193	EVAL	EVT-1 Coverage = N/A%, Total Coverage = 100%, No Change in Indications, CR 11-93688
1B13-SD-CRUD STEAM DRYER CRUD EXAM N/A N/A 305-006-119			X-A X4.11	VT-1 (89)	1Q800-11-192	SAT	EVT-1 Coverage = N/A%, Total Coverage = 100%, No Change in "Stucco" Deposits
1B13-SD-LD4 LIFTING ROD TO LIFTING EYE BARREL TACK WELDS N/A N/A 305-006-130			X-A X4.12	VT-1 (89)	1Q800-11-194	EVAL	EVT-1 Coverage = N/A%, Total Coverage = 100%, No Change in Indications, CR 11-93580
1B13-SD-LG-180 LOWER GUIDE TO LOWER SUPPORT RING WELDS, 180 DEG SIDE N/A N/A 305-006-128			X-A X4.12	VT-1 (89)	1Q800-11-176	UNSAT	100% coverage. Condition monitoring CR 11-93580 generated.

ID of Component Examined			ASME Category	Exam Method	Exam Report No.	Status	Remarks
Description of Component	ASME Item No.						
Size - Sched. - ISI Dwg. No.							
1B13-SD-USR UPPER SUPPORT RING ACCESSIBLE SURFACES, INCL RING TO SKIRT N/A N/A 305-006-128	X-A X4.12		VT-1 (89)	1Q800-11-195	EVAL	EVT-1 Coverage = N/A%, Total Coverage = 100%, No Appreciable Change in Indications, CR 11-95050	
1B13-SDHDB-WA STEAM DRYER HOLD DOWN BRACKET/VESSEL WELDED N/A N/A 305-006-130	B-N-2 B13.30		VT-3	1042-11-059	SAT	None	
1B13-SDSB-WA STEAM DRYER SUPORT BRACKET WELDED ATTACHMENTS N/A N/A 305-006-130	B-N-2 B13.30		VT-3	1Q800-11-196	EVAL	EVT-1 Coverage = N/A%, Total Coverage = 100%, No Appreciable Change in Indications, CR 11-94900	
1B13-SHSAM SHROUD HEAD STUD ASY MOD LOCKING PINS N/A N/A 305-006-119	X-A X6.14		VT-1	1Q800-11-197	EVAL	EVT-1 Coverage = N/A, Total Coverage = 4 with 65%, 1 with 90%, and 11 with 100%, Pin Wear Evaluated Under CR 11-94984	
1B13-SRM-16/45 SRM INSTRUMENT DRY TUBE A N/A N/A 305-006-117	X-A X2.10		VT-3	1Q800-11-198	SAT	EVT-1 Coverage = N/A, Total Coverage = 100%	
1B13-SRM-40/21 SRM INSTRUMENT DRY TUBE C N/A N/A 305-006-117	X-A X2.10		VT-3	1Q800-11-199	SAT	EVT-1 Coverage = N/A, Total Coverage = 100%	
1B13-VIB ABANDONED VIBRATION MONITORING INSTRUMENTATION N/A N/A 305-006-001	X-A X6.11		VT-3	1Q800-11-200	SAT	EVT-1 Coverage = N/A, Total Coverage = 100%	
1B21-0018 26" PIPE TO 28" PIPE 26" 1.321" 305-605-109	C-F-2 C5.51		UT	UT-11-E018	NRI	None	
1B21-F028A-1B MSIV STUD N/A N/A 305-605-111	B-G-1 B6.210		UT	UT-11-E017	NRI	None	
1B21-F028A-2B MSIV STUD N/A N/A 305-605-111	B-G-1 B6.210		UT	1Q800-11-056	SAT	Zone 1 Exam	
1B21-F028A-3B MSIV STUD N/A N/A 305-605-111	B-G-1 B6.210		UT	1Q800-11-057	SAT	Zone 1 Exam	

ID of Component Examined Description of Component Size - Sched. - ISI Dwg. No.			ASME Category ASME Item No.	Exam Method	Exam Report No.	Status	Remarks
1B21-F028A-4B MSIV STUD			B-G-1 B6.210	UT	1Q800-11-058	SAT	Zone 1 Exam
N/A	N/A	305-605-111					
1B21-F028A-5B MSIV STUD			B-G-1 B6.210	UT	1Q800-11-059	SAT	Zone 1 Exam
N/A	N/A	305-605-111					
1B21-F028A-6B MSIV STUD			B-G-1 B6.210	UT	1Q800-11-060	SAT	Zone 1 Exam
N/A	N/A	305-605-111					
1B21-F028A-N MSIV NUTS AND WASHERS, 18 EACH			B-G-1 B6.230	VT-1	1042-11-060	SAT	None
N/A	N/A	305-605-111					
1B21-H0107 MECHANICAL SNUBBER (WA) (TANDEM)			F-A F3.SN	VT-3	1042-11-052	SAT	None
10"	N/A	305-605-123					
1B21-H0107-WA INTEGRAL ATTACHMENT MECHANICAL SNUBBER			D-A D1.20	VT-1	1042-11-051	SAT	None
10"	N/A	305-605-123					
1B21-H0134 RIGID GUIDE (WA)			F-A F3.Gs	VT-3	1042-11-063	SAT	None
12"	N/A	305-605-127					
1B21-H0134-WA INTEGRAL ATTACHMENT RIGID GUIDE			D-A D1.20	VT-1	1042-11-065	SAT	None
12"	N/A	305-605-127					
1B21-H0437-WA INTEGRAL ATTACHMENT VARIABLE SPRING			D-A D1.20	VT-1	1042-11-069	SAT	None
10"	N/A	305-605-128					
1B21-H0448 VARIABLE SPRING			F-A F1.SP	VT-3	1042-11-045	SAT	None
2"	N/A	305-605-106					
1B21-H0459 MECHANICAL SNUBBER			F-A F1.SN	VT-3	1Q800-11-110	SAT	Supplemental exam due to CR 11-95005 for piston rod set only.
2"	N/A	305-605-106					

ID of Component Examined			ASME Category	Exam Method	Exam Report No.	Status	Remarks
Description of Component	ASME Item No.						
Size - Sched. - ISI Dwg. No.							
1B21-H0459 MECHANICAL SNUBBER	F-A F1.SN			VT-3	1042-11-048	SAT	None
2" N/A 305-605-106							
1B21-H5000 RIGID GUIDE	F-A F3.Gs			VT-3	1042-11-053	SAT	None
12" N/A 305-605-125							
1B21-S102C HYDRAULIC SNUBBER MPL 1B21G7074	F-A F1.SN			VT-3	1Q800-11-111	SAT	None
26" N/A 305-605-103							
1B21-S102C HYDRAULIC SNUBBER MPL 1B21G7074	F-A F1.SN			VT-3	1042-11-075	SAT	None
26" N/A 305-605-103							
1B21-RS105A RIGID STRUT MPL 1B21G7084	F-A F1.ST			VT-3	1042-11-082	SAT	None
26" N/A 305-605-101							
1B33-0028 16" PIPE TO 16" X 12" SWEEPOLET	R-A R3.ND			UT	UT-11-E024	NRI	None
16" .951" 305-602-101							
1B33-0057 12" PIPE TO ELBOW	R-A R3.ND			UT	UT-11-E023	NRI	None
12" .575" 305-602-101							
1B33-0057-D ELBOW SEAM, DOWNSTREAM	R-A R3.LS			UT	1Q800-11-108	SAT	None
12" .575" 305-602-101							
1B33-0057-U PIPE SEAM, UPSTREAM	R-A R3.LS			UT	1Q800-11-109	SAT	None
12" .575" 305-602-101							
1B33-B301A RIGID STRUT, PUMP, MPL 1B33G7000A	F-A F1.40			VT-3	1042-11-061	SAT	None
N/A N/A 305-602-102							
1B33-H302A CONSTANT SUPPORT, PUMP, MPL 1B33F7014A	F-A F1.40			VT-3	1042-11-062	SAT	None
N/A N/A 305-602-102							

ID of Component Examined			ASME Category	Exam Method	Exam Report No.	Status	Remarks
Description of Component	ASME Item No.						
Size - Sched. - ISI Dwg. No.							
1B33-H305A VARIABLE SPRING (WA) MPL 1B33G7017A 22" N/A 305-602-102	F-A F1.SP	VT-3	1042-11-083	SAT	None		
1B33-H305A-WA INTEGRAL WELDED ATTACHMENT FOR VARIABLE SPRING 22" N/A 305-602-102	B-K B10.20	PT	0941-11A-005	ACC	None		
1B33-S369A HYDRAULIC SNUBBER, PUMP MOTOR, MPL 1B33G7064A N/A N/A 305-602-102	F-A F1.40	VT-3	1042-11-074	SAT	None		
1B33-S369A HYDRAULIC SNUBBER, PUMP MOTOR, MPL 1B33G7064A N/A N/A 305-602-102	F-A F1.40	VT-3	1Q800-11-112	SAT	None		
1B33-S372A HYDRAULIC SNUBBER, PUMP (WA), MPL 1B33G7067A N/A N/A 305-602-102	F-A F1.40	VT-3	1042-11-081	SAT	None		
1B33-S372A-WA PUMP WELDED ATTACHMENT N/A N/A 305-602-102	B-K B10.30	PT	0941-11A-004	ACC	None		
1B33-S373A HYDRAULIC SNUBBER, PUMP (WA), MPL 1B33G7068A N/A N/A 305-602-102	F-A F1.40	VT-3	1042-11-080	SAT	None		
1C11-0070 8" PIPE TO CAP 8" 100 305-871-101	C-F-2 C5.51	UT	UT-11-E010	NRI	None		
1C11-0078 8" TEE TO PIPE 8" 100 305-871-102	C-F-2 C5.51	UT	UT-11-E011	NRI	None		
1C11-H0033 RIGID GUIDE(WA) 8" N/A 305-871-103	F-A F2.G	VT-3	1042-11-049	SAT	None		
1C11-H0033-WA PIPING SUPPORT WELDED ATTACHMENT 8" N/A 305-871-103	C-C C3.20	MT	0942-11A-008	ACC	None		

ID of Component Examined Description of Component Size - Sched. - ISI Dwg. No.			ASME Category ASME Item No.	Exam Method	Exam Report No.	Status	Remarks
1C11-H0659 MECHANICAL SNUBBER (WA)			F-A F2.SN	VT-3	1Q800-11-008	SAT	None
8"	N/A	305-871-102					
1C11-H0665 RIGID STRUT (WA)			F-A F2.STm	VT-3	1042-11-047	SAT	None
8"	N/A	305-871-104					
1C11-H0665-WA PIPING SUPPORT WELDED ATTACHMENT			C-C C3.20	MT	0942-11A-007	ACC	None
8"	N/A	305-871-104					
1E12-0095 24" VALVE F004B TO PIPE			C-F-2 C5.51	UT	UT-11-E004	NRI	None
24"	40	305-642-116					
1E12-0161 18" FLANGE TO PIPE			C-F-2 C5.51	UT	UT-11-E008	NRI	None
18"	40	305-643-101					
1E12-0177 18" PIPE TO ELBOW			C-F-2 C5.51	UT	UT-11-E009	NRI	None
18"	40	305-643-102					
1E12-0222 18" ELBOW TO PIPE			C-F-2 C5.51	UT	UT-11-E007	NRI	None
18"	40	305-643-118					
1E12-0559D 18" PIPE TO VALVE P45-F575			C-F-2 C5.51	UT	UT-11-E006	NRI	None
18"	40	305-643-105					
1E12-0626A 18" PIPE TO ELBOW			C-F-2 C5.51	UT	UT-11-E005	NRI	None
18"	40	305-643-109					
1E12-0642 18" ELBOW TO RO-D003B FLANGE			C-F-2 C5.51	UT	UT-11-E019	NRI	None
18"	STD	305-642-133					
1E12-0892 12" VALVE F039C TO PIPE			R-A R2.ND	UT	UT-11-E022	NRI	None
12"	80	305-642-145					

ID of Component Examined			ASME Category			
Description of Component			ASME	Exam		
Size -	Sched. -	ISI Dwg. No.	Item No.	Method	Exam Report No.	Status Remarks
1E12-C002C-005			C-G	MT	0942-11A-006	ACC None
18" DISCHARGE FLANGE TO 18"			C6.10			
DISCHARGE PIPE.						
N/A	N/A	305-643-122				
1E12-F0041B-IS			B-M-2	VT-3	1042-11-072	Accept None
12"CHECK VALVE,INTERNAL			B12.50			
SURFACE(GROUPING NO. XIII)						
12"	N/A	305-642-141				
1E12-F0041C-IS			B-M-2	VT-3	1042-11-079	Accept None
12"CHECK VALVE INTERNAL			B12.50			
SURFACE(GROUPING NO. XIII)						
12"	N/A	305-642-145				
1E12-H0001			F-A	VT-3	1042-11-071	SAT None
RIGID STRUT			F1.ST			
12"	N/A	305-642-139				
1E12-H0003			F-A	VT-3	1042-11-050	SAT None
VARIABLE SPRING			F1.SP			
12"	N/A	305-642-141				
1E12-H0010			F-A	VT-3	1Q800-11-004	SAT None
MECHANICAL SNUBBER			F1.SN			
12"	N/A	305-642-145				
1E12-H0019			F-A	VT-3	1042-11-070	SAT None
RIGID SUPPORT			F1.R			
12"	N/A	305-642-143				
1E12-H0054			F-A	VT-3	1042-11-064	SAT None
RIGID SUPPORT			F1.R			
12"	N/A	305-642-142				
1E12-H0360			F-A	VT-3	1042-11-038	SAT None
MECHANICAL SNUBBER (WA)			F2.SN			
24"	N/A	305-642-116				
1E12-H0360-WA			C-C	MT	0942-11A-005	ACC None
PIPING SUPPORT WELDED			C3.20			
ATTACHMENT						
24"	N/A	305-642-116				
1E12-H0443			F-A	VT-3	1042-11-044	SAT None
RIGID STRUT			F2.ST			
18"	N/A	305-643-102				

ID of Component Examined			ASME Category	Exam Method	Exam Report No.	Status	Remarks
Description of Component	Size -	Sched. -	ISI Dwg. No.				
1E12-H0559 VARIABLE SPRING							
	12"	N/A	305-642-136	F-A F2.SP	VT-3	1042-11-015	SAT None
1E12-H0660 MECHANICAL SNUBBER (TANDEM)							
	12"	N/A	305-642-137	F-A F1.SN	VT-3	1Q800-11-009	SAT None
1E12-H0714 RIGID STRUT							
	N/A	N/A	305-642-111	F-A F2.ST	VT-3	1042-11-039	SAT None
1E12-H0734 MECHANICAL SNUBBER							
	12"	N/A	305-642-134	F-A F2.SN	VT-3	1Q800-11-002	SAT None
1E12-H0736 MECHANICAL SNUBBER							
	12"	N/A	305-642-134	F-A F1.SN	VT-3	1Q800-11-003	SAT None
1E21-F0006-IS 12" CHK VLV, INTERNAL SURFACE (GROUPING NO. XVII)							
	12"	N/A	305-705-111	B-M-2 B12.50	VT-3	1Q800-11-114	SAT None
1E22-0078 24" PENE. P401 PROCESS PIPE TO ELBOW							
	24"	80	305-701-101	C-F-2 C5.51	UT	UT-11-E001	NRI None
1E22-C001-006 16" DISCHARGE FLANGE TO 16" DISCHARGE PIPE							
	16"	N/A	305-701-114	C-G C6.10	MT	0942-11A-001	ACC None
1E22-C001-007 16" DISCHARGE PIPE TO HEAD SHELL							
	16"	N/A	305-701-114	C-G C6.10	MT	0942-11A-002	ACC None
1E22-C001-016 16" DISCHARGE PIPE LONGITUDINAL SEAM							
	16"	N/A	305-701-114	C-G C6.10	MT	0942-11A-003	ACC None
1E22-F0005-IS 12" CHECK VALVE INTERNAL SURFACE (GROUPING NO. XX)							
	12"	N/A	305-701-111	B-M-2 B12.50	VT-3	1042-11-073	Accept None

ID of Component Examined Description of Component Size - Sched. - ISI Dwg. No.			ASME Category ASME Item No.	Exam Method	Exam Report No.	Status	Remarks
1E22-H0009 VARIABLE SPRING			F-A F1.SP	VT-3	1042-11-046	SAT	None
12"	N/A	305-701-109					
1E22-H0017 MECHANICAL SNUBBER			F-A F1.SN	VT-3	1Q800-11-007	SAT	None
12"	N/A	305-701-109					
1E22-H0033 RIGID SUPPORT			F-A F2.R	VT-3	1042-11-021	SAT	Added scope due to 1E22-H0034 failure, CR 11-92050.
24"	N/A	305-701-102					
1E22-H0034 MECHANICAL SNUBBER			F-A F2.SN	VT-3	1Q800-11-001	UNSAT	Unsat due to loose nut on middle bolt. CR 11-92050
24"	N/A	305-701-102					
1E22-H0034 MECHANICAL SNUBBER			F-A F2.SN	VT-3	1042-11-019	SAT	As-Left exam, post maintenance per CR 11-92050.
24"	N/A	305-701-102					
1E22-H0036 RIGID SUPPORT			F-A F2.R	VT-3	1042-11-022	SAT	Added scope due to 1E22-H0034 failure, CR 11-92050.
24"	N/A	305-701-102					
1E22-H0037 MECHANICAL SNUBBER			F-A F2.SN	VT-3	1042-11-023	SAT	Added scope due to 1E22-H0034 failure, CR 11-92050.
24"	N/A	305-701-102					
1E22-H0038 MECHANICAL SNUBBER (WA)			F-A F2.SN	VT-3	1042-11-024	SAT	Added scope due to 1E22-H0034 failure, CR 11-92050.
24"	N/A	305-701-101					
1E22-H0051 RIGID STRUT			F-A F2.ST	VT-3	1042-11-016	SAT	None
16"	N/A	305-701-105					
1E22-H0062 RIGID SUPPORT (WA)			F-A F2.R	VT-3	1042-11-017	SAT	None
16"	N/A	305-701-107					
1E51-0003 6" VALVE F066 TO PIPE			R-A R2.11	UT	UT-11-E014	NRI	None
6"	80	305-631-108					

ID of Component Examined			ASME Category	Exam Method	Exam Report No.	Status	Remarks
Description of Component	Size -	Sched. -	ISI Dwg. No.				
1E51-0031 6" PIPE TO VALVE F013							
	6"	120	305-631-105	C-F-2 C5.51	UT	UT-11-E003	NRI None
1E51-0102 8" X 12" REDUCING ELBOW TO 12" PIPE.							
	12"	STD	305-632-103	C-F-2 C5.51	UT	UT-11-E002	NRI None
1E51-C001-003 6" SUCTION NOZZLE TO ELBOW							
	6"	N/A	305-631-109	C-G C6.10	PT	0941-11A-002	ACC None
1E51-C002-SP ANCHOR, TURBINE							
	N/A	N/A	305-632-103	F-A F1.40	VT-3	1042-11-020	SAT None
1E51-H0026 ANCHOR (WA)							
	12"	N/A	305-632-105	F-A F2.A	VT-3	1042-11-031	SAT None
1E51-H0026-WA PIPING SUPPORT WELDED ATTACHMENT							
	12"	N/A	305-632-105	C-C C3.20	MT	0942-11A-004	ACC None
1E51-H0073 HYDRAULIC SNUBBER							
	6"	N/A	305-631-108	F-A F1.SN	VT-3	1Q800-11-005	SAT None
1G33-H0142 MECHANICAL SNUBBER (AUGMENTED HEPIBER)							
	6"	N/A	305-671-104	F-A aug F1.50	VT-3	1042-11-057	SAT None
1G33-H0179 VARIABLE SPRING							
	6"	N/A	305-672-102	F-A F2.SP	VT-3	1042-11-056	SAT None
1G33-H0224 MECHANICAL SNUBBER (TANDEM)							
	6"	N/A	305-672-101	F-A F2.SN	VT-3	1Q800-11-113	SAT None
1G33-H0224 MECHANICAL SNUBBER (TANDEM)							
	6"	N/A	305-672-101	F-A F2.SN	VT-3	1042-11-054	SAT None

ID of Component Examined Description of Component Size - Sched. - ISI Dwg. No.			ASME Category ASME Item No.	Exam Method	Exam Report No.	Status	Remarks
1G33-H0238 RIGID STRUT (AUGMENTED HEPIBER) 6" N/A 305-671-104			F-A aug F1.50	VT-3	1042-11-055	SAT	None
1N27-F0559B-IS 20" CHECK VALVE,INTERNAL SURFACE (GROUPING NO.III) 20" N/A 305-082-105			B-M-2 B12.50	VT-3	1042-11-086	Accept	Examined accessible portions from view of Fiberscope.
1N27-H0001 HYDRAULIC SNUBBER 12" N/A 305-082-103			F-A F1.SN	VT-3	1042-11-076	SAT	None
1N27-H0011 VARIABLE SPRING 20" N/A 305-082-102			F-A F1.SP	VT-3	1042-11-078	SAT	None
1N27-H0029 RIGID GUIDE (WA) 20" N/A 305-082-102			F-A F1.G	VT-3	1042-11-077	SAT	None
1N27-P121-WA @ PEN. P121 FLUED HD FITTING TO PROCESS PIPE ATT WLD 20" N/A 305-082-101			X-E X10.20	UT	UT-11-E021	NRI	None
1P42-H0105 RIGID STRUT 10" N/A 305-621-108			F-A F3.ST	VT-3	1042-11-009	SAT	None
1P42-H0122 RIGID GUIDE (WA) 10" N/A 305-621-106			F-A F3.Gs	VT-3	1042-11-007	SAT	None
1P42-H0122-WA INTEGRAL ATTACHMENT RIGID GUIDE 10" N/A 305-621-106			D-A D1.20	VT-1	1042-11-008	SAT	None
1P42-H0125 RIGID ROD 10" N/A 305-621-108			F-A F3.R	VT-3	1042-11-010	SAT	None
1P45-H0046 RIGID ROD 14" N/A 305-792-116			F-A F3.R	VT-3	1042-11-037	SAT	None

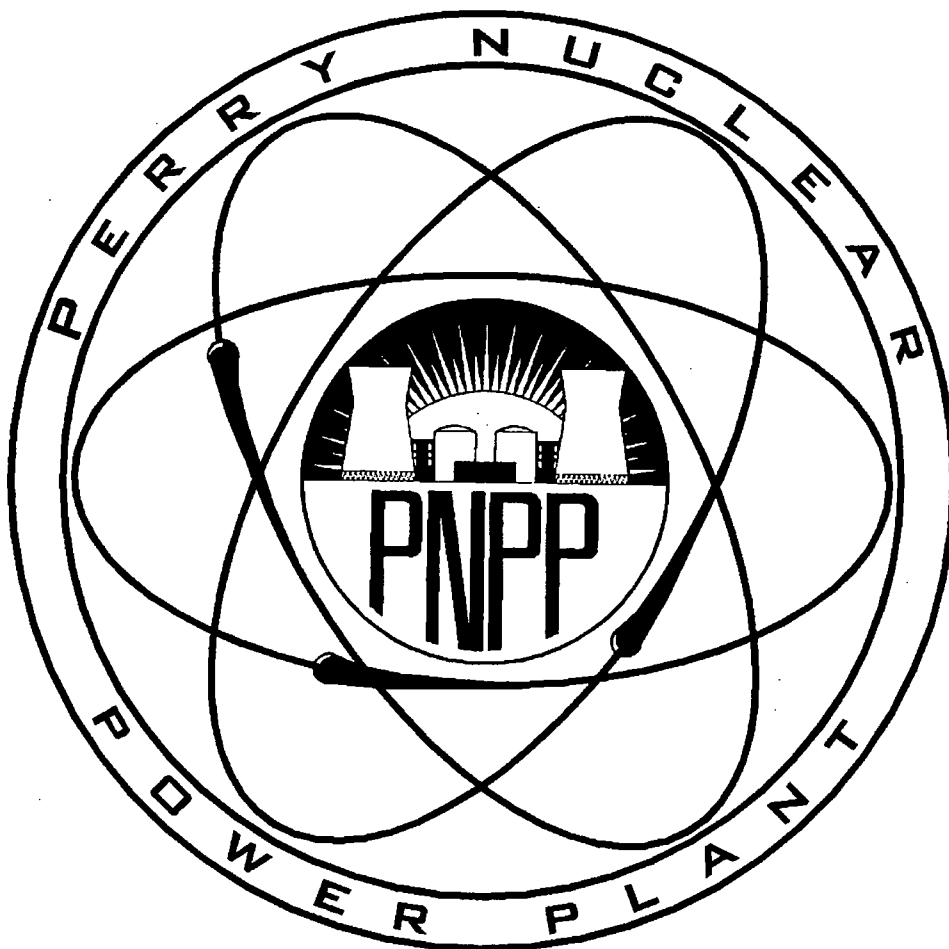
ID of Component Examined Description of Component Size - Sched. - ISI Dwg. No.			ASME Category ASME Item No.	Exam Method	Exam Report No.	Status	Remarks
1P45-H0070 ANCHOR (WA)			F-A F3.A	VT-3	1042-11-040	SAT	None
24"	N/A	305-792-112					
1P45-H0070-WA INTEGRAL ATTACHMENT ANCHOR			D-A D1.20	VT-1	1042-11-041	SAT	None
24"	N/A	305-792-112					
1P45-H0071 VARIABLE SPRING (WA)			F-A F3.SP	VT-3	1042-11-036	SAT	None
20"	N/A	305-792-113					
1P45-H0081 RIGID GUIDE			F-A F3.G	VT-3	1042-11-018	SAT	None
16"	N/A	305-792-117					
1P45-H0101 RIGID STRUT			F-A F3.STm	VT-3	1042-11-013	SAT	None
20"	N/A	305-792-118					
1P45-H0205 RIGID GUIDE			F-A F3.Gs	VT-3	1042-11-032	SAT	None
14"	N/A	305-791-113					
1P45-H0312 RIGID GUIDE (WA)			F-A F3.G	VT-3	1042-11-042	SAT	None
8"	N/A	305-792-115					
1P45-H0312-WA INTEGRAL ATTACHMENT RIGID GUIDE			D-A D1.20	VT-1	1042-11-043	SAT	None
8"	N/A	305-792-115					
1P45-H0448 RIGID STRUT			F-A F3.ST	VT-3	1042-11-034	SAT	None
8"	N/A	305-792-114					
1P45-H0508 RIGID GUIDE			F-A F3.G	VT-3	1042-11-033	SAT	None
8"	N/A	305-792-111					
1P45-H0611 MECHANICAL SNUBBER (WA)			F-A F2.SN	VT-3	1Q800-11-006	SAT	None
18"	N/A	305-792-113					

ID of Component Examined Description of Component Size - Sched. - ISl Dwg. No.			ASME Category ASME Item No.	Exam Method	Exam Report No.	Status	Remarks
1P45-H0655 RIGID GUIDE			F-A F3.Gs	VT-3	1042-11-012	SAT	None
14"	N/A	305-791-110					
1P47-H0036 RIGID STRUT			F-A F3.ST	VT-3	1042-11-035	SAT	None
10"	N/A	305-002-103					
1P47-H0190 RIGID STRUT			F-A F3.ST	VT-3	1042-11-029	SAT	None
8"	N/A	305-002-113					
1P47-H0219 ANCHOR (WA)			F-A F3.A	VT-3	1042-11-025	SAT	None
10"	N/A	305-002-113					
1P47-H0219-WA INTEGRAL ATTACHMENT ANCHOR			D-A D1.20	VT-1	1042-11-026	SAT	None
10"	N/A	305-002-113					
1P47-H0265 RIGID GUIDE			F-A F3.G	VT-3	1042-11-028	SAT	None
10"	N/A	305-002-113					
1P47-H0322 RIGID GUIDE			F-A F3.G	VT-3	1042-11-027	SAT	None
10"	N/A	305-002-102					
1P47-H0378 VARIABLE SPRING (WA)			F-A F3.SP	VT-3	1042-11-030	SAT	None
10"	N/A	305-002-109					
1P57-A003A-SP ANCHOR, ADS SAFETY-RELATED AIR STORAGE TANK A (WA)			F-A F1.40	VT-3	1042-11-001	SAT	None
N/A	N/A	305-271-101					
1P57-A003A-WA INTEGRAL ATTACHMENT ADS S/R AIR STORAGE TANK A			D-A D1.10	VT-1	1042-11-002	SAT	None
N/A	N/A	305-271-101					
1R46-B002A-SP ANCHOR, JACKET WATER HEAT EXCHANGER (WA)			F-A F1.40	VT-3	1042-11-005	SAT	None
N/A	N/A	305-354-103					

ID of Component Examined Description of Component Size - Sched. - ISI Dwg. No.			ASME Category ASME Item No.	Exam Method	Exam Report No.	Status	Remarks
1R47-D006A-SP STNBY DIESEL GEN. L.O. KP WARM FILTER ANCHOR (WA) N/A N/A 305-353-101			F-A F1.40	VT-3	1042-11-003	SAT	None
1R47-D006A-WA INTEGRAL ATTACHMENT WARM FILTER ANCHOR N/A N/A 305-353-101			D-A D1.10	VT-1	1042-11-004	SAT	None
1R48-H0002 RIGID GUIDE 24" N/A 305-355-103			F-A F3.G	VT-3	1042-11-006	SAT	None
1R48-H0031 ANCHOR (NOT WELDED) 26" N/A 305-355-105			F-A F3.A	VT-3	1042-11-014	SAT	None
2P42-H0036 RIGID ROD 12" N/A 305-623-110			F-A F3.R	VT-3	1042-11-011	SAT	None
1T23-016-E ANNULUS CONCRETE SURFACE AZ 0-360 N/A N/A 305-503-139			L-A L1.11	VT-3C	1042-11-058	SAT	None

Table Notes:


1. Status codes are "SAT", "UNSAT" or "EVAL" for visual exams. For surface exams they are "ACC" for acceptable, "REJ" for rejectable and "INFO" for exams that require additional information. For ultrasonic exams they are "IND" for indication, "GEO" for geometry, and "NRI" for no recordable indications along with "SAT", "UNSAT" or "EVAL" for vendor UT datasheets.
2. The above exam listing is all the inservice examinations that were performed during Cycle 13 or RFO13 in accordance with Perry's Inservice Examination Plan (ISEP).

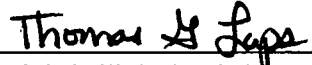


First Energy Nuclear Operating Company

Perry Nuclear Power Plant

ISI Summary Report No. P0059-0013
Third Interval, First Period, First Outage (RFO13)
Cycle 13 and RFO13 Preservice Examinations

Prepared by:  Date: 8/4/11
ISI Engineer

Reviewed by:  Date: 8/15/11
Authorized Nuclear Inservice Inspector

ID of Component Examined			ASME Category	Exam Method	Exam Report No.	Status	Remarks
Description of Component	ASME Item No.						
Size - Sched. - ISI Dwg. No.							
1B13-N8-B RPV HEAD SPRAY NOZZLE N8 TO FLANGE BOLTING N/A 305-006-103	B-G-2 B7.10	VT-1	1042-11-085	SAT	None		
1B13-N8-B RPV HEAD SPRAY NOZZLE N8 TO FLANGE BOLTING N/A 305-006-103	B-G-2 B7.10	VT-1	1042-11-087	SAT	None		
1B21-F041K-B SRV BOLTING, 12 EACH N/A 305-605-102	B-G-2 B7.50	VT-1	1042-11-084	SAT	None		
1B21-H0446 HYDRAULIC SNUBBER (WA < .625" T) (TANDEM) N/A 305-605-106	F-A F1.SN	VT-3	1Q800-11-133	SAT	None		
1B21-S101B HYDRAULIC SNUBBER MPL 1B21G7070 N/A 305-605-102	F-A F1.SN	VT-3	1Q800-11-115	SAT	None		
1B21-S102A HYDRAULIC SNUBBER MPL 1B21G7072 N/A 305-605-101	F-A F1.SN	VT-3	1Q800-11-116	SAT	None		
1B21-S103A HYDRAULIC SNUBBER MPL 1B21G7076 N/A 305-605-101	F-A F1.SN	VT-3	1Q800-11-117	SAT	None		
1B21-S104A HYDRAULIC SNUBBER MPL 1B21G7080 N/A 305-605-101	F-A F1.SN	VT-3	1Q800-11-118	SAT	None		
1B21-S105D HYDRAULIC SNUBBER MPL 1B21G7087 N/A 305-605-104	F-A F1.SN	VT-3	1Q800-11-119	SAT	None		
1B21-S107B HYDRAULIC SNUBBER MPL 1B21G7090 N/A 305-605-102	F-A F1.SN	VT-3	1Q800-11-120	SAT	None		
1G33-H0146 MECHANICAL SNUBBER (AUGMENTED HEPIBER) N/A 305-671-104	F-A aug F1.50	VT-3	1Q800-11-084	SAT	None		

ID of Component Examined			ASME Category			
Description of Component			ASME	Exam		
Size -	Sched. -	ISI Dwg. No.	Item No.	Method	Exam Report No.	Status Remarks
1N22-H0006			F-A	VT-3	1Q800-11-134	SAT None
MECHANICAL SNUBBER			F1.SN			
N/A		305-121-102				

Table Notes:

1. Status codes are "SAT", "UNSAT" or "EVAL" for visual exams. For ultrasonic exams they are "IND" for indication, "GEO" for geometry, and "NRI" for no recordable indications.
2. The above exam listing is all the preservice exams that were performed during Cycle 13 or RFO13 due to repair/replacement activities.

APPENDIX B
"CYCLE 13 & RFO13 NIS-2/NR-1 FORMS"
INSERVICE INSPECTION SUMMARY REPORT
FOR
PERRY NUCLEAR POWER PLANT
(PNPP)
UNIT 1

Corrected Copy 1B13-055

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

1. Owner: FIRSTENERGY CORP. Date 08/24/2011
10 Center Road, Perry, Ohio 44081 Sheet 1 of 39

2. Plant: Perry Nuclear Power Plant (PNPP) Unit One
10 Center Road, Perry, Ohio 44081 SEE ATTACHED CHART
 (Repair Org. P.O. No., etc.)

3. Work Performed By: FIRSTENERGY Nuclear Operating Company PNPP Type Code Symbol Stamp NR
10 Center Road, Perry, Ohio 44081 Authorization No. 33
 Expiration Date 9-28-11

4. Identification of System: 1B13 REACTOR AND INTERNALS

5. (a) Applicable Construction Code: ASME SECTION III CLASS 1, 1974 Edition
 NAME/SECTION/DIVISION/CLASS
WINTER 1975 Addenda Code Case(s) * N207,1361-2,1728,1644-4,N272

(b) Construction Code used for repairs, modifications, or replacements: 1974 W/75 *
 Edition Addenda Code Case(s)

(c) ASME Code Section XI applicable for Inservice Inspection: 2001 2003 N/A
 Edition Addenda Code Case(s)

(d) Applicable Edition of Section XI Utilized for Repairs, Modification, or Replacements:
49, 2001 49, 2003 Addenda N/A
TJK 08/24/2011 TJK 08/24/2011 Code Case(s)

(e) Design Responsibilities FENOC

6. Identification of Components Repaired, Modified, or Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	Nat. Board No.	Other ID.	Year Built	Repair, Replacement, or Modification	ASME Code Stamped
Piping System	General Electric	1B13	64077	N/A	1984	Replacement	YES

7. Description of Work: 1B13D0008. Replaced 19 Control Rod Drives and 1" Cap Screws on 20 Control Rod Drives. See Attached Chart for details.

8. Test Conducted: Hydrostatic- ☐ Pneumatic- ☐ Nominal Operating Pressure- ☒ Other- ☐
 Pressure 1025 psi Test Temperature 132 degrees F Code Case(s) N/A

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

9. Remarks: See Attached Sheet for Details

NO NAMEPLATE/STAMPING PERFORMED DUE TO THE INTERFACE CONTROLS OF PART 3 SECTION

1.8.6 BEING IN EFFECT AND JURISDICTIONAL AUTHORITY CONCURRENCE HAVING BEEN RECEIVED.

Note: Attach all applicable Manufacturer's Data Reports. Supplemental sheets such as 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 of this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded on the front of this form.

CERTIFICATE OF COMPLIANCE

I, SCOTT J ROTH (alternate for JOHN S DAVIS) 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 items described above conforms to Section XI of the ASME Code and to the National Board Inspection Code "NR" rules.

National Board Certificate of Authorization No. 33 to use the "NR stamp expires 28 SEPT. 20 11
Date 8/24, 20 11 Signed FENOC-PNPP [Signature] QC SUPV.
(name of repair organization) (authorized representative) (title)

CERTIFICATE OF INSPECTION/INSERVICE INSPECTION

I, THOMAS G LAPS, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of OHIO and employed by HSB CT. of HARTFORD CT. have inspected the repair, modification or replacement described in this report on AUG. 24 20 11 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 ASME Code and the National Board Inspection Code "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work 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.

Date 8/24, 20 11 Signed Thomas G Laps Commissions NB 9330 "N" "I" "A" OHIO COMM.
(inspector) (National Board (include endorsements), and jurisdiction, and no.)

Corrected Copy 1B13-055

1. Owner: FIRSTENERGY CORP. Date 08/24/2011
10 Center Road, Perry, Ohio 44081 Sheet 1 of 39
2. Plant: Perry Nuclear Power Plant (PNPP) Unit One
10 Center Road, Perry, Ohio 44081
3. Work Performed By: FIRSTENERGY Nuclear Operating Company PNPP Type Code Symbol Stamp NR
10 Center Road, Perry, Ohio 44081 Authorization No. 33
Expiration Date 9-28-11
4. Identification of System: 1B13 REACTOR AND INTERNALS
5. (a) Applicable Construction Code: ASME SECTION III CLASS 1, 1974 Edition
NAME/SECTION/DIVISION/CLASS
WINTER 1975 Addenda Code Case(s) N207, 1361-2, 1728, 1644-4, N272
- (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 2001 Edition 2003 Addenda N/A
Code Case(s)

WO NUMBER	CORE LOCATION	NEW CRDM S/N	NUMBER OF CAPSCREWS REPLACED	HT NUMBERS OF NEW CAPSCREWS
200387797	10-19	A3325	8	34751
200319785	18-43	A5283	8	34751
200319786	22-39	A5255	8	34751
200387789	06-27	A6481	8	34751
200380055	34-55	A4170	8	34751
200319783	30-47	A5598	8	255A
200319787	38-39	A3620	8	34751
200447110	46-55	A5586	8	34751
200319784	38-47	A4253	8	34751
200326641	14-47	A4521	8	34751
200326645	46-23	A5649	8	34751
200447995	54-47	A5110	8	34751
200319791	30-19	A5386	8	34751
200319789	34-27	A2442	8	34751
200408272	02-31	A5393	8	34751
200326638	34-15	A4520	8	34751
200326642	14-39	A5220	8	34751
200326891	50-35	A4674	8	34751
200387796	14-15	A4007	8	34751
200387794	50-43	N/A (CRD NOT REPLACED)	8	34751

Sheet 1 of 2

1B13-055

Sheet 2 of 3

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*

As required by the Provision of the ASME Code Rules, Section III, Div. 1

1. (a) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N.C.
(Name and address of NPT Certificate Holder)
- (b) Manufactured for General Electric Company, San Jose, California
(Name and address of N Certificate Holder for completed nuclear component)
2. Identification-Certificate Holder's Serial No. of Part A3325 Nat'l Bd. No. _____
- (a) Constructed According to Drawing No. 768E534G001 Drawing Prepared by D. L. Peterson
- (b) Description of Part Inspected Control Rod Drive, Model #7RDB144DG001
- (c) Applicable ASME Code: Section III, Edition 1974, Addenda W'75, Case No. N207 1361-2, Class 1
3. Remarks: Standard part for use with Reactor. Hydrostatically tested at 1820 psi.
(Brief description of service for which component was designed)

* Total number of sheets - 2

We certify that the statements made in this report are correct and this vessel part or appurtenance as defined in the Code conforms to the rules of construction of the ASME Code Section III.
(The applicable Design Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certificate Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report.)

Date 12/26 19 79 Signed GE, NEPD-WMD-QA By [Signature]
(NPT Certificate Holder)

Certificate of Authorization Expires June 16, 1981 Certificate of Authorization No. NPT N-1151

CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at GE, NEPD-WMD-QA, Castle Hayne Rd., Wilmington, N.C.
22A5556, Rev. 1

Stress analysis report on file at GE, NEPD-WMD-QA, Castle Hayne Rd., Wilmington, N.C.
22A4912, Rev. 2

Design specifications certified by B. N. Sridhar Prof. Eng. State Calif Reg. No. 18345

Stress analysis report certified by B. N. Sridhar Prof. Eng. State Calif Reg. No. 18345

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 12/25 19 79, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in this Partial 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 12/25 19 79
[Signature]
Inspector's Signature

Commissions

National Board, State, Province and No.

NC 723, PA WC1766, OHIO.

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

(10/77)

This form (E00040) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017

FORM N-2 (back)

Items 4-8 Incl. to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____ in.
(Kind & Spec. No.) (Min. of Range Specified)5. Seams: Long _____ H.T.¹ _____ R.T. _____ Efficiency _____ %Girth _____ H.T.¹ _____ R.T. _____ No. of Courses _____
6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____
Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Press.
(Top, bottom, ends) (Conv. or Conc.)(a) _____
(b) _____If removable, bolts used _____ Other fastening _____
(Material, Spec. No., T.S., Size, Number) (Describe or attach sketch)7. Jacket Closure: _____
(Describe as ogee and weld, bar, etc. If barg give dimensions, if bolted, describe or sketch)8. Design pressure² 1250 psi at 575 °F Drop Weight _____
Charpy Impact _____ ft-lb
at temp. of _____ °F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ Dia. _____ Thickness _____ in. Attachment _____
(Kind & Spec. No.) (Subject to pressure) (Welded, Bolted)Floating. Material _____ Dia. _____ Thickness _____ in. Attachment _____
10. Tubes: Material _____ O.D. _____ in. Thickness _____ inches or gage. Number _____ Type _____
(Str. or U)

Items 11-14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____ in.
(Kind & Spec. No.) (Min. of Range Specified)12. Seams: Long _____ H.T.¹ _____ R.T. _____ Efficiency _____ %Girth _____ H.T.¹ _____ R.T. _____ No. of Courses _____
13. Heads (a) Material _____ T.S. _____ (b) Material _____ T.S. _____Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Press.
(Conv. or Conc.)(a) Top, bottom, ends _____
(b) Channel _____If removable, bolts used (a) _____ (b) _____ (c) _____ Other fastening _____
(Describe or attach sketch)14. Design pressure² _____ psi at _____ °F Drop Weight _____
Charpy Impact _____ ft-lb
at temp. of _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:

Purpose (Inlet, Outlet, Drain) Number Dia. or Size Type Material Thickness Reinforcement Material How Attached

_____17. Inspection Manholes, No. _____ Size _____ Location _____
Openings: Handholes, No. _____ Size _____ Location _____
Threaded, No. _____ Size _____ Location _____18. Supports: Skirt _____ Lugs _____ Legs _____ Other _____ Attached _____
(Yes or No) (Number) (Number) (Describe) (Where & How)¹ If Postweld Heat-Treated.² List other internal or external pressure with coincident temperature when applicable.

Sheet 2 of 2

1813-055

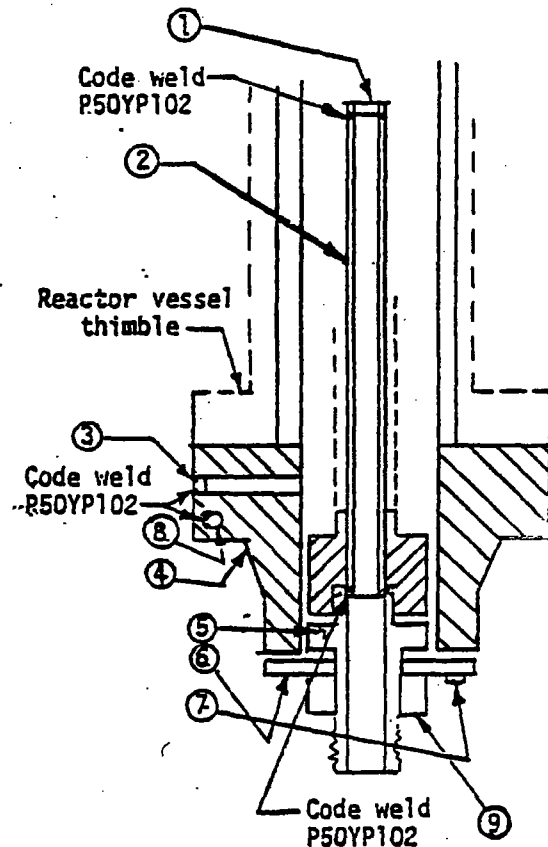
FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES

SHEET 3 of 39

As required by the Provision of the ASME Code Rules, Section III, Div. 1

1. (a) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N.C.
(Name and address of NPT Certificate Holder)
- (b) Manufactured for General Electric Company, San Jose, California (NEBG)
(Name and address of N Certificate Holder for completed nuclear component)
2. Identification-Certificate Holder's Serial No. of Part A3325 Nat'l Bd. No. _____
- (a) Constructed According to Drawing No. 768E534G001 Drawing Prepared by D. L. Peterson
- (b) Description of Part Inspected Control Rod Drive, Model #7RDB144DG001
- (c) Applicable ASME Code: Section III, Edition 1974, Addenda date W'75 Case No. N207
1361-2 Class 1

1. Cap 166B9274P1
(167A2343)
SA182 - F316
3/8 thick x 1 1/16 OD
2. Indicator Pipe 166B9313P1
SA312-TP316
3/4 sch 40-seamless pipe
0.113 wall thickness
1.065 max. dia.
3. Plug 159A1176P1
SA182-F304
1/4 thick x 0.812 OD
4. Flange 919D610P1 (719E474)
SA182-F304
3.37 thick x 9 5/8 OD
neck 1 1/16 thick x 5.0 OD
2.875 ID
5. Base 137C5311P1
XM-19 ASME SA479
3.0 OD x .884 ID
6. Ring Flange 11485122P2
SA182-F304
1" thick x 5.0 OD x 1.75 ID
7. Cap Screw 117C4516P2
SA193-86
6 ea. 1/2 dia. on 4 1/8 bolt circle
8. Plug 175A7961P1
SA182-F304
0.38 thick x 1.307 dia.



CONTROL ROD DRIVE
DWG - 768E534

9. Nut 137C5934P1
XM-19 SA479
1.30 thick x 2.62 dia.

Sheet 1 of 2

1B13-055
SHEET 4 of 3
28195

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*

As required by the Provision of the ASME Code Rules, Section III, Div. 1

1. (a) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N.C.
(Name and address of NPT Certificate Holder)
- (b) Manufactured for General Electric Company, San Jose, California (NEBG)
(Name and address of N Certificate Holder for completed nuclear component)
2. Identification-Certificate Holder's Serial No. of Part A5283 Nat'l Bd. No. _____
- (a) Constructed According to Drawing No. 768E534G001 Drawing Prepared by D. L. Paterson
- (b) Description of Part Inspected Control Rod Drive, Model #7RDB144DG001
- (c) Applicable ASME Code: Section III, Edition 1974, Addenda date W'75, Case No. N207 1361-2 Class 1
3. Remarks: Standard part for use with Reactor. Hydrostatically tested at 1820 psi.
(Brief description of service for which component was designed)
- * Total number of sheets - 2

We certify that the statements made in this report are correct and this vessel part or appurtenance as defined in the Code conforms to the rules of construction of the ASME Code Section III.
(The applicable Design Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certificate Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report.)

Date 2/24 19 83 Signed GE, NEPD-WMD By J. E. Strudemann
(NPT Certificate Holder)

Certificate of Authorization Expires June 16, 1984 Certificate of Authorization No. NPT N-1151

CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at GENERAL ELECTRIC CO., SAN JOSE, CALIFORNIA
22A5556, Rev. 2

Stress analysis report on file at GENERAL ELECTRIC CO., SAN JOSE, CALIFORNIA
22A4912, Rev. 2

Design specifications certified by B. N. Sridhar Prof. Eng. State Calif Reg. No. 18345

Stress analysis report certified by B. N. Sridhar Prof. Eng. State Calif Reg. No. 18345

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of North Carolina and employed by Department of Labor
of State of North Carolina have inspected the part of a pressure vessel described in this

Partial Data Report on 2/24 19 83 and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in this Partial 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 2/24 19 83

E. H. Sherill Commissions _____
Inspector's Signature National Board, State, Province and No. _____

N.C. 723, PA.WC1766, OHIO

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

0342

FORM N-2 (back)

Items 4-8 Incl. to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____ in.
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T.¹ _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.¹ _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____
Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Press.
(Top, bottom, ends) (Conv. or Conc.)

(a) _____
(b) _____

If removable, bolts used _____ Other fastening _____
(Material, Spec. No., T.S., Size, Number) (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as ogee and weld, bar, etc. If bar give dimensions, if bolted, describe or sketch)

8. Design pressure² 1250 psi at 575 °F Drop Weight _____
Charpy Impact _____ ft-lb
at temp. of _____ °F

Items 9 and 10 to be completed for tube sections.

9. Tube Sheets: Stationary. Material _____ Dia. _____ Thickness _____ in. Attachment _____
(Kind & Spec. No.) (Subject to pressure) (Welded, Bolted)

Floating. Material _____ Dia. _____ Thickness _____ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ inches or gage. Number _____ Type _____
(Str. or U)

Items 11-14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____ in.
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T.¹ _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.¹ _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____
Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Press.
(Top, bottom, ends) (Conv. or Conc.)

(a) Top, bottom, ends _____

(b) Channel _____

If removable, bolts used (a) _____ (b) _____ (c) _____ Other fastening _____
(Describe or attach sketch)

14. Design pressure² _____ psi at _____ °F Drop Weight _____
Charpy Impact _____ ft-lb
at temp. of _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:

Purpose (Inlet, Outlet, Drain)	Number	Dia. or Size	Type	Material	Thickness	Reinforcement Material	How Attached
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17. Inspection Manholes, No. _____ Size _____ Location _____
Openings: Handholes, No. _____ Size _____ Location _____
Threaded, No. _____ Size _____ Location _____

Sheet 2 of 2

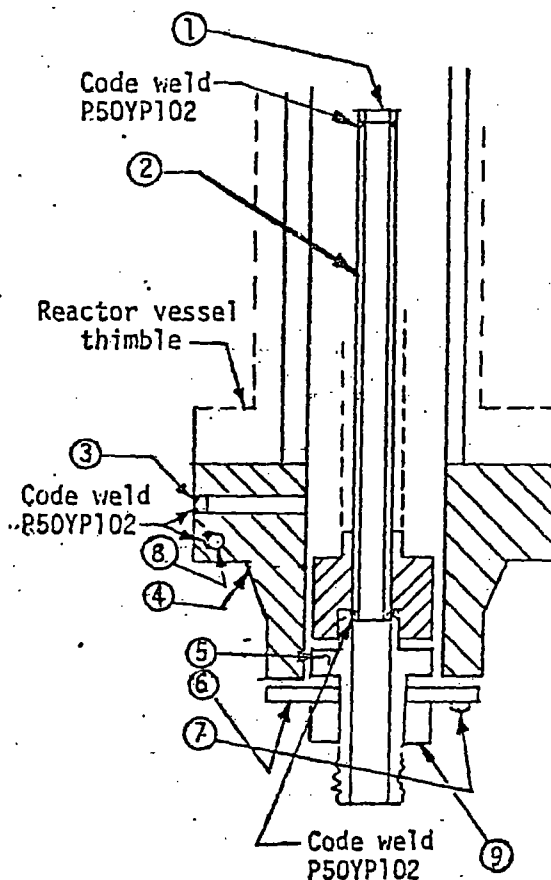
1013-055
SHEET 5 of 39
28195

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*

As required by the Provision of the ASME Code Rules, Section III, Div. 1

1. (a) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N.C.
(Name and address of NPT Certificate Holder)
- (b) Manufactured for General Electric Company, San Jose, California (NEBG)
(Name and address of N Certificate Holder for completed nuclear component)
2. Identification-Certificate Holder's Serial No. of Part A5283 Nat'l Bd. No. _____
- (a) Constructed According to Drawing No. 768E534G001 Drawing Prepared by D. L. Peterson
- (b) Description of Part Inspected Control Rod Drive, Model #7RDB144DG001
- (c) Applicable ASME Code: Section III, Edition 1974, Addenda date W'75, Case No. N207 1361-2 Class 1

1. Cap 166B9274P1
(167A2343)
SA182 - F316
3/8 thick x 1 1/16 OD
2. Indicator Pipe 166B9313P1
SA312-TP316
3/4 sch 40-seamless pipe
0.113 wall thickness
1.065 max. dia.
3. Plug 159A1176P1
SA182-F304
1/4 thick x 0.812 OD
4. Flange 919D610P1 (719E474)
SA182-F304
3.37 thick x 9 5/8 OD
neck 1 1/16 thick x 5.0 OD
2.875 ID
5. Base 137C5311P1
XM-19 ASME SA479
3.0 OD x .884 ID
6. Ring Flange 114B5122P2
SA182-F304
1" thick x 5.0 OD x 1.75 ID
7. Cap Screw 117C4516P2
SA193-B6
6 ea. 1/2 dia. on 4 1/8 bolt circle
8. Plug 175A7961P1
SA182-F304



CONTROL ROD DRIVE
DWG - 768E534

00343

9. Nut 137C5934P1
XM-19 SA479
1.30 thick x 2.62 dia.

Sheet 1 of 2

1813-055
SHEET 6 of 8

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*

As required by the Provision of the ASME Code Rules, Section III, Div. 1

1. (a) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N.C.
(Name and address of NPT Certificate Holder)
- (b) Manufactured for General Electric Company, San Jose, California (NEBG)
(Name and address of N Certificate Holder for completed nuclear component)
2. Identification-Certificate Holder's Serial No. of Part A5255 Nat'l Bd. No. _____
- (a) Constructed According to Drawing No. 768E534G001 Drawing Prepared by D. L. Paterson
- (b) Description of Part Inspected Control Rod Drive, Model #7RDB144DG001
- (c) Applicable ASME Code Section III, Edition 1974, Addenda date W'75, Case No. N207 1361-2 Class 1
3. Remarks: Standard part for use with Reactor. Hydrostatically tested at 1820 psi.
(Brief description of service for which component was designed)
- * Total number of sheets - 2

We certify that the statements made in this report are correct and this vessel part or appurtenance as defined in the Code conforms to the rules of construction of the ASME Code Section III.
(The applicable Design Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certificate Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report.)

Date 3/4 19 83 Signed GE, NEPD-WMD By J. Estrada
(NPT Certificate Holder)

Certificate of Authorization Expires June 16, 1984 Certificate of Authorization No. NPT N-1151

CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at GENERAL ELECTRIC CO., SAN JOSE, CALIFORNIA
22A5556, Rev. 2

Stress analysis report on file at GENERAL ELECTRIC CO., SAN JOSE, CALIFORNIA
22A4912, Rev. 2

Design specifications certified by B. N. Sridhar Prof. Eng. State Calif Reg. No. 18345

Stress analysis report certified by B. N. Sridhar Prof. Eng. State Calif Reg. No. 19345

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of North Carolina and employed by Department of Labor
of State of North Carolina have inspected the part of a pressure vessel described in this

Partial Data Report on 3/4 19 83 and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in this Partial 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 3/4 19 83

W. J. Steelman
Inspector's Signature

Commissions

N.C. 687, PA.WC2711

National Board, State, Province and No.

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

FORM N-2 (back)

Items 4-8 Incl. to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____ in.
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T.¹ _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.¹ _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____
Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Press.
(Top, bottom, ends) (Conv. or Conc.)

(a) _____
(b) _____

If removable, bolts used _____ Other fastening _____
(Material, Spec. No., T.S., Size, Number) (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as segue and weld, bar, etc. If bar give dimensions, if bolted, describe or sketch)

8. Design pressure² 1250 psi at 575 °F Drop Weight _____
Charpy Impact _____ ft-lb
at temp. of _____ °F

Items 9 and 10 to be completed for tube sections.

9. Tube Sheets: Stationary. Material _____ Dia. _____ Thickness _____ in. Attachment _____
(Kind & Spec. No.) (Subject to pressure) (Welded, Bolted)

Floating. Material _____ Dia. _____ Thickness _____ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ inches or gage. Number _____ Type _____
(Str. or U)

Items 11-14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____ in.
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T.¹ _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.¹ _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____
Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Press.
(Top, bottom, ends) (Conv. or Conc.)

(a) Top, bottom, ends _____
(b) Channel _____

If removable, bolts used (a) _____ (b) _____ (c) _____ Other fastening _____
(Describe or attach sketch)

14. Design pressure² _____ psi at _____ °F Drop Weight _____
Charpy Impact _____ ft-lb
at temp. of _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:
Purpose (Inlet, Outlet, Drain) Number Dia. or Size Type Material Thickness Reinforcement Material How Attached

17. Inspection Manholes, No. _____ Size _____ Location _____
Openings: Handholes, No. _____ Size _____ Location _____
Threaded, No. _____ Size _____ Location _____

Sheet 2 of 2

1813-055

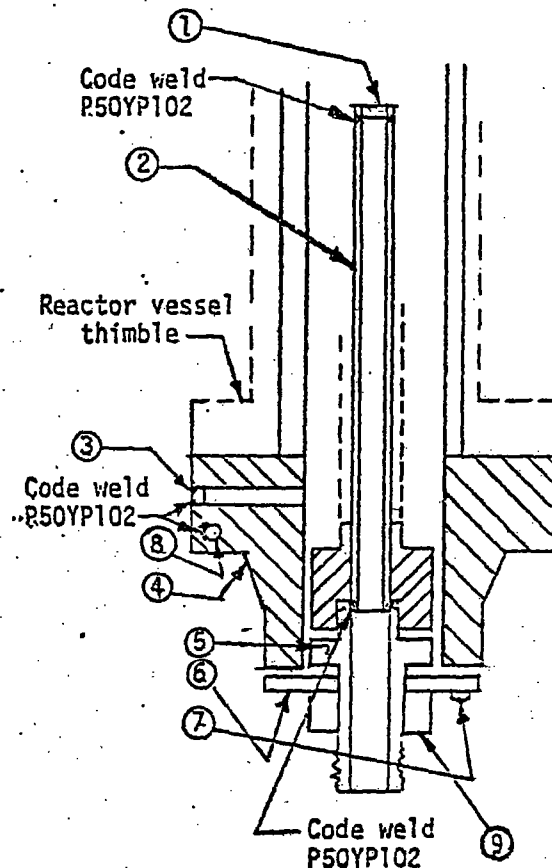
SHEET 7 of 39

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*

As required by the Provision of the ASME Code Rules, Section III, Div. 1

1. (a) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N.C.
(Name and address of NPT Certificate Holder)
- (b) Manufactured for General Electric Company, San Jose, California (NEBG)
(Name and address of N Certificate Holder for completed nuclear component)
2. Identification-Certificate Holder's Serial No. of Part A5255 Nat'l Bd. No. _____
- (a) Constructed According to Drawing No. 768E534G001 Drawing Prepared by D. L. Peterson
- (b) Description of Part Inspected Control Rod Drive, Model #7RDB144DG001
- (c) Applicable ASME Code: Section III, Edition 1974, Addenda date W'75, Case No. 1361-2 Class 1

1. Cap 166B9274P1
(167A2343)
SA182-F316
3/8 thick x 1 1/16 OD
2. Indicator Pipe 166B9313P1
SA312-TP316
3/4 sch 40-seamless pipe
0.113 wall thickness
1.065 max. dia.
3. Plug 159A1176P1
SA182-F304
1/4 thick x 0.812 OD
4. Flange 919D610P1 (719E474)
SA182-F304
3.37 thick x 9 5/8 OD
neck 1 1/16 thick x 5.0 OD
2.875 ID
5. Base 137C5311P1
XM-19 ASME SA479
3.0 OD x .884 ID
6. Ring Flange 11485122P2
SA182-F304
1" thick x 5.0 OD x 1.75 ID
7. Cap Screw 117C4516P2
SA193-B6
6 ea. 1/2 dia. on 4 1/8 bolt circle
8. Plug 175A7961P1
SA182-F304



CONTROL ROD DRIVE
DWG - 768E534

9. Nut 137C5934P1
XM-19 SA479
1.30 thick x 2.62 dia.

0298

Sheet 1 of 2 1B13-055
 SHEET 8 of 38
 78195

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*

*As required by the Provision of the ASME Code Rules, Section III, Div. 1

1. (a) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N.C.
(Name and address of NPT Certificate Holder)
- (b) Manufactured for General Electric Company, San Jose, California (NEBG)
(Name and address of N Certificate Holder for completed nuclear component)
2. Identification-Certificate Holder's Serial No. of Part A6481 Nat'l Bd. No. _____
- (a) Constructed According to Drawing No. 768E534G001 Drawing Prepared by D. L. Paterson
- (b) Description of Part Inspected Control Rod Drive, Model #7RDB144DG001
- (c) Applicable ASME Code Section III, Edition 1974, Addenda date W'75, Case No. N20/1361-2 Class 1
3. Remarks: Standard part for use with Reactor. Hydrostatically tested at 1820 psi.
(Brief description of service for which component was designed)
- * Total number of sheets - 2

We certify that the statements made in this report are correct and this vessel part or appurtenance as defined in the Code conforms to the rules of construction of the ASME Code Section III.
 (The applicable Design Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certificate Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report.)

Date 7/19 19 83 Signed GE, NEPD-WMD By J. Ottendunni
(NPT Certificate Holder)

Certificate of Authorization Expires June 16, 1984 Certificate of Authorization No. NPT N-1151

CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at GENERAL ELECTRIC CO., SAN JOSE, CALIFORNIA
22A5556, Rev. 2

Stress analysis report on file at GENERAL ELECTRIC CO., SAN JOSE, CALIFORNIA
22A4912, Rev. 2

Design specifications certified by B. N. Sridhar Prof. Eng. State Calif Reg. No. 18345

Stress analysis report certified by B. N. Sridhar Prof. Eng. State Calif Reg. No. 18345

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 7/19 19 83 and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in this Partial 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 7/19 19 83

E. J. Sherrill
 Inspector's Signature

Commissions

National Board, State, Province and No.

N.C. 723, PA.WC1766, OHIO.

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

Form N-2 (Rev. 4-68) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017

01662

FORM N-2 (back)

Items 4-8 Incl. to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____ in.
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T.¹ _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.¹ _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____
Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Press. (Conv. or Conc.)
(Top, bottom, ends)

(a) _____

(b) _____

If removable, bolts used _____ (Material, Spec. No., T.S., Size, Number) Other fastening _____ (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as ogee and weld, bar, etc. If bar give dimensions, if bolted, describe or sketch)

8. Design pressure¹ 1250 psi at 575 °F Drop Weight _____
Charpy Impact _____ ft-lb
at temp. of _____ °F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ Dia. _____ Thickness _____ in. Attachment _____
(Kind & Spec. No.) (Subject to pressure) (Welded, Bolted)

Floating. Material _____ Dia. _____ Thickness _____ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ inches or gage. Number _____ Type _____
(Str. or U)

Items 11-14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____ in.
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T.¹ _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.¹ _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____
Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Press. (Conv. or Conc.)
(a) Top, bottom, ends _____
(b) Channel _____

If removable, bolts used (a) _____ (b) _____ (c) _____ Other fastening _____ (Describe or attach sketch)

Drop Weight _____

Charpy Impact _____ ft-lb

at temp. of _____ °F

14. Design pressure¹ _____ psi at _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:

Purpose (Inlet, Outlet, Drain)	Number	Dia. or Size	Type	Material	Thickness	Reinforcement Material	How Attached
--------------------------------	--------	--------------	------	----------	-----------	------------------------	--------------

17. Inspection Manholes, No. _____ Size _____ Location _____

Openings: Handholes, No. _____ Size _____ Location _____

Threaded, No. _____ Size _____ Location _____

Attached _____

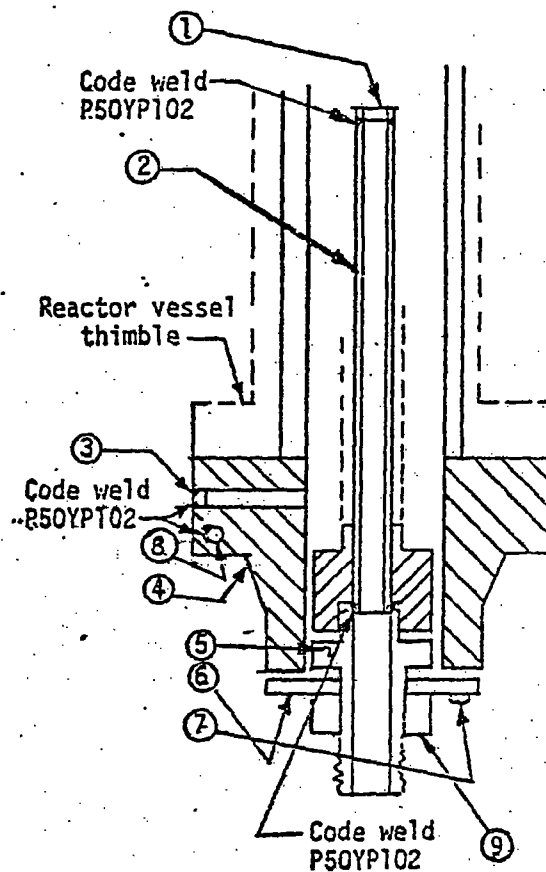
1813-055
Sheet 2 of 2 SHEET 9 of 20

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*

As required by the Provision of the ASME Code Rules, Section III, Div. 1

1. (a) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N.C.
(Name and address of NPT Certificate Holder)
- (b) Manufactured for General Electric Company, San Jose, California (NEBG)
(Name and address of N Certificate Holder for completed nuclear component)
2. Identification-Certificate Holder's Serial No. of Part A6481 Nat'l Bd. No. _____
- (a) Constructed According to Drawing No. 768E534G001 Drawing Prepared by D. L. Peterson
- (b) Description of Part Inspected Control Rod Drive, Model #7RDB144DG001
- (c) Applicable ASME Code: Section III, Edition 1974, Addenda date W'75, Case No. N207 1361-2 Class 1

1. Cap 166B9274P1
(167A2343)
SA182 - F316
3/8 thick x 1 1/16 OD
2. Indicator Pipe 166B9313P1
SA312-TP316
3/4 sch 40-seamless pipe
0.113 wall thickness
1.065 max. dia.
3. Plug 159A1176P1
SA182-F304
1/4 thick x 0.812 OD
4. Flange 919D610P1 (719E474)
SA182-F304
3.37 thick x 9 5/8 OD
neck 1 1/16 thick x 5.0 OD
2.875 ID
5. Base 137C5311P1
XM-19 ASME SA479
3.0 OD x .884 ID
6. Ring Flange 11485122P2
SA182-F304
1" thick x 5.0 OD x 1.75 ID
7. Cap Screw 117C4516P2
SA193-B6
6 ea. 1/2 dia. on 4 1/8 bolt circle
8. Plug 175A7961P1
SA182-F304



CONTROL ROD DRIVE
DWG - 768E534

9. Nut 137C5934P1
XM-19 SA479
1.30 thick x 2.62 dia.

(1663

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES

As required by the Provision of the ASME Code Rules, Section III, Div. 1

1813-055

Sheet 10 of 39

P6147

- (a) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N.C.
(Name and address of NPT Certificate Holder)
- (b) Manufactured for General Electric Company, San Jose, California (NEBG)
(Name and address of N Certificate Holder for completed nuclear component)
2. Identification-Certificate Holder's Serial No. of Part A4170 Nat'l Bd. No. _____
- (a) Constructed According to Drawing No. 768E534G001 Drawing Prepared by D. L. Paterson
- (b) Description of Part Inspected Control Rod Drive, Model #7RDB144DG001
- (c) Applicable ASME Code: Section III, Edition 1974, Addenda date W'75, Case No. N207 N295
1361-2 Class I
3. Remarks: Standard part for use with Reactor. Hydrostatically tested at 1820 psi.
(Brief description of service for which component was designed)
- * Total number of sheets - 2

We certify that the statements made in this report are correct and this vessel part or appurtenance as defined in the Code conforms to the rules of construction of the ASME Code Section III.
(The applicable Design Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certificate Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report.)

Date 8/31 19 81 Signed GE, NEPD-WMD By J. E. [Signature]
Certificate of Authorization Expires September 15, 1981 Certificate of Authorization No. NPT N-1151

CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at GE, NEPD-WMD-OA, Castle Hayne Rd., Wilmington, N.C.
22A5556, Rev. 2

Stress analysis report on file at GE, NEPD, San Jose, Calif.
22A4912, Rev. 2

Design specifications certified by B. N. Sridhar Prof. Eng. State Calif Reg. No. 18345

Stress analysis report certified by B. N. Sridhar Prof. Eng. State Calif Reg. No. 18345

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 8/31 19 81 and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in this Partial 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 8/31 19 81


Inspector's Signature

Commissions

N.C. 723, PA.WC1766, OHIO

National Board, State, Province and No.

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

00428

(10/77)

This form (E00040) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017

FORM N-2 (back)

1813-055
SHEET 10 of 39

Items 4-8 incl. to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____ in.
(Kind & Spec. No.) (Min. of Range Specified)5. Seams: Long _____ H.T.¹ _____ R.T. _____ Efficiency _____ %Girth _____ H.T.¹ _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

Location (Top, bottom, ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (Conv. or Conc.)
(a) _____	_____	_____	_____	_____	_____	_____	_____	_____
(b) _____	_____	_____	_____	_____	_____	_____	_____	_____

If removable, bolts used _____ Other fastening _____
(Material, Spec. No., T.S., Size, Number) (Describe or attach sketch)7. Jacket Closure: _____
(Describe as edges and weld, bar, etc. If bar give dimensions, if bolted, describe or sketch)8. Design pressure² 1250 psi at 575 °F
Drop Weight _____
Charpy Impact _____ ft-lb
at temp. of _____ °F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ Dia. _____ Thickness _____ in. Attachment _____
(Kind & Spec. No.) (Subject to pressure) (Welded, Bolted)

Floating. Material _____ Dia. _____ Thickness _____ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ inches or gage. Number _____ Type _____
(Rtr. or U)

Items 11-14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____ in.
(Kind & Spec. No.) (Min. of Range Specified)12. Seams: Long _____ H.T.¹ _____ R.T. _____ Efficiency _____ %Girth _____ H.T.¹ _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (Conv. or Conc.)
(a) Top, bottom, ends _____	_____	_____	_____	_____	_____	_____	_____	_____
(b) Channel _____	_____	_____	_____	_____	_____	_____	_____	_____

If removable, bolts used (a) _____ (b) _____ (c) _____ Other fastening _____
(Describe or attach sketch)14. Design pressure² _____ psi at _____ °F
Drop Weight _____
Charpy Impact _____ ft-lb
at temp. of _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:

Purpose (Inlet, Outlet, Drain)	Number	Dia. or Size	Type	Material	Thickness	Reinforcement Material	How Attached
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

17. Inspection Manholes, No. _____ Size _____ Location _____

Openings: Handholes, No. _____ Size _____ Location _____

Threaded, No. _____ Size _____ Location _____

18. Supports: Skirt _____ Lugs _____ Legs _____ Other _____ Attached _____
(Yes or No) (Number) (Number) (Describe) (Where & How)¹ If Postweld Heat-Treated.² List other internal or external pressure with coincident temperature when applicable.

Pg. 2 of 2

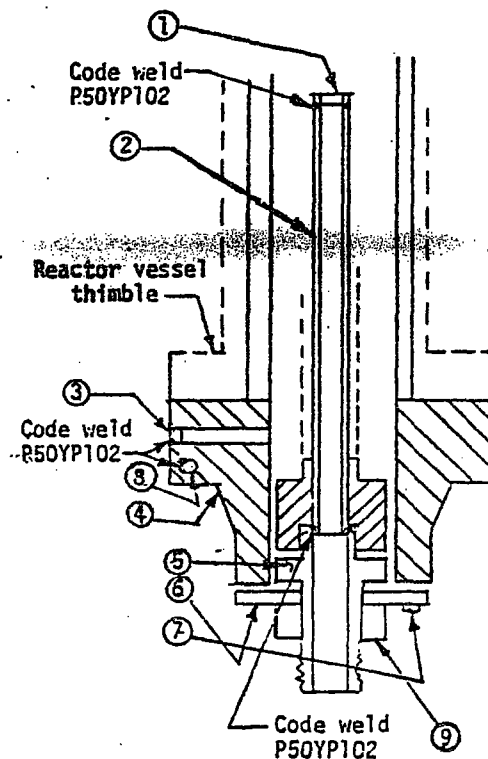
FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*

As required by the Provision of the ASME Code Rules, Section III, Div. 1

1813-055
SHEET 11 of 39

1. (a) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N.C.
(Name and address of NPT Certificate Holder)
- (b) Manufactured for General Electric Company, San Jose, California (NEBC)
(Name and address of N Certificate Holder for completed nuclear component)
2. Identification-Certificate Holder's Serial No. of Part A4170 Nat'l Bd. No. _____
- (a) Constructed According to Drawing No. 768E534G001 Drawing Prepared by D. L. Peterson
- (b) Description of Part Inspected Control Rod Drive, Model #7RDB144DG001
- (c) Applicable ASME Code: Section III, Edition 1974, Addenda date W'75, Case No. N207N295
1361-2 Class 1

1. Cap 166B9274P1
(167A2343)
SA182 - F316
3/8 thick x 1 1/16 OD
2. Indicator Pipe 166B9313P1
SA312-TP316
3/4 sch 40-seamless pipe
0.112 wall thickness
1.065 max. dia.
3. Plug 159A1176P1
SA182-F304
1/4 thick x 0.812 OD
4. Flange 919D610P1 (719E474)
SA182-F304
3.37 thick x 9 5/8 OD
neck 1 1/16 thick x 5.0 OD
2.875 ID
5. Base 137C5311P1
XM-19 ASME SA479
3.0 OD x .884 ID
6. Ring Flange 114B5122P2
SA182-F304
1" thick x 5.0 OD x 1.75 ID
7. Cap Screw 117C4516P2
SA193-B6
6 ea. 1/2 dia. on 4 1/8 bolt circle
8. Plug 175A7961P1
SA182-F304
0.38 thick x 1.307 dia.

CONTROL ROD DRIVE
DWG - 768E534

9. Nut 137C5934P1
XM-19 SA479
1.30 thick x 2.62 dia. **00429**

Sheet 1 of 2

1813-055
SHEET 12 OF 39

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*

As required by the Provision of the ASME Code Rules, Section III, Div. I

1. (a) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N.C.
(Name and address of NPT Certificate Holder)
- (b) Manufactured for General Electric Company, San Jose, California (NEBG)
(Name and address of N Certificate Holder for completed nuclear component)
2. Identification-Certificate Holder's Serial No. of Part A5598 Nat'l Bd. No. _____
- (a) Constructed According to Drawing No. 768E534G001 Drawing Prepared by D. L. Paterson
- (b) Description of Part Inspected Control Rod Drive, Model #7RDB144DG001
- (c) Applicable ASME Code: Section III, Edition 1974, Addenda date W'75, Case No. N207
1361-2 Class 1
3. Remarks: Standard part for use with Reactor. Hydrostatically tested at 1820 psi.
(Brief description of service for which component was designed)

* Total number of sheets - 2

We certify that the statements made in this report are correct and this vessel part or appurtenance as defined in the Code conforms to the rules of construction of the ASME Code Section III.
(The applicable Design Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certificate Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report.)

Date 8/26/81 19 81 Signed GE, NEPD-WMD NPT Certificate Holder
Certificate of Authorization Expires September 15, 1981 Certificate of Authorization No. NPT N-1151

CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at GE, NEPD-WMD-DA, Castle Hayne Rd., Wilmington, N.C.
22A5556, Rev. 2

Stress analysis report on file at GE, NEPD, San Jose, Calif.
22A4912, Rev. 2

Design specifications certified by B. N. Sridhar Prof. Eng. State Calif Reg. No. 18345

Stress analysis report certified by B. N. Sridhar Prof. Eng. State Calif Reg. No. 18345

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 8/26/81 1981, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in this Partial 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 8/26/81 19 81
E. D. Sherill Inspector's Signature
Commissions N.C. 723, PAWC1766, OHIO 00593
National Board, State, Province and No.

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

(10/77)

This form (E00040) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017

FORM N-2 (back)

Items 4-8 incl. to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____ in.
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T.¹ _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.¹ _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

Location (Top, bottom, ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (Conv. or Conc.)
(a) _____	_____	_____	_____	_____	_____	_____	_____	_____
(b) _____	_____	_____	_____	_____	_____	_____	_____	_____

If removable, bolts used _____ Other fastening _____
(Material, Spec. No., T.S., Size, Number) (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as gage and weld, bar, etc. If bargive dimensions, if bolted, describe or sketch)

8. Design pressure² 1250 psi at 575 °F Drop Weight _____
Charpy Impact _____ ft-lb
at temp. of _____ °F

Items 9 and 10 to be completed for tube sections.

9. Tube Sheets: Stationary. Material _____ Dis. _____ Thickness _____ in. Attachment _____
(Kind & Spec. No.) (Subject to pressure) (Welded, Bolted)

Floating. Material _____ Dis. _____ Thickness _____ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ in. Attachment _____
Inches or gage. Number _____ Type _____
(Std. or U)

Items 11-14 incl. to be completed for jackets of jacketed vessels, or shells of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____ in.
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T.¹ _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.¹ _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Press. (Conv. or Conc.)
(a) Top, bottom, ends	_____	_____	_____	_____	_____	_____	_____	_____
(b) Channel	_____	_____	_____	_____	_____	_____	_____	_____

If removable, bolts used (a) _____ (b) _____ (c) _____ Other fastening _____
(Describe or attach sketch)

14. Design pressure² _____ psi at _____ °F Drop Weight _____
Charpy Impact _____ ft-lb
at temp. of _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:

Purpose (Inlet, Outlet, Drain)	Number	Dis. or Size	Type	Material	Thickness	Reinforcement Material	How Attached
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

17. Inspection Manholes, No. _____ Size _____ Location _____

Openings: Handholes, No. _____ Size _____ Location _____

Threaded, No. _____ Size _____ Location _____

18. Supports: Skirt _____ Lugs _____ Legs _____ Other _____ Attached _____
(Yes or No) (Number) (Number) (Describe) (Where & How)

¹ If Postweld Heat-Treated.

² List other internal or external pressure with coincident temperature when applicable.

Sheet 2 of 2

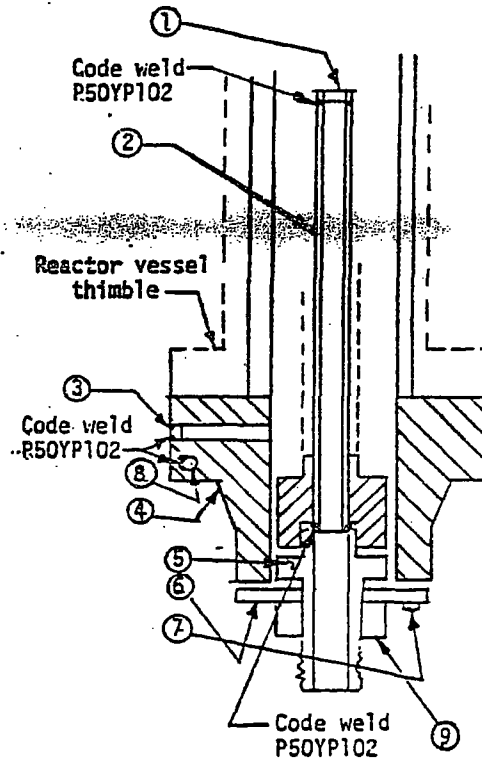
1813-055
SHEET 13 of 34

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*

As required by the Provision of the ASME Code Rules, Section III, Div. 1

1. (a) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N.C.
(Name and address of NPT Certificate Holder)
- (b) Manufactured for General Electric Company, San Jose, California (NEBG)
(Name and address of N Certificate Holder for completed nuclear component)
2. Identification-Certificate Holder's Serial No. of Part A5598 Nat'l Bd. No. _____
- (a) Constructed According to Drawing No. 768E534G001 Drawing Prepared by D. L. Paterson
- (b) Description of Part Inspected Control Rod Drive, Model #7RDB144DG001
- (c) Applicable ASME Code: Section III, Edition 1974, Addenda date W'75, Case No. N207 1361-2, Class 1

1. Cap 166B9274P1
(167A2343)
SA182 - F316
3/8 thick x 1 1/16 OD
2. Indicator Pipe 166B9313P1
SA312-TP316
3/4 sch 40-seamless pipe
0.113 wall thickness
1.065 max. dia.
3. Plug 159A1176P1
SA182-F304
1/4 thick x 0.812 OD
4. Flange 919D610P1 (719E474)
SA182-F304
3.37 thick x 9 5/8 OD
neck 1 1/16 thick x 5.0 OD
2.875 ID
5. Base 137C5311P1
XM-19 ASME SA479
3.0 OD x .884 ID
6. Ring Flange 11485122P2
SA182-F304
1" thick x 5.0 OD x 1.75 ID
7. Cap Screw 117C4516P2
SA193-B6
6 ea. 1/2 dia. on 4 1/8 bolt circle
8. Plug 175A7961P1
SA182-F304
0.38 thick x 1.307 dia.



CONTROL ROD DRIVE
DWG - 768E534

9. Nut 137C5934P1
XM-19 SA479
1.30 thick x 2.62 dia.

00594

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*

As required by the Provision of the ASME Code Rules, Section III, Div. I

- 1B17-055
SHEET 14 of 39
1. (a) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N.C.
(Name and address of NPT Certificate Holder)
- (b) Manufactured for General Electric Company, San Jose, California (NEBG)
(Name and address of N Certificate Holder for completed nuclear component)
2. Identification-Certificate Holder's Serial No. of Part A3620 Nat'l Bd. No. _____
- (a) Constructed According to Drawing No. 768E534G001 Drawing Prepared by D. L. Peterson
- (b) Description of Part Inspected Control Rod Drive, Model #7RDB144DG001
- (c) Applicable ASME Code: Section III, Edition 1974, Addenda date W'75, Case No. N207 1361-2 Class 1
3. Remarks: Standard part for use with Reactor. Hydrostatically tested at 1820 psi.
(Brief description of service for which component was designed)

* Total number of sheets - 2

We certify that the statements made in this report are correct and this vessel part or appurtenance as defined in the Code conforms to the rules of construction of the ASME Code Section III.
(The applicable Design Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certificate Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report.)

Date 8/29 19 81 Signed GE, NEPD-WMD By J. Ottendunni
(NPT Certificate Holder)

Certificate of Authorization Expires September 15, 1981 Certificate of Authorization No. NPT N-1151

CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at GE, NEPD-WMD-OA, Castle Hayne Rd., Wilmington, N.C.
22A5556, Rev. 2

Stress analysis report on file at GE, NEPD, San Jose, Calif.
22A4912, Rev. 2

Design specifications certified by B. N. Sridhar Prof. Eng. State Calif Reg. No. 18345

Stress analysis report certified by B. N. Sridhar Prof. Eng. State Calif Reg. No. 18345

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 8/29 19 81 and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in this Partial 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 8/29 19 81
E. J. Sherrill
Inspector's Signature

N.C. 723,PA.WC1766, OHIO

Commissions National Board, State, Province and No. 06173

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

(10/77)

This form (E00040) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017

FORM N-2 (back)

Items 4-8 Incl. to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____ in.
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T.¹ _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.¹ _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____
Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Press.
(Top, bottom, ends) (Conv. or Conc.)

(a) _____

(b) _____

If removable, bolts used _____ Other fastening _____
(Material, Spec. No., T.S., Size, Number) (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as ogee and weld, bar, etc. if bargive dimensions, if bolted, describe or sketch)

8. Design pressure² 1250 psi at 575 °F Drop Weight _____
Charpy Impact _____ ft-lb
at temp. of _____ °F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ Dia. _____ Thickness _____ in. Attachment _____
(Kind & Spec. No.) (Subject to pressure) (Welded, Bolted)

Floating. Material _____ Dia. _____ Thickness _____ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ inches or gage. Number _____ Type _____
(Str. or U)

Items 11-14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____ in.
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T.¹ _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.¹ _____ R.T. _____ No. of Courses _____

13. Heads (a) Material _____ T.S. _____ (b) Material _____ T.S. _____
Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Press.
(Top, bottom, ends) (Conv. or Conc.)

(a) Top, bottom, ends _____

(b) Channel _____

If removable, bolts used (a) _____ (b) _____ (c) _____ Other fastening _____
(Describe or attach sketch)

14. Design pressure² _____ psi at _____ °F Drop Weight _____
Charpy Impact _____ ft-lb
at temp. of _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:

Purpose (Inlet, Outlet, Drain)	Number	Dia. or Size	Type	Material	Thickness	Reinforcement Material	How Attached

17. Inspection Manholes, No. _____ Size _____ Location _____

Openings: Handholes, No. _____ Size _____ Location _____

Threaded, No. _____ Size _____ Location _____

18. Supports: Skirt _____ Lugs _____ Legs _____ Other _____ Attached _____
(Yes or No) (Number) (Number) (Describe) (Where & How)

¹ If Postweld Heat-Treated.

² List other internal or external pressure with coincident temperature when applicable.

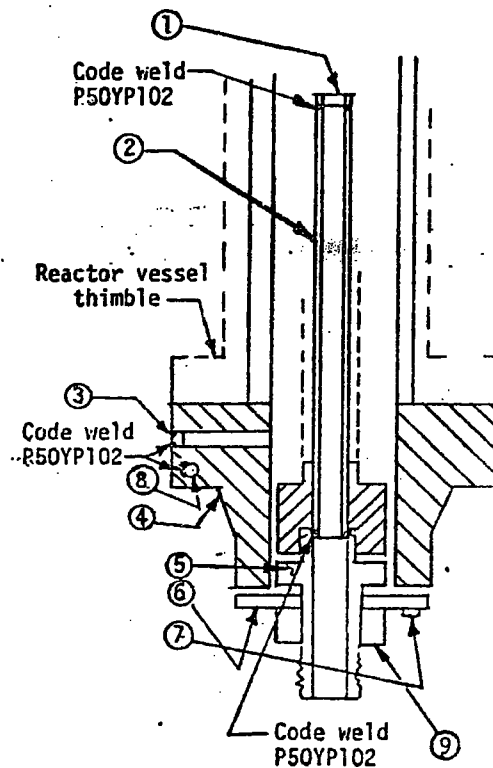
1813-055
SHEET 15 of 39

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*

As required by the Provision of the ASME Code Rules, Section III, Div. 1

1. (a) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N.C.
(Name and address of NPT Certificate Holder)
- (b) Manufactured for General Electric Company, San Jose, California (NEBG)
(Name and address of N Certificate Holder for completed nuclear component)
2. Identification-Certificate Holder's Serial No. of Part A3620 Nat'l Bd. No. _____
- (a) Constructed According to Drawing No. 768E534G001 Drawing Prepared by D. L. Peterson
- (b) Description of Part Inspected Control Rod Drive, Model #7RDB144DG001
- (c) Applicable ASME Code: Section III, Edition 1974, Addenda date W'75, Case No. N207 1361-2 Class 1

1. Cap 166B9274P1
(167A2343)
SA182 - F316
3/8 thick x 1 1/16 OD
2. Indicator Pipe 166B9313P1
SA312-TP316
3/4 sch 40-seamless pipe
0.113 wall thickness
1.065 max. dia.
3. Plug 159A1176P1
SA182-F304
1/4 thick x 0.812 OD
4. Flange 919D610P1 (719E474)
SA182-F304
3.37 thick x 9 5/8 OD
neck 1 1/16 thick x 5.0 OD
2.875 ID
5. Base 137C5311P1
XM-19 ASME SA479
3.0 OD x .884 ID
6. Ring Flange 11485122P2
SA182-F304
1" thick x 5.0 OD x 1.75 ID
7. Cap Screw 117C4516P2
SA193-B6
6 ea. 1/2 dia. on 4 1/8 bolt circle
8. Plug 175A7961P1
SA182-F304
0.38 thick x 1.307 dia.

CONTROL ROD DRIVE
DWG - 768E534

9. Nut 137C5934P1
XM-19 SA479
1.30 thick x 2.62 dia. 00174

FORM N-1 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*

As required by the Provision of the ASME Code Rules, Section III, Div. 1

1. (a) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N.C.
(Name and address of NPT Certificate Holder)
- (b) Manufactured for General Electric Company, San Jose, California (NEBG)
(Name and address of N Certificate Holder for completed nuclear component)
2. Identification-Certificate Holder's Serial No. of Part A5586 Nat'l Bd. No. _____
- (a) Constructed According to Drawing No. 768E534G001 Drawing Prepared by D. L. Paterson
- (b) Description of Part Inspected Control Rod Drive, Model #7RDB144DG001
- (c) Applicable ASME Code: Section III, Edition 1974, Addenda date W'75, Case No. N207 1361-2 Class 1
3. Remarks: Standard part for use with Reactor. Hydrostatically tested at 1820 psi.
(Brief description of service for which component was designed)

* Total number of sheets - 2

We certify that the statements made in this report are correct and this vessel part or appurtenance as defined in the Code conforms to the rules of construction of the ASME Code Section III.
(The applicable Design Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certificate Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report.)

Date 7/23 19 81 Signed GE, NEPD-WMD-QA
Certificate of Authorization Expires September 15, 1981 Certificate of Authorization No. NPT N-1151

CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file as GE, NEPD-WMD-QA, Castle Hayne Rd., Wilmington, N.C.
22A5556, Rev. 2

Stress analysis report on file as GE, NEPD-WMD-QA, Castle Hayne Rd., Wilmington, N.C.
22A4912, Rev. 2

Design specifications certified by B. N. Sridhar Prof. Eng. State Calif Reg. No. 18345

Stress analysis report certified by B. N. Sridhar Prof. Eng. State Calif Reg. No. 18345

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 7/23 19 81, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in this Partial 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 7/23 19 81

W. J. Stehman
Inspector's Signature

Commissions N.C. 687, PAWC2711
National Board, State, Province and No.

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

10-771

This form (E00040) may be obtained from the Order Dept., ASME, ONE E 17th St., New York, N.Y. 10011

00353

FORM N-2 (back)

Items 4-8 incl. to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____ in.
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T.¹ _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.¹ _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____
Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Press. (Conv. or Conc.)

(a) _____

(b) _____

If removable, bolts used _____ (Material, Spec. No., T.S., Size, Number) Other fastening _____ (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as edge and weld, bar, etc. If bar give dimensions, if bolted, describe or sketch)

8. Design pressure² 1250 psi at 575 °F Drop Weight _____
Charpy Impact _____ ft-lb
at temp. of _____ °F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material _____ Dia. _____ Thickness _____ in. Attachment _____
(Kind & Spec. No.) (Subject to pressure) (Welded, Bolted)

Flaring. Material _____ Dia. _____ Thickness _____ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ inches or gage. Number _____ Type _____
(Std. or U)

Items 11-14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____ in.
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T.¹ _____ R.T. _____ Efficiency _____ %

Girth _____ H.T.¹ _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____
Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Press. (Conv. or Conc.)

(a) Top, bottom, ends _____

(b) Channel _____

If removable, bolts used (a) _____ (b) _____ (c) _____ Other fastening _____ (Describe or attach sketch)

14. Design pressure² _____ psi at _____ °F Drop Weight _____
Charpy Impact _____ ft-lb
at temp. of _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:

Purpose (Inlet, Outlet, Drain)	Number	Dia. or Size	Type	Material	Thickness	Reinforcement Material	How Attached

17. Inspection Manholes, No. _____ Size _____ Location _____

Openings: Manholes, No. _____ Size _____ Location _____

Threaded, No. _____ Size _____ Location _____

18. Supports: Skirt _____ Yes or No _____ Lugs _____ Number _____ Legs _____ Number _____ Other _____ Attached _____ (Describe or attach sketch)

¹ If Postweld Heat-Treatment.
² If C.S. or other material or pressure with corrosion allowance not applicable

Sheet 2 of 2

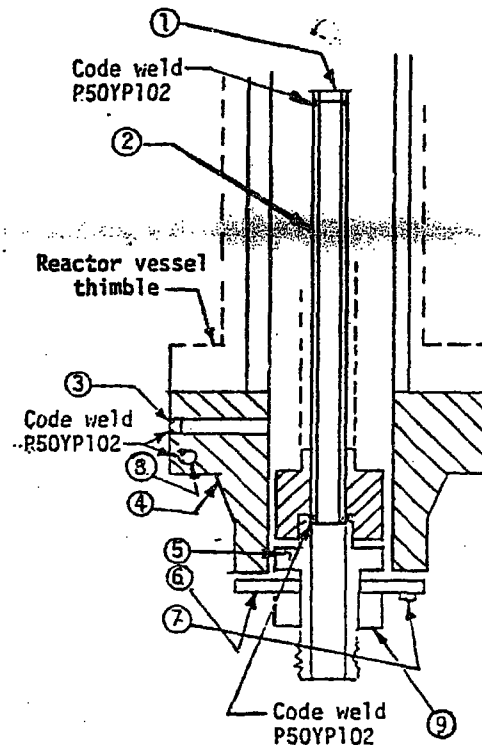
1813-055
SHEET 17 of 39

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*

As required by the Provision of the ASME Code Rules, Section III, Div. 1

1. (a) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N.C.
(Name and address of NPT Certificate Holder)
- (b) Manufactured for General Electric Company, San Jose, California (NEBG)
(Name and address of N Certificate Holder for completed nuclear components)
2. Identification-Certificate Holder's Serial No. of Part A5586 Nat'l Bd. No. _____
- (a) Constructed According to Drawing No. 768E534G001 Drawing Prepared by D. L. Peterson
- (b) Description of Part Inspected Control Rod Drive, Model #7RDB144DG001
N207
- (c) Applicable ASME Code: Section III, Edition 1974, Addenda date W'75, Case No. 1361-2 Class 1

1. Cap 166B9274P1
(167A2343)
SA182 - F316
3/8 thick x 1 1/16 OD
2. Indicator Pipe 166B9313P1
SA312-TP316
3/4 sch 40-seamless pipe
0.113 wall thickness
1.065 max. dia.
3. Plug 159A1176P1
SA182-F304
1/4 thick x 0.812 OD
4. Flange 919D610P1 (719E474)
SA182-F304
3.37 thick x 9 5/8 OD
neck 1 1/16 thick x 5.0 OD
2.875 ID
5. Base 137C5311P1
XM-19 ASME SA479
3.0 OD x .884 ID
6. Ring Flange 114B5122P2
SA182-F304
1" thick x 5.0 OD x 1.75 ID
7. Cap Screw 117C4516P2
SA193-B6
6 ea. 1/2 dia. on 4 1/8 bolt circle
8. Plug 175A7961P1
SA182-F304
0.38 thick x 1.307 dia.



CONTROL ROD DRIVE
DWG - 768E534

9. Nut 137C5934P1
XM-19 SA479
1.30 thick x 2.62 dia.

00354

1B13-055
Sheet 1 of 2 SHEET 18 of 39

FORM N-1 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*

As required by the Provision of the ASME Code Rules, Section III, Div. 1

1. (a) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N.C.
(Name and address of NPT Certificate Holder)
(b) Manufactured for General Electric Company, San Jose, California (NEBG)
(Name and address of NPT Certificate Holder for completed nuclear component)
2. Identification - Certificate Holder's Serial No. of Part A4253 Nat'l Bd. No. _____
(c) Constructed According to Drawing No. 768E534C001 Drawing Prepared by E. L. Peterson
(d) Description of Part Inspected Control Rod Drive, Model #7EDB144DG001
(e) Applicable ASME Code Section III, Edition 1974, Addenda date W'75, Code No. N20/1361-2 Class 1
3. Remarks Standard part for use with Reactor. Hydrostatically tested at 1820 psi.
(Brief description of service for which component was designed)

* Total number of sheets - 2

We certify that the statements made in this report are correct and this vessel part or appurtenance as defined in the Code conforms to the rules of construction of the ASME Code Section III.
(The applicable Design Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certificate Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report.)

Date 6/23 19 81 Signed GE, NEPD-WMD By J. Ottoboni
(NPT Certificate Holder)
Certificate of Authorization Expires September 15, 1981 Certificate of Authorization No. NPT N-1151

CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at GE, NEPD-WMD-0A, Castle Hayne Rd., Wilmington, N.C.
22A5556, Rev. 2
Stress analysis report on file at GE, NEPD, San Jose, Calif.
22A4912, Rev. 2
Design specifications certified by B. N. Sridhar Prof. Eng. State Calif Reg. No. 18345
Stress analysis report certified by B. N. Sridhar Prof. Eng. State Calif Reg. No. 18345

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 6/23 19 81 and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.
By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in this Partial 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 6/23 19 81
J. J. Ottoboni Inspector's Signature
Commission No. N.C. 687 PAWC2711
National Board, State, Province and No.

* Supplemental sheets in form of lists, sketches or drawings may be used provided: (1) also in BW" x 11", (2) information in items 1-7 on this Data Report is repeated on each sheet, and (3) each sheet is numbered and number of sheets is indicated in item 3, "Remarks".

(10/77)

This form (E000-40) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017

00248

FORM N-2 (back)

Items 4-8 incl. to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers.

4. Shell: Material T.S. Nominal Thickness in. Allowance in. Dia. ft. in. Length ft. in.
(Kind & Spec. No.) (Min. of Range Specified)

5. Senses Long H.T.¹ R.T. Efficiency %

Girth H.T.¹ R.T. No. of Courses

6. Heads: (a) Material T.S. (b) Material T.S.

Location Thickness Crown Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Press. (Conn. or Conn.)

(a) Top, bottom, ends

(b) Channel

If removable, bolts used (Material, Spec. No., T.S., Size, Number) Other fastening (Describe or attach sketch)

7. Jacket Closure: (Describe or attach sketch, if bolted, describe or sketch)

8. Design pressure 1250 psi at 375 °F Drop Weight ft-lb
Charpy Impact ft-lb
at temp. of °F

Items 9 and 10 to be completed for tube sections

9. Tube Sheet: Stationary. Material Dia. Thickness in. Attachment (Welded, Bolted)
(Kind & Spec. No.) (Subject to pressure)

Floating. Material Dia. Thickness in. Attachment

10. Tubes: Material G.D. in. Thickness in. or gage. Number Type (Std. or U)

Items 11-14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material T.S. Nominal Thickness in. Allowance in. Dia. ft. in. Length ft. in.
(Kind & Spec. No.) (Min. of Range Specified)

12. Senses Long H.T.¹ R.T. Efficiency %

Girth H.T.¹ R.T. No. of Courses

13. Heads: (a) Material T.S. (b) Material T.S.

Location Thickness Crown Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Press. (Conn. or Conn.)

(a) Top, bottom, ends

(b) Channel

If removable, bolts used (a) (b) (c) Other fastening (Describe or attach sketch)

14. Design pressure psi at °F Drop Weight ft-lb
Charpy Impact ft-lb
at temp. of °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlet: Number Size Location

16. Nozzles

Purpose (Inlet, Outlet, Drain) Number Dia. or Size Type Material Thickness Reinforcement Material How Attached

17. Inspection Manholes: No. Size Location

Openings: Handholes: No. Size Location

Threaded: No. Size Location

18. Supports: Skirt (Yes or No) Legs (Number) Legs (Number) Other (Describe) Attached (Where & How)

¹ If Footvalve Head-Tested.

² List other material or treatment processes with coincident temperature when applicable.

1B13-055

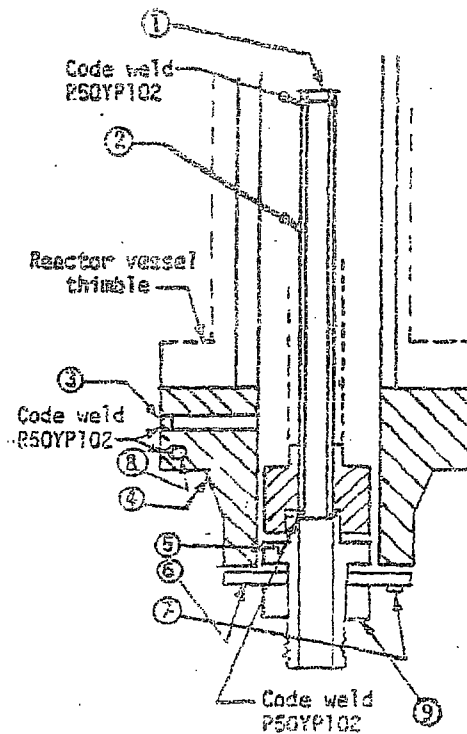
FORM N-3 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES

SHEET 19 of 39

As required by the Provision of the ASME Code Rules, Section III, Div. 1

1. (a) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N.C.
(Name and address of NPT Certificate Holder)
- (b) Manufactured for General Electric Company, San Jose, California (NEBC)
(Name and address of N Certificate Holder for completed nuclear component)
2. Identification-Certificate Holder's Serial No. of Part A4253 Nat'l Id. No. _____
- (c) Constructed According to Drawing No. 76AE534G001 Drawing Prepared by D. L. Paragon
- (d) Description of Part Inspected Control Rod Drive, Model #7BDE144DG001
- (e) Applicable ASME Codes Section III, Edition 1974, Addenda W'75, Code No. N207, Class 1361-2 Class 1

1. Cap 166B9274P1
(157A2343)
SA182 - F316
3/8 thick x 1 1/16 OD
2. Indicator Pipe 166B9313P1
SA312-TP316
3/4 sch 40-seamless pipe
0.113 wall thickness
1.065 max. dia.
3. Plug 159A1176P1
SA182-F304
1/4 thick x 0.812 OD
4. Flange 9190610P1 (719E474)
SA182-F304
3.37 thick x 9 5/8 OD
neck 1 1/16 thick x 5.0 OD
2.875 ID
5. Base 137C5311P1
XM-19 ASME SA479
3.0 OD x .884 ID
6. Ring Flange 114B5122P2
SA182-F304
1" thick x 5.0 OD x 1.75 ID
7. Cap Screw 117C4516P2
SA193-86
6 ea. 1/2 dia. on 4 1/8 bolt circle
8. Plug 175A7951P1
SA182-F304
0.38 thick x 1.307 dia.



CONTROL ROD DRIVE
DWG - 76AE534

9. Nut 137C5311P1
XM-19 SA479
1.30 thick x 2.62 dia.

00249

FORM N-1 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES

1B13-055
SHEET 20 of 39

As required by the Provision of the ASME Code Rules, Section III, Div. 1

(a) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N.C.
(Name and address of NPT Certificate Holder)

(b) Manufactured for General Electric Company, San Jose, California (NEBG)
(Name and address of N Certificate Holder for completed nuclear component)

Identification-Certificate Holder's Serial No. of Part A4521 Nat'l Bd. No. _____

(c) Constructed According to Drawing No. 768E534G001 Drawing Prepared by D. L. Peterson

(b) Description of Part Inspected Control Rod Drive, Model #7RDB144DG001

(c) Applicable ASME Code Section III, Edition 1974, Addenda date W'75, Case No. N207
1361-2 Class 1

Remarks Standard part for use with Reactor. Hydrostatically tested at 1320 psi.
(Brief description of service for which component was designed)

* Total number of sheets - 2

We certify that the statements made in this report are correct and this vessel part or appurtenance as defined in the Code conforms to the rules of construction of the ASME Code Section III. The applicable Design Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certificate Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report.

Signed GE, NEPD-WMD-QA By [Signature]
(NPT Certificate Holder)

Certificate of Authorization Expires June 16, 1981 Certificate of Authorization No. NPT N-1151

CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at GE, NEPD-WMD-QA, Castle Hayne Rd., Wilmington, N.C.
22A5556, Rev. 1

Stress analysis report on file at GE, NEPD-WMD-QA, Castle Hayne Rd., Wilmington, N.C.
22A4912, Rev. 2

Design specifications certified by B. N. Sridhar Prof. Eng. Score Calif Reg. No. 13345

Stress analysis report certified by B. N. Sridhar Prof. Eng. Score Calif Reg. No. 18345

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 12/30 19 80 and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the part described in this Partial 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 12/30 19 80

[Signature] Commissioner NC 779.PA.WC2L50, OHIO
Inspector's Signature National Board, State, Province and Co.

Additional copies of this report may be obtained from the National Board of Boiler and Pressure Vessel Inspectors, 1230 North 17th Street, New York, N.Y. 10017.

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This form E00040 may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017

FORM N-2 (back)

Items 4-8 Incl. to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____ in.
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T. _____ R.T. _____ Efficiency _____ %

Girth _____ H.T. _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Press. (Conv. or Conc.)

(a) _____

(b) _____

If removable, bolts used _____ Other fastening _____
(Material, Spec. No., T.S., Size, Number) (Describe or attach sketch)

7. Jacket Closure: _____
(Describe gasket and weld, bar, etc. if bar give dimensions, if bolted, describe or sketch)

8. Design pressure¹ _____ 1250 _____ psi at _____ 375 _____ °F Drop Weight _____ Charpy Impact _____ ft-lb at temp. of _____ °F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets, Stationary, Material _____ Dia. _____ Thickness _____ in. Attachment _____
(Kind & Spec. No.) (Subject to pressure) (Welded, Bolted)

Floating, Material _____ Dia. _____ Thickness _____ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ in. Number _____ Type _____
(Str. or U)

Items 11-14 Inc. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____ in.
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T. _____ R.T. _____ Efficiency _____ %

Girth _____ H.T. _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Press. (Conv. or Conc.)

(a) Top, bottom, ends _____

(b) Channel _____

If removable, bolts used (a) _____ (b) _____ Other fastening _____
(Describe or attach sketch)

14. Design pressure¹ _____ psi at _____ °F Drop Weight _____ Charpy Impact _____ ft-lb at temp. of _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:

Purpose: Inlet, Outlet, Drain, Number _____ Dia. or Size _____ Type _____ Material _____ Thickness _____ Reinforcement Material _____ How Attached _____

17. Inspection Mannholes, No. _____ Size _____ Location _____

Openings: Handholes, No. _____ Size _____ Location _____

Threaded, No. _____ Size _____ Location _____

18. Supports: Shell _____ Legs _____ Other _____ Attached _____
(Yes or No) (Number) (Number) (Number) (Describe) (Where & How)

¹ If Post-weld Heat-Treating.
² List other internal or external pressure with corresponding temperature when applicable.

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES

As required by the Provision of the ASME Code Rules, Section III, Div. 1

1B13-055

SHEET 21 of 39

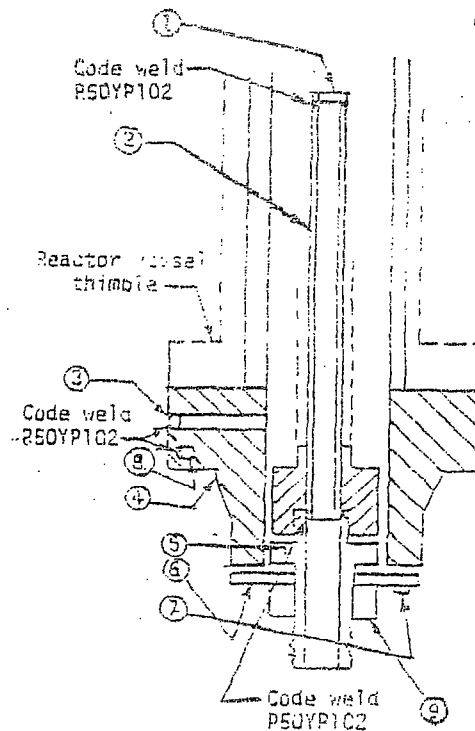
1. (a) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N.C.
(Name and address of NPT Certificate Holder)
- (b) Manufactured for General Electric Company, San Jose, California (NEBC)
(Name and address of N Certificate Holder for completed nuclear component)
2. Identification-Certificate Holder's Serial No. of Part A4521 Nat'l Ed. No. _____
- (a) Constructed According to Drawing No. 768E534G001 Drawing Prepared by D. L. Peterson
- (b) Description of Part Inspected Control Rod Drive, Model #768E534G001
- (c) Applicable ASME Code Section III, Edition 1974, Addenda date W'75 Case No. N207
1961-2, Class 1

Perry Document Control

AUG 04 2011

Best Available
Copy

1. Cap 16629274P1
(167A2343)
SA182 - F316
3/8 thick x 1 1/16 OD
2. Indicator Pipe 16629313P1
SA312-TP316
3/4 sch 40-seamless pipe
0.112 wall thickness
1.065 max. dia.
3. Plug 169A1176P1
SA182-F304
1/4 thick x 0.812 OD
4. Flange 9190610P1 (719E474)
SA182-F304
3.37 thick x 9 5/8 OD
neck 1 1/16 thick x 5.0 OD
2.875 ID
5. Base 137C5311P1
XM-19 ASME SA479
3.0 OD x .884 ID
6. Ring Flange 11485722P2
SA182-F304
1" thick x 5.0 OD x 1.75 ID
7. Cap Screw 117C4314P2
SA193-88
5 ea. 1/2 dia. on 4 1/8 bolt circle
8. Plug 175A2361P1
SA182-F304
0.33 thick x 1.307 dia.

CONTROL ROD DRIVE
GWS - 768E534

9. Nut 137C5924P1
XM-19 SA479
1.50 thick x 2.62 dia.

66-132

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES

As required by the Provision of the ASME Code Rules, Section III, Div. 1

1B13-055
SHEET 22 of 3

1. (a) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N.C.
(Name and address of NPT Certificate Holder)
(b) Manufactured for General Electric Company, San Jose, California (NEBG)
(Name and address of N Certificate Holder for completed nuclear component)

2. Identification-Certificate Holder's Serial No. of Part A5649 Nat'l Bd. No. _____

(a) Constructed According to Drawing No. 768E534G001 Drawing Prepared by D. L. Peterson
(b) Description of Part Inspected Control Rod Drive, Model #7RDB144DG001

(c) Applicable ASME Code: Section III, Edition 1974, Addenda date 4/75, Case No. N207 1361-2, Class 1

3. Remarks Standard part for use with Reactor. Hydrostatically tested at 1620 psi.
(Brief description of service for which component was designed)

* Total number of sheets - 2

We certify that the statements made in this report are correct and this vessel part or appurtenance as defined in the Code was
fabricated to the rules of construction of the ASME Code Section III.
(The applicable Design Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certificate Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not
included in the component Design Specification and Stress Report.)

Date 7/7 19 81 Signed GE, NEPD-WMD by E. Henderson
(NPT Certificate Holder)
Certificate of Authorization Expires September 15, 1981 Certificate of Authorization No. NPT N-1151

CERTIFICATION OF DESIGN FOR APPURTENANCE (where applicable)

Design information on file at GE, NEPD-WMD-0A, Castle Hayne Rd., Wilmington, N.C.
2245556, Rev. 2
Stress analysis report on file at GE, NEPD, San Jose, Calif.
2249112, Rev. 2
Design specifications certified by B. N. Sridhar Prof. Eng. State Calif Reg. No. 3345
Stress analysis report certified by B. N. Sridhar Prof. Eng. State Calif Reg. No. 3345

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors
and/or the State or Province of North Carolina and employed by Department of Labor
of State of North Carolina have inspected the part of a pressure vessel described in this
Partial Data Report on 7/7 19 81 and state that to the best of my knowledge
and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.
By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concern-
ing the part described in this Partial 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 7/7 19 81 8-1 Mo. 11
Inspector's Signature 8-1 Mo. 11 N.C. 723.PA.WC1766.GH17

* This form is to be used for the inspection of components that are not covered by the ASME Code Section III, Division 1, and are not covered by the ASME Code Section III, Division 2, and are not covered by the ASME Code Section III, Division 3.

(10/77)

The form E00040 may be obtained from the Order Dept., ASME, 475 E. 4th St., New York, N.Y. 10017

המחבר: ד"ר יצחק יוסף, מנהל מחלקת המחקר, משרד החינוך, תל אביב.

4. Shell: Material _____ T.S. _____
 Normal Thickness _____ in. Allowance _____ in. Dia. _____ in. Length _____ in.
 (List & Spec. No.) (List of Range Specimens)

3. Series: Long H.T. R.T. Efficiency %

Grain	R.T.	No. of Courses

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1. **Содержание:** В документе содержится информация о том, что в соответствии с требованиями законодательства Российской Федерации, в целях обеспечения безопасности и защиты информации, содержащейся в документах, принадлежащих на праве собственности государству, в отношении документов, содержащих государственную тайну, необходимо принимать меры по их защите.

1. General
 2. Size
 3. Thickness
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Sheet 2 of 2 1B13-055

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES • SHEET 2 of 39

As required by the Provision of the ASME Code Rules, Section III, Div. 1

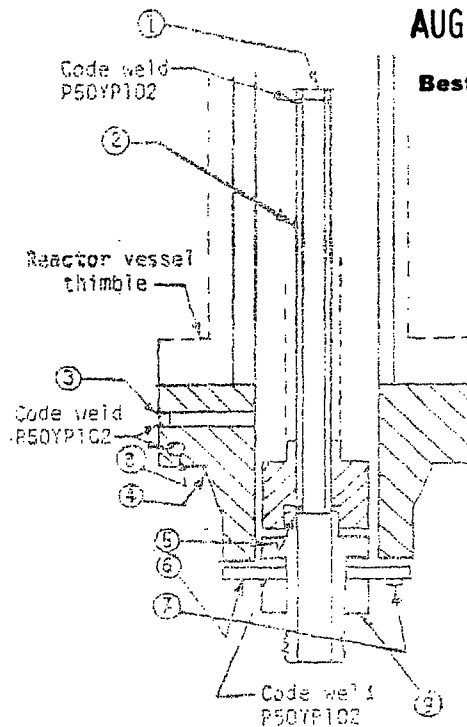
1. (a) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N.C.
(Name and address of NPT Certificate Holder)
- (b) Manufactured for General Electric Company, San Jose, California (NEBG)
(Name and address of N Certificate Holder for completed nuclear component)
2. Identification—Certificate Holder's Serial No. of Part A5649 Mat'l Bld. No. _____
- (c) Constructed According to Drawing No. 768P534G001 Drawing Prepared by D. L. Peterson
- (d) Description of Part Inspected Control Rod Drive, Model #7RDB144DG001
- (e) Applicable ASME Code Section III, Edition 1974, Addenda date N75 Case No. 1361-3 Class 1

Perry Document Control

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Best Available
Copy

1. Cap 166B9274P1
(157A2343)
SA182 - F316
3/8 thick x 1 1/16 OD
2. Indicator Pipe 166B9310P1
SA312-TP316
3/4 sch 40-seamless pipe
0.113 wall thickness
1.065 max. dia.
3. Plug 159A1176P1
SA182-F304
1/4 thick x 0.812 OD
4. Flange 9190610P1 (7195474)
SA182-F304
3.37 thick x 9 5/8 OD
neck 1 1/16 thick x 3.0 OD
2.875 ID
5. Base 137C5311P1
XM-19 ASME SA479
3.0 OD x .204 ID
6. Ring Flange 11495122P2
SA182-F304
1" thick x 5.0 OD x 1.75 ID
7. Cap Screw 11704510P2
SA193-B6
6 ea. 1/2 dia. on 4 1/8 bolt circle
8. Plug 175A7961P1
SA182-F304
0.38 thick x 1.307 dia.

CONTROL ROD DRIVE
Dwg - 768P534

9. Nut 11705934P1
XM-19 SA479
1.50 thick x 2.52 dia.

(1) 181

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES

As required by the Provision of the ASME Code Rules, Section III, Div. 1

1313-055
SHEET 24 of 39

1. (a) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N.C.
(Name and address of NPT Certificate Holder)

(b) Manufactured for General Electric Company, San Jose, California (NEBG)
(Name and address of NPT Certificate Holder for completed Section III, Division 1)

2. Identification-Certificate Holder's Serial No. of Part AS110 Nat'l Bd. No. _____

(a) Constructed According to Drawing No. 768E534G001 Drawing Prepared by D. L. Peterson

(b) Description of Part Inspected Control Rod Drive, Model #7RDB144DG001

(c) Applicable ASME Code: Section III, Edition 1974, Addenda date W'75, Case No. N207 1361-2 Class 1

3. Remarks Standard part for use with Reactor. Hydrostatically tested at 1820 psi.
(Brief description of service for which component was designed)

* Total number of sheets - 2

We certify that the statements made in this report are correct and this vessel part or appurtenance as defined in the Code code forms to the rules of construction of the ASME Code Section III.
(The applicable Design Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certificate Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report.)

Date 7/24 19 81 Signed GZ, NEPD-WMD-QA By J. Attwood
(NPT Certificate Holder)

Certificate of Authorization Expires September 15, 1981 Certificate of Authorization No. NPT X-1151

CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at GZ, NEPD-WMD-QA, Castle Hayne Rd., Wilmington, N.C.
22A5356, Rev. 2

Stress analysis report on file at GZ, NEPD-WMD-QA, Castle Hayne Rd., Wilmington, N.C.
22A-912, Rev. 2

Design specifications certified by B. N. Bridgman Prof. Eng. State Calif Reg. No. 33345

Stress analysis report certified by B. N. Bridgman Prof. Eng. State Calif Reg. No. 33345

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 7/24 19 81 and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the part described in this Partial 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 7/24 19 81

[Signature]
Inspector's Signature

N.C. 723.FAWC1766. OHIO

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(10/77)

This form (2000-40) may be obtained from the National Board of Boiler and Pressure Vessel Inspectors, 1010 North 17th Street, Columbus, Ohio 43261.

FORM N-2 (back)

Items 4-8 Incl. to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____ in.
(Kind & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T. ¹ _____ R.T. _____ Efficiency _____ %

Girth _____ H.T. ¹ _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____
Location _____ Thickness _____ Crown Radius _____ Elliptical Ratio _____ Conical Apex Angle _____ Hemispherical Radius _____ Flat Diameter _____ Side to Press. (Conv. or Conc.)
(Top, bottom, ends) (a) _____ (b) _____
If removable, bolts used _____ (Material, Spec. No., T.S., Size, Number) Other fastening _____ Describe or attach content

7. Jacket Closure: _____
(Describe as edge weld, bar, etc. if bar give dimensions, if bolted, describe or attach)

8. Design pressure: 1250 psi at 575 °F Drop Weight _____
Charpy Impact _____ ft-lb
is temp. of _____ °F

Items 9 and 10 to be completed for tube sections

9. Tube Sheet: Stationary: Material _____ Dia. _____ Thickness _____ in. Attachment _____
(Kind & Spec. No.) (Subject to pressure) (Welded, Bolted)

Floating: Material _____ Dia. _____ Thickness _____ in. Attachment _____

10. Tubes: Material _____ C.D. _____ in. Thickness _____ inches or gage Number _____ Type _____
(St. or U)

Items 11-14 Incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____ in.
(Kind & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T. ¹ _____ R.T. _____ Efficiency _____ %

Girth _____ H.T. ¹ _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____
Location _____ Thickness _____ Crown Radius _____ Elliptical Ratio _____ Conical Apex Angle _____ Hemispherical Radius _____ Flat Diameter _____ Side to Press. (Conv. or Conc.)
(a) Top, bottom, ends _____ (b) Channel _____
If removable, bolts used (a) _____ (b) _____ Other fastening _____ Describe or attach content

14. Design pressure: _____ psi at _____ °F Drop Weight _____
Charpy Impact _____ ft-lb
is temp. of _____ °F

Items below to be completed on all vessels where applicable.

15. Safety Valve Outlet: Number _____ Size _____ Location _____

16. Nozzles:

| Purpose (Inlet, Outlet, Drain) | Number | Dia. or Size | Type | Material | Thickness | Attachment Material | How Attached |
|--------------------------------|--------|--------------|------|----------|-----------|---------------------|--------------|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

17. Inspection Manholes: No. _____ Size _____ Location _____
Coverings: Handholes: No. _____ Size _____ Location _____
Threaded: No. _____ Size _____ Location _____

18. Supports: Bolt _____ Size _____ No. _____ Weld _____ No. _____
(See 17. 18.) (See 17. 18.) (See 17. 18.) (See 17. 18.)

¹ Refer to Form T-1000
1. When ordering a pressure vessel with a pressure rating of 1500 psi or less, the design pressure shall be indicated on the drawing.

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*

As required by the Provision of the ASME Code Rules, Section III, Div. 1

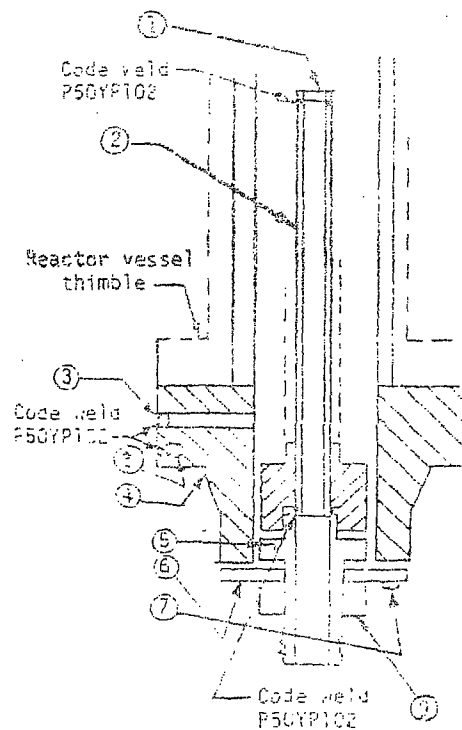
1. (a) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N.C.
(Name and address of NPT Certificate Holder)
- (b) Manufactured for General Electric Company, San Jose, California (NERG)
(Name and address of N Certificate Holder for completed nuclear equipment)
2. Identification-Certificate Holder's Serial No. of Part AS110 NPT Bd. No. _____
- (c) Constructed According to Drawing No. 768E34G001 Drawing Prepared by D. I. Peterson
- (d) Description of Part Inspected Control Rod Drive, Model #7RDB144DG001
- (e) Applicable ASME Code: Section III, Edition 1974, Addenda date W'75, Case No. N207, Code No. 1361-2, Class 1

Perry Document Control

AUG 04 2011

Best Available
Copy

1. Cap 16689214P1
(167A2343)
SA192-F304
3/8 thick x 1 1/16 OD
2. Indicator Pipe 16689313P1
SA192-F304
3/4 sch 40-seamless pipe
0.112 wall thickness
1.065 max. dia.
3. Plug 159A1175P1
SA192-F304
1/4 thick x 0.812 OD
4. Flange 9190610P1 (779E404)
SA192-F304
3.37 thick x 3 5/8 OD
neck 1 1/16 thick x 3 3/4 OD
2.375 ID
5. Base 13705911P1
ASME SA476
3.0 OD x 1.564 ID
6. Ring Flange 11455122P2
SA192-F304
1" thick x 5.0 OD x 1.75 ID
7. Cap Screw 11704158P2
SA193-B6
5 ea. 1/2 dia. on 1 1/8 bolt circle
8. Plug 173A1021P1
SA192-F304
0.88 thick x 1.327 dia.

CONTROL PIN 117E
Dwg - 768E34G0019. Nut 13705911P1
SA193-B6
1 ea. 1/2 dia. on 1 1/8 bolt circle

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES

As required by the Provision of the ASME Code Rules, Section III, Div. 1

1813-055
SHEET 26 of 39

1. (a) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N.C.
(Name and address of NPT Certificate Holder)

(b) Manufactured for General Electric Company, San Jose, California (NEBG)
(Name and address of N Certificate Holder for completed nuclear component)

2. Identification—Certificate Holder's Serial No. of Part A5386 Nat'l Id. No. _____

(a) Constructed According to Drawing No. 768P534G001 Drawing Prepared by D. L. Peterson

(b) Description of Part Inspected Control Rod Drive, Model #7EDB144DG001

(c) Applicable ASME Code Section III, Edition 1974, Addenda date W'75, Case No. N20/1561-2 Class 1

3. Remarks Standard part for use with Reactor. Hydrostatically tested at 1820 psi.
(Brief description of service for which component was designed)

Total number of sheets - 2

We certify that the statements made in this report are correct and this vessel part or appurtenance as defined in the Code conforms to the rules of construction of the ASME Code Section III.
(The applicable Design Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certificate Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report.)

7/24/81
Certificate of Authorization Expires September 15, 1981 Certificate of Authorization No. NPT N-1151

CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file as G2, NEPD-420-QA, Castle Hayne Rd., Wilmington, N.C.
32A5536, Rev. 2

Stress analysis report on file as G2, NEPD-420-QA, Castle Hayne Rd., Wilmington, N.C.
22A4912, Rev. 2

Design specifications certified by B. N. Sridhar Prof. Eng. State Calif Reg. No. 13345

Stress analysis report certified by B. N. Sridhar Prof. Eng. State Calif Reg. No. 13345

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report as 7/24/81 and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in this Partial 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 7/24/81

[Signature]
Inspector's Signature

Commission No. _____ National Board, State, Province and No. N.C. 723,PA.WC1766, OHIO

Supplemental notes to Form N-2 may be made on separate sheets attached to the back of this form. Do not attach to the front of this form.

(10/77)

This form (E00040) Rev. 02 requires minimum copy 20. ASME, 333 East 47th St., New York, N.Y. 10017

FORM N-2 (back)

Items 4-8 Incl. to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____ in.
(Kind & Spec. No.) (Min. or Range Specified)

5. Seams: Long _____ H.T. _____ R.T. _____ Efficiency _____ %

Girth _____ H.T. _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

Location Thickness Crown Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Press. (Conv. or Conc.)

(a) _____

(b) _____

If removable, bolts used _____ Other fastening _____
(Material, Spec. No., T.S., Size, Number) (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as gage and hold, cap, etc., if per given dimensions, if bolted, describe or sketch)

8. Design pressure: 1250 psi at 575 °F Drop Weight _____ Charpy Impact _____
at temp. of _____ at temp. of _____

Items 9 and 10 to be completed for tube sections

9. Tube Sheet or Secondary: Material _____ Dia. _____ Thickness _____ in. Attachment _____
(Kind & Spec. No.) (Subject to pressure) (Welded, Bolted)

Flaring: Material _____ Dia. _____ Thickness _____ in. Attachment _____

10. Tubes: Material _____ O.D. _____ in. Thickness _____ in. Number _____ Type _____
(Per. or UT)

Items 11-14 Incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____ in.
(Kind & Spec. No.) (Min. or Range Specified)

12. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

Girth _____ H.T. _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____

Location Thickness Crown Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Press. (Conv. or Conc.)

(a) Top, bottom, ends _____

(b) Channel _____

If removable, bolts used (a) _____ (b) _____ Other fastening _____
(Describe or attach sketch)

14. Design pressure: _____ psi at _____ °F Drop Weight _____ Charpy Impact _____
at temp. of _____ at temp. of _____

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:

Purpose: Inlet, Outlet, Drain Number Dia. or Size Type Material Thickness Reinforcement Material How Attached

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES

1813-055
SHEET 27 of 39

As required by the Provision of the ASME Code Rules, Section III, Div. 1

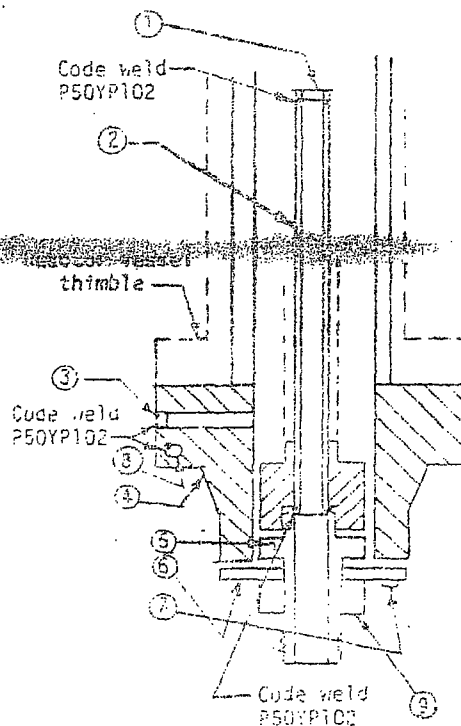
1. (a) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N.C.
(Name and address of NPT Certificate Holder)
- (b) Manufactured for General Electric Company, San Jose, California (NEBG)
(Name and address of N Certificate Holder for completed nuclear component)
2. Identification-Certificate Holder's Serial No. of Part A5386 Nat'l S. No. _____
- (a) Constructed According to Drawing No. 758E534G001 Drawing Prepared by D. L. Peterson
N207
- (b) Description of Part Inspected Control Rod Drive, Model #7RDE144DC001
- (c) Applicable ASME Code: Section III, Edition 1974, Addenda date W.75, Case No. 1361-2 Class 1

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Best Available
Copy

1. Cap 166B9274P1
(167A2343)
SA182 - F316
3/8 thick x 1 1/16 OD
2. Indicator Pipe 166B9313P1
SA312-TP316
3/4 sch 40-seamless pipe
0.113 wall thickness
7.655 ID
3. Plug 159A1175P1
SA182-F304
1/4 thick x 0.812 OD
4. Flange 919D61CP1 (719E474)
SA182-F304
3.37 thick x 3 5/8 OD
neck 1 1/16 thick x 5.0 OD
2.875 ID
5. Base 137C5311P1
ASME SA479
3.9 OD x 1.804 ID
6. Ring Flange 114B5122P2
SA182-F304
1" thick x 5.0 OD x 1.75 ID
7. Top Screw 111451CP1
SA193-B6
6 ea. 1/2 dia. on 4 1/8 bolt circle
8. Plug 175A7051P1
SA182-F304
0.50 thick x 0.307 dia.

CONTROL ROD DRIVE
DWC - 7505301

9. Nut 127C5934P1
SA479 - A193
1.00 thick x 1.50 dia. 0.510

SHEET 28 of 39

1. (a) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N.C.
(Name and address of NPT Certificate Holder)
(b) Manufactured for General Electric Company, San Jose, California (NEBG)
(Name and address of R Certificate Holder for completed machine component)

2. Identification—Certificate Holder's Serial No. of Part A2442 Part Id. No. _____

(a) Casemated According to Drawing No. 763E534G001 Drawing Prepared by D. L. Peterson

(b) Description of Part Inspected Control Rod Drive, Model #7KDB144DG001

(c) Applicable ASME Code Section III, Edition 1974, Addenda W'75, Case No. N207 1361-2 Class 1

3. Remarks Standard part for use with Reactor. Hydrostatically tested at 1520 psi.
(Brief description of service for which component was designed)

We certify that the statements made in this report are correct and this vessel part or apparatus as defined in the Code now comes in the rules of construction of the ASME Code Section III.
(The applicable Design Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certificate Holder for apparatuses is responsible for furnishing a separate Design Specification and Stress Report if the apparatuses is not included in the components Design Specification and Stress Report.)

7/24 1981 Signed CE, NEPT-10-14 For V. E. [Signature]
 Certificate of Authorization Expires September 15, 1981 Certificate of Authorization No. NEPT R-1151

Design information on file as G2, NEPD-WMD-QA, Castle Hayne Rd., Wilmington, N.C.
 2245556, Rev. 2
 Stress analysis report on file as G2, NEPD-WMD-QA, Castle Hayne Rd., Wilmington, N.C.
 224912, Rev. 2
 Design specifications certified by B. N. Sridhar Prof. Eng. State Calif Reg. No. 3345
 Stress analysis report certified by B. N. Sridhar Prof. Eng. State Calif Reg. No. 3345

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 7/24 1981 and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section (U).

By signing this certificate, neither the Inspector or his employee makes any warranty, expressed or implied, concerning the part described in this Partial 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 7/24 '9 5
E. J. Strickland
NATIONAL BOARD, STATE, PROVINCE AND NO.
N.C. 723.PA.WC1766. OHIO

000771

This document contains neither recommendations nor conclusions of the FBI. It is the property of the FBI and is loaned to your agency; it and its contents are not to be distributed outside your agency.

FORM N-2 (back)

Items 4-8 Incl. to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers.

4. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____ in.
(Kling & Spec. No.) (Min. of Range Specified)

5. Seams: Long _____ H.T.¹ _____ R.T. _____ Efficiency _____ %
Girth _____ H.T.¹ _____ R.T. _____ No. of Courses _____

6. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____
Location _____ Thickness _____ Crown Radius _____ Knuckle Radius _____ Elliptical Ratio _____ Conical Apex Angle _____ Hemispherical Radius _____ Flat Diameter _____ Side to Press. _____
(Top, bottom, ends) (Cover, or Comp.)
(a) _____
(b) _____
If removable, bolts used _____ Other fastening _____
(Material, Spec. No., T.S., Size, Number) (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as girth and weld, bar, etc. If bar give dimensions. If bolted, describe or sketch)

8. Design pressure¹ _____ 1250 _____ psi at _____ 575 _____ °F
Drop Weight _____
Charpy Impact _____ ft-lb
at temp. of _____ °F

Items 9 and 10 to be completed for tube sections

9. Tube Sheet: Stationary. Material _____ Dia. _____ Thickness _____ in. Attachment _____
(Kling & Spec. No.) (Subject to pressure) (Welded, Bolted)

Flanging. Material _____ Dia. _____ Thickness _____ in. Attachment _____
inches _____
or gage. Number _____ Type _____
(Std. or U)

10. Tubes: Material _____ O.D. _____ in. Thickness _____ in. Number _____ Type _____
(Std. or U)

Items 11-14 Incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material _____ T.S. _____ Nominal Thickness _____ in. Corrosion Allowance _____ in. Dia. _____ ft. _____ in. Length _____ ft. _____ in.
(Kling & Spec. No.) (Min. of Range Specified)

12. Seams: Long _____ H.T.¹ _____ R.T. _____ Efficiency _____ %
Girth _____ H.T.¹ _____ R.T. _____ No. of Courses _____

13. Heads: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____
Location _____ Thickness _____ Crown Radius _____ Knuckle Radius _____ Elliptical Ratio _____ Conical Apex Angle _____ Hemispherical Radius _____ Flat Diameter _____ Side to Press. _____
(Top, bottom, ends) (Cover, or Comp.)
(a) _____
(b) Channel _____
If removable, bolts used (a) _____ (b) _____ Other fastening _____
(Describe or attach sketch)

14. Design pressure¹ _____ psi at _____ °F
Drop Weight _____
Charpy Impact _____ ft-lb
at temp. of _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:

| Purpose: Inlet, Outlet, Drain | Number | Dia. or Size | Type | Material | Thickness | Reinforcement Material | How Attached |
|-------------------------------|--------|--------------|------|----------|-----------|------------------------|--------------|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Inspection Manholes, No. _____ Size _____ Location _____
Doorways: Manholes, No. _____ Size _____ Location _____
Threaded, No. _____ Size _____ Location _____

17. Supports: Bolt _____ Lugs _____ Ties _____
Yes or No: _____ Number _____
Type of _____ Attached _____
(Specify if none)

¹ Pressure Weld Heat-Treated

² Charpy Impact at 100°F. Charpy Impact at 50°F. Charpy Impact at 0°F. Charpy Impact at -10°F. Charpy Impact at -20°F.

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES SHEET 29 of 39
As required by the Provision of the ASME Code Rules, Section III, Div. 1

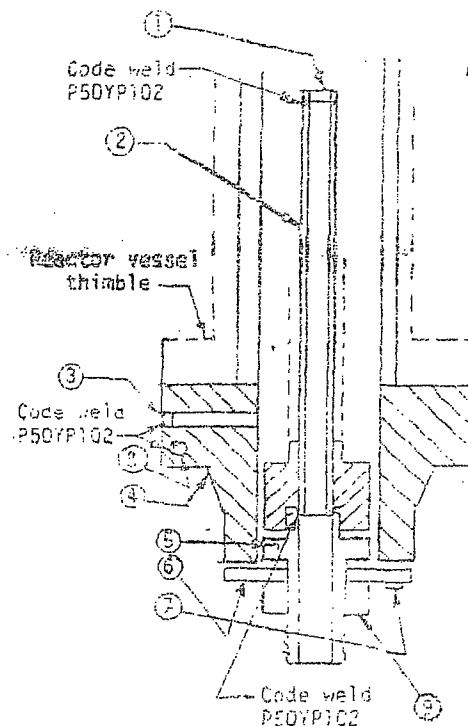
1. (a) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N.C.
(Name and address of NPT Certificate Holder)
(b) Manufactured for General Electric Company, San Jose, California (NEBG)
(Name and address of N Certificate Holder for completed purchase documents)
2. Identification-Certificate Holder's Serial No. of Part A2442 Nat'l Bd. No. _____
- (a) Constructed According to Drawing No. 768F514G001 Drawing Prepared by D. L. Peterson
- (b) Description of Part Inspected Control Rod Drive, Model #7RDE144DC001
- (c) Applicable ASME Code: Section III, Edition 1974, Addenda date W'75, Case No. M207 1361-2 Class 1

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1. Cap 16689274P1
(167A2343)
SA182-F316
3/8 thick x 1 1/16 OD
2. Indicator Pipe 16689312P1
SA312-TP316
3/4 sch 40-seamless pipe
0.113 wall thickness
1.065 outside diameter
3. Plug 159A1176P1
SA182-F304
1/4 thick x 0.812 OD
4. Flange 91S0610P1 (719E474)
SA182-F304
3.27 thick x 9 5/8 OD
neck 1 1/16 thick x 5.0 OD
2.875 ID
5. Base 137C5311P1
A19-19 ASME SA479
3.0 OD x 1.894 ID
6. Ring Flange 11485122P2
SA182-F304
1" thick x 5.0 OD x 1.75 ID
7. Cap Screw 117C1516P2
SA193-B8
5 ea. 1/2 dia. on 4 1/8 bolt circle
8. Plug 175A7861P1
SA182-F304
0.36 thick x 1.307 dia.



CONTROL ROD DR. AS
DWS - 7405504

9. Cap 137C5311P1
A19-19 ASME SA479
1.30 thick x 2.01 dia.

00670

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES

As required by the Provision of the ASME Code Rules, Section III, Div. 1

1813-055
SHEET 304 39

1. (a) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N.C.
(b) Manufactured for General Electric Company, San Jose, California (NEBG)

2. Identification-Certificate Holder's Serial No. of Part A5393 Nat'l Ed. No. _____

(c) Constructed according to Drawing No. 768E534G001 Drawing Prepared by D. L. Peterson

(d) Description of Part Inspected Control Rod Drive, Model #7RDB144DG001

(e) Applicable ASME Code Section III, Edition 1974, Addenda date W'75, Case No. N20/1361-2, Class 1

3. Remarks Standard part for use with Reactor. Hydrostatically tested at 1800 psi.

* Total number of sheets = 2

We certify that the statements made in this report are correct and this vessel part or appurtenance as defined in the Code conforms to the rules of construction of the ASME Code Section III.
(The applicable Design Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certificate Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report.)

Date 7/23 19 81 Signed GZ, NEPD-WMD-QA Certificate of Authorization Expires September 15, 1981 Certificate of Authorization No. NPT E-1151

CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file as GZ, NEPD-WMD-QA, Castle Hayne Rd., Wilmington, N.C.
22A5556, Rev. 2
Stress analysis report on file as GZ, NEPD-WMD-QA, Castle Hayne Rd., Wilmington, N.C.
22A4912, Rev. 2
Design specifications certified by B. N. Sridhar Prof. Eng. State Calif Reg. No. 18345
Stress analysis report certified by B. N. Sridhar Prof. Eng. State Calif Reg. No. 18345

CERTIFICATE OF NPT INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 7/23 1981, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.
By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in this Partial 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 7/23 19 81

N.C. 723,PA.WC1766, OHIO

E. A. Merrill
Inspector's Signature

C-100000000

National Board, State, Province and Co.

THIS FORM IS TO BE FILLED OUT BY THE INSPECTOR OF THE NATIONAL BOARD OF BOILER AND PRESSURE VESSEL INSPECTORS AND/OR THE STATE OR PROVINCE OF NORTH CAROLINA. IT IS TO BE FILLED OUT BY THE INSPECTOR OF THE NATIONAL BOARD OF BOILER AND PRESSURE VESSEL INSPECTORS AND/OR THE STATE OR PROVINCE OF NORTH CAROLINA. IT IS TO BE FILLED OUT BY THE INSPECTOR OF THE NATIONAL BOARD OF BOILER AND PRESSURE VESSEL INSPECTORS AND/OR THE STATE OR PROVINCE OF NORTH CAROLINA.

00684

110/771

The form E000401 may be obtained from the Chief Clerk, ASME, 1700 Broadway, New York, N.Y. 10011

FORM A-2 (back)

Sheet 2 of 2

13B-055

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES

SHEET 31 of 39

As required by the Provision of the ASME Code Rules, Section III, Div. 1

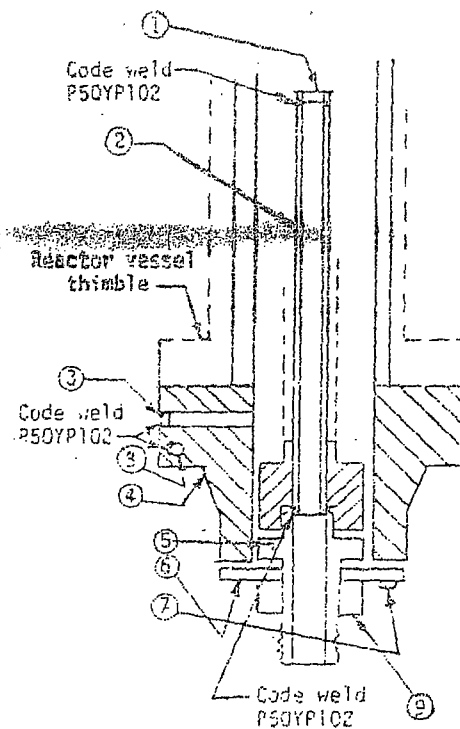
1. (a) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N.C.
(Name and address of NPT Certificate Holder)
- (b) Manufactured for General Electric Company, San Jose, California (NEBC)
(Name and address of N Certificate Holder for completed nuclear components)
2. Identification-Certificate Holder's Serial No. of Part A5393 Nat'l Bd. No. _____
- (c) Constructed According to Drawing No. 758F534G001 Drawing Prepared by D. L. Peterson
- (d) Description of Part Inspected Control Rod Drive, Model #7RDB144DG001
- (e) Applicable ASME Code: Section III, Edition 1974, Addenda date 11/75, Case No. 1361-2 (1) 1

Perry Document Control

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Copy

1. Cap 16683274P1
(167A2343)
SA182 - F316
3/8 thick x 1 1/16 OD
2. Indicator Pipe 16689313P1
SA312-TP316
3/4 sch 40-seamless pipe
0.113 wall thickness
1.055 max. dia.
3. Plug 158A1176P1
SA182-F304
1/4 thick x 0.812 OD
4. Flange 9150610P1 (719E474)
SA182-F304
3.37 thick x 9 5/2 OD
neck 1 1/16 thick x 5.0 OD
2.875 ID
5. Base 137C5311P1
XM-19 ASME SA479
3.0 OD x .884 ID
6. Ring Flange 1148S122P2
SA182-F304
1" thick x 5.0 OD x 1.75 ID
7. Cap Screw 117C4516P2
SA193-86
6 ea. 1/2 dia. on 1 1/8 bolt circle
8. Plug 175A7241P1
SA182-F304
0.28 thick x 1.307 dia.

CONTROL ROD DRIVE
Dwg - 758F534G

9. Plug 137C5311P1
XM-19 ASME SA479
3.0 OD x .884 ID

00686

Sheet 1 of 1

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES

As required by the Provision of the ASME Code Rules, Section III, Div. 1

1. (a) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N.C.
(Name and address of NPT Certificate Holder)
- (b) Manufactured for General Electric Company, San Jose, California (NEBC)
(Name and address of N Certificate Holder for completed nuclear components)
2. Identification-Certificate Holder's Serial No. of Part A4520 Nat'l Bd. No. _____
- (a) Constructed According to Drawing No. 7682534G001 Drawing Prepared by D. L. Peterson
- (b) Description of Part Inspected Control Rod Drive, Model #7RDB144DG001
- (c) Applicable ASME Code Section III, Edition 1974, Addenda date W'75, Case No. N207 1361-2 Class 1
3. Remarks: Standard part for use with Reactor. Hydrostatically tested at 1320 psi.
(Enter description of service for which component was designed)

* Total number of sheets - 2

We certify that the statements made in this report are correct and this vessel part or appurtenance as defined in the Code conforms to the rules of construction of the ASME Code Section III.
(The applicable Design Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certificate Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report.)

6/12/81
NPT Certificate Holder
Certificate of Authorization Expires June 16, 1981 Certificate of Authorization No. NPT N-1151

CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file as GE, NEPD-WMD-0A, Castle Hayne Rd., Wilmington, N.C.
22A5556, Rev. 2

Stress analysis report on file as GE, NEPD, San Jose, Calif.
22A4912, Rev. 2

Design specifications certified by B. N. Sridhar Prof. Eng. State Calif Reg. No. 18345

Stress analysis report certified by B. N. Sridhar Prof. Eng. State Calif Reg. No. 18345

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 6/12 1981, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in this Partial 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 6/12 81
[Signature]
Inspector's Signature

N.C. 723.PA.WC1766. QH10

Commission No. _____ National Board, State, Province and No.

* Supplemental sheets in form of lists, sketches or drawings may be attached to this report. The information in these sheets must be included in the report and must be included in the report.

(10/77)

This form (E00040) may be obtained from the Code Dept., ASME, 145 E. 47th St., New York, N.Y. 10017

FORM N-2 (back)

Items 4-8 incl. to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers.

4. Shell: Material T.S. Nominal Thickness in. Corrosion Allowance in. Dia. in. Length ft.
(Kind & Spec. No.) (Min. or Range Specified)

5. Seams: Long H.T. R.T. Efficiency %

Girth H.T. R.T. No. of Courses

6. Heads: (a) Material T.S. (b) Material T.S.

| Location
(Top, bottom, ends) | Thickness | Crown
Radius | Knuckle
Radius | Elliptical
Ratio | Conical
Apex Angle | Hemispherical
Radius | Flat
Diameter | Side to Face
(Conv. or Conc.) |
|---------------------------------|-----------|-----------------|-------------------|---------------------|-----------------------|-------------------------|------------------|----------------------------------|
| (a) | | | | | | | | |
| (b) | | | | | | | | |

If removable, bolts used (Material, Spec. No., T.S., Size, Number) Other fastening (Describe or attach sketch)

7. Jacket Closure: (Describe at edge and weld, but, not, if large dimensions, at bottom, describe or sketch)

8. Design pressure 1250 psi at 575 °F

Drop Weight
Charpy Impact ft-lb
at temp. of °F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary. Material Dia. Thickness in. Attachment (welded, bolted)

Floating. Material Dia. Thickness in. Attachment

10. Tubes: Material O.D. in. Thickness in. No. of tubes Type (S, W, or U)

Items 11-14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell: Material T.S. Nominal Thickness in. Corrosion Allowance in. Dia. in. Length ft.
(Kind & Spec. No.) (Min. or Range Specified)

12. Seams: Long H.T. R.T. Efficiency %

Girth H.T. R.T. No. of Courses

13. Heads: (a) Material T.S. (b) Material T.S.

| Location | Thickness | Crown
Radius | Knuckle
Radius | Elliptical
Ratio | Conical
Apex Angle | Hemispherical
Radius | Flat
Diameter | Side to Face
(Conv. or Conc.) |
|-----------------------|-----------|-----------------|-------------------|---------------------|-----------------------|-------------------------|------------------|----------------------------------|
| (a) Top, bottom, ends | | | | | | | | |
| (b) Channel | | | | | | | | |

If removable, bolts used (a) (b) Other fastening (Describe or attach sketch)

14. Design pressure psi at °F

Drop Weight
Charpy Impact ft-lb
at temp. of °F

Items below to be completed for all vessels where applicable.

15. Safety Valve: Number Size Location

16. Nozzles:

| Purpose: Inlet, Outlet, Drain | Number | Dia. or Size | Type | Material | Thickness | Reinforcement Material | How Attached |
|-------------------------------|--------|--------------|------|----------|-----------|------------------------|--------------|
| | | | | | | | |
| | | | | | | | |

17. Inspection Manholes: No. Size Location

20. Drawings: Manholes: No. Size Location

Threaded: No. Size Location

18. Supports: Skirt No. Size Location

Legs No. Size Location

1. For vessels designed to hold liquid, the design pressure shall be the maximum allowable working pressure (MAWP) at the design temperature.

2. For vessels designed to hold gas, the design pressure shall be the maximum allowable working pressure (MAWP) at the design temperature.

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES*

As required by the Provision of the ASME Code Rules, Section III, Div. 1

1813-055
SHEET 33 of 39

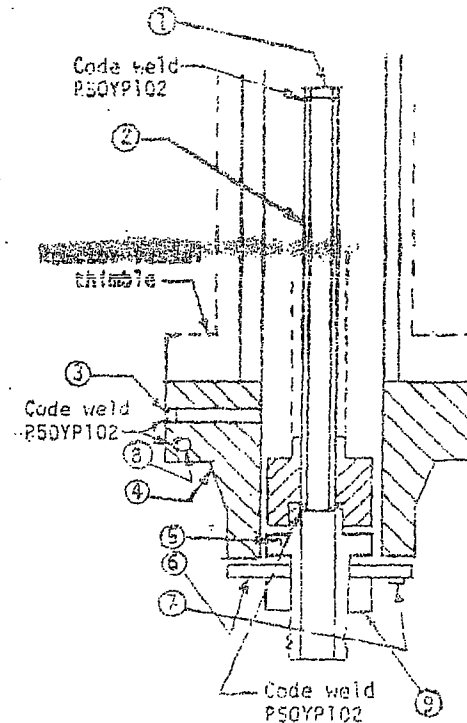
1. (a) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N.C.
(Name and address of NPT Certificate Holder)
- (b) Manufactured for General Electric Company, San Jose, California (NEBC)
(Name and address of N Certificate Holder for completed nuclear component)
2. Identification-Certificate Holder's Serial No. of Part A4520 Nat'l Id. No. _____
- (a) Constructed According to Drawing No. 768E534G001 Drawing Prepared by D. L. Peterson
- (b) Description of Part Inspected Control Rod Drive, Model #7RDB144DG001
- (c) Applicable ASME Code Section III, Edition 1974, Addenda dec. W175 Case No. N207 1361-2 Class 1

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Best Available
Copy

1. Cap 166B9274P1
(167A2343)
SA182 - F316
3/8 thick x 1 1/16 OD
2. Indicator Pipe 166B9313P1
SA312-TP316
3/4 sch 40-seamless pipe
0.113 wall thickness
1.000 OD
3. Plug 159A1176P1
SA182-F304
1/4 thick x 0.812 OD
4. Flange 219B610P1 (719E474)
SA182-F304
3.37 thick x 9 5/8 OD
neck 1 1/16 thick x 5.0 OD
2.875 ID
5. Base 137C5311P1
XM-19 ASME SA479
3.0 OD x .884 ID
5. Ring Flange 114B5122P2
SA182-F304
1" thick x 5.0 OD x 1.75 ID
7. Cap Screw 117C4516P2
SA193-B6
6 ea. 1/2 dia. on 4 1/8 bolt circle
8. Plug 175A7961P1
SA182-F304
0.39 thick x 1.307 dia.

CONTROL ROD DRIVE
DWG - 768E534

3. Nut 137C5934P1
XM-19 SA479
1.00 thick x 2.62 dia.

WJ775

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES¹ **SHEET 34 of 39**
As required by the Provision of the ASME Code Rules, Section III, Div. 1

1. (a) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N.C.
(Name and address of NPT Certificate Holder)
(b) Manufactured for General Electric Company, San Jose, California (NEBC)
(Name and address of NPT Certificate Holder for component nuclear equipment)
2. Identification-Certificate Holder's Serial No. of Part A5220 NPT Cert. No. _____
(a) Constructed According to Drawing No. 768Z534G001 Drawing Prepared by D. L. Pearson
(b) Description of Part Inspected Control Rod Drive, Model #7EDB144DG001
(c) Applicable ASME Code Section III, Edition 1974, Addenda N'75, Case No. 1361-2 Class 1
3. Remarks Standard part for use with Reactor. Hydrostatically tested at 1820 psi.
(Brief description of service for which component was designed)
* Total number of sheets - 2

We certify that the statements made in this report are correct and this report part or appurtenance as defined in the Code conforms to the rules of construction of the ASME Code Section III.
(The applicable Design Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certificate Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report.)

Date 7/7 19 81 Signed GE, NEBC-NEBC By J. E. [Signature]
(NPT Certificate Holder)
Certificate of Authorization Expires September 15, 1981 Certificate of Authorization No. NPT X-1151

CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at GE, NEBC-440-0A, Castle Hayne Rd., Wilmington, N.C.
22A5556, Rev. 2
Stress analysis report on file at GE, NEBC, San Jose, Calif.
22A4912, Rev. 2
Design specifications certified by B. N. Bridhar Prof. Eng. State Calif Reg. No. 23345
Stress analysis report certified by B. N. Bridhar Prof. Eng. State Calif Reg. No. 23345

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of a pressure vessel described in this Partial Data Report on 7/7 19 81 and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.
By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in this Partial 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 net kind arising from or connected with this inspection.

Date 7/7 19 81
E. J. [Signature]
Inspector's Signature

N.C. 723.PAWC1766. OHIO

¹ NPT Certificate Holder is responsible for the accuracy of the information furnished in this report and for the accuracy of the information furnished in the report.

(10/77)

The form (E00040) may be obtained from the Order Dept., ASME, 140 E. 47th St., New York, N.Y. 10017

FORM V-2 (back)

Items 1-8 incl. to be completed for single well vessels, vessels of jacketed vessels, or shells of heat exchangers.

1. Shell: Material T.S. Thickness in. Allowance in. Dia. in. Length ft.

2. Seams: Long H.T. Efficiency 7

3. Girth H.T. No. of Courses T.S.

4. Head: (a) Material T.S. Location (Top, Bottom, End) Thickness in. Radius in. Crown in. Elliptical Ratio Conical Apex Angle Hemispherical Radius Dia. in. Side to Protr. (Cover, or Conc.)

5. Jacket Cladding: (a) Material T.S. Thickness in. Allowance in. Dia. in. Length ft.

6. Tube Sheet: Stationary, Material T.S. Thickness in. Allowance in. Dia. in. Length ft.

7. Tube Sheet: Stationary, Material T.S. Thickness in. Allowance in. Dia. in. Length ft.

8. Design Pressure: 1250 psi at 575 °F

9. Design Temperature: 575 °F

10. Design Pressure: 1250 psi at 575 °F

11. Design Temperature: 575 °F

12. Design Pressure: 1250 psi at 575 °F

13. Design Temperature: 575 °F

14. Design Pressure: 1250 psi at 575 °F

15. Design Temperature: 575 °F

16. Design Pressure: 1250 psi at 575 °F

17. Design Temperature: 575 °F

18. Design Pressure: 1250 psi at 575 °F

19. Design Temperature: 575 °F

20. Design Pressure: 1250 psi at 575 °F

21. Design Temperature: 575 °F

22. Design Pressure: 1250 psi at 575 °F

23. Design Temperature: 575 °F

24. Design Pressure: 1250 psi at 575 °F

25. Design Temperature: 575 °F

26. Design Pressure: 1250 psi at 575 °F

27. Design Temperature: 575 °F

28. Design Pressure: 1250 psi at 575 °F

29. Design Temperature: 575 °F

30. Design Pressure: 1250 psi at 575 °F

31. Design Temperature: 575 °F

32. Design Pressure: 1250 psi at 575 °F

33. Design Temperature: 575 °F

34. Design Pressure: 1250 psi at 575 °F

35. Design Temperature: 575 °F

36. Design Pressure: 1250 psi at 575 °F

37. Design Temperature: 575 °F

38. Design Pressure: 1250 psi at 575 °F

39. Design Temperature: 575 °F

40. Design Pressure: 1250 psi at 575 °F

41. Design Temperature: 575 °F

42. Design Pressure: 1250 psi at 575 °F

43. Design Temperature: 575 °F

44. Design Pressure: 1250 psi at 575 °F

45. Design Temperature: 575 °F

46. Design Pressure: 1250 psi at 575 °F

47. Design Temperature: 575 °F

48. Design Pressure: 1250 psi at 575 °F

49. Design Temperature: 575 °F

50. Design Pressure: 1250 psi at 575 °F

51. Design Temperature: 575 °F

52. Design Pressure: 1250 psi at 575 °F

53. Design Temperature: 575 °F

54. Design Pressure: 1250 psi at 575 °F

55. Design Temperature: 575 °F

56. Design Pressure: 1250 psi at 575 °F

57. Design Temperature: 575 °F

58. Design Pressure: 1250 psi at 575 °F

59. Design Temperature: 575 °F

60. Design Pressure: 1250 psi at 575 °F

61. Design Temperature: 575 °F

62. Design Pressure: 1250 psi at 575 °F

63. Design Temperature: 575 °F

64. Design Pressure: 1250 psi at 575 °F

65. Design Temperature: 575 °F

66. Design Pressure: 1250 psi at 575 °F

67. Design Temperature: 575 °F

68. Design Pressure: 1250 psi at 575 °F

69. Design Temperature: 575 °F

70. Design Pressure: 1250 psi at 575 °F

71. Design Temperature: 575 °F

72. Design Pressure: 1250 psi at 575 °F

73. Design Temperature: 575 °F

74. Design Pressure: 1250 psi at 575 °F

75. Design Temperature: 575 °F

76. Design Pressure: 1250 psi at 575 °F

77. Design Temperature: 575 °F

78. Design Pressure: 1250 psi at 575 °F

79. Design Temperature: 575 °F

80. Design Pressure: 1250 psi at 575 °F

81. Design Temperature: 575 °F

82. Design Pressure: 1250 psi at 575 °F

83. Design Temperature: 575 °F

84. Design Pressure: 1250 psi at 575 °F

85. Design Temperature: 575 °F

86. Design Pressure: 1250 psi at 575 °F

87. Design Temperature: 575 °F

88. Design Pressure: 1250 psi at 575 °F

89. Design Temperature: 575 °F

90. Design Pressure: 1250 psi at 575 °F

91. Design Temperature: 575 °F

92. Design Pressure: 1250 psi at 575 °F

93. Design Temperature: 575 °F

94. Design Pressure: 1250 psi at 575 °F

95. Design Temperature: 575 °F

96. Design Pressure: 1250 psi at 575 °F

97. Design Temperature: 575 °F

98. Design Pressure: 1250 psi at 575 °F

99. Design Temperature: 575 °F

100. Design Pressure: 1250 psi at 575 °F

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES

As required by the Provision of the ASME Code Rules, Section III, Div. 1

1B13-055
SHEET 35 of 39

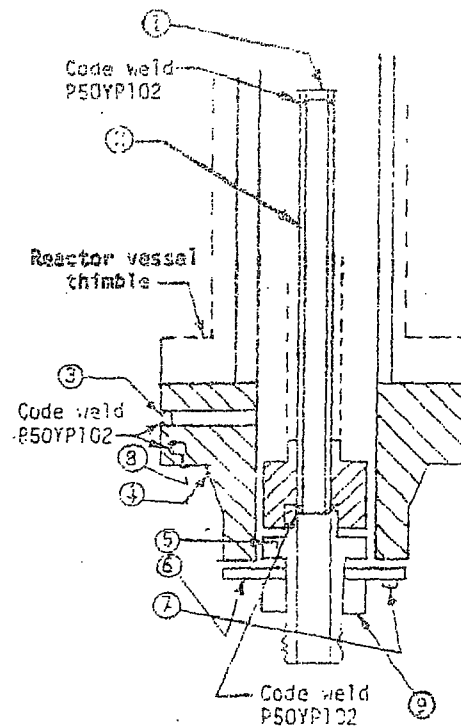
1. (a) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N.C.
(Name and address of NPT Certificate Holder)
- (b) Manufactured for General Electric Company, San Jose, California (NEBC)
(Name and address of N Certificate Holder for completed nuclear component)
2. Identification-Certificate Holder's Serial No. of Part A5220 Mat'l Bd. No. _____
- (a) Constructed According to Drawing No. 759P5340001 Drawing Prepared by D. L. Paterson
- (b) Description of Part Inspected Control Rod Drive, Model #7RDB144DG001
- (c) Applicable ASME Code: Section III, Edition 1974, Addenda date W'75 Case No. N207 1361-2 Class 1

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Best Available
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1. Cap 16689274P1
(157A2343)
SA182 - F316
3/8 thick x 1 1/16 OD
2. Indicator Pipe 16139313P1
SA312-TP316
3/4 sch 40-seamless pipe
0.133 wall thickness
1.055 max. dia.
3. Plug 159A1176P1
SA182-F304
1/4 thick x 0.812 OD
4. Flange 919B610P1 (719E474)
SA182-F304
3.37 thick x 9 5/8 OD
neck 1 1/16 thick x 5.0 OD
2.875 ID
5. Base 137C5311P1
XM-19 ASME SA475
3.0 OD x .884 ID
6. Ring Flange 114B5122P2
SA182-F304
1" thick x 5.0 OD x 1.75 ID
7. Cap Screw 117C4516P2
SA193-B6
6 ea. 1/2 dia. on 3 1/8 bolt circle
8. Plug 175A7251P1
SA182-F304
0.35 thick x 1.307 dia

CONTROL ROD DRIVE
DWG - 759P534

9. Nut 137C5934P1
XM-19 SA475
1.20 thick x 1.62 dia.

FORM NPT-CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES

As required by the Provision of the ASME Code Rules, Section III, Div. 1

1. (a) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N.C.
(Name and address of NPT Certificate Holder)
- (b) Manufactured for General Electric Company, San Jose, California (NEBS)
(Name and address of NPT Certificate Holder for completed nuclear component)
2. Manufacturer's Certificate Holder's Serial No. of Part A4674 Part No. 1784
- (c) Constructed According to Drawing No. 758E534G001 Drawing Prepared by D. L. Peterson
- (d) Description of Part Issued Control Rod Drive, Model 07RDE144G001
- (e) Applicable ASME Code Section III, Edition 1974, Addenda W'75, Case No. N207 1381-2 Class 1
3. Reason Standard part for use with Reactor. Hydrostatically tested at 1830 psi.
(Brief description of service for which component was designed)

* Total number of sheets - 2

We certify that the statements made in this report are correct and this vessel part or appurtenance as defined in the Code conforms to the rules of construction of the ASME Code, Section III.

(The Applicable Design Specification and Stress Report are the responsibility of the NPT Certificate Holder for parts. An NPT Certificate Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report.)

Date 7/23 19 81 Signed GE, NEPD-WD-QA By J. E. H. H. H.
(Name and Title)

Certificate of Authorization Expires September 15, 1981 Certificate No. NET N-1451

CERTIFICATION OF DESIGN FOR APPURTENANCE (When applicable)

Design information as file GE, NEPD-WD-QA, Castle Hayne Rd., Wilmington, N.C.

Stress analysis report as file GE, NEPD-WD-QA, Castle Hayne Rd., Wilmington, N.C.

Design specifications certified by B. N. Sridhar Prof. Eng. Sec. CA-14 Reg. No. 18346

Stress analysis report certified by B. N. Sridhar Prof. Eng. Sec. CA-14 Reg. No. 18346

CERTIFICATE OF SHOP INSPECTION

The undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or State or Province of North Carolina and employed by Department of Labor of State of North Carolina have inspected the part of Control Rod Drive described as follows:

Partial Data Report No. 7723 81 and have found that the part conforms to the ASME Code Section III.

By signing this certificate, the Inspector or his employer, makes no warranty, representation, or opinion concerning the part or its fitness for service. 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 7/23 19 81
E. D. McNeill
(Inspector's Signature)

N.C. 723 PAWGL766, OHIO

Commission National Board, State, Province and No.

Print (optional) name and title of Inspector or his employer, and date of inspection, and (if applicable) name and address of the part or its fitness for service.

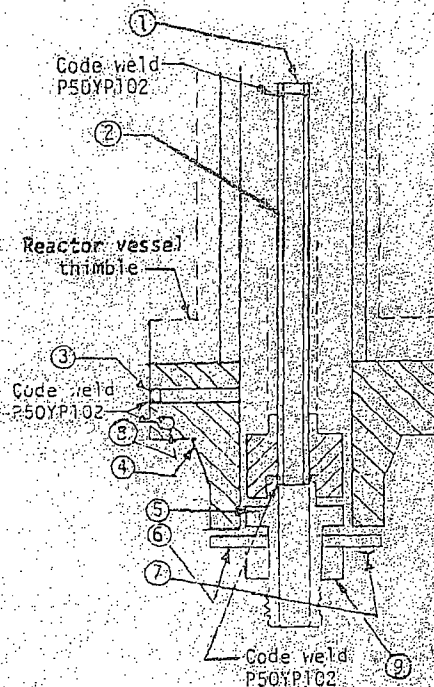
This form (P0059) may be obtained from the ASME Code Rules, Section III, Div. 1, New York, N.Y. 10017.

FORM N-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES

As required by the Provision of the ASME Code Rules, Section III, Div. 1

1. (a) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N.C.
(Name and address of NPT Certificate Holder)
- (b) Manufactured for General Electric Company, San Jose, California (NEBC)
(Name and address of N Certificate Holder for completed nuclear component)
2. Identification Certificate Holder's Serial No. of Part A4674 Nat'l Bd. No. _____
- (a) Constructed According to Drawing No. 766E534G001 Drawing Prepared by D. L. Peterson
- (b) Description of Part Inspected Control Rod Drive, Model #7RDB144D0001
- (c) Applicable ASME Code Section III, Edition 1974 Addenda date W75 Case No. 1351-2 Class 1

1. Cap 16689274P1
(167A2343)
SA182 - F316
3/8" thick x 1 1/16" OD
2. Indicator Pipe 16629313P1
SA312-TP316
3/4" sch 40-seamless pipe
0.113 wall thickness
1.065 max. dia.
3. Plug 159A1176P1
SA182-F304
1/4" thick x 0.812" OD
4. Flange 919D610P1 (719E474)
SA182-F304
3.37" thick x 9 5/8" OD
neck 1 1/16" thick x 5.0" OD
2.875" ID
5. Base 137C5311P1
XM-19 ASME SA479
3.0" OD x .884" ID
6. Ring Flange 114B5122P2
SA182-F304
1" thick x 5.0" OD x 1.75" ID
7. Cap Screw 117C4516P2
SA193-B6
5 ea. 1/2" dia. on 4 1/8" bolt circle
8. Plug 175A7961P1
SA182-F304
0.38" thick x 1.307" dia.



9. Nut 137C5934P1
XM-19 SA479
1.30" thick x 2.62" dia.

FORM N-1 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES 1813-055
As required by the provision of the ASME Code Rules, Section III, Div. 1

SHEET 38 of 39

1. (a) Manufactured by: General Electric Company, Castle Hayne Rd., Wilmington, N.C.
(Name and address of NPT Certificate Holder)
(b) Manufactured for: General Electric Company, San Jose, California (NEBC)
(Name and address of NPT Certificate Holder for completed nuclear component)
2. Identification Certificate Holder's Serial No. of part: A4007, Part No. No.
(c) Constructed According to Drawing No. 7682534C001, Drawing Prepared by D. L. Paterson
(d) Description of Part Inspected: Control Rod Drive, Model V7RDB1445C001
(e) Applicable ASME Code: Section III, Edition 1974, Addenda 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 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1008, 1009, 1010, 1011, 1012, 1013, 1014, 1015, 1016, 1017, 1018, 1019, 1020, 1021, 1022, 1023, 1024, 1025, 1026, 1027, 1028, 1029, 1030, 1031, 1032, 1033, 1034, 1035, 1036, 1037, 1038, 1039, 1040, 1041, 1042, 1043, 1044, 1045, 1046, 1047, 1048, 1049, 1050, 1051, 1052, 1053, 1054, 1055, 1056, 1057, 1058, 1059, 1060, 1061, 1062, 1063, 1064, 1065, 1066, 1067, 1068, 1069, 1070, 1071, 1072, 1073, 1074, 1075, 1076, 1077, 1078, 1079, 1080, 1081, 1082, 1083, 1084, 1085, 1086, 1087, 1088, 1089, 1090, 1091, 1092, 1093, 1094, 1095, 1096, 1097, 1098, 1099, 1100, 1101, 1102, 1103, 1104, 1105, 1106, 1107, 1108, 1109, 1110, 1111, 1112, 1113, 1114, 1115, 1116, 1117, 1118, 1119, 1120, 1121, 1122, 1123, 1124, 1125, 1126, 1127, 1128, 1129, 1130, 1131, 1132, 1133, 1134, 1135, 1136, 1137, 1138, 1139, 1140, 1141, 1142, 1143, 1144, 1145, 1146, 1147, 1148, 1149, 1150, 1151, 1152, 1153, 1154, 1155, 1156, 1157, 1158, 1159, 1160, 1161, 1162, 1163, 1164, 1165, 1166, 1167, 1168, 1169, 1170, 1171, 1172, 1173, 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1838, 1839, 1840, 1841, 1842, 1843, 1844, 1845, 1846, 1847, 1848, 1849, 1850, 1851, 1852, 1853, 1854, 1855, 1856, 1857, 1858, 1859, 1860, 1861, 1862, 1863, 1864, 1865, 1866, 1867, 1868, 1869, 1870, 1871, 1872, 1873, 1874, 1875, 1876, 1877, 1878, 1879, 1880, 1881, 1882, 1883, 1884, 1885, 1886, 1887, 1888, 1889, 1890, 1891, 1892, 1893, 1894, 1895, 1896, 1897, 1898, 1899, 1900, 1901, 1902, 1903, 1904, 1905, 1906, 1907, 1908, 1909, 1910, 1911, 1912, 1913, 1914, 1915, 1916, 1917, 1918, 1919, 1920, 1921, 1922, 1923, 1924, 1925, 1926, 1927, 1928, 1929, 1930, 1931, 1932, 1933, 1934, 1935, 1936, 1937, 1938, 1939, 1940, 1941, 1942, 1943, 1944, 1945, 1946, 1947, 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 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2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 218

FORM N-2 (Back)

Items 4-9 incl. to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers.

4. Shell Material: T.S. _____ Nominal Thickness _____ in. Allowance _____ in. Dia. _____ in. Length _____ ft. _____ in.
(Kind & Spec. No.) (Material)

5. Seams: Long _____ H.T. _____ R.T. _____ Efficiency _____ %

6. Heads: (a) Material: T.S. _____ (b) Material: T.S. _____
Location: _____ Thickness _____ Crown Radius _____ Elliptical Ratio _____ Conical Apex Angle _____ Hemispherical Radius _____ Flat Diameter _____ Side to Press. (Conv. or Conc.)

(c) _____

(b) _____

If removable, bolts used: (a) _____ (b) _____ (c) _____ Other fastening: _____
(Material, Spec. No., T.S., Dia., No. per) (Describe or attach sketch)

7. Jacket Closure: _____
(Describe as open end weld, bar, etc. If bar give dimensions. If bolted, describe or sketch)

8. Design pressure: _____ psi at _____ 575 _____ °F
Drop Weight _____ ft-lb
Charpy Impact _____ ft-lb
at temp. of _____ °F

Items 9 and 10 to be completed for tube sections

9. Tube Sheets: Stationary Material: _____ Dia. _____ Thickness _____ in. Attachment _____
(Kind & Spec. No.) (Subject to pressure) (Welded, Bolted)

Floating Material: _____ Dia. _____ Thickness _____ in. Attachment _____

10. Tubes: Material: _____ O.D. _____ in. Thickness _____ in. Number _____ Type _____
(9a or 10)

Items 11-14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

11. Shell Material: T.S. _____ Nominal Thickness _____ in. Allowance _____ in. Dia. _____ in. Length _____ ft. _____ in.
(Kind & Spec. No.) (Material)

12. Seams: Long _____ H.T. _____ R.T. _____ Efficiency _____ %

13. Heads: (a) Material: T.S. _____ (b) Material: T.S. _____
Location: _____ Thickness _____ Crown Radius _____ Elliptical Ratio _____ Conical Apex Angle _____ Hemispherical Radius _____ Flat Diameter _____ Side to Press. (Conv. or Conc.)

(c) _____

(b) _____

If removable, bolts used: (a) _____ (b) _____ (c) _____ Other fastening: _____
(Describe or attach sketch)

14. Design pressure: _____ psi at _____ 575 _____ °F
Drop Weight _____ ft-lb
Charpy Impact _____ ft-lb
at temp. of _____ °F

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:

Outlet: _____ Number _____ Dia. or Size _____ Type _____ Material _____ Thickness _____ Reinforcement Material _____ How Attached _____

17. Inspection Manholes: No. _____ Size _____ Location _____
Openings: Handholes: No. _____ Size _____ Location _____
Threaded: No. _____ Size _____ Location _____

18. Supports: Skirt _____ Yes or No _____ Legs _____ (Number) _____ Legs _____ (Number) _____ Other _____ Attached _____
(Where & How)

19. Control Valve: _____

20. _____

21. _____

22. _____

23. _____

24. _____

25. _____

26. _____

27. _____

28. _____

29. _____

30. _____

31. _____

32. _____

33. _____

34. _____

35. _____

36. _____

37. _____

FORM N-1 NPT-CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTENANCES

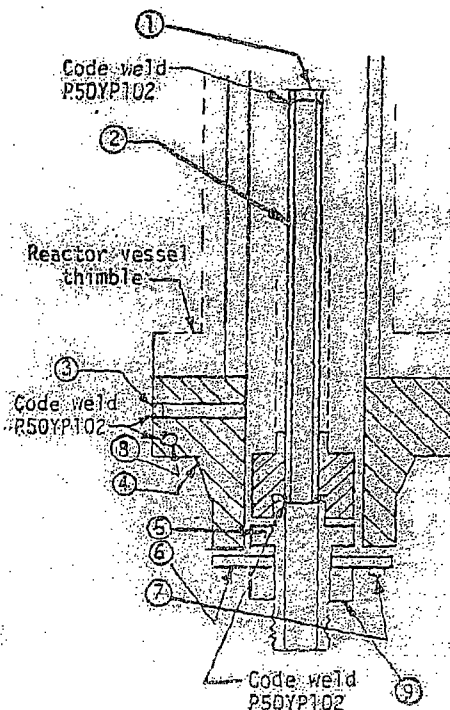
As required by the Provision of the ASME Code Rules, Section III, Div. 1

Sheet 2 of 2

1813-055
SHEET 2 of 2

1. (a) Manufactured by General Electric Company, Castle Hayne Rd., Wilmington, N.C.
(Name and address of NPT Certificate Holder)
(b) Manufactured for General Electric Company, San Jose, California (NEBC)
(Name and address of NPT Certificate Holder for compliance nuclear component)
2. Identification-Certificate Holder's Serial No. of Part A4007 Part Id. No. _____
- (a) Constructed According to Drawing No. 768E534G001 Drawing Prepared by D. L. Peterson
- (b) Description of Part Inspected Control Rod Drive, Model #7RD8144D6001
- (c) Applicable ASME Code: Section III, Edition 1974, Addenda date 11/75, Case No. N207 H295
1161-2 Class 1

1. Cap 166B9274P1
(167A2343)
SA182 - F316
3/8 thick x 1 1/16 OD
2. Indicator Pipe 166B9313P1
SA312-TP316
3/4 sch 40-seamless pipe
0.113 wall thickness
1.065 max. dia.
3. Plug 159A1176P1
SA182-F304
1/4 thick x 0.812 OD
4. Flange 919D610P1 (719E474)
SA182-F304
3.37 thick x 9.578 OD
neck 1 1/16 thick x 5.0 OD
2.875 ID
5. Base 137C5311P1
XM-19 ASME SA479
3.0 OD x .884 ID
6. Ring Flange 114B5122P2
SA182-F304
1" thick x 5.0 OD x 1.75 ID
7. Cap Screw 117GA516P2
SA193-B8
6 ea. 1/2 dia. on 4 1/8 bolt circle
8. Plug 175A7961P1
SA182-F304
0.38 thick x 1.307 dia.



CONTROL ROD DRIVE
DWG - 768E534

9. Nut 137C5934P1
XM-19 SA479
1.30 thick x 2.62 dia. 02163

1B13-056

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

1. Owner: FIRSTENERGY CORP. Date 7/18/11
10 Center Road, Perry, Ohio 44081 Sheet 1 of 3
2. Plant: Perry Nuclear Power Plant (PNPP) Unit One
10 Center Road, Perry, Ohio 44081 Order 200083188
 (Repair Org. P.O. No., etc.)
3. Work Performed By: FIRSTENERGY Nuclear Operating Company PNPP Type Code Symbol Stamp NR
10 Center Road, Perry, Ohio 44081 Authorization No. 33
 Expiration Date 9-28-11
4. Identification of System: 1B13 Reactor and Internals
5. (a) Applicable Construction Code: ASME SECTION III CLASS 1, 1974 Edition
 NAME/SECTION/DIVISION/CLASS
WINTER 1974 Addenda Code Case(s) N/A
- (b) Construction Code used for repairs, modifications, or replacements: 1974 W/75 N/A
 Edition Addenda Code Case(s)
- (c) ASME Code Section XI applicable for Inservice Inspection: 2001 2003 N/A
 Edition Addenda Code Case(s)
- (d) Applicable Edition of Section XI Utilized for Repairs, Modification, or Replacements:
19, 2001 49, 2003 Addenda N/A
 TJK 05/13/2011 TJK 05/13/2011 Code Case(s)
- (e) Design Responsibilities FENOC
6. Identification of Components Repaired, Modified, or Replacement Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | Nat. Board No. | Other ID. | Year Built | Repair, Replacement, or Modification | ASME Code Stamped |
|-------------------|----------------------|-------------------------|----------------|--------------------------------|------------|--------------------------------------|-------------------|
| R.P.Vessel | CBI-Nuclear | T49 | 30 | Part # 166B752
8PL/SN# 0211 | 1976 | Replacement | yes |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: Replaced LPRM Dry Tubes 08-33 with SN 10I01MAJ, 24- 41 with SN 10I01MAL, 32-09 with SN 10I01MAK, 40-09 with SN 04S85852, 40-17 with SN 10I01MAM, 48-17with SN 10I01MAN.

Plant ID 1B13D0211

8. Test Conducted: Hydrostatic- ☐ Pneumatic- ☐ Nominal Operating Pressure- ☒ Other- ☐
 Pressure NOP psi Test Temperature NOT degrees F Code Case(s) N/A

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

9. Remarks: _____

NO NAMEPLATE/STAMPING PERFORMED DUE TO THE INTERFACE CONTROLS OF PART 3 SECTION
1.8.6 BEING IN EFFECT AND JURISDICTIONAL AUTHORITY CONCURRENCE HAVING BEEN RECEIVED.

Note: Attach all applicable Manufacturer's Data Reports. Supplemental sheets such as 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 of this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded on the front of this form.

CERTIFICATE OF COMPLIANCE

I, JOHN S DAVIS, 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 items described above conforms to Section XI of the ASME Code and to the National Board Inspection Code "NR" rules.

National Board Certificate of Authorization No. 33 to use the "NR" stamp expires 28 SEPT., 20 11
Date 7/29, 20 11 Signed FENOC-PNPP [Signature] QC SUPV.
(name of repair organization) (authorized representative) (title)

CERTIFICATE OF INSPECTION/INSERVICE INSPECTION

I, THOMAS G LAPS, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of OHIO and employed by HSB CT. of HARTFORD, CT. have inspected the repair, modification or replacement described in this report on July 29, 20 11 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 ASME Code and the National Board Inspection Code "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work 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.

Date 7/29/11, 20 11 Signed Thomas G Laps Commissions NB 9330 "N" "A" OHIO COMM.
(inspector) (National Board (include endorsements), and jurisdiction, and no.)

PRODUCTION ORDER NUMBER: 18550184

FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL
NUCLEAR PARTS AND APPURTENANCES*As Required by the Provisions of the ASME Code, Section III
Not to Exceed One Day's Production1813-056
Sheet 2 of 3

Pg. 1 of 2

1. Manufactured and certified by GE Reuter-Stokes, Inc., 8499 Darrow Road, Twinsburg, Ohio 44087
(name and address of NPT Certificate Holder)
2. Manufactured for First Energy
(name and address of Purchaser)
3. Location of installation Perry Nuclear Power Plant 10 Center Road Perry, OH 44081
(name and address)
4. Type: RS-E5-1210-201 N/A N/A N/A 2010
(drawing no.) (mat'l spec. no.) (tensile strength) (CRN) (year built)
5. ASME Code, Section III, Division 1: 1974 Winter 1974 1 N/A
(edition) (addenda date) (class) (Code Case no.)
6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A Revision N/A Date N/A
(no.)
7. Remarks: Certified Design Specification CDS-C-272A8152-1 Rev. 0
Certified Design Report CDR-C-5253-19 Rev. NC
On File at GE Reuter-Stokes, Inc.
CORRECTED COPY - Revised to correct original Form N-2 signed 12/11/10. Corrected item 2 & 3 above.
8. Nom. Thickness (in.) N/A Min. design thickness (in.) N/A Dia. ID (ft & in.) N/A Length overall (ft & in.) N/A
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) 10I01MAJ | N/A | (26) | |
| (2) 10I01MAK | N/A | (27) | |
| (3) 10I01MAL | N/A | (28) | |
| (4) 10I01MAM | N/A | (29) | |
| (5) 10I01MAN | N/A | (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 1250 PSIG psi. Temp. Vessel 575°F. Seal 300°F. Hydro. test pressure 1950 PSIG at temp. 73°-74°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.

PRODUCTION ORDER NUMBER: 18550184

FORM N-2 (Back - Pg. 2 of 2)

Certificate Holder's Serial Nos. N/A through N/A

Reprint (7/91)

CERTIFICATION OF DESIGN

Design specifications certified by Bill A. Balazs P.E. State CA Reg. no. MF348
(when applicable)
Design report* certified by Robert Scott Betschman P.E. State OH Reg. no. E-56133
(when applicable)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) Assemblies
conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-2703 Expires September 16, 2012

Date July 25, 2011 Name GE Reuter-Stokes, Inc. Signed [Signature]
(NPT 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 the State or Province of OHIO and employed by H.S.B. CT of HARTFORD, CT have inspected these items described in this Data Report on 12-11-10, 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 7/25/11 Signed [Signature] Commissions 13169 AN OH667
(Authorized Inspector) [Nat'l Bd. (incl. endorsements) and state or prov. and no.]

WORK ORDER NUMBER: 13710

**FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL
NUCLEAR PARTS AND APPURTENANCES***
As Required by the Provisions of the ASME Code, Section III
Not to Exceed One Day's Production

1813-056
Sheet 3 of 3

Pg. 1 of 2

1. Manufactured and certified by GE Reuter-Stokes, Inc., 8499 Darrow Road, Twinsburg, Ohio 44087
(name and address of NPT Certificate Holder)
2. Manufactured for First Energy
(name and address of Purchaser)
3. Location of installation Perry Nuclear Power Plant 10 Center Road Perry, OH 44081
(name and address)
4. Type: RS-E5-1210-201 N/A N/A N/A 2005
(drawing no.) (mat'l spec. no.) (tensile strength) (CRN) (year built)
5. ASME Code, Section III, Division 1: 1974 Winter 1974 1 N/A
(edition) (addenda date) (class) (Code Case no.)
6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A Revision N/A Date N/A
(no.)
7. Remarks: Certified Design Specification CDS-C-272A8152-1
Certified Design Report CDR-C-5253-08
On File at GE Reuter-Stokes, Inc.
8. Nom. Thickness (in.) N/A Min. design thickness (in.) N/A Dia. ID (ft & in.) N/A Length overall (ft & in.) N/A
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) 04S85851 | N/A | (26) | |
| (2) 04S85852 | N/A | (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) | |

Design pressure 1250 PSIG psi. Temp. Vessel 575°F. Seal 300°F. Hydro. test pressure 1875 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.

(12/88)

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

WORK ORDER NUMBER: 13710

FORM N-2 (Back - Pg. 2 of 2)

Certificate Holder's Serial Nos. N/A through N/A

Reprint (7/91)

| CERTIFICATION OF DESIGN | | | |
|------------------------------------|--|----------------------|------------------------|
| Design specifications certified by | <u>Bill A. Balazs</u>
(when applicable) | P.E. State <u>CA</u> | Reg. no. <u>MF348</u> |
| Design report* certified by | <u>Ahmed I. Sabet</u>
(when applicable) | P.E. State <u>NY</u> | Reg. no. <u>071638</u> |

| CERTIFICATE OF COMPLIANCE | | | |
|---|----------------|---------|---|
| We certify that the statements made in this report are correct and that this (these) <u>Assemblies</u> conforms to the rules of construction of the ASME Code, Section III, Division 1. | | | |
| NPT Certificate of Authorization No. | <u>N-2703</u> | Expires | <u>September 16, 2006</u> |
| Date | <u>2/17/05</u> | Name | <u>GE Reuter-Stokes, Inc.</u>
(NPT Certificate Holder) |
| | | Signed | <u>[Signature]</u>
(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 <u>OHIO</u> and employed by <u>H.S.B. CT</u> of <u>HARTFORD, CT</u> have inspected these items described in this Data Report on <u>2/17/05</u> 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 | <u>2/17/05</u> | Signed | <u>Walter J. Beach</u>
(Authorized Inspector) |
| | | Commissions | <u>NB 10802 N, NS Ohio 420</u>
[Nat'l Bd. (incl. endorsements) and state or prov. and no.] |

1B21-426

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

1. Owner: FIRSTENERGY CORP. Date 5-20-11
10 Center Road, Perry, Ohio 44081 Sheet 1 of 2
2. Plant: Perry Nuclear Power Plant (PNPP) Unit One
10 Center Road, Perry, Ohio 44081 200386060
 (Repair Org. P.O. No., etc.)
3. Work Performed By: FIRSTENERGY Nuclear Operating Company PNPP Type Code Symbol Stamp NR
10 Center Road, Perry, Ohio 44081 Authorization No. 33
 Expiration Date 9-28-11
4. Identification of System: MAIN STEAM 1B21
5. (a) Applicable Construction Code: ASME SECTION III CLASS 1, 1974 Edition
 NAME/SECTION/DIVISION/CLASS
WINTER 19 75 Addenda Code Case(s) *1728,1644-4,272
- (b) Construction Code used for repairs, modifications, or replacements: 1974 W/75 *
 Edition Addenda Code Case(s)
- (c) ASME Code Section XI applicable for Inservice Inspection: 2001 2003 N/A
 Edition Addenda Code Case(s)
- (d) Applicable Edition of Section XI Utilized for Repairs, Modification, or Replacements:
~~19~~ 2001 ~~19~~ 2003 Addenda N/A
 Code Case(s)
- (e) Design Responsibilities FENOC
6. Identification of Components Repaired, Modified, or Replacement Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | Nat. Board No. | Other ID. | Year Built | Repair, Replacement, or Modification | ASME Code Stamped |
|-------------------|----------------------|-------------------------|----------------|-----------|------------|--------------------------------------|-------------------|
| PIPING | PULLMAN | 1B21 | 64084 | N/A | 1985 | REPLACEMENT | YES |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: REMOVED SNUBBER S/N 271 AND INSTALLED SNUBER 060.
8. Test Conducted: Hydrostatic- ☐ Pneumatic- ☐ Nominal Operating Pressure- ☐ Other- ☐
 Pressure N/A psi Test Temperature N/A degrees F Code Case(s) N/A

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

9. Remarks: _____

NO NAMEPLATE/STAMPING PERFORMED DUE TO THE INTERFACE CONTROLS OF PART 3 SECTION

1.8.6 BEING IN EFFECT AND JURISDICTIONAL AUTHORITY CONCURRENCE HAVING BEEN RECEIVED.

Note: Attach all applicable Manufacturer's Data Reports. Supplemental sheets such as 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 of this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded on the front of this form.

CERTIFICATE OF COMPLIANCE

I, JOHN S DAVIS, 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 items described above conforms to Section XI of the ASME Code and to the National Board Inspection Code "NR" rules.

National Board Certificate of Authorization No. 33 to use the "NR" stamp expires 28 SEPT., 20 11
Date 5/20, 20 11 Signed FENOC-PNPP [Signature] QC SUPV.
(name of repair organization) (authorized representative) (title)

CERTIFICATE OF INSPECTION/INSERVICE INSPECTION

I, THOMAS G LAPS, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of OHIO and employed by HSB CT. of HARTFORD CT. have inspected the repair, modification or replacement described in this report on MAY 20, 20 11 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 ASME Code and the National Board Inspection Code "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work 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.

Date 5/20, 20 11 Signed Thomas G Laps Commissions NB 9330 "N" "A" OHIO COMM.
(inspector) (National Board (include endorsements), and jurisdiction, and no.)

1821-426 SHEET 2 OF 2

(CORRECTED COPY)

FORM NC-1 MANUFACTURERS' DATA REPORT FOR COMPONENT SUPPORTS
As Required by the Provisions of the ASME Code Rules, Section III, Division 1

1. Manufactured by E-Systems, Inc., Montek Division, Salt Lake City, UT
(Name and address of manufacturer)

2. Manufacturer for General Electric Company, San Jose, California
(Name and address of purchaser or owner)

3. Location of installation Black Fox 1 R.S., Tulsa, Oklahoma 74102

4. Identification

| (a)
Component
Support
I.D. No. | (b)
Canadian
Registration
No. | (c)
Applicable
Drawing with
Last Rev. & Date | (d)
Stress Report
or Load Capacity
Data Sheet | (e)
Type of
Component
Support | (f)
Class | (g)
Next Exam
No. | (h)
Year Built |
|---|--|---|--|--|--------------|-------------------------|-------------------|
| (1) <u>056</u> | <u>N/A</u> | <u>157505(A)</u> | <u>CD152000-602</u> | <u>Linear</u> | <u>1</u> | <u>None</u> | <u>1981</u> |
| (2) <u>055</u> | | | | | | | |
| (3) <u>060</u> | | | | | | | |
| (4) <u>059</u> | | | | | | | |
| (5) <u>062</u> | | | | | | | |
| (6) <u>E530</u> | | <u>152205(F)</u> | | | | | |
| (7) <u>E531</u> | | | | | | | |
| (8) <u>009</u> | | | | | | | |
| (9) <u>E532</u> | | | | | | | |
| (10) <u>E533</u> | | | | | | | |

5. Remarks: * - To correct clerical error. Added -1 & Value 157505

page 1 of 2

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that these component supports conform to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Division 1, Edition 1977, Addenda Winter 1977, Code Case No. 1644-9, 1682-1, 1706, N242-1.

Date Dec. 11, 1981 Signed E-Systems, Inc., Montek Div by J. Lynch
(Manufacturer) (Date) (Signature)

Our ASME Certificate of Authorization No. 1356 is valid to the NPT (Institution) (Date)

Symbol expires 1 March 1982 (Date)

OCT 28 1982

CERTIFICATION OF DESIGN

Design Information on File at E-Systems, Inc., Montek Division, Salt Lake City, UT

Stress Report or Load Capacity Data Sheet on File at:
E-Systems, Inc., Montek Division, Salt Lake City, UT

Design Specifications Certified by (1) M.D. Potter PE State CA
Reg. No. 25904

Stress Analysis Report or Load Capacity Data Sheet Certified by (1) Robert Lee Warren III
PE State Utah Reg. No. 3942

(1) List name only; signatures not required.

Perry Document Control: Ints, sketches or drawings may be used provided (1) size is 8 1/2 in., (2) information in Items 1, 2, 4c, 4d on this data report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded at top of this form.

AUG 04 2011

This form (E00075) is available from the Order Dept., ASME, 345 E. 47 St., New York, N.Y. 10017

Best Available
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PAGE NO. 2-D

FORM NF-1 (Back)

CERTIFICATE OF SHOP 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 Utah and employed by Royal Globe Ins. of New York, New York, have inspected the component supports described in this Manufacturer's Data Report on Dec. 11, 1981 and state that to the best of my knowledge and belief the Manufacturer has constructed these component supports in accordance with the ASME Code for Nuclear Power Plant Components.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the component supports 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 11 Dec. 1981

Signed A. L. Hamilton Commissioners Utah 2 (Nat'l B.G., State, Prov., and N.S.)

CERTIFICATION OF FIELD 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 _____ and employed by _____ of _____

have compared the statements in this Manufacturer's Data Report with the described component supports and state that the 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 these component supports in accordance with the ASME Code for Nuclear Power Plant Components.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the component supports 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 _____

Signed _____ Commissioners _____ (Nat'l B.G., State, Prov., and N.S.)

04-1
001-20-002

Perry Document Control

AUG 04 2011

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PAGE NO.

2-E

1B21-427

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

1. Owner: FIRSTENERGY CORP. Date 5-20-11
10 Center Road, Perry, Ohio 44081 Sheet 1 of 2

2. Plant: Perry Nuclear Power Plant (PNPP) Unit One
10 Center Road, Perry, Ohio 44081 200386059
 (Repair Org. P.O. No., etc.)

3. Work Performed By: FIRSTENERGY Nuclear Operating Company PNPP Type Code Symbol Stamp NR
10 Center Road, Perry, Ohio 44081 Authorization No. 33
 Expiration Date 9-28-11

4. Identification of System: MAIN STEAM 1B21

5. (a) Applicable Construction Code: ASME SECTION III CLASS 1, 1974 Edition
 NAME/SECTION/DIVISION/CLASS
WINTER 19 75 Addenda Code Case(s) *1728,1644-4,272

(b) Construction Code used for repairs, modifications, or replacements: 1974 W/75 *
 Edition Addenda Code Case(s)

(c) ASME Code Section XI applicable for Inservice Inspection: 2001 2003 N/A
 Edition Addenda Code Case(s)

(d) Applicable Edition of Section XI Utilized for Repairs, Modification, or Replacements:
49, 2001 49 2003 Addenda N/A
 Code Case(s)

(e) Design Responsibilities FENOC

6. Identification of Components Repaired, Modified, or Replacement Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | Nat. Board No. | Other ID. | Year Built | Repair, Replacement, or Modification | ASME Code Stamped |
|-------------------|----------------------|-------------------------|----------------|-----------|------------|--------------------------------------|-------------------|
| PIPING | PULLMAN | 1B21 | 64084 | N/A | 1985 | REPLACEMENT | YES |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: REMOVED SNUBBER S/N 142 AND INSTALLED SNUBER 399.

8. Test Conducted: Hydrostatic- ☐ Pneumatic- ☐ Nominal Operating Pressure- ☐ Other- ☐
 Pressure N/A psi Test Temperature N/A degrees F Code Case(s) N/A

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

9. Remarks: _____

NO NAMEPLATE/STAMPING PERFORMED DUE TO THE INTERFACE CONTROLS OF PART 3 SECTION
1.8.6 BEING IN EFFECT AND JURISDICTIONAL AUTHORITY CONCURRENCE HAVING BEEN RECEIVED.

Note: Attach all applicable Manufacturer's Data Reports. Supplemental sheets such as 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 of this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded on the front of this form.

CERTIFICATE OF COMPLIANCE

I, JOHN S DAVIS, 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 items described above conforms to Section XI of the ASME Code and to the National Board Inspection Code "NR" rules.

National Board Certificate of Authorization No. 33 to use the NR stamp expires 28 SEPT. 20 11
Date 5/20, 20 11 Signed FENOC-PNPP [Signature] QC SUPV.
(name of repair organization) (authorized representative) (title)

CERTIFICATE OF INSPECTION/INSERVICE INSPECTION

I, THOMAS G LAPS, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of OHIO and employed by HSB CT. of HARTFORD CT. have inspected the repair, modification or replacement described in this report on MAY 30, 20 11 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 ASME Code and the National Board Inspection Code "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work 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.

Date 5/20, 20 11 Signed Thomas G Laps Commissions NB 9330 "N" "A" OHIO COMM.
(inspector) (National Board (include endorsements), and jurisdiction, and no.)

AUG 04 2011

Best Available
Copy

1B21-427 SHEET 2 OF 2

FORM NF-1 MANUFACTURERS' DATA REPORT FOR COMPONENT SUPPORTS*
As Required by the Provisions of the ASME Code Rules, Section III, Division 1

1. Manufactured by E-Systems, Inc., Montek Division, Salt Lake City, Utah 84119
(Name and address of manufacturer)

2. Manufacturer for Power Piping Company, Pittsburgh, Pennsylvania 15233
(Name and address of purchaser or owner)

3. Location of Installation Perry Nuclear Power Plant, Units 1 & 2, Perry, Ohio 44081

4. Identification

| (a)
Component
Support
I.D. No. | (b)
Canadian
Registration
No. | (c)
Applicable
Drawings with
Last Rev. & Date | (d)
Stress Report
or Load Capa-
city Data Sheet | (e)
Type of
Component
Support | (f)
Class | (g)
Nat'l Board
No. | (h)
Year Built |
|---|--|--|--|--|--------------|---------------------------|-------------------|
| (1) 299 | N/A | 152003 G | LCD152000-602 | Linear | I | None | 1982 |
| (2) 401 | " | " | " | " | " | " | " |
| (3) 402 | " | " | " | " | " | " | " |
| (4) 520 | " | 152005 G | " | " | " | " | " |
| (5) 521 | " | " | " | " | " | " | " |
| (6) 526 | " | " | " | " | " | " | " |
| (7) 527 | " | " | " | " | " | " | " |
| (8) 528 | " | " | " | " | " | " | " |
| (9) 529 | " | " | " | " | " | " | " |
| (10) 301 | " | 152007 H | " | " | " | " | " |

5. Remarks

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that these components supports conform to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Division 1, Edition 1974, Addenda Winter 1975.
Code Case No. 1644, N-242-1, Para. 5.5.

Date Sept. 22, 1982 Signed E-Systems, Inc., Montek Div. by J. Lynch
(Manufacturer) (NPT)
Our ASME Certificate of Authorization No. N-2563 to use the NPT JUL 21 1983
(Date)

Symbol expires June, 21, 1985
(Date)

CERTIFICATION OF DESIGN

Design Information on File at E-Systems, Inc., Montek Division, Salt Lake City, Utah 84119

Stress Report or Load Capacity Data Sheets on File at E-Systems, Inc., Montek Division, Salt Lake City, Utah 84119

Design Concentrations Certified by (1) Robert Lee Warren III PE State Utah

Reg. No. 3942

Stress Analysis Report or Load Capacity Data Sheets Certified by (1) Robert Lee Warren III

PE State Utah Reg. No. 3942

(1) Last name only, signature not required.

*Supplemental sheets in form of lists, sketches or drawings may be used provided (1) use is B5 in (2) information in items 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 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1829, 1830, 1831, 1832, 1833, 1834, 1835, 1836, 1837, 1838, 1839, 1840, 1841, 1842, 1843, 1844, 1845, 1846, 1847, 1848, 1849, 1850, 1851, 1852, 1853, 1854, 1855, 1856, 1857, 1858, 1859, 1860, 1861, 1862, 1863, 1864, 1865, 1866, 1867, 1868, 1869, 1870, 1871, 1872, 1873, 1874, 1875, 1876, 1877, 1878, 1879, 1880, 1881, 1882, 1883, 1884, 1885, 1886, 1887, 1888, 1889, 1890, 1891, 1892, 1893, 1894, 1895, 1896, 1897, 1898, 1899, 1900, 19

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FORM NF-1 (Back)

CERTIFICATE OF SHOP 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 Utah and employed by Royal Indemnity of New York, New York
1982 have inspected the component supports described in this Manufacturers' Data Report on Sept. 22
and state that to the best of my knowledge and belief the Manufacturer has constructed these component supports in accordance
with the ASME Code for Nuclear Power Plant Components.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the component
supports described in this Manufacturers' 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 Sept. 22, 1992Signed A. J. [Signature]

Commissions

Utah 2

(Nat'l Bd., State, Prov., and No.)

CERTIFICATION OF FIELD 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 _____ and employed by _____ of _____
_____ have compared the statements in this Manufacturers' Data Report with the described component supports
and state that the 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 these component supports in accordance
with the ASME Code for Nuclear Power Plant Components.

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

Date _____

Signed _____

Commissions

(Nat'l Bd., State, Prov., and No.)

JUL 21 1983



PAGE NO.

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1B21-428

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

1. Owner: FIRSTENERGY CORP. Date 5-20-11
10 Center Road, Perry, Ohio 44081 Sheet 1 of 2
2. Plant: Perry Nuclear Power Plant (PNPP) Unit One
10 Center Road, Perry, Ohio 44081 200386062
 (Repair Org. P.O. No., etc.)
3. Work Performed By: FIRSTENERGY Nuclear Operating Company PNPP Type Code Symbol Stamp NR
10 Center Road, Perry, Ohio 44081 Authorization No. 33
 Expiration Date 9-28-11
4. Identification of System: MAIN STEAM 1B21
5. (a) Applicable Construction Code: ASME SECTION III CLASS 1, 1974 Edition
 NAME/SECTION/DIVISION/CLASS
WINTER 19 75 Addenda Code Case(s) *1728,1644-4,272
- (b) Construction Code used for repairs, modifications, or replacements: 1974 W/75 *
 Edition Addenda Code Case(s)
- (c) ASME Code Section XI applicable for Inservice Inspection: 2001 2003 N/A
 Edition Addenda Code Case(s)
- (d) Applicable Edition of Section XI Utilized for Repairs, Modification, or Replacements:
19 2001 19 2003 Addenda N/A
 Code Case(s)
- (e) Design Responsibilities FENOC
6. Identification of Components Repaired, Modified, or Replacement Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | Nat. Board No. | Other ID. | Year Built | Repair, Replacement, or Modification | ASME Code Stamped |
|-------------------|----------------------|-------------------------|----------------|-----------|------------|--------------------------------------|-------------------|
| PIPING | PULLMAN | 1B21 | 64084 | N/A | 1985 | REPLACEMENT | YES |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: REMOVED SNUBBER S/N 274 AND INSTALLED SNUBER 048.
8. Test Conducted: Hydrostatic- ☐ Pneumatic- ☐ Nominal Operating Pressure- ☐ Other- ☐
 Pressure N/A psi Test Temperature N/A degrees F Code Case(s) N/A

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

9. Remarks: _____

NO NAMEPLATE/STAMPING PERFORMED DUE TO THE INTERFACE CONTROLS OF PART 3 SECTION

1.8.6 BEING IN EFFECT AND JURISDICTIONAL AUTHORITY CONCURRENCE HAVING BEEN RECEIVED.

Note: Attach all applicable Manufacturer's Data Reports. Supplemental sheets such as 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 of this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded on the front of this form.

CERTIFICATE OF COMPLIANCE

I, JOHN S DAVIS, 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 items described above conforms to Section XI of the ASME Code and to the National Board Inspection Code "NR" rules.

National Board Certificate of Authorization No. 33 to use the "NR" stamp expires 28 SEPT., 20 11
Date 5/20, 20 11 Signed FENOC-PNPP [Signature] QC SUPV.
(name of repair organization) (authorized representative) (title)

CERTIFICATE OF INSPECTION/INSERVICE INSPECTION

I, THOMAS G LAPS, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of OHIO and employed by HSB CT. of HARTFORD CT. have inspected the repair, modification or replacement described in this report on MAY 20 20 11 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 ASME Code and the National Board Inspection Code "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work 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.

Date 5/20 20 11 Signed Thomas G Laps Commissions NB 9330 "N" "A" OHIO COMM.
(inspector) (National Board (include endorsements), and jurisdiction, and no.)

Peer-Document Control

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(CORRECTED COPY)

FORM NP-1 MANUFACTURERS' DATA REPORT FOR COMPONENT SUPPORTS
As Required by the Provisions of the ASME Code Rules, Section III, Division 1

1. Manufactured by E-Systems, Inc., Montek Division, Salt Lake City, UT
(Name and address of manufacturer)

2. Manufacturer for General Electric Company, San Jose, California
(Name and address of purchaser or owner)

3. Location of Installation Black Fox 2 M.S., Tulsa, Oklahoma 74102

4. Identification

| (a)
Component
Support
I.D. No. | (b)
Canadian
Registration
No. | (c)
Applicable
Drawings with
Last Rev. & Date | (d)
Stress Report
or Load Capacity
Data Sheet | (e)
Type of
Component
Support | (f)
Class | (g)
Nat'l. Board
No. | (h)
Year Built |
|---|--|--|--|--|--------------|----------------------------|-------------------|
| (1) 040 | N/A | 157503(N/C) | 1-CD152000-602 | Linear | 3 | None | 1981 |
| (2) 043 | | | | | | | |
| (3) E612 | | 152203(E) | | | | | |
| (4) E614 | | | | | | | |
| (5) E613 | | | | | | | |
| (6) 048 | | 157503(N/C) | | | | | |
| (7) 047 | | | | | | | |
| (8) E615 | | 152203(E) | | | | | |
| (9) E616 | | | | | | | |

5. Remarks: To correct clerical error: Added -1 8/4/2011 4/1/2012

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that these components supports conform to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Division 1, Edition 1977, Addenda Winter 1977.

Code Case No. 1644-B-3682-1, 1705, N242-1

Date Dec. 31, 1981 Signed E-Systems, Inc., Montek Div. by J. Lynch
(Manufacturer)

Our ASME Certificate of Authorization No. 1356 to use the NPT (NPT)

Symbol expires 1 March 1982 (Date)

CERTIFICATION OF DESIGN

Design Information on File at: E-Systems, Inc., Montek Division, Salt Lake City, UT

Stress Report or Load Capacity Data Sheet on File at: E-Systems, Inc., Montek Division, Salt Lake City, UT

Design Specifications Certified by (1) M.D. Potter PE State: CA

Reg. No. 25904

Stress Analysis Report or Load Capacity Data Sheet Certified by (1) Robert Lee Warren III

PE State: Utah Reg. No. 3942

(1) List name only; signature not required.

(1/76)

This form (E00075) is available from the Order Dept., ASME, 345 E. 47 St., New York, N.Y. 100

PAGE NO.

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Best Available

FORM NF-1 (Back)

CERTIFICATE OF SHOP 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 Washington and employed by Royal Indemnity of New York, New York have inspected the component supports described in this Manufacturers' Data Report on Aug. 12, 1982 and state that to the best of my knowledge and belief the Manufacturer has constructed these component supports in accordance with the ASME Code for Nuclear Power Plant Components.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the component supports described in this Manufacturers' 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 Aug. 12, 1982

Signed James P. Egan Commission PA 14 (Natl. B.O., State, Prov. and No.)

CERTIFICATION OF FIELD 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 Washington and employed by Royal Indemnity of New York, New York have compared the statements in this Manufacturers' Data Report with the described component supports and state that the 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 these component supports in accordance with the ASME Code for Nuclear Power Plant Components.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the component supports described in this Manufacturers' 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 _____

Signed _____ Commission _____ (Natl. B.O., State, Prov. and No.)

GO 1
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PAGE NO. 2 E.

1B21-429

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

1. Owner: FIRSTENERGY CORP. Date 5-24-11
10 Center Road, Perry, Ohio 44081 Sheet 1 of 2
2. Plant: Perry Nuclear Power Plant (PNPP) Unit One
10 Center Road, Perry, Ohio 44081 200386064 4/24/11
 (Repair Org. P.O. No., etc.)
3. Work Performed By: FIRSTENERGY Nuclear Operating Company PNPP Type Code Symbol Stamp NR
10 Center Road, Perry, Ohio 44081 Authorization No. 33
 Expiration Date 9-28-11
4. Identification of System: MAIN STEAM 1B21
5. (a) Applicable Construction Code: ASME SECTION III CLASS 1, 1974 Edition
 NAME/SECTION/DIVISION/CLASS
WINTER 19 75 Addenda Code Case(s) *1728, 1644-4, 272
- (b) Construction Code used for repairs, modifications, or replacements: 1974 W/75 *
 Edition Addenda Code Case(s)
- (c) ASME Code Section XI applicable for Inservice Inspection: 2001 2003 N/A
 Edition Addenda Code Case(s)
- (d) Applicable Edition of Section XI Utilized for Repairs, Modification, or Replacements:
49 2001 49 2003 Addenda N/A
 Code Case(s)
- (e) Design Responsibilities FENOC

6. Identification of Components Repaired, Modified, or Replacement Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | Nat. Board No. | Other ID. | Year Built | Repair, Replacement, or Modification | ASME Code Stamped |
|-------------------|----------------------|-------------------------|----------------|-----------|------------|--------------------------------------|-------------------|
| PIPING | PULLMAN | 1B21 | 64084 | N/A | 1985 | REPLACEMENT | YES |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: REMOVED SNUBBER S/N 276 AND INSTALLED SNUBBER 275.

8. Test Conducted: Hydrostatic- ☐ Pneumatic- ☐ Nominal Operating Pressure- ☐ Other- ☐
 Pressure N/A psi Test Temperature N/A degrees F Code Case(s) N/A

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

9. Remarks: _____

NO NAMEPLATE/STAMPING PERFORMED DUE TO THE INTERFACE CONTROLS OF PART 3 SECTION
1.8.6 BEING IN EFFECT AND JURISDICTIONAL AUTHORITY CONCURRENCE HAVING BEEN RECEIVED.

Note: Attach all applicable Manufacturer's Data Reports. Supplemental sheets such as 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 of this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded on the front of this form.

CERTIFICATE OF COMPLIANCE

I, JOHN S DAVIS, 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 items described above conforms to Section XI of the ASME Code and to the National Board Inspection Code "NR" rules.

National Board Certificate of Authorization No. 33 to use the "NR" stamp expires 28 SEPT., 20 11
Date 5/24, 20 11 Signed FENOC-PNPP [Signature] QC SUPV.
(name of repair organization) (authorized representative) (title)

CERTIFICATE OF INSPECTION/INSERVICE INSPECTION

I, THOMAS G LAPS, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of OHIO and employed by HSB CT of HARTFORD CT. have inspected the repair, modification or replacement described in this report on MAY 24, 20 11 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 ASME Code and the National Board Inspection Code "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work 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.

Date MAY 24, 20 11 Signed Thomas G Laps Commissions NB 9330 "N" "A" OHIO COMM.
(inspector) (National Board (include endorsements), and jurisdiction, and no.)

1B21-429 SHEET 2 OF 2

FORM NF-1 MANUFACTURERS' DATA REPORT FOR COMPONENT SUPPORTS*
As Required by the Provisions of the ASME Code Rules, Section III, Division 1

1. Manufactured by E-Systems, Inc., Montek Division, Salt Lake City, Utah
(Name and address of manufacturer)

2. Manufacturer for General Electric Company, San Jose, California
(Name and address of purchaser or owner)

3. Location of installation Perry I Nuclear Power Plant, Main Steam, Fairport, Ohio

4. Identification

| (a)
Component
Support
I. D. No. | (b)
Canadian
Registration
No. | (c)
Applicable
Drawings with
Last Rev. & Date | (d)
Stress Report
or Load Capac-
ity Data Sheet | (e)
Type of
Component
Support | (f)
Class | (g)
Net't Board
No. | (h)
Year Built |
|--|--|--|--|--|--------------|---------------------------|-------------------|
| (1) <u>273</u> | <u>N/A</u> | <u>152605A</u> | <u>LCD152000-602-7</u> | <u>Linear</u> | <u>1</u> | <u>None</u> | <u>1978</u> |
| (2) <u>274</u> | " | " | " | " | " | " | " |
| (3) <u>275</u> | " | " | " | " | " | " | " |
| (4) <u>276</u> | " | " | " | " | " | " | " |
| (5) <u>277</u> | " | " | " | " | " | " | " |
| (6) <u>278</u> | " | " | " | " | " | " | " |
| (7) <u>281</u> | " | " | " | " | " | " | " |
| (8) <u>282</u> | " | " | " | " | " | " | " |
| (9) <u>055</u> | " | <u>152607A</u> | <u>LCD152000-602-8</u> | " | " | " | " |
| (10) <u>056</u> | " | " | " | " | " | " | " |

5. Remarks:

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that these components supports conform to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Division 1, Edition 1974, Addenda Winter 1976
Code Case No. 1644-4, 1682-1, 1706.

Date 30 Sept. 1978 Signed E-Systems, Inc., Montek Div. by W.S. Enright
(Manufacturer) (Date)

Our ASME Certificate of Authorization No. 1356 to use the NPT (NPT)

Symbol expires 1 March 1979
(Date)

CERTIFICATION OF DESIGN

Design Information on File at E-Systems, Inc., Montek Division, Salt Lake City, Utah

Stress Report or Load Capacity Data Sheets on File at:
E-Systems, Inc., Montek Division, Salt Lake City, Utah

Design Specifications Certified by (1) Robert Lee Warren III PE State Utah
Reg. No. 3942

Stress Analysis Report or Load Capacity Data Sheets Certified by (1) Robert Lee Warren III
PE State Utah Reg. No. 3942

(1) List name only, signature not required.

*Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8 1/2 in., (2) information in items 1, 2, 4c, 4g on this data report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded at top of this form.

1B21-430

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

1. Owner: FIRSTENERGY CORP. Date 5-24-11
10 Center Road, Perry, Ohio 44081 Sheet 1 of 2

2. Plant: Perry Nuclear Power Plant (PNPP) Unit One
10 Center Road, Perry, Ohio 44081 200386063
 (Repair Org. P.O. No., etc.)

3. Work Performed By: FIRSTENERGY Nuclear Operating Company PNPP Type Code Symbol Stamp NR
10 Center Road, Perry, Ohio 44081 Authorization No. 33
 Expiration Date 9-28-11

4. Identification of System: MAIN STEAM 1B21

5. (a) Applicable Construction Code: ASME SECTION III CLASS 1, 1974 Edition
 NAME/SECTION/DIVISION/CLASS
WINTER 19 75 Addenda Code Case(s) *1728,1644-4,272

(b) Construction Code used for repairs, modifications, or replacements: 1974 W/75 *
 Edition Addenda Code Case(s)

(c) ASME Code Section XI applicable for Inservice Inspection: 2001 2003 N/A
 Edition Addenda Code Case(s)

(d) Applicable Edition of Section XI Utilized for Repairs, Modification, or Replacements:
49, 2001 49 2003 Addenda N/A
 Code Case(s)

(e) Design Responsibilities FENOC

6. Identification of Components Repaired, Modified, or Replacement Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | Nat. Board No. | Other ID. | Year Built | Repair, Replacement, or Modification | ASME Code Stamped |
|-------------------|----------------------|-------------------------|----------------|-----------|------------|--------------------------------------|-------------------|
| PIPING | PULLMAN | 1B21 | 64084 | N/A | 1985 | REPLACEMENT | YES |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: REMOVED SNUBBER S/N 270 AND INSTALLED SNUBBER 065. 1B21/G 7087.
 5/24/11

8. Test Conducted: Hydrostatic-☐ Pneumatic-☐ Nominal Operating Pressure-☐ Other-☐
 Pressure N/A psi Test Temperature N/A degrees F Code Case(s) N/A

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00.

9. Remarks:

NO NAMEPLATE/STAMPING PERFORMED DUE TO THE INTERFACE CONTROLS OF PART 3 SECTION
1.8.6 BEING IN EFFECT AND JURISDICTIONAL AUTHORITY CONCURRENCE HAVING BEEN RECEIVED.

Note: Attach all applicable Manufacturer's Data Reports. Supplemental sheets such as 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 of this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded on the front of this form.

CERTIFICATE OF COMPLIANCE

I, JOHN S DAVIS, 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 items described above conforms to Section XI of the ASME Code and to the National Board Inspection Code "NR" rules.

National Board Certificate of Authorization No. 33 to use the "NR" stamp expires 28 SEPT., 20 11
Date 5/24, 20 11 Signed FENOC-PNPP [Signature] QC SUPV.
(name of repair organization) (authorized representative) (title)

CERTIFICATE OF INSPECTION/INSERVICE INSPECTION

I, THOMAS G LAPS, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of OHIO and employed by HSB CT. of HARTFORD, CT. have inspected the repair, modification or replacement described in this report on MAY 25, 20 11 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 ASME Code and the National Board Inspection Code "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work 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.

Date 5/25/11 20 11 Signed Thomas G Laps Commissions NB 9330 "N" "I" "A" OHIO COMM.
(inspector) (National Board (include endorsements), and jurisdiction, and no.)

1B21-430 SHEET 2 OF 2

(CORRECTED COPY)

AUG 04 2011

FORM NO. 1 MANUFACTURERS' DATA REPORT FOR COMPONENT SUPPORTS
As Required by the Provisions of the ASME Code Rules, Section III, Division 1

Best Available
Copy

1. Manufactured by E-Systems, Inc., Montek Division, Salt Lake City, UT
(Name and address of manufacturer)

2. Manufacturer for General Electric Company, San Jose, California
(Name and address of purchaser or owner)

3. Location of Installation Black Fox 1 R.S., Tulsa, Oklahoma 74102

4. Identification

| (a)
Component
Support
I.D. No. | (b)
Canadian
Registration
No. | (c)
Applicable
Drawings with
List Rev. & Date | (d)
Stress Report
or Load Capacity
Data Sheet | (e)
Type of
Component
Support | (f)
Class | (g)
Natl. Board
No. | (h)
Year Built |
|---|--|--|--|--|--------------|---------------------------|-------------------|
| (1) 061 | N/A | 157505(A) | 160152000-602 (linear) | | | | 1981 |
| (2) 058 | | | | | | | |
| (3) 057 | | | | | | | |
| (4) 066 | | | | | | | |
| (5) 065 | | | | | | | |
| (6) 069 | | 152205(E) | | | | | |
| (7) 006 | | | | | | | |
| (8) 112 | | | | | | | |
| (9) 036 | | | | | | | |
| (10) 007 | | | | | | | |

5. Remarks:
* - To correct clerical error Added -1 *of November 1981*

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that these component supports conform to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Division 1, Edition 1977, Addenda Winter 1977, Code Case No. 1644-B-1682-1, 1706, N242-1.*

Date Dec. 1, 1981 Signed E-Systems, Inc., Montek Div. (Manufacturer) J. Lynch (Date)

Our ASME Certificate of Authorization No. 1356 to use the NPT Symbol expires 1 March 1982 (Date)

GCM OCT 28 1982

CERTIFICATION OF DESIGN

Design Information on File at E-Systems, Inc., Montek Division, Salt Lake City, UT

Stress Report or Load Capacity Data Sheet on File at:
E-Systems, Inc., Montek Division, Salt Lake City, UT

Design Specifications Certified by (iii) M.D. Potter PE State CA
Reg. No. 25904

Stress Analysis Report or Load Capacity Data Sheet Certified by (iii) Robert Lee Warren III
PE State Utah Reg. No. 3942

(ii) List name only, signature not required.

* Supplemental sheets in form of lists, sketches or drawings may be used provided (1) use is in accordance with (2) information in items 1, 2, 4c, 4d on this data report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded at top of this form.

11/781

This form (ED0075) is available from the Order Dept., ASME, 348 E. 47 St., New York, N.Y. 10017

FORM NO. 1 (Back)

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Utah and employed by Royal-Globe Ins. of New York, New York have inspected the component supports described in this Manufacturers' Data Report on Dec. 11 1981 and state that to the best of my knowledge and belief the Manufacturer has constructed these component supports in accordance with the ASME Code for Nuclear Power Plant Components.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the component supports described in this Manufacturers' 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 11 Dec. 1981

Signed A. L. Robinson Commission Utah 2 (Nat'l Bd., State, Firm, and No.)

CERTIFICATION OF FIELD INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Utah and employed by Royal-Globe Ins. of New York, New York have compared the statements in this Manufacturers' Data Report with the described component supports and state that the parts referred to in data item 1 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 these component supports in accordance with the ASME Code for Nuclear Power Plant Components.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the component supports described in this Manufacturers' 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 _____

Signed _____ Commission _____ (Nat'l Bd., State, Firm, and No.)

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GCM
OCT 26 1982

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AUG 04 2011

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PAGE NO. 21

— 96 2 of 2

1B21-431

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

1. Owner: FIRSTENERGY CORP. Date 07/15/2011
10 Center Road, Perry, Ohio 44081 Sheet 1 of 1

2. Plant: Perry Nuclear Power Plant (PNPP) Unit One
10 Center Road, Perry, Ohio 44081 200377212
 (Repair Org. P.O. No., etc.)

3. Work Performed By: FIRSTENERGY Nuclear Operating Company PNPP Type Code Symbol Stamp NR
10 Center Road, Perry, Ohio 44081 Authorization No. 33
 Expiration Date 9-28-11

4. Identification of System: B21 NUCLEAR BOILER PROCESS INSTRUMENTATION

5. (a) Applicable Construction Code: ASME SECTION III CLASS 1, 1974 Edition
 NAME/SECTION/DIVISION/CLASS
WINTER 1975 Addenda Code Case(s) None

(b) Construction Code used for repairs, modifications, or replacements: 1974 W/75 N/A
 Edition Addenda Code Case(s)

(c) ASME Code Section XI applicable for Inservice Inspection: 2001 2003 N/A
 Edition Addenda Code Case(s)

(d) Applicable Edition of Section XI Utilized for Repairs, Modification, or Replacements:
49, 2001 49, 2003 Addenda N/A
 TJK 05/13/2011 TJK 05/13/2011 Code Case(s)

(e) Design Responsibilities FENOC

6. Identification of Components Repaired, Modified, or Replacement Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | Nat. Board No. | Other ID. | Year Built | Repair, Replacement, or Modification | ASME Code Stamped |
|-------------------|----------------------|-------------------------|----------------|-----------|------------|--------------------------------------|-------------------|
| Valve | Rockwell | QA-26 | 665 | N/A | 1981 | Replacement | YES |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: 1B21F0032A. Remove and replace welded test fitting. Installed Test Fitting Heat Number H9181. Weld material Heat Number C78286, A900319.

8. Test Conducted: Hydrostatic- ☐ Pneumatic- ☐ Nominal Operating Pressure- ☒ Other- ☐
 Pressure 1025 psi Test Temperature 132 degrees F Code Case(s) N/A

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

9. Remarks: _____

NO NAMEPLATE/STAMPING PERFORMED DUE TO THE INTERFACE CONTROLS OF PART 3 SECTION

1.8.6 BEING IN EFFECT AND JURISDICTIONAL AUTHORITY CONCURRENCE HAVING BEEN RECEIVED.

Note: Attach all applicable Manufacturer's Data Reports. Supplemental sheets such as 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 of this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded on the front of this form.

CERTIFICATE OF COMPLIANCE

I, JOHN S DAVIS, 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 items described above conforms to Section XI of the ASME Code and to the National Board Inspection Code "NR" rules.

National Board Certificate of Authorization No. 33 to use the "NR" stamp expires 28 SEPT., 20 11
Date 7/19, 20 11 Signed FENOC-PNPP QC SUPV.
(name of repair organization) (authorized representative) (title)

CERTIFICATE OF INSPECTION/INSERVICE INSPECTION

I, THOMAS G LAPS, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of OHIO and employed by HSB CT. of HARTFORD, CT. have inspected the repair, modification or replacement described in this report on July 22, 20 11 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 ASME Code and the National Board Inspection Code "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work 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.

Date 7/22, 20 11 Signed Thomas G Laps Commissions NB 9330 "N" "A" OHIO COMM.
(inspector) (National Board (include endorsements), and jurisdiction, and no.)

1B21-432

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

1. Owner: FIRSTENERGY CORP. Date 05/27/2011
10 Center Road, Perry, Ohio 44081 Sheet 1 of 2
2. Plant: Perry Nuclear Power Plant (PNPP) Unit One
10 Center Road, Perry, Ohio 44081 200386061
 (Repair Org. P.O. No., etc.)
3. Work Performed By: FIRSTENERGY Nuclear Operating Company PNPP Type Code Symbol Stamp NR
10 Center Road, Perry, Ohio 44081 Authorization No. 33
 Expiration Date 9-28-11
4. Identification of System: B21 NUCLEAR BOILER PROCESS INSTRUMENTATION
5. (a) Applicable Construction Code: ASME SECTION III CLASS 1, 1974 Edition
 NAME/SECTION/DIVISION/CLASS
WINTER 1975 Addenda Code Case(s) *1728,1644-4,272
- (b) Construction Code used for repairs, modifications, or replacements: 1974 W/75 *
 Edition Addenda Code Case(s)
- (c) ASME Code Section XI applicable for Inservice Inspection: 2001 2003 N/A
 Edition Addenda Code Case(s)
- (d) Applicable Edition of Section XI Utilized for Repairs, Modification, or Replacements:
49, 2001 49, 2003 Addenda N/A
 TJK 05/13/2011 TJK 05/13/2011 Code Case(s)
- (e) Design Responsibilities FENOC

6. Identification of Components Repaired, Modified, or Replacement Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | Nat. Board No. | Other ID. | Year Built | Repair, Replacement, or Modification | ASME Code Stamped |
|-------------------|----------------------|-------------------------|----------------|-----------|------------|--------------------------------------|-------------------|
| Piping System | General Electric | 1B21 | 64084 | N/A | 1985 | Replacement | YES |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: 1B21G7076. Replace 30 KIP Snubber S/N 141 with 30 KIP Snubber S/N 138.

8. Test Conducted: Hydrostatic- ☐ Pneumatic- ☐ Nominal Operating Pressure- ☐ Other- ☐
 Pressure N/A psi Test Temperature N/A degrees F Code Case(s) N/A

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

9. Remarks: _____

NO NAMEPLATE/STAMPING PERFORMED DUE TO THE INTERFACE CONTROLS OF PART 3 SECTION

1.8.6 BEING IN EFFECT AND JURISDICTIONAL AUTHORITY CONCURRENCE HAVING BEEN RECEIVED.

Note: Attach all applicable Manufacturer's Data Reports. Supplemental sheets such as 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 of this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded on the front of this form.

CERTIFICATE OF COMPLIANCE

I, JOHN S DAVIS, 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 items described above conforms to Section XI of the ASME Code and to the National Board Inspection Code "NR" rules.

National Board Certificate of Authorization No. 33 to use the "NR" stamp expires 28 SEPT., 20 11

Date 6/3, 20 11 Signed FENOC-PNPP [Signature] QC SUPV.
(name of repair organization) (authorized representative) (title)

CERTIFICATE OF INSPECTION/INSERVICE INSPECTION

I, THOMAS G LAPS, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of OHIO and employed by HSB CT. of HARTFORD, CT. have inspected the repair, modification or replacement described in this report on JUNE 3, 20 11 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 ASME Code and the National Board Inspection Code "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work 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.

Date 6/3, 20 11 Signed Thomas G Laps Commissions NB 9330 "N" "A" OHIO COMM.
(inspector) (National Board (include endorsements), and jurisdiction, and no.)

Perry Document Control

AUG 04 2011

1B21-432
Sheet 2 of 2Last Available
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(CORRECTED COPY)

FORM NP-1 MANUFACTURERS' DATA REPORT FOR COMPONENT SUPPORTS
As Required by the Provisions of the ASME Code Rules, Section III, Division 1

1. Manufactured by E-Systems, Inc., Montek Division, Salt Lake City, UT
(Name and address of Manufacturer)

2. Manufacturer for General Electric Company, San Jose, California
(Name and address of purchaser or owner)

3. Location of installation Perry 1 Main Steam, North Perry, Ohio

4. Identification

| (a)
Component
Support
I.D. No. | (b)
Corrosion
Registration
No. | (c)
Applicable
Drawings with
Last Rev. & Date | (d)
Stress Report
or Load Capacity
Data Sheet | (e)
Type of
Component
Support | (f)
Class | (g)
Non-Record
No. | (h)
Year Built |
|---|---|--|--|--|--------------|--------------------------|-------------------|
| (1) 271 | N/A | 152605(B) | LED152000-602 | linear | 1 | None | 1983 |
| (2) 272 | | | | | | | |
| (3) 138 | | 152603(C) | | | | | |
| (4) 142 | | | | | | | |
| (5) | | | | | | | |
| (6) | | | | | | | |
| (7) | | | | | | | |
| (8) | | | | | | | |
| (9) | | | | | | | |
| (10) | | | | | | | |

5. Remarks: * Typing Error, added -1, APR 29 1982, DSK 4/30/82

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that these components supports conform to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Division 1, Edition 1974, Addenda Summer 1975.

Code Case No. 1044 or 1682-1, 1706, N292-1, 9 (Detail)

Date May 5, 1981 Signed E-Systems, Inc., Montek Div. (Manufacturer) PE Lucky

Our ASME Certificate of Authorization No. 1356 in use for NPI (NPI)

Valid expires 1 March 1982 (Date)

CERTIFICATION OF DESIGN

Design Information on File at E-Systems, Inc., Montek Division, Salt Lake City, UT

Stress Report or Load Capacity Data Sheet on File at E-Systems, Inc., Montek Division, Salt Lake City, UT

Design Specifications Certified by (1) M.D. Potter PE State CA

Reg. No. 25904

Stress Analysis Report or Load Capacity Data Sheet Certified by (1) Robert Lee Warren, III

PE State Utah Reg. No. 3942

(1) If not name only, signature not required.

*Supplemental sheets in form of lists, sketches or drawings may be used provided (1) they are signed, (2) information in items 5, 7, 8, 9, 10 on this data report is included on each sheet, and (3) each sheet is numbered and a number of sheets is recorded at top of this form.

17(78)

This form 1E000751 is available from the Order Dept., ASME, 345 E. 47 St., New York, N.Y. 10017

PAGE NO.

2-H/179

AUG 04 2011

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FORM NF-1 (Back)

CERTIFICATE OF SHOP 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 Utah and employed by Royal Globe Ins. of New York, New York have inspected the component supports described in this Manufacturer's Data Report on May 5, 1981 and state that to the best of my knowledge and belief the Manufacturer has constructed these component supports in accordance with the ASME Code for Nuclear Power Plant Components.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the component supports 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 May 5, 1981

Signed A. L. Richman Commission Utah 2

(Natl. Bd. of State, Prov. and M.C.)

CERTIFICATION OF FIELD 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 _____ and employed by _____ of _____ have compared the statements in this Manufacturer's Data Report with the described component supports and state that the data 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 these component supports in accordance with the ASME Code for Nuclear Power Plant Components.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the component supports 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 _____

Signed _____ Commission _____

(Natl. Bd. of State, Prov. and M.C.)



PAGE NO 25

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1B21-433

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

1. Owner: FIRSTENERGY CORP. Date 06/06/2011
10 Center Road, Perry, Ohio 44081 Sheet 1 of 1
2. Plant: Perry Nuclear Power Plant (PNPP) Unit One
10 Center Road, Perry, Ohio 44081 200386065
 (Repair Org. P.O. No., etc.)
3. Work Performed By: FIRSTENERGY Nuclear Operating Company PNPP Type Code Symbol Stamp NR
10 Center Road, Perry, Ohio 44081 Authorization No. 33
 Expiration Date 9-28-11
4. Identification of System: 1B21 NUCLEAR BOILER PROCESS INSTRUMENTATION
5. (a) Applicable Construction Code: ASME SECTION III CLASS 1, 1974 Edition
 NAME/SECTION/DIVISION/CLASS
WINTER 1975 Addenda Code Case(s) *1644-5, 1728, N-32-4, N-241, N-242, N-282, N-413
- (b) Construction Code used for repairs, modifications, or replacements: 1974 W/75 *
 Edition Addenda Code Case(s)
- (c) ASME Code Section XI applicable for Inservice Inspection: 2001 2003 N/A
 Edition Addenda Code Case(s)
- (d) Applicable Edition of Section XI Utilized for Repairs, Modification, or Replacements:
19, 2001 19, 2003 Addenda N/A
 TJK 05/13/2011 TJK 05/13/2011 Code Case(s)
- (e) Design Responsibilities FENOC
6. Identification of Components Repaired, Modified, or Replacement Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | Nat. Board No. | Other ID. | Year Built | Repair, Replacement, or Modification | ASME Code Stamped |
|-------------------|----------------------|-------------------------|----------------|-----------|------------|--------------------------------------|-------------------|
| Piping System | Pullman Power | 1B21 | 109 | N/A | 1985 | Replacement | YES |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: PY-1B21H0446. Replace Snubber with Snubber S/N 30800103/001.
8. Test Conducted: Hydrostatic- ☐ Pneumatic- ☐ Nominal Operating Pressure- ☐ Other- ☐
 Pressure N/A psi Test Temperature N/A degrees F Code Case(s) N/A

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

9. Remarks: _____

NO NAMEPLATE/STAMPING PERFORMED DUE TO THE INTERFACE CONTROLS OF PART 3 SECTION

1.8.6 BEING IN EFFECT AND JURISDICTIONAL AUTHORITY CONCURRENCE HAVING BEEN RECEIVED.

Note: Attach all applicable Manufacturer's Data Reports. Supplemental sheets such as 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 of this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded on the front of this form.

CERTIFICATE OF COMPLIANCE

I, JOHN S DAVIS, 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 items described above conforms to Section XI of the ASME Code and to the National Board Inspection Code "NR" rules.

National Board Certificate of Authorization No. 33 to use the "NR" stamp expires 28 SEPT., 20 11
Date 6/6, 20 11 Signed FENOC-PNPP [Signature] QC SUPV.
(name of repair organization) (authorized representative) (title)

CERTIFICATE OF INSPECTION/INSERVICE INSPECTION

I, THOMAS G LAPS, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of OHIO and employed by H&B CT. of HARTFORD, CT. have inspected the repair, modification or replacement described in this report on JUNE 6, 20 11 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 ASME Code and the National Board Inspection Code "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work 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.

Date 6/6, 20 11 Signed Thomas G Laps Commissions NB 9330 "N" "I" "A" OHIO COMM.
(inspector) (National Board (include endorsements), and jurisdiction, and no.)

1B21-434

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

1. Owner: FIRSTENERGY CORP. Date 07/01/2011
10 Center Road, Perry, Ohio 44081 Sheet 1 of 2
2. Plant: Perry Nuclear Power Plant (PNPP) Unit One
10 Center Road, Perry, Ohio 44081 200377213
 (Repair Org. P.O. No., etc.)
3. Work Performed By: FIRSTENERGY Nuclear Operating Company PNPP Type Code Symbol Stamp NR
10 Center Road, Perry, Ohio 44081 Authorization No. 33
 Expiration Date 9-28-11
4. Identification of System: 1B21 NUCLEAR BOILER PROCESS INSTRUMENTATION
5. (a) Applicable Construction Code: ASME SECTION III CLASS 1, 1974 Edition
 NAME/SECTION/DIVISION/CLASS
WINTER 1975 Addenda Code Case(s) None
- (b) Construction Code used for repairs, modifications, or replacements: 1974 W/75 N/A
 Edition Addenda Code Case(s)
- (c) ASME Code Section XI applicable for Inservice Inspection: 2001 2003 N/A
 Edition Addenda Code Case(s)
- (d) Applicable Edition of Section XI Utilized for Repairs, Modification, or Replacements:
19-2001 19-2003 Addenda N/A
 TJK 05/13/2011 TJK 05/13/2011 Code Case(s)
- (e) Design Responsibilities FENOC

6. Identification of Components Repaired, Modified, or Replacement Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | Nat. Board No. | Other ID. | Year Built | Repair, Replacement, or Modification | ASME Code Stamped |
|-------------------|----------------------|-------------------------|----------------|-----------|------------|--------------------------------------|-------------------|
| Valve | Rockwell | QC-51 | 670 | N/A | 1982 | Replacement | YES |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: PY-1B21F0032B. Removal and reinstallation of plug for inspection. Weld filler materialheat numbers: C78286, A900319.

8. Test Conducted: Hydrostatic- ☐ Pneumatic- ☐ Nominal Operating Pressure- ☒ Other- ☐
 Pressure 1025 psi Test Temperature 132 degrees F Code Case(s) N/A

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

9. Remarks: _____

NO NAMEPLATE/STAMPING PERFORMED DUE TO THE INTERFACE CONTROLS OF PART 3 SECTION
1.8.6 BEING IN EFFECT AND JURISDICTIONAL AUTHORITY CONCURRENCE HAVING BEEN RECEIVED.

Note: Attach all applicable Manufacturer's Data Reports. Supplemental sheets such as 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 of this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded on the front of this form.

CERTIFICATE OF COMPLIANCE

I, JOHN S DAVIS, 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 items described above conforms to Section XI of the ASME Code and to the National Board Inspection Code "NR" rules.

National Board Certificate of Authorization No. 33 to use the "NR" stamp expires 28 SEPT. 20 11
Date 7/11, 20 11 Signed FENOC-PNPP [Signature] QC SUPV.
(name of repair organization) (authorized representative) (title)

CERTIFICATE OF INSPECTION/INSERVICE INSPECTION

I, THOMAS G LAPS, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of OHIO and employed by HSB CT. of HARTFORD, CT. have inspected the repair, modification or replacement described in this report on July 15, 20 11 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 ASME Code and the National Board Inspection Code "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work 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.

Date July 15, 20 11 Signed Thomas G Laps Commissions NB 9330 "N" "A" OHIO COMM.
(inspector) (National Board (include endorsements), and jurisdiction, and no.)

1B21-434
sheet 2 of 2

FORM NPV-1 N-CERTIFICATE HOLDERS DATA REPORT FOR NUCLEAR POWER PLANTS
As Required by the Provisions of the ASME Code, Section III, Div. 1

1. Manufactured by: Rockwell International Corp., 1900 S. Saunders St., Raleigh, NC 27603
(Name and Address of N-Certificate Holder)

2. Manufactured for: Cleveland Elec. Tl. Company, P.O. Box 500, Cleveland, Ohio 44101
(Name and Address of Purchaser or Owner)

3. Location of Installation: Perry Nuclear Power Plant, Units 1 & 2, North Perry, Ohio
(Name and Address)

4. Pump or Valve: Valve Nominal Inlet Size: 20 (inch) Outlet Size: 20 (inch)

(a) Model No. (b) N-Certificate Holder's (c) Canadian
Series No. Serial Registration (d) Drawing (f) Nat'l (g) Year
or Type No. No. No. No. Cl. Bd. No. Built

(1) 7592(WCC) QC-51 N/A D81-24401-15 1 670 1982
(2) UNOTY Rev. A
(3)
(4)
(5)
(6)
(7)
(8)
(9)
(10)

Perry Document Control

AUG 04 2011

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5. Controlled Closure Check Valve
(Brief description of service for which equipment was designed)
Heat No. 4810433-120 Rockwell S.O. 16-24401

6. Design Conditions: 1510 psi 420 °F or Valve Pressure Class: N/A (1)
(Pressure) (Temperature)

7. Cold Working Pressure: 2250 psi at 100°F

8. Pressure Retaining Pieces:

| Mark No. | Material Spec. No. | Manufacturer | Remarks |
|----------------|-------------------------|---|------------------------|
| (a) Castings | | | |
| <u>4810433</u> | <u>SA 216 Gr. WCC</u> | <u>Rockwell Int'l</u>
(Metal Casting Div.) | <u>Body</u> |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| (b) Forgings | | | |
| <u>116447</u> | <u>SA 105</u> | <u>Charles E. Larson</u> | <u>Cover</u> |
| <u>10502</u> | <u>SA 105</u> | <u>Charles E. Larson</u> | <u>Disk</u> |
| <u>36996</u> | <u>SA 638 Gr. 660T2</u> | <u>Charles E. Larson</u> | <u>Gasket Retainer</u> |
| <u>125376</u> | <u>SA 105</u> | <u>Charles E. Larson</u> | <u>Drain Cap (2)</u> |
| <u>116792</u> | <u>SA 105</u> | <u>Charles E. Larson</u> | <u>Test Fitting</u> |

(1) For manually operated valves only.

* Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8-1/2" x 11"; (2) information in items 1, 2 and 5 on this Data Report is included on each sheet; and (3) each sheet is numbered and number of sheets is recorded at top of this form.

(10/77)

This form (E00037) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017

FORM NPV-1 (Back)

| Mark No. | Material Spec. No. | Manufacturer | Remarks |
|-----------------|--------------------|-------------------------------|------------------------|
| (c) Bolting | | | Perry Document Control |
| N/A | | | AUG 04 2011 |
| | | | Best Available Copy |
| (d) Other Parts | | | Equalizer |
| 1.23469 | SA 106 Gr. B | Capital Pipe & Steel Products | |
| | | | Drain Nipple (2) |
| 05505 | SA 106 Gr. B | Capital Pipe & Steel Products | |
| | | | |
| | | | |
| | | | |

9. Hydrostatic test 3375 psi. Disk Differential test pressure 2250 psi.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this pump, or valve, conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Div. 1, Edition 1974, Addenda Winter 1975. Code Case No. N/A Date 2-10-82
 Signed Rockwell International Corp. by Manager, Quality Assurance (In Certificate Holder) N-1562 to use the (N) symbol expires 11/26/82 (Date)
 Our ASME Certificate of Authorization No. N-1562

CERTIFICATION OF DESIGN

Design information on file at Rockwell International Corp., Raleigh, NC 27603
 Stress analysis report (Class 1 only) on file at Rockwell International Corp., Raleigh, NC 27603
 Design specifications certified by (1) Milton G. Capiotis
 PE State PA Reg. No. 028303-E
 Stress analysis certified by (1) R.L. Clapper
 PE State NC Reg. No. 10057

(1) Signature not required. List name only.

CERTIFICATE OF SHOP 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 North Carolina and employed by HSBI & I Co.
 of Hartford, CT have inspected the pump, or valve, described in this Data Report on FEB 05, 1982 and state that to the best of my knowledge and belief, the N Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III.

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 a loss of any kind arising from or connected with this inspection.

Date FEB 10 1982

Commissions NE8383 NC915
 (Nat'l Bd. State, Prov. and No.)

1B21-435

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

1. Owner: FIRSTENERGY CORP. Date 7/26/11
10 Center Road, Perry, Ohio 44081 Sheet 1 of 2
2. Plant: Perry Nuclear Power Plant (PNPP) Unit One
10 Center Road, Perry, Ohio 44081 Order 200461418
 (Repair Org. P.O. No., etc.)
3. Work Performed By: FIRSTENERGY Nuclear Operating Company PNPP Type Code Symbol Stamp NR
10 Center Road, Perry, Ohio 44081 Authorization No. 33
 Expiration Date 9-28-11

4. Identification of System: 1B21 Nuclear Boiler Process Instrumentation
5. (a) Applicable Construction Code: ASME SECTION III CLASS 1, 1974 Edition
 NAME/SECTION/DIVISION/CLASS
WINTER 1975 Addenda Code Case(s) N-272, N-3
- (b) Construction Code used for repairs, modifications, or replacements: 1974 W/75 N/A
 Edition Addenda Code Case(s)
- (c) ASME Code Section XI applicable for Inservice Inspection: 2001 2003 N/A
 Edition Addenda Code Case(s)
- (d) Applicable Edition of Section XI Utilized for Repairs, Modification, or Replacements:
19 2001 19 2003 Addenda N/A
 TJK 05/13/2011 TJK 05/13/2011 Code Case(s)
- (e) Design Responsibilities FENOC

6. Identification of Components Repaired, Modified, or Replacement Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | Nat. Board No. | Other ID. | Year Built | Repair, Replacement, or Modification | ASME Code Stamped |
|-------------------|----------------------|-------------------------|----------------|-----------|------------|--------------------------------------|-------------------|
| Piping System | JCI | 1B21-F051B | N/A | N/A | 85 | Replacement | Yes |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: Replaced existing Flexible Metal Hose with SN M03043-1-1, Material used in support of replacement consisted of Material HT # 8882 / 3/32" ER308L (GTAW) Weld Rod and HT # DM7832 / 1/8" ER308L (GTAW) Weld Rod. SRV Plant ID 1B21F0051B

8. Test Conducted: Hydrostatic- ☐ Pneumatic- ☐ Nominal Operating Pressure- ☒ Other- ☐
 Pressure NOP psi Test Temperature NOT degrees F Code Case(s) N/A

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

9. Remarks: _____

NO NAMEPLATE/STAMPING PERFORMED DUE TO THE INTERFACE CONTROLS OF PART 3 SECTION

1.8.6 BEING IN EFFECT AND JURISDICTIONAL AUTHORITY CONCURRENCE HAVING BEEN RECEIVED.

Note: Attach all applicable Manufacturer's Data Reports. Supplemental sheets such as 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 of this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded on the front of this form.

CERTIFICATE OF COMPLIANCE

I, JOHN S DAVIS, 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 items described above conforms to Section XI of the ASME Code and to the National Board Inspection Code "NR" rules.

National Board Certificate of Authorization No. 33 to use the "NR stamp" expires 28 SEPT. 20 11
Date 8/1, 20 11 Signed FENOC-PNPP [Signature] QC SUPV.
(name of repair organization) (authorized representative) (title)

CERTIFICATE OF INSPECTION/INSERVICE INSPECTION

I, THOMAS G LAPS, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of OHIO and employed by HSB CT. of HARTFORD, CT. have inspected the repair, modification or replacement described in this report on AUG. 1, 20 11 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 ASME Code and the National Board Inspection Code "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work 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.

Date 8/1, 20 11 Signed Thomas G Laps Commissions NB 9330 "N" "A" OHIO COMM.
(inspector) (National Board (include endorsements), and jurisdiction, and no.)

1821-435
Sheet 2 of 2FORM NPP-1 CERTIFICATE HOLDERS' DATA REPORT FOR FABRICATED
NUCLEAR PIPING SUBASSEMBLIES*

As Required by the Provisions of the ASME Code, Section III, Division 1

Pg. 1 of 1

Sales Order Number: M03043

1. Fabricated and certified by Senior Operations LLC, Senior Flexonics Pathway Division, 2400 Longhorn Industrial Drive, New Braunfels, TX 78130
(name and address of NPT Certificate Holder)
2. Fabricated for First Energy Nuclear Operating Company Perry Nuclear Power Plant 10 Center Road, Perry, OH 44081
(name and address)
3. Location of installation Perry Nuclear Power Plant 10 Center Road, Perry OH 44081
(name and address of Purchaser)
4. Type M03043-1-1 N/A M03043-1 Rev.0 N/A 2011
(Cert. Holder's serial no.) CRN (drawing no.) (Nat'l Bd. No.) (year built)
5. ASME Code, Section III, Division 1: 1977 Summer 1978 3 N192-2
(edition) (addenda date) (class) (Code Case no.)
6. Shop Hydrostatic test 300 psi at 76 ° F (if performed)
7. Description of piping 2" Nominal Diameter Hose Assembly

8. Certificate Holder's Data Reports properly identified and signed by commissioned inspectors have been furnished for the following items of this report: None

9. Remarks Materials

| Drawing Part Number | Description | Specification | Material Traceability Code Number (MTCN) |
|---------------------|--------------------|------------------|--|
| <u>1</u> | <u>Hose</u> | <u>SA240/321</u> | <u>TDA747-3</u> |
| <u>2</u> | <u>Hose Braid</u> | <u>A580/ 321</u> | <u>TDR985</u> |
| <u>5 & 6</u> | <u>End Fitting</u> | <u>SA479/304</u> | <u>TDX279</u> |

CERTIFICATE OF SHOP COMPLIANCE

We certify that the statements made in this report are correct and that the fabrication of the described piping subassembly conforms to the rules for construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-2778 Expires April 1, 2014
Date 5/31/11 Name Senior Operations, LLC, Senior Flexonics Pathway Division Signed [Signature]
(NPT Certificate Holder) (authorized representative)

CERTIFICATE OF SHOP 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 Texas and employed by One Beacon America Insurance Company of Lynn, Mass have inspected the piping subassembly described in this Data Report on 5-31-11, and state to the best of my knowledge and belief, the Certificate Holder has fabricated this piping subassembly 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 piping subassembly 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 5-31-11 Signed [Signature] Commissions TK 1083
(Authorized Nuclear Inspector) [Nat'l Bd. (incl. endorsements) state or prov. and no.]

*Supplemental information in form of lists, sketches, or drawings may be used provided (1) size 8 1/2 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.

This form (E00062) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300

1B21-436

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

1. Owner: FIRSTENERGY CORP. Date 08/04/2011
10 Center Road, Perry, Ohio 44081 Sheet 1 of 2
2. Plant: Perry Nuclear Power Plant (PNPP) Unit One
10 Center Road, Perry, Ohio 44081 200260977
 (Repair Org. P.O. No., etc.)
3. Work Performed By: FIRSTENERGY Nuclear Operating Company PNPP Type Code Symbol Stamp NR
10 Center Road, Perry, Ohio 44081 Authorization No. 33
 Expiration Date 9-28-11

4. Identification of System: 1B21 NUCLEAR BOILER PROCESS INSTRUMENTATION
5. (a) Applicable Construction Code: ASME SECTION III CLASS 1, 1974 Edition
 NAME/SECTION/DIVISION/CLASS
SUMMER 1976 Addenda Code Case(s) * 1728, 1644-4, 272
- (b) Construction Code used for repairs, modifications, or replacements: 1974 S/76 *
 Edition Addenda Code Case(s)
- (c) ASME Code Section XI applicable for Inservice Inspection: 2001 2003 N/A
 Edition Addenda Code Case(s)
- (d) Applicable Edition of Section XI Utilized for Repairs, Modification, or Replacements:
49-2001 49-2003 Addenda N/A
 TJK 05/13/2011 TJK 05/13/2011 Code Case(s)
- (e) Design Responsibilities FENOC

6. Identification of Components Repaired, Modified, or Replacement Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | Nat. Board No. | Other ID. | Year Built | Repair, Replacement, or Modification | ASME Code Stamped |
|-------------------|----------------------|-------------------------|----------------|-----------|------------|--------------------------------------|-------------------|
| Piping System | GE | 1B21 | 64084 | N/A | 1985 | Replacement | YES |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: 1B21F0047B. Replace Safety Relief Valve 160855 with Safety Relief Valve 160877.
Installed 1 5/8" Studs (12) H/N 4Y96, 1" Studs (16) H/N 0G81
8. Test Conducted: Hydrostatic- ☐ Pneumatic- ☐ Nominal Operating Pressure- ☒ Other- ☐
 Pressure NOP psi Test Temperature NOT degrees F Code Case(s) N/A

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

9. Remarks: N/A

NO NAMEPLATE/STAMPING PERFORMED DUE TO THE INTERFACE CONTROLS OF PART 3 SECTION

1.8.6 BEING IN EFFECT AND JURISDICTIONAL AUTHORITY CONCURRENCE HAVING BEEN RECEIVED.

Note: Attach all applicable Manufacturer's Data Reports. Supplemental sheets such as 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 of this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded on the front of this form.

CERTIFICATE OF COMPLIANCE

I, JOHN S DAVIS, 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 items described above conforms to Section XI of the ASME Code and to the National Board Inspection Code "NR" rules.

National Board Certificate of Authorization No. 33 to use the "NR" stamp expires 28 SEPT., 20 11
Date 8/10, 20 11 Signed FENOC-PNPP [Signature] QC SUPV.
(name of repair organization) (authorized representative) (title)

CERTIFICATE OF INSPECTION/INSERVICE INSPECTION

I, THOMAS G LAPS, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of OHIO and employed by HSB CT of HARTFORD, CT. have inspected the repair, modification or replacement described in this report on AUG 10, 20 11 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 ASME Code and the National Board Inspection Code "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work 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.

Date 8/10, 20 11 Signed Thomas G Laps Commissions NB 9330 "N" "A" OHIO COMM.
(inspector) (National Board (include endorsements), and jurisdiction, and no.)

Corrected Report

1B21-436
sheet 2 of 2FORM RV-1 IN CERTIFICATE HOLDERS' DATA REPORT FOR SAFETY AND SAFETY RELIEF VALVES^{*}
As Required by the Provisions of the ASME Code, Section III, Div. I

| 1. Manufactured by | G. Dijkers & Co. NV. Hengelo (O) The Netherlands | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------|---|--|--|--|------------------------------|--|------|-----------|------------|----------------|-----------|------------|--------------|--|--|--------|---------|------------|------|------------|-------------|----------------|-------------|---------------|-----------------|-----------------|--------------|---------|---------|-------------------------------|--------|--|--|-----------|--------------------------------------|------------------------------|----------------|---|--|-------|-----------|-------------|-------|-----------|-------------|------------|---------|--------|-----------|-----------------|--------|
| 2. Manufactured for | General Electric, San Jose, California
<small>(Name and Address of Certificate Holder)</small> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3. Location of Installation | Perry II North Perry Ohio
<small>(Name and Address of Purchaser or Owner)</small> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4. | G 471-6/125.04 Rev. 8
<small>(CRN)</small> | 79
<small>(Drawing No.)</small> | 1979
<small>(Nat'l. Brd. No.)</small> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5. Valve | Identifying Nos. 160877
<small>(Model No., Gate No.)</small> | | 160877
<small>(In Certificate Holder's Serial No.)</small> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Type | Safety/Relief
<small>Safety, Safety Relief; Pilot; Power Actuated</small> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Orifice Size | 4.84"
<small>inch</small> | Nominal Inlet Size 8"
<small>inch</small> | Outlet Size 10"
<small>inch</small> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6. Set Pressure (PSIG) | 1180 | Rated Temperature | 585 °F | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Stamped Capacity | 917253
<small>Set. Steam</small> | lbs/hr @ 3% | % Overpressure Blowdown (PSIG) 45.9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hydrostatic Test (PSIG) Inlet | 2350 | Outlet | 975
<small>(Applicable to valves for closed systems only)</small> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7. Pressure Retaining Pieces | <table border="0"> <thead> <tr> <th></th> <th>Serial No. or Identification</th> <th>Material Specification Incl. Type or Grade</th> </tr> </thead> <tbody> <tr> <td>Body</td> <td>14.23.8-2</td> <td>SA 352 LCB</td> </tr> <tr> <td>Bonnet or Yoke</td> <td>06.29.8-1</td> <td>SA 352 LCB</td> </tr> <tr> <td>Support Rods</td> <td></td> <td></td> </tr> <tr> <td>Nozzle</td> <td>AJW 006</td> <td>SA 350 LF2</td> </tr> <tr> <td>Disc</td> <td>57.29.8-1A</td> <td>SA 351 CF3A</td> </tr> <tr> <td>Spring Washers</td> <td>26.30.95-76</td> <td>45 Cr Mo V 67</td> </tr> <tr> <td>Adjusting Screw</td> <td>AFU 033 AME 011</td> <td>SA 182 F 316</td> </tr> <tr> <td>Spindle</td> <td>AJE 042</td> <td>A 564-74 type 630 cond. H1100</td> </tr> <tr> <td>Spring</td> <td></td> <td></td> </tr> <tr> <td>* Bolting</td> <td>ANY/AJJ/AVS/AVS/AJK/AWZ</td> <td>SA 193-B7/SA 194-7/SA 194-2H</td> </tr> <tr> <td>* Other Pieces</td> <td>AJS/APA/AJL/AYE/AYE <i>See</i></td> <td></td> </tr> <tr> <td>Liner</td> <td>55.31.8-2</td> <td>SA 351 CF3A</td> </tr> <tr> <td>Cover</td> <td>56.12.8-1</td> <td>SA 351 CF8M</td> </tr> <tr> <td>Vent. Pipe</td> <td>AKE 009</td> <td>SA 105</td> </tr> <tr> <td>* Flanges</td> <td>AKF 073 AKF 037</td> <td>SA 105</td> </tr> </tbody> </table> | | | | Serial No. or Identification | Material Specification Incl. Type or Grade | Body | 14.23.8-2 | SA 352 LCB | Bonnet or Yoke | 06.29.8-1 | SA 352 LCB | Support Rods | | | Nozzle | AJW 006 | SA 350 LF2 | Disc | 57.29.8-1A | SA 351 CF3A | Spring Washers | 26.30.95-76 | 45 Cr Mo V 67 | Adjusting Screw | AFU 033 AME 011 | SA 182 F 316 | Spindle | AJE 042 | A 564-74 type 630 cond. H1100 | Spring | | | * Bolting | ANY/AJJ/ AVS /AVS/AJK/AWZ | SA 193-B7/SA 194-7/SA 194-2H | * Other Pieces | AJS/APA/AJL/ AYE /AYE <i>See</i> | | Liner | 55.31.8-2 | SA 351 CF3A | Cover | 56.12.8-1 | SA 351 CF8M | Vent. Pipe | AKE 009 | SA 105 | * Flanges | AKF 073 AKF 037 | SA 105 |
| | Serial No. or Identification | Material Specification Incl. Type or Grade | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Body | 14.23.8-2 | SA 352 LCB | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bonnet or Yoke | 06.29.8-1 | SA 352 LCB | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Support Rods | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nozzle | AJW 006 | SA 350 LF2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Disc | 57.29.8-1A | SA 351 CF3A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Spring Washers | 26.30.95-76 | 45 Cr Mo V 67 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Adjusting Screw | AFU 033 AME 011 | SA 182 F 316 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Spindle | AJE 042 | A 564-74 type 630 cond. H1100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Spring | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| * Bolting | ANY/AJJ/ AVS /AVS/AJK/AWZ | SA 193-B7/SA 194-7/SA 194-2H | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| * Other Pieces | AJS/APA/AJL/ AYE /AYE <i>See</i> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Liner | 55.31.8-2 | SA 351 CF3A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cover | 56.12.8-1 | SA 351 CF8M | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vent. Pipe | AKE 009 | SA 105 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| * Flanges | AKF 073 AKF 037 | SA 105 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Max. outside diam. valve body 479 mm (18.86)"

Max. outside length valve 1643 mm (64.68)"

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

FORM NV-1 (Back)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this valve conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Div. 1., 1974 Edition, Addenda SUM. '76, Code Case No. N.A. (Date)

Date 01.06.25 Signed G. Dikkers & Co NV by [Signature] (N Certificate Holder)
Our ASME Certificate of Authorization No. 1806 to use the NV (NV)
symbol expires 1st. July 1980 (Date)

CERTIFICATION OF DESIGN

Design information on file at General Electric and Perry II
Stress analysis report (Class 1 only) on file at General Electric and Perry II
Design specifications certified by¹ Boyd P. Brooks
PE State California Reg. No. 13655
Stress report certified by¹ Robert L. Weiss
PE State California/Illinois Reg. No. M 14921/62-25749

¹ Signature not required—list name only.

CERTIFICATE OF SHOP 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 Ohio, PA and employed by Kemper Ins.
of Long Grove III have inspected the pump, or valve, described in this Data Report on 23 March, 19 79 and state that to the best of my knowledge and belief, the N Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code for Nuclear Power Plant Components.

By signing this certificate, neither the Inspector nor his employer makes any warrant, 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 a loss of any kind arising from or connected with this inspection.

Date 6-26-80
Signed [Signature] (Inspector) Commissions NB 4805 (Nat'l. Bd., State Prov. and No.)

1B21-437

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

1. Owner: FIRSTENERGY CORP. Date 08/04/2011
10 Center Road, Perry, Ohio 44081 Sheet 1 of 2

2. Plant: Perry Nuclear Power Plant (PNPP) Unit One
10 Center Road, Perry, Ohio 44081 200260976
 (Repair Org. P.O. No., etc.)

3. Work Performed By: FIRSTENERGY Nuclear Operating Company PNPP Type Code Symbol Stamp NR
10 Center Road, Perry, Ohio 44081 Authorization No. 33
 Expiration Date 9-28-11

4. Identification of System: 1B21 NUCLEAR BOILER PROCESS INSTRUMENTATION

5. (a) Applicable Construction Code: ASME SECTION III CLASS 1, 1974 Edition
 NAME/SECTION/DIVISION/CLASS
SUMMER 1976 Addenda Code Case(s) * 1728, 1644-4, 272

(b) Construction Code used for repairs, modifications, or replacements: 1974 S/76 *
 Edition Addenda Code Case(s)

(c) ASME Code Section XI applicable for Inservice Inspection: 2001 2003 N/A
 Edition Addenda Code Case(s)

(d) Applicable Edition of Section XI Utilized for Repairs, Modification, or Replacements:
49, 2001 49 2003 Addenda N/A
 TJK 05/13/2011 TJK 05/13/2011 Code Case(s)

(e) Design Responsibilities FENOC

6. Identification of Components Repaired, Modified, or Replacement Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | Nat. Board No. | Other ID. | Year Built | Repair, Replacement, or Modification | ASME Code Stamped |
|-------------------|----------------------|-------------------------|----------------|-----------|------------|--------------------------------------|-------------------|
| Piping System | GE | 1B21 | 64084 | N/A | 1985 | Replacement | YES |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: 1B21F0041K. Replace Safety Relief Valve 160883 with Safety Relief Valve 160888.
Installed 1 5/8" Studs (12) H/N 4Y96, 1" Studs (16) 0G81, 1 5/8" Hydra-Nut (1) H/N 4D88

8. Test Conducted: Hydrostatic- ☐ Pneumatic- ☐ Nominal Operating Pressure- ☒ Other- ☐
 Pressure NOP psi Test Temperature NOT degrees F Code Case(s) N/A

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

9. Remarks: N/A

NO NAMEPLATE/STAMPING PERFORMED DUE TO THE INTERFACE CONTROLS OF PART 3 SECTION

1.8.6 BEING IN EFFECT AND JURISDICTIONAL AUTHORITY CONCURRENCE HAVING BEEN RECEIVED.

Note: Attach all applicable Manufacturer's Data Reports. Supplemental sheets such as 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 of this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded on the front of this form.

CERTIFICATE OF COMPLIANCE

I, JOHN S DAVIS, 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 items described above conforms to Section XI of the ASME Code and to the National Board Inspection Code "NR" rules.

National Board Certificate of Authorization No. 33 to use the "NR" stamp expires 28 SEPT. 20 11
Date 8/8, 20 11 Signed FENOC-PNPP [Signature] QC SUPV.
(name of repair organization) (authorized representative) (title)

CERTIFICATE OF INSPECTION/INSERVICE INSPECTION

I, THOMAS G LAPS, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of OHIO and employed by HSB CT. of HARTFORD, CT. have inspected the repair, modification or replacement described in this report on AUG. 8, 20 11 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 ASME Code and the National Board Inspection Code "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work 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.

Date 8/8, 20 11 Signed Thomas G Laps Commissions NB 9330 "N" "A" OHIO COMM.
(inspector) (National Board (include endorsements), and jurisdiction, and no.)

PAGE 2 of 2

* Corrected report

FORM NV-1 N CERTIFICATE HOLDERS' DATA REPORT FOR SAFETY AND SAFETY RELIEF VALVES*

As Required by the Provisions of the ASME Code, Section III, Div. I

1 B 21-437

| | | | |
|-------------------------------|--|--|--|
| 1. Manufactured by | G. Dijkers & Co. NV, Hengelo (O) The Netherlands | | |
| 2. Manufactured for | General Electric, San Jose, California | | |
| 3. Location of Installation | Perry Hill Spares North Perry Ohio | | |
| | G 471-6/125.04.03 rev. 6 | 141 | 1979 |
| (CRN) | G471 | (Drawing No.) | (Nat'l. Brd. No.) |
| 5. Valve | Identifying Nos. 160888 | | |
| (Model No., Series No.) | (N Certificate Holder's Serial No.) | | |
| Type | Safety/Relief | | |
| | Safety, Safety Relief; Pilot; Power Actuated | | |
| Orifice Size | inch | Nominal Inlet Size | 8" (Flanges) inch |
| | | Outlet Size | 10" inch |
| 6. Set Pressure (PSIG) | 1165 | Rated Temperature | 585 °F |
| Stamped Capacity | 905732 lbs/hr @ 2350 | % Overpressure Blowdown (PSIG) | 42.93 |
| | Sat. Steam | | 975 |
| Hydrostatic Test (PSIG) Inlet | | Outlet | (Applicable to valves for closed systems only) |
| 7. Pressure Retaining Pieces | Serial No. or Identification | Material Specification Incl. Type or Grade | |
| Body | 06.25.8 s/n 3 | SA 352 LCB | |
| Bonnet or Yoke | 07.29.8 s/n 2 | SA 352 LCB | |
| Support Rods | AJW 058 | SA 350 LF2 | |
| * Nozzle | 58.08.9 s/n 2A | SA 351 CF3A | |
| * Disc | 26.30.95 s/n 149 | 45 Cr Mo V 67 | |
| Spring Washers | ASB 089/CBA 017 | SA 182 F316 | |
| Adjusting Screw | CAD 002 | A 564-74 type 630 cond. H1100 | |
| Spindle | | | |
| Spring | | | |
| Bolting | ANY/ANZ/AVS/AJS/APA/APB/ANZ | SA 193-B7/SA 194-7/SA 194-2H | |
| Other Pieces | CAL/AIR/AUY | SA 351 CF3A | |
| Cover | 54.07.9 s/n 2 | SA 351 CF8M | |
| Vent. Pipe | 62.40.8 s/n 1 | SA 105 | |
| Flanges | AWB 048 | SA 105 | |
| | AKF 070 ASA 206 | | |

Max. outside diam. valve body : 479 mm (18.82)

Max. outside length valve : 1648 mm. (64.89)

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

FORM NV-1 (Back)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this valve conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Div. 1, 1974 Edition, Addenda Sum. 76
Code Case No. N.A. (Date)

Date 01-07-03 Signed G. Dikkers & Co NV by JF Probben
(N Certificate Holder) 1806

Our ASME Certificate of Authorization No. 1806 to use the NV
symbol expires 1st. July 1980 (NV)
(Date)

CERTIFICATION OF DESIGN

Design information on file at General Electric and Perry 1+1 spares
Stress analysis report (Class 1 only) on file at General Electric and Perry 1+1 spares

Design specifications certified by Boyd P. Brooks
PE State California Reg. No. 13555

Stress report certified by Robert L. Weiss
State California/Illinois Reg. No. M 14921/62-25749

¹ Signature not required—list name only.

CERTIFICATE OF SHOP 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 Ontario (Canada) and employed by Royal Indemnity Co.
of New York have inspected the pump, or valve, described in this Data Report on
25 September 19 79 and state that to the best of my knowledge and belief, the N Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code for Nuclear Power Plant Components.

By signing this certificate, neither the Inspector nor his employer makes any warrant, 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 a loss of any kind arising from or connected with this inspection.

Date 7th July 1981
Signed (Inspector) [Signature] Commissions N.B. 6653
(Nat'l. Bd., State Prov. and No.)

1B21-438

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

1. Owner: FIRSTENERGY CORP. Date 08/04/2011
10 Center Road, Perry, Ohio 44081 Sheet 1 of 2
2. Plant: Perry Nuclear Power Plant (PNPP) Unit One
10 Center Road, Perry, Ohio 44081 200260982
 (Repair Org. P.O. No., etc.)
3. Work Performed By: FIRSTENERGY Nuclear Operating Company PNPP Type Code Symbol Stamp NR
10 Center Road, Perry, Ohio 44081 Authorization No. 33
 Expiration Date 9-28-11

4. Identification of System: 1B21 NUCLEAR BOILER PROCESS INSTRUMENTATION

5. (a) Applicable Construction Code: ASME SECTION III CLASS 1, 1974 Edition
 NAME/SECTION/DIVISION/CLASS
SUMMER 1976 Addenda Code Case(s) * 1728, 1644-4, 272

(b) Construction Code used for repairs, modifications, or replacements: 1974 S/76 *
 Edition Addenda Code Case(s)

(c) ASME Code Section XI applicable for Inservice Inspection: 2001 2003 N/A
 Edition Addenda Code Case(s)

(d) Applicable Edition of Section XI Utilized for Repairs, Modification, or Replacements:

49-2001 49-2003 Addenda N/A
 TJK 05/13/2011 TJK 05/13/2011 Code Case(s)

(e) Design Responsibilities FENOC

6. Identification of Components Repaired, Modified, or Replacement Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | Nat. Board No. | Other ID. | Year Built | Repair, Replacement, or Modification | ASME Code Stamped |
|-------------------|----------------------|-------------------------|----------------|-----------|------------|--------------------------------------|-------------------|
| Piping System | GE | 1B21 | 64084 | N/A | 1985 | Replacement | YES |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: 1B21F0051B. Replace Safety Relief Valve 160862 with Safety Relief Valve 160860.
Installed 1 5/8" Studs (8) H/N 3U53, 1 5/8" Studs (4) H/N 4Y96, 1" Studs (16) H/N 0G81.

8. Test Conducted: Hydrostatic- ☐ Pneumatic- ☐ Nominal Operating Pressure- ☒ Other- ☐
 Pressure NOP psi Test Temperature NOT degrees F Code Case(s) N/A

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

9. Remarks: N/A

NO NAMEPLATE/STAMPING PERFORMED DUE TO THE INTERFACE CONTROLS OF PART 3 SECTION

1.8.6 BEING IN EFFECT AND JURISDICTIONAL AUTHORITY CONCURRENCE HAVING BEEN RECEIVED.

Note: Attach all applicable Manufacturer's Data Reports. Supplemental sheets such as 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 of this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded on the front of this form.

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National Board Certificate of Authorization No. 33 to use the "NR" stamp expires 28 SEPT., 20 11
Date 8/10, 20 11 Signed FENOC-PNPP [Signature] QC SUPV.
(name of repair organization) (authorized representative) (title)

CERTIFICATE OF INSPECTION/INSERVICE INSPECTION

I, THOMAS G LAPS, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of OHIO and employed by HSB CT. of HARTFORD, CT. have inspected the repair, modification or replacement described in this report on AUG. 10, 20 11 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 ASME Code and the National Board Inspection Code "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work 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.

Date 8/10, 20 11 Signed Thomas G Laps Commissions NB 9330 "N" "A" OHIO COMM.
(inspector) (National Board (include endorsements), and jurisdiction, and no.)

1B21-438
* Corrected report *sheet 2 of 2*

FORM NV-1 N CERTIFICATE HOLDERS' DATA REPORT FOR SAFETY AND SAFETY RELIEF VALVES*
As Required by the Provisions of the ASME Code, Section III, Div. I

| | | | |
|-------------------------------|---|--|-------------------------|
| 1. Manufactured by | G. Dijkers & Co. NV. Hengelo (O) The Netherlands | | |
| 2. Manufactured for | General Electric, San Jose, California
<small>(Name and Address of N Certificate Holder)</small> | | |
| 3. Location of Installation | Perry 1 North Perry Ohio
<small>(Name and Address of Purchaser or Owner)</small> | | |
| 4. <small>(CRN)</small> | G 471 | <small>(Drawing No.)</small> | 35 |
| | | <small>(Nat'l. Brd. No.)</small> | 1978 |
| 5. Valve | G 471 | | Identifying Nos. 160860 |
| | <small>(Model No., Series No.)</small> | <small>(N Certificate Holder's Serial No.)</small> | |
| Type | Safety/Relief | | |
| | Safety, Safety Relief; Pilot; Power Actuated | | |
| Orifice Size | 4.84" | Nominal Inlet Size | 8" |
| | <small>inch</small> | | <small>inch</small> |
| 6. Set Pressure (PSIG) | 1190 | Rated Temperature | 585 °F |
| Stamped Capacity | 924933 | lbs/hr @ | 3 % |
| | <small>Sat. Steam</small> | Overpressure Blowdown (PSIG) | 108.0 |
| Hydrostatic Test (PSIG) Inlet | 2350 | Outlet | 975 |
| 7. Pressure Retaining Pieces | <small>(Applicable to valves for closed systems only)</small> | | |

| | Serial No. or Identification | Material Specification
Incl. Type or Grade |
|-----------------|------------------------------|---|
| Body | 08.05.8 R2 | SA 352 LCB |
| Bonnet or Yoke | 08.24.8 sn 3 | SA 352 LCB |
| Support Rods | | |
| * Nozzle | AEU 062 | SA 350 LF2 |
| Disc | 58.52.7 1B | SA 351 CF3A |
| Spring Washers | 26.30.95-40 | 45 Cr Mo V 67 |
| Adjusting Screw | AFU 071 AME 023 | SA 182 F 316 |
| Spindle | AEW 008 | A 564-74 type 630 cond. H1100 |
| Spring | | |
| Bolting | AVT/AJR/AKA/AJJ/ALR | SA 193-B7/SA 194-7/SA 194-2H |
| Other Pieces | AMR/AUY/AJM/AJL | |
| Liner | 55.07.8 sn 2 | SA 351 CF3A |
| Cover | 58.46.7 sn 6 | SA 351 CF8M |
| Vent. Pipe | AKE 002 | SA 105 |
| Flanges | AFV 029 AFV 004 | SA 105 |

Max. outside diam. valve body 480 mm (18.90)"

Max. outside length valve 1642 mm (64.65)"

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

FORM NV-1 (Back)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this valve conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Div. 1., 1974 Edition, Addenda Sum. '76
 Code Case No. N.A. (Date)

Date 81-06-25 Signed G. Dikkers & Co NV by [Signature]
 (IN Certificate Holder) 1806 to use the NV
 (NV)

Our ASME Certificate of Authorization No. _____ to use the _____
 symbol expires 1st. July 1980
 (Date)

CERTIFICATION OF DESIGN

Design information on file at General Electric and Perry II
 Stress analysis report (Class 1 only) on file at General Electric and Perry II

Design specifications certified by Boyd P. Brooks
 PE State California Reg. No. 13655

Stress report certified by Robert L. Weiss
 E State California/Illinois Reg. No. M 14921/62-25749

¹ Signature not required—list name only.

CERTIFICATE OF SHOP 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 Ohio, PA and employed by Kemper Ins.
 of Long Grove III have inspected the pump, or valve, described in this Data Report on
28-11, 19 78 and state that to the best of my knowledge and belief, the N Certificate Holder has
 constructed this pump, or valve, in accordance with the ASME Code for Nuclear Power Plant Components.

By signing this certificate, neither the Inspector nor his employer makes any warrant, 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 a loss of any kind arising from or connected with this inspection.

Date 6-26 19 81
 Signed [Signature] Commissions NB 4805
 (Inspector) (Nat'l. Bd., State Prov. and No.)

1B21-439

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

1. Owner: FIRSTENERGY CORP. Date 08/04/2011
10 Center Road, Perry, Ohio 44081 Sheet 1 of 2

2. Plant: Perry Nuclear Power Plant (PNPP) Unit One
10 Center Road, Perry, Ohio 44081 200260980
 (Repair Org. P.O. No., etc.)

3. Work Performed By: FIRSTENERGY Nuclear Operating Company PNPP Type Code Symbol Stamp NR
10 Center Road, Perry, Ohio 44081 Authorization No. 33
 Expiration Date 9-28-11

4. Identification of System: 1B21 NUCLEAR BOILER PROCESS INSTRUMENTATION

5. (a) Applicable Construction Code: ASME SECTION III CLASS 1, 1974 Edition
 NAME/SECTION/DIVISION/CLASS
SUMMER 1976 Addenda Code Case(s) * 1728, 1644-4, 272

(b) Construction Code used for repairs, modifications, or replacements: 1974 S/76 *
 Edition Addenda Code Case(s)

(c) ASME Code Section XI applicable for Inservice Inspection: 2001 2003 N/A
 Edition Addenda Code Case(s)

(d) Applicable Edition of Section XI Utilized for Repairs, Modification, or Replacements:
49, 2001 49, 2003 Addenda N/A
 TJK 05/13/2011 TJK 05/13/2011 Code Case(s)

(e) Design Responsibilities FENOC

6. Identification of Components Repaired, Modified, or Replacement Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | Nat. Board No. | Other ID. | Year Built | Repair, Replacement, or Modification | ASME Code Stamped |
|-------------------|----------------------|-------------------------|----------------|-----------|------------|--------------------------------------|-------------------|
| Piping System | GE | 1B21 | 64084 | N/A | 1985 | Replacement | YES |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: 1B21F0047F. Replace Safety Relief Valve 160875 with Safety Relief Valve 160873.
Installed 1 5/8" Studs (12) H/N 4Y96, 1" Studs (16) 0G81

8. Test Conducted: Hydrostatic- ☐ Pneumatic- ☐ Nominal Operating Pressure- ☒ Other- ☐
 Pressure NOP psi Test Temperature NOT degrees F Code Case(s) N/A

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

9. Remarks: N/A

NO NAMEPLATE/STAMPING PERFORMED DUE TO THE INTERFACE CONTROLS OF PART 3 SECTION

1.8.6 BEING IN EFFECT AND JURISDICTIONAL AUTHORITY CONCURRENCE HAVING BEEN RECEIVED.

Note: Attach all applicable Manufacturer's Data Reports. Supplemental sheets such as 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 of this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded on the front of this form.

CERTIFICATE OF COMPLIANCE

I, JOHN S DAVIS, 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 items described above conforms to Section XI of the ASME Code and to the National Board Inspection Code "NR" rules.

National Board Certificate of Authorization No. 33 to use the "NR" stamp expires 28 SEPT. 20 11
Date 8/8, 20 11 Signed FENOC-PNPP [Signature] QC SUPV.
(name of repair organization) (authorized representative) (title)

CERTIFICATE OF INSPECTION/INSERVICE INSPECTION

I, THOMAS G LAPS, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of OHIO and employed by HSB CT. of HARTFORD, CT. have inspected the repair, modification or replacement described in this report on AUG. 8 20 11 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 ASME Code and the National Board Inspection Code "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work 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.

Date 8/8, 20 11 Signed Thomas G Laps Commissions NB 9330 "N" "I" "A" OHIO COMM.
(inspector) (National Board (include endorsements), and jurisdiction, and no.)

PAGE 2 OF 2

3 * Corrected report

FORM NV-1 N CERTIFICATE HOLDERS' DATA REPORT FOR SAFETY AND SAFETY RELIEF VALVES*

As Required by the Provisions of the ASME Code, Section III, Div. I

1E21-439

| | | | |
|-------------------------------|--|--|--|
| 1. Manufactured by | G. Dijkers & Co. NV, Hengelo (O) The Netherlands | | |
| | (Name and Address of N Certificate Holder) | | |
| 2. Manufactured for | General Electric, San Jose, California | | |
| | (Name and Address of Purchaser or Owner) | | |
| 3. Location of Installation | Perry 11 North Perry Ohio | | |
| | (Name and Address) | | |
| 4. (CRN) | G 471-6/125.04.03 rev. 6 | 81 | 1979 |
| | (Drawing No.) | (Nat'l. Brd. No.) | (Year Built) |
| 5. Valve | G471 | Identifying Nos. | 160873 |
| | (Model No., Series No.) | (N Certificate Holder's Serial No.) | |
| Type | Safety/Relief | | |
| | Safety, Safety Relief; Pilot; Power Actuated | | |
| Orifice Size | 4.84" | Nominal Inlet Size | 8" Outlet Size 10" |
| | inch | inch | inch |
| 6. Set Pressure (PSIG) | 1180 | Rated Temperature | 585 °F |
| Stamped Capacity | 917253 lbs/hr | @ 3 % Overpressure Blowdown (PSIG) | 106.6 |
| | Sat. Steam | 2350 | 975 |
| Hydrostatic Test (PSIG) Inlet | | Outlet | (Applicable to valves for closed systems only) |
| 7. Pressure Retaining Pieces | Serial No. or Identification | Material Specification Incl. Type or Grade | |
| Body | 06.24.8-3 | SA 352 LCB | |
| Bonnet or Yoke | 11.05.8-3 | SA 352 LCB | |
| Support Rods | | | |
| Nozzle | AJW 036 | SA 350 LF2 | |
| Disc | 54.30.8-1A | SA 351 CF3A | |
| Spring Washers | 26.30.95.67 | 45 Cr Mo V 67 | |
| Adjusting Screw | AFU 092 AFU 068 | SA 182 F 316 | |
| Spindle | AJE 036 | A 564-74 type 630 cond. H1100 | |
| Spring | | | |
| Bolting | AJK/AVS/ANY/AJJ/AYE | SA 193-B7/SA 194-7/SA 194-2H | |
| * Other Pieces | AWZ/AJJ/APA/AJL/AJS | | |
| Liner | 55.35.8-1 | SA 351 CF3A | |
| Cover | 53.28.8-9 | SA 351 CF8M | |
| Vent. Pipe | AKE 011 | SA 105 | |
| Flanges | AKF 021 + 034 | SA 105 | |

Max. outside diam. valve body 478 mm (18.82)"

Max. outside length valve 1642 mm (64.64)"

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

FORM NV-1 (Back)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this valve conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Div. 1., 1974 Edition, Addenda sum. '76, Code Case No. N.A. (Date)

Date 81-06-25 Signed G. Dikkers & Co NV by [Signature] (N Certificate Holder)

Our ASME Certificate of Authorization No. 1806 to use the NV symbol expires 1st. July 1980 (NV) (Date)

CERTIFICATION OF DESIGN

Design information on file at General Electric and Perry II
Stress analysis report (Class 1 only) on file at General Electric and Perry II

Design specifications certified by Boyd P. Brooks
PE State California Reg. No. 13655
Stress report certified by Robert L. Weiss
PE State California/Illinois Reg. No. M 14921/62-25749

¹ Signature not required—list name only.

CERTIFICATE OF SHOP 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 Ohio, PA and employed by Kemper Ins. of Long Grove III have inspected the pump, or valve, described in this Data Report on 23 March, 19 79 and state that to the best of my knowledge and belief, the N Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code for Nuclear Power Plant Components.

By signing this certificate, neither the Inspector nor his employer makes any warrant, 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 a loss of any kind arising from or connected with this inspection.

Date 6-26 19 81
Signed [Signature] Commissions NB 4805
(Inspector) (Nat'l. Bd., State Prov. and No.)

1B21-440

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

1. Owner: FIRSTENERGY CORP. Date 08/04/2011
10 Center Road, Perry, Ohio 44081 Sheet 1 of 2
2. Plant: Perry Nuclear Power Plant (PNPP) Unit One
10 Center Road, Perry, Ohio 44081 200260975
 (Repair Org. P.O. No., etc.)
3. Work Performed By: FIRSTENERGY Nuclear Operating Company PNPP Type Code Symbol Stamp NR
10 Center Road, Perry, Ohio 44081 Authorization No. 33
 Expiration Date 9-28-11
4. Identification of System: 1B21 NUCLEAR BOILER PROCESS INSTRUMENTATION
5. (a) Applicable Construction Code: ASME SECTION III CLASS 1, 1974 Edition
 NAME/SECTION/DIVISION/CLASS
SUMMER 1976 Addenda Code Case(s) * 1728, 1644-4, 272
- (b) Construction Code used for repairs, modifications, or replacements: 1974 S/76 *
 Edition Addenda Code Case(s)
- (c) ASME Code Section XI applicable for Inservice Inspection: 2001 2003 N/A
 Edition Addenda Code Case(s)
- (d) Applicable Edition of Section XI Utilized for Repairs, Modification, or Replacements:
19-2001 19-2003 Addenda N/A
 TJK 05/13/2011 TJK 05/13/2011 Code Case(s)
- (e) Design Responsibilities FENOC

6. Identification of Components Repaired, Modified, or Replacement Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | Nat. Board No. | Other ID. | Year Built | Repair, Replacement, or Modification | ASME Code Stamped |
|-------------------|----------------------|-------------------------|----------------|-----------|------------|--------------------------------------|-------------------|
| Piping System | GE | 1B21 | 64084 | N/A | 1985 | Replacement | YES |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: 1B21F0041F. Replace Safety Relief Valve 160871 with Safety Relief Valve 160869.
Installed 1 5/8" Studs (14) H/N 3U53, 1" Studs (14) 0G81 and (2) 3V71.
8. Test Conducted: Hydrostatic-☐ Pneumatic-☐ Nominal Operating Pressure-☒ Other-☐
 Pressure NOP psi Test Temperature NOT degrees F Code Case(s) N/A

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

9. Remarks: N/A

NO NAMEPLATE/STAMPING PERFORMED DUE TO THE INTERFACE CONTROLS OF PART 3 SECTION

1.8.6 BEING IN EFFECT AND JURISDICTIONAL AUTHORITY CONCURRENCE HAVING BEEN RECEIVED.

Note: Attach all applicable Manufacturer's Data Reports. Supplemental sheets such as 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 of this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded on the front of this form.

CERTIFICATE OF COMPLIANCE

I, JOHN S DAVIS, 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 items described above conforms to Section XI of the ASME Code and to the National Board Inspection Code "NR" rules.

National Board Certificate of Authorization No. 33 to use the "NR" stamp expires 28 SEPT., 20 11
Date 8/8, 20 11 Signed FENOC-PNPP [Signature] QC SUPV.
(name of repair organization) (authorized representative) (title)

CERTIFICATE OF INSPECTION/INSERVICE INSPECTION

I, THOMAS G LAPS, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of OHIO and employed by HSB CT. of HARTFORD, CT. have inspected the repair, modification or replacement described in this report on AUG. 8, 20 11 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 ASME Code and the National Board Inspection Code "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work 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.

Date 8/8, 20 11 Signed Thomas G Laps Commissions NB 9330 "N" "I" "A" OHIO COMM.
(inspector) (National Board (include endorsements), and jurisdiction, and no.)

SHEET
2 OF 2105200
9-8/14

FORM NV-1: N CERTIFICATE HOLDERS' DATA REPORT FOR SAFETY AND SAFETY RELIEF VALVES*

As Required by the Provisions of the ASME Code, Section III, Div. 1

1321-440

1. Manufactured by C. Dijkers & Co. N.V. (U) The Netherlands
(Name and Address of N Certificate Holder)

2. Manufactured for General Electric Co. Calif.
(Name and Address of Purchaser or Owner)

3. Location of Installation Perry II North Perry Ohio
(Name and Address)

4. (CRN) 671-67125.01.03 rev. 06 67 (Year Built) 1979
(Drawing No.) (Nat'l Brd No.)

5. Valve G111 (Model No., Series No.) Identifying Nos. 160869* (N Certificate Holder's Serial No.)
Type safety/relief
Safety, Safety Relief, Pilot, Power Actuated

Orifice Size 4.841" inch Nominal Inlet Size 8" inch Outlet Size 10" inch

6. Set Pressure (PSIG) 1105 Rated Temperature 585 °F
Stamped Capacity 905732 lbs/hr @ 3 % Overpressure Blowdown (PSIG) 33.8
Set Steam
Hydrostatic Test (PSIG) Inlet 2350 Outlet 975
(Applicable to valves for closed systems only)

7. Pressure Retaining Pieces

| | Serial No. or Identification | Material Specification Incl. Type or Grade |
|-----------------|------------------------------|--|
| Body | 13.21.8 SN 4 | SA 352 LGB |
| Bonnet or Yoke | 05.12.8 SN 3 | SA 352 LGB |
| Support Rods† | | |
| Nozzle | AJW 025 | SA 350 LF2 |
| Disc | 54.30.8 - 8A | SA 351 CF3A |
| Spring Washers | 26.30.95 - 69 | 45 Cr Mo V 67 |
| Adjusting Screw | AFU 031 AFU 020 | SA 182 F 316 |
| Spindle | AJE 029 | A 564-74 type 630 cond. HI 100 |
| Spring† | | |
| Bolting | ANY/AYE/AVS/ALR/AWZ | SA 193-B7/SA 194-7/SA 194-2H |
| Other Pieces | AMR/AJM/AJL/AIJ | |
| Liner | 59.36.8 SN 2 | SA 351 CF3A |
| Cover | 56.12.8 SN 6 | SA 351 CF8M |
| Vent pipe | AKE 061 | SA 105 |
| Flanges | AFV 016 AKE 012 | SA 105 |

Max. outside diam. valve body 479 mm. (18.86)"

Max. outside length valve 1642 mm. (64.64)"

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

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this valve conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Div. 1, 1974 Edition, Addenda SUM. 176, Code Case No. _____ (Date)

Date 1979 03-12 Signed G. Dikkers & Co., N.V. by W. D. Williams
(N Certificate Holder)

Our ASME Certificate of Authorization No. 1806 to use the NV
(RV)

symbol expires 1st July, 1980
(Date)

CERTIFICATION OF DESIGN

Design information on file at General Electric and Perry II

Stress analysis report (Class 1 only) on file at General Electric and Perry II

Design specifications certified by Boyd P. Brooks

PE State California Reg No. 13665

Stress report certified by Robert L. Weiss

PE State California/Illinois Reg No. M14921/62-25749

* Signature not required—list name only

CERTIFICATE OF SHOP 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 Ohio and employed by Kemper Ins. of Long Grove Ill. have inspected the pump, or valve, described in this Data Report on 12 March 19 79 and state that to the best of my knowledge and belief, the N Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code for Nuclear Power Plant Components.

By signing this certificate, neither the Inspector nor his employer makes any warrant, 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 a loss of any kind arising from or connected with this inspection.

Date 3-12 19 79

Signed [Signature]
(Inspector)

Commission No. 1456
(Nat'l Bd., State Prov. and No.)

1B21-441

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

1. Owner: FIRSTENERGY CORP. Date 08/04/2011
10 Center Road, Perry, Ohio 44081 Sheet 1 of 2
2. Plant: Perry Nuclear Power Plant (PNPP) Unit One
10 Center Road, Perry, Ohio 44081 200260973
 (Repair Org. P.O. No., etc.)
3. Work Performed By: FIRSTENERGY Nuclear Operating Company PNPP Type Code Symbol Stamp NR
10 Center Road, Perry, Ohio 44081 Authorization No. 33
 Expiration Date 9-28-11

4. Identification of System: 1B21 NUCLEAR BOILER PROCESS INSTRUMENTATION
5. (a) Applicable Construction Code: ASME SECTION III CLASS 1, 1974 Edition
 NAME/SECTION/DIVISION/CLASS
SUMMER 1976 Addenda Code Case(s) * 1728, 1644-4, 272
- (b) Construction Code used for repairs, modifications, or replacements: 1974 S/76 *
 Edition Addenda Code Case(s)
- (c) ASME Code Section XI applicable for Inservice Inspection: 2001 2003 N/A
 Edition Addenda Code Case(s)
- (d) Applicable Edition of Section XI Utilized for Repairs, Modification, or Replacements:
49, 2001 49, 2003 Addenda N/A
TJK 05/13/2011 TJK 05/13/2011 Code Case(s)
- (e) Design Responsibilities FENOC

6. Identification of Components Repaired, Modified, or Replacement Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | Nat. Board No. | Other ID. | Year Built | Repair, Replacement, or Modification | ASME Code Stamped |
|-------------------|----------------------|-------------------------|----------------|-----------|------------|--------------------------------------|-------------------|
| Piping System | GE | 1B21 | 64084 | N/A | 1985 | Replacement | YES |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: 1B21F0041B. Replace Safety Relief Valve 160849 with Safety Relief Valve 160848.
Installed 1 5/8" Studs (8) H/N K745, 1 5/8" Studs (4) H/N 0G84, 1" Studs (16) H/N 0G81.
8. Test Conducted: Hydrostatic- ☐ Pneumatic- ☐ Nominal Operating Pressure- ☐ Other- ☐
 Pressure _____ psi Test Temperature _____ degrees F Code Case(s) N/A

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

9. Remarks: _____

NO NAMEPLATE/STAMPING PERFORMED DUE TO THE INTERFACE CONTROLS OF PART 3 SECTION

1.8.6 BEING IN EFFECT AND JURISDICTIONAL AUTHORITY CONCURRENCE HAVING BEEN RECEIVED.

Note: Attach all applicable Manufacturer's Data Reports. Supplemental sheets such as 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 of this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded on the front of this form.

CERTIFICATE OF COMPLIANCE

I, JOHN S DAVIS, 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 items described above conforms to Section XI of the ASME Code and to the National Board Inspection Code "NR" rules.

National Board Certificate of Authorization No. 33 to use the "NR" stamp expires 28 SEPT., 20 11

Date 8/10, 20 11 Signed FENOC-PNPP [Signature] QC SUPV.
(name of repair organization) (authorized representative) (title)

CERTIFICATE OF INSPECTION/INSERVICE INSPECTION

I, THOMAS G LAPS, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of OHIO and employed by HSB CT. of HARTFORD, CT. have inspected the repair, modification or replacement described in this report on AUG 10, 20 11 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 ASME Code and the National Board Inspection Code "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work 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.

Date 8/10, 20 11 Signed Thomas G Laps Commissions NB 9330 "N" "I" "A" OHIO COMM.
(inspector) (National Board (include endorsements), and jurisdiction, and no.)

1321-441
sheet 2 of 2
* Corrected report

FORM NV-1 N CERTIFICATE HOLDERS' DATA REPORT FOR SAFETY AND SAFETY RELIEF VALVES*
As Required by the Provisions of the ASME Code, Section III, Div. I

| | | | |
|-------------------------------|--|--|---------------------------------------|
| 1. Manufactured by | G. Dikkers & Co. NV. Hengelo (O) The Netherlands | | |
| 2. Manufactured for | General Electric, San Jose, California | | |
| 3. Location of Installation | Perry 1 North Perry Ohio | | |
| 4. (CRN) | G 471-6/125.04.03 rev. 6 | 34 | 1978 |
| 5. Valve | G471 | Identifying Nos. | 160848 |
| Type | Safety/Relief | | |
| Orifice Size | 4.84 | Nominal Inlet Size | 8" |
| Orifice Size | inch | Orifice Size | inch |
| 6. Set Pressure (PSIG) | 1165 | Rated Temperature | 585 °F |
| Stamped Capacity | 905732 | lbs/hr @ | 3 % Overpressure Blowdown (PSIG) 43.0 |
| Hydrostatic Test (PSIG) Inlet | 2350 | Outlet | 975 |
| 7. Pressure Retaining Pieces | (Applicable to valves for closed systems only) | | |
| | Serial No. or Identification | Material Specification Incl. Type or Grade | |
| * Body | 05.48.7 s.n. 2 | SA 352 LCB | |
| Bonnet or Yoke | 04.14.8 s.n. 1 | SA 352 LCB | |
| Support Rods | | | |
| Nozzle | AEU 032 | SA 350 LF2 | |
| Disc | 61.03.8 4A | SA 351 CF3A | |
| Spring Washers | 21.16.53 s.n. 19 | 45 Cr Mo V 67 | |
| Adjusting Screw | AFU 056 AFU 009 | SA 182 F 316 | |
| Spindle | AEW 036 | A 564-74 type 630 cond. H1100 | |
| Spring | | | |
| Bolting | AJZ/AJR/KA/AJJ/ALR/AUY/ | SA 193-B7/SA 194-7/SA 194-2H | |
| Other Pieces | AMR/AJM/AJL | | |
| Liner | 57.06.8 s.n. 1 | SA 351 CF3A | |
| Cover | 58.04.8 s.n. 1 | SA 351 CF8M | |
| Vent. Pipe | AFW 002 | SA 105 | |
| Flanges | AFV 048 AFV 061 | SA 105 | |

Max. outside diam. valve body 478 mm (18.82)"

Max. outside length valve 1645 mm (64.76)"

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

FORM NV-1 (Back)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this valve conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Div. 1., 1974 Edition, Addenda sum 176, Code Case No. N.A. (Date)

Date 81-06-25 Signed G. Dijkers & Co. NV by J.A. Probben (N Certificate Holder)

Our ASME Certificate of Authorization No. 1806 to use the NV (NV) symbol expires 1st. July 1980 (Date)

CERTIFICATION OF DESIGN

Design information on file at General Electric and Perry II
Stress analysis report (Class 1 only) on file at General Electric and Perry II

Design specifications certified by¹ Boyd P. Brooks
PE State California Reg. No. 13655
Stress report certified by¹ Robert L. Weiss
PE State California/Illinois Reg. No. M 14921/62-25749

¹ Signature not required—list name only.

CERTIFICATE OF SHOP 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 Ohio, PA and employed by Kemper Ins. of Long Grove III have inspected the pump, or valve, described in this Data Report on 24-11, 1978 and state that to the best of my knowledge and belief, the N Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code for Nuclear Power Plant Components.

By signing this certificate, neither the Inspector nor his employer makes any warrant, 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 a loss of any kind arising from or connected with this inspection.

Date 6-26 1981
Signed J.W. Stokes Commissions NB 4805 (Inspector) (Nat'l. Bd., State Prov. and No.)

1C41-040

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

1. Owner: FIRSTENERGY CORP. Date 05/27/2011
10 Center Road, Perry, Ohio 44081 Sheet 1 of 2
217 6-2-11
2. Plant: Perry Nuclear Power Plant (PNPP) Unit One
10 Center Road, Perry, Ohio 44081 200377946
 (Repair Org. P.O. No., etc.)
3. Work Performed By: FIRSTENERGY Nuclear Operating Company PNPP Type Code Symbol Stamp NR
10 Center Road, Perry, Ohio 44081 Authorization No. 33
 Expiration Date 9-28-11

4. Identification of System: C41 STANDBY LIQUID CONTROL

5. (a) Applicable Construction Code: ASME SECTION III CLASS 2, 1974 Edition
 NAME/SECTION/DIVISION/CLASS
WINTER 1975 Addenda Code Case(s) *1644-8, N242, N272, N240, N413, 1644-5

(b) Construction Code used for repairs, modifications, or replacements: 1974 W/75 *
 Edition Addenda Code Case(s)

(c) ASME Code Section XI applicable for Inservice Inspection: 2001 2003 N/A
 Edition Addenda Code Case(s)

(d) Applicable Edition of Section XI Utilized for Repairs, Modification, or Replacements:

49, 2001 49, 2003 Addenda N/A
 TJK 05/13/2011 TJK 05/13/2011 Code Case(s)

(e) Design Responsibilities FENOC

6. Identification of Components Repaired, Modified, or Replacement Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | Nat. Board No. | Other ID. | Year Built | Repair, Replacement, or Modification | ASME Code Stamped |
|-------------------|----------------------|-------------------------|----------------|-----------|------------|--------------------------------------|-------------------|
| Piping System | Pullman Power | 1C41 | 108 | N/A | 1985 | Replacement | YES |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: 1C41F0029A. Replacement of Relief Valve S/N 2 with Relief Valve S/N 8.

8. Test Conducted: Hydrostatic- ☐ Pneumatic- ☐ Nominal Operating Pressure- ☒ Other- ☐
 Pressure 1250 psi Test Temperature 82 degrees F Code Case(s) N/A

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

9. Remarks: _____

NO NAMEPLATE/STAMPING PERFORMED DUE TO THE INTERFACE CONTROLS OF PART 3 SECTION
1.8.6 BEING IN EFFECT AND JURISDICTIONAL AUTHORITY CONCURRENCE HAVING BEEN RECEIVED.

Note: Attach all applicable Manufacturer's Data Reports. Supplemental sheets such as 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 of this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded on the front of this form.

CERTIFICATE OF COMPLIANCE

I, JOHN S DAVIS, 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 items described above conforms to Section XI of the ASME Code and to the National Board Inspection Code "NR" rules.

National Board Certificate of Authorization No. 33 to use the "NR" stamp expires 28 SEPT., 20 11
Date 6/3, 20 11 Signed FENOC-PNPP [Signature] QC SUPV.
(name of repair organization) (authorized representative) (title)

CERTIFICATE OF INSPECTION/INSERVICE INSPECTION

I, THOMAS G LAPS, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of OHIO and employed by HSB CT. of HARTFORD, CT. have inspected the repair, modification or replacement described in this report on JUNE 3, 20 11 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 ASME Code and the National Board Inspection Code "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work 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.

Date 6/3, 20 11 Signed Thomas G Laps Commissions NB 9330 "N" "I" "A" OHIO COMM.
(inspector) (National Board (include endorsements), and jurisdiction, and no.)

1041-040 SHEET 2 OF 2

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 2

| | | | | |
|---|-------------------------------------|---|-------------------------------|--|
| 1. Manufactured and certified by <u>Target Rock; 1966E Broadhollow Rd.; E. Farmingdale, NY 11735</u>
(name and address of NV Certificate Holder) | | | | |
| 2. Manufactured for <u>The Cleveland Electric Illuminating Co.; North Perry, Ohio 44081</u>
(name and address of Purchaser) | | | | |
| 3. Location of installation <u>Perry Nuclear Power Plant; North Perry, Ohio 44081</u>
(name and address) | | | | |
| 4. Valve <u>76H-012A</u>
(Model no., series no.) | Orifice size <u>0.500</u>
(in.) | Nom. Inlet size <u>1 1/2</u>
(in.) | Outlet size <u>2</u>
(in.) | |
| 5. ASME Code, Section III, Division 1: | <u>1974</u>
(edition) | <u>Summer 1975</u>
(addenda date) | <u>2</u>
(class) | <u>None</u>
(Code Case no.) |
| 6. Type <u>Spring</u>
(s pring, pilot or power operated) | <u>1400</u>
(set pressure, psig) | <u>55</u>
(blowdown, psi) | <u>120°F</u>
(rated temp) | <u>2350</u>
(hydro, test psig, inlet) |
| 7. Identification <u>8</u>
(Cert. Holder's serial no.) | <u>NA</u>
(CRN) | <u>76H-012A</u>
(drawing no.) | <u>NA</u>
(Nat'l. Bd. no.) | <u>2003</u>
(year built) |
| 8. Control ring settings <u>Not Applicable</u> | | | | |
| 9. Pressure retaining items: | | | | |
| | Serial No. Or
Identification | Mat'l. Spec.
Including Type or Grade | Tensile
Strength | |
| Body | S/N 109 | SA479 316L | 70 ksi | |
| Bonnet or Yoke | S/N 109 | SA479 316 | 75 ksi | |
| Support Rods | | | | |
| Nozzle Seat | S/N 16 | SA479 316 | 75 ksi | |
| Disk | S/N 16 | SA564 630 | 140 ksi | |
| Spring Washers | | | | |
| Adjusting Screws | | | | |
| Boss | | | | |
| Spring | | | | |
| Bolting | See remarks | | | |
| Other Items | | | | |
| 10. Relieving capacity <u>103 gpm</u> @ <u>1540 psid</u> overpressure as certified by the National Board (not applicable)
(date) | | | | |
| 11. Remarks: Cap s/n 3 SA216 WCB 70 ksi | | | | |
| Cap Screw | Heat #8970760 | SA193 B7 | 125 ksi | |
| Screw | Heat # 7243476 | SA193 B7 | 125 ksi | |
| Nut | Heat # 8868492 | SA194 2H | n/a | |

| CERTIFICATION OF DESIGN | | | |
|--|--|---|----------------------------------|
| Design Specification certified by | <u>Jean Paul Sockel</u> | P.E. State | <u>PA</u> Reg. No. <u>20130E</u> |
| Design Report certified by | <u>-</u> | P.E. State | <u>-</u> Reg. No. <u>-</u> |
| 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. | <u>N-1949</u> | Expires | <u>12/12/2004</u> |
| Date <u>6/27/03</u> | Name <u>Target Rock</u>
(NV Certificate Holder) | Signed <u>R. E. Glazier</u>
R. E. Glazier, QA Manager
(authorized representative) | |

* Supplemental information in form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 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

Certificate Holder's Serial No. 76H-012A s/n 8

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 of Boston, MA have inspected the pump, or valve, described in this Data Report on 6/27/2003 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 6-27-03 Signed [Signature] Commissions NY 2597
(Authorized Inspector) (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

1C41-041

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

1. Owner: FIRSTENERGY CORP. Date 06/06/2011
10 Center Road, Perry, Ohio 44081 Sheet 1 of 4
2. Plant: Perry Nuclear Power Plant (PNPP) Unit One
10 Center Road, Perry, Ohio 44081 200280610
 (Repair Org. P.O. No., etc.)
3. Work Performed By: FIRSTENERGY Nuclear Operating Company PNPP Type Code Symbol Stamp NR
10 Center Road, Perry, Ohio 44081 Authorization No. 33
 Expiration Date 9-28-11

4. Identification of System: 1C41 STANDBY LIQUID CONTROL5. (a) Applicable Construction Code: ASME SECTION III CLASS 1, 1971 Edition
 NAME/SECTION/DIVISION/CLASSWINTER 1972 Addenda Code Case(s) N/A(b) Construction Code used for repairs, modifications, or replacements: 1971 W/72 N/A
 Edition Addenda Code Case(s)(c) ASME Code Section XI applicable for Inservice Inspection: 2001 2003 N/A
 Edition Addenda Code Case(s)

(d) Applicable Edition of Section XI Utilized for Repairs, Modification, or Replacements:

49-2001 49-2003 Addenda N/A
 TJK 05/13/2011 TJK 05/13/2011 Code Case(s)(e) Design Responsibilities FENOC

6. Identification of Components Repaired, Modified, or Replacement Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | Nat. Board No. | Other ID. | Year Built | Repair, Replacement, or Modification | ASME Code Stamped |
|-------------------|----------------------|-------------------------|----------------|-----------|------------|--------------------------------------|-------------------|
| Valve | Conax Corp. | N/A | 113 | N/A | 1975 | Replacement | YES |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: PY-1C41F0004B. Replace primer/trigger assembly with Kit S/N 862EQ using trigger subassembly SN 8013 and inlet fitting S/N 8038.8. Test Conducted: Hydrostatic- ☐ Pneumatic- ☐ Nominal Operating Pressure- ☐ Other- ☐
 Pressure N/A psi Test Temperature N/A degrees F Code Case(s) N/A

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

9. Remarks: _____

NO NAMEPLATE/STAMPING PERFORMED DUE TO THE INTERFACE CONTROLS OF PART 3 SECTION

1.8.6 BEING IN EFFECT AND JURISDICTIONAL AUTHORITY CONCURRENCE HAVING BEEN RECEIVED.

Note: Attach all applicable Manufacturer's Data Reports. Supplemental sheets such as 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 of this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded on the front of this form.

CERTIFICATE OF COMPLIANCE

I, JOHN S DAVIS, 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 items described above conforms to Section XI of the ASME Code and to the National Board Inspection Code "NR" rules.

National Board Certificate of Authorization No. 33 to use the NR stamp expires 28 SEPT., 20 11

Date 6/16, 20 11 Signed FENOC-PNPP [Signature] QC SUPV.
(name of repair organization) (authorized representative) (title)

CERTIFICATE OF INSPECTION/INSERVICE INSPECTION

I, THOMAS G LAPS, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of OHIO and employed by HSB CT. of HARTFORD, CT. have inspected the repair, modification or replacement described in this report on JUNE 7, 20 11 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 ASME Code and the National Board Inspection Code "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work 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.

Date 6/7, 20 11 Signed Thomas G Laps Commissions NB 9330 "N" "I" "A" OHIO COMM.
(inspector) (National Board (include endorsements), and jurisdiction, and no.)

1C41-041
sheet 2 of 4
008

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

As Required by the Provisions of the ASME Code, Section III
Not to Exceed One Day's Production

Pg. 1 of 2

1. Manufactured and certified by Mirion Technologies (Conax Nuclear), Inc. 402 Sonwil Drive, Cheektowaga, NY 14225
(name and address of NPT Certificate Holder)
2. Manufactured for GE Nuclear Energy, 3901 Castle Hayne Road, Wilmington, NC 28401
(name and address of Purchaser)
3. Location of installation Unknown
(name and address)
4. Type: N20000, Rev. G SA478/30458T 75 KSI N/A N/A 2010
(drawing no.) (matl spec. no.) (tensile strength) (CRN) (year built)
5. ASME Code, Section III, Division 1: 77 Summer 77 1 N/A
(edition) (addenda date) (class) (Code Case no.)
6. Fabricated in accordance with Const. Spec. (Div. 2 only) Revision Date
(no.)
7. Remarks: Trigger Body Subassembly for explosive actuated valve replacement kit for Standby Liquid Control System
- Para. NB-2121 (b) is applicable to ram. Press fit/seal on .328 & .4375 diameters. Overall subassembly length is 2.5".
- Pressure Test at 2800 psi for 10 minutes.
8. Nom. thickness (in.) See remarks Min. design thickness (in.) See remarks Dia. ID (ft & in.) See remarks Length overall (ft & in.) See remarks
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 |
|---------------------------------------|---|
| (1) 8011 | 8011 |
| (2) 8012 | 8012 |
| (3) 8013 | 8013 |
| (4) 8014 | 8014 |
| (5) 8015 | 8015 |
| (6) 8016 | 8016 |
| (7) 8017 | 8017 |
| (8) 8018 | 8018 |
| (9) 8019 | 8019 |
| (10) 8020 | 8020 |
| (11) 8021 | 8021 |
| (12) 8022 | 8022 |
| (13) 8023 | 8023 |
| (14) 8024 | 8024 |
| (15) 8025 | 8025 |
| (16) 8026 | 8026 |
| (17) 8027 | 8027 |
| (18) 8028 | 8028 |
| (19) 8029 | 8029 |
| (20) 8030 | 8030 |
| (21) 8031 | 8031 |
| (22) 8032 | 8032 |
| (23) 8033 | 8033 |
| (24) 8034 | 8034 |
| (25) 8035 | 8035 |

| Part or Appurtenance
Serial Number | National
Board No.
in Numerical Order |
|---------------------------------------|---|
| (26) | |
| (27) | |
| (28) | |
| (29) | |
| (30) | |
| (31) | |
| (32) | |
| (33) | |
| (34) | |
| (35) | |
| (36) | |
| (37) | |
| (38) | |
| (39) | |
| (40) | |
| (41) | |
| (42) | |
| (43) | |
| (44) | |
| (45) | |
| (46) | |
| (47) | |
| (48) | |
| (49) | |
| (50) | |

10. Design pressure 1500 psi. Temp. 160 °F. Hydro. test pressure * See Remarks at temp. °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.

ASME

Scale Item

W01-9437 NR

Certificate Holder's Serial Nos. 8011 through 8035

| CERTIFICATION OF DESIGN | | | |
|---|---|--|--|
| Design specifications certified by | <u>George I. Skoda</u>
<small>(when applicable)</small> | P.E. State <u>CA</u> | Reg. no. <u>15847</u> |
| Design report* certified by | <u>Michael A. Francioli</u>
<small>(when applicable)</small> | P.E. State <u>NY</u> | Reg. no. <u>078450-1</u> |
| CERTIFICATE OF COMPLIANCE | | | |
| We certify that the statements made in this report are correct and that this (these) | | <u>Inlet Fittings</u> | |
| conforms to the rules of construction of the ASME Code, Section III, Division 1. | | | |
| NPT Certificate of Authorization No. | <u>N-1850</u> | Expires | <u>September 3, 2013</u> |
| Date <u>10/13/2010</u> | Name <u>Miron Technologies (Conax Nuclear), Inc.</u>
<small>(NPT Certificate Holder)</small> | Signed <u>Paul Elouchman</u>
<small>(authorized representative)</small> | |
| 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 <u>New York</u> and employed by <u>HSB CT</u> | | | |
| of <u>Hartford, CT</u> have inspected these items described in this Data Report on <u>12 OCT 2010</u> , 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 <u>10-25-10</u> | Signed <u>John J. Demerouti</u>
<small>(Authorized Inspector)</small> | Commissions <u>NB 10964AN NY 5057</u> | <small>[Nat'l Bd. (incl. endorsements) and state or prov. and no.]</small> |

A.S.M.E.

to Item

WA-9437NE

1041-041
sheet 3 of 4
010

**FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL
NUCLEAR PARTS AND APPURTENANCES***
As Required by the Provisions of the ASME Code, Section III
Not to Exceed One Day's Production

Pg. 1 of 2

1. Manufactured and certified by Miron Technologies (Conax Nuclear), Inc. 402 Sonwil Drive, Cheektowaga, NY 14225
(name and address of NPT Certificate Holder)

2. Manufactured for GE Nuclear Energy, 3901 Castle Hayne Road, Wilmington, NC 28401
(name and address of Purchaser)

3. Location of installation Unknown
(name and address)

4. Type: N38017 Rev. F SA478/304SST 75 KSI N/A N/A 2010
(drawing no.) (mat'l spec. no.) (tensile strength) (CRN) (year built)

5. ASME Code, Section III, Division 1: 77 Summer 77 1 N/A
(edition) (addenda date) (class) (Code Case no.)

6. Fabricated in accordance with Const. Spec. (Div. 2 only) Revision Date
(no.)

7. Remarks: Inlet Fitting for explosive actuated valve replacement kit for Standby Liquid Control System

Pressure Test at 2800 psi for 10 minutes

8. Nom. thickness (in.) .040" Min. design thickness (in.) .031" Dia. ID (ft & in.) .815" Length overall (ft & in.) 2.245"

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) 8036 | 8036 | (26) | |
| (2) 8037 | 8037 | (27) | |
| (3) 8038 | 8038 | (28) | |
| (4) 8039 | 8039 | (29) | |
| (5) 8040 | 8040 | (30) | |
| (6) 8041 | 8041 | (31) | |
| (7) 8042 | 8042 | (32) | |
| (8) 8043 | 8043 | (33) | |
| (9) 8044 | 8044 | (34) | |
| (10) 8045 | 8045 | (35) | |
| (11) 8046 | 8046 | (36) | |
| (12) 8047 | 8047 | (37) | |
| (13) 8048 | 8048 | (38) | |
| (14) 8049 | 8049 | (39) | |
| (15) 8050 | 8050 | (40) | |
| (16) 8051 | 8051 | (41) | |
| (17) 8052 | 8052 | (42) | |
| (18) 8053 | 8053 | (43) | |
| (19) 8054 | 8054 | (44) | |
| (20) 8055 | 8055 | (45) | |
| (21) 8056 | 8056 | (46) | |
| (22) 8057 | 8057 | (47) | |
| (23) 8058 | 8058 | (48) | |
| (24) 8059 | 8059 | (49) | |
| (25) 8060 | 8060 | (50) | |

10. Design pressure 1500 psi. Temp. 150 °F. Hydro. test pressure * See Remarks at temp. °F
(when applicable)

*Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8½ 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.

A.S.M.E.

Q. 1. Item

WDI-9439NE

Certificate Holder's Serial Nos. 8036 through 8060

| CERTIFICATION OF DESIGN | | | |
|------------------------------------|--|----------------------|--------------------------|
| Design specifications certified by | <u>George I. Skoda</u>
(when applicable) | P.E. State <u>CA</u> | Reg. no. <u>15847</u> |
| Design report* certified by | <u>Michael A. Francioli</u>
(when applicable) | P.E. State <u>NY</u> | Reg. no. <u>078450-1</u> |

| CERTIFICATE OF COMPLIANCE | |
|--|---|
| We certify that the statements made in this report are correct and that this (these) <u>Inlet Fittings</u> | |
| conforms to the rules of construction of the ASME Code, Section III, Division 1. | |
| NPT Certificate of Authorization No. <u>N-1850</u> | Expires <u>September 3, 2013</u> |
| Date <u>10/13/2010</u> Name <u>Mirion Technologies (Conax Nuclear), Inc.</u>
(NPT Certificate Holder) | Signed <u>Paul Elouchman</u>
(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 <u>New York</u> and employed by <u>HSB CT</u> | |
| of <u>Hartford, CT</u> have inspected these items described in this Data Report on <u>13 OCT 2010</u> , 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 <u>10-25-10</u> Signed <u>[Signature]</u>
(Authorized Inspector) | Commissions <u>NB 10964AN NY 5057</u>
(Nat'l Bd. (incl. endorsements) and state or prov. and no.) |

ASME
to Item

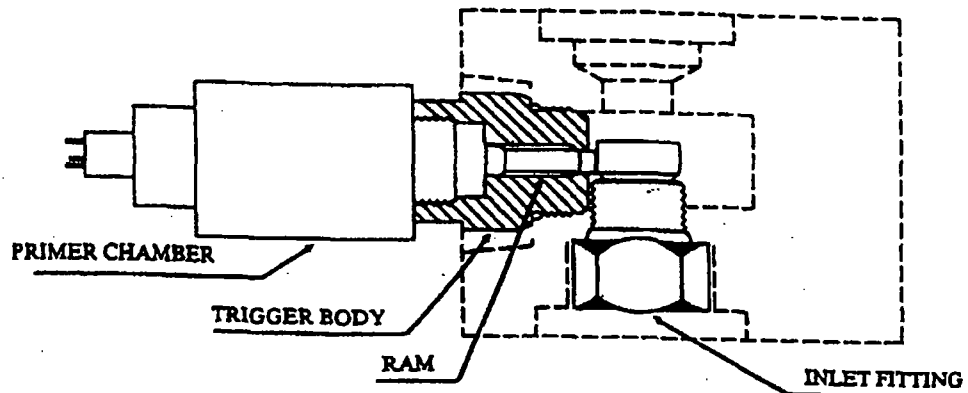
W01-9437NE


MIRION
TECHNOLOGIES

Miron Technologies (Conax Nuclear), Inc.

 1041-041
sheet 4 of 4
Tabulation
of
Materials

015

 VALVE REPLACEMENT KIT
P/N N27006-03


| Trigger Body | Ram | Primer Chamber | Inlet Fitting |
|-----------------------------------|------------------------|----------------------|----------------------|
| P/N: N38018-01 | P/N: N-39012-01 | P/N: N38062-01 | P/N: N38017-01B |
| Vendor: Dubose Natl. | Vendor: Carpenter Tech | Vendor: Dubose Natl. | Vendor: Dubose Natl. |
| P.O.: P93-S-823N | P.O.: N91896 | P.O.: P93-S-823N | P.O.: P93-S-823N |
| Heat No.: 243020 | Heat No.: 53891 | Heat No.: 243020 | Heat No.: 243020 |
| Control No.: 27149 | Control No.: 27345 | Control No.: 27274 | Control No.: 27054 |
| Trigger Subassembly N.B.S/N: 8013 | | SEP S/N: 1994 | N.B. S/N: 8038 |

 Customer: GE Hitachi Nuclear
 Customer P.O.: 437041814
 Conax Nuclear S.O.: 801300 Item 001
 G.E. P/N: AA01CC42-003
 G.E. S/N: G.E.-862-EQ

 S.M.E.
 S.M.E.

Conax Nuclear Quality:

Date: 10/26/2010

W01-9437NE

1E12-312
SHEET 1 OF 2**NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS**

As required by the Provisions of the ASME Code Section XI

PNPP No. 9308 Rev. 9/11/00

NQI-1741

1. Owner: FIRSTENERGY CORP. Date 8/09/10
10 Center Road, Perry, Ohio 44081 Sheet 1 of 2
2. Plant: Perry Nuclear Power Plant (PNPP) Unit 1
10 Center Road, Perry, Ohio 44081 Order 200007544
 (Repair Org. P.O. No., etc.)
3. Work Performed By: FIRSTENERGY Nuclear Operating Company PNPP Type Code Symbol Stamp NR
10 Center Road, Perry, Ohio 44081 Authorization No. 33
 Expiration Date 9/28/11

4. Identification of System: 1E12 Residual Heat Removal5. (a) Applicable Construction Code: ASME SECTION III CLASS 2, 1974 Edition
 NAME/SECTION/DIVISION/CLASSWINTER 19 75 Addenda Code Case(s) N/A(b) Construction Code used for repairs, modifications, or replacements: 1974 winter 75 N/A
 Edition Addenda Code Case(s)(c) ASME Code Section XI applicable for Inservice Inspection: 2001 2003 N/A
 Edition Addenda Code Case(s)

(d) Applicable Edition of Section XI Utilized for Repairs, Modification, or Replacements:

2001, 2003 Addenda N/A
 Code Case(s)(e) Design Responsibilities FirstEnergy Corp.

6. Identification of Components Repaired, Modified, or Replacement Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | Nat. Board No. | Other ID. | Year Built | Repair, Replacement, or Modification | ASME Code Stamped |
|-------------------|----------------------|-------------------------|----------------|-----------|------------|--------------------------------------|-------------------|
| Valve | Borg-Warner | 60009 | N/A | N/A | 1980 | Replacement | YES |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: Installed a Disc/Stem Assembly (S/N 07X164-1)(Mfg./Flowserve Corp.) on 4" Globe Valve (1E12F0011A).8. Test Conducted: Hydrostatic-☐ Pneumatic-☐ Nominal Operating Pressure-☒ Other-☐Pressure NOP psi Test Temperature NOT degrees F Code Case(s) N/A

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)

PNPP No. 9308 Rev. 9/11/00

NQI-1741

9. Remarks: No nameplates/stamping performed due to the interface controls of part 3 section 1.8.6 being in effect and jurisdictional authority concurrence having been received.

Note: Attach all applicable Manufacturer's Data Reports. Supplemental sheets such as 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 of this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded on the front of this form.

CERTIFICATE OF COMPLIANCE

I, David E. Siedlarczyk, 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 items described above conforms to Section XI of the ASME Code and to the National Board Inspection Code "NR" rules.

National Board Certificate of Authorization No. 33 to use the "NR" stamp expires September 28, 20 11

Date 8-11, 20 10 Signed FENOC-PNPP [Signature] NQC Supervisor
(name of repair organization) (authorized representative) (title)

CERTIFICATE OF INSPECTION/INSERVICE INSPECTION

I, Jacob C. Scholl, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of OHIO and employed by HSBCT of Hartford, Conn. have inspected the repair, modification or replacement described in this report on 8-11, 20 10 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 ASME Code and the National Board Inspection Code "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work 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.

Date 8-11, 20 10 Signed Jacob C. Scholl Commissions NB 7920 ANBI Ohio Commission 432
(inspector) (National Board (include endorsements), and jurisdiction, and no.)

1E12-312
Sheet 2 of 2

**FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL
NUCLEAR PARTS AND APPURTENANCES***
As Required by the Provisions of the ASME Code, Section III
Not to Exceed One Day's Production

Pg. 1 of 2

1. Manufactured and certified by Flowserve Corporation 1900 S. Saunders St. Raleigh, NC
(name and address of NPT Certificate Holder)
2. Manufactured for First Energy Corp/Accounts Payable/P.O. Box 6100 Johnstown, PA 15907-6100
(name and address of purchaser)
3. Location of installation Perry Main Warehouse/Perry Nuclear Power Plant/ 10 Center Road, Perry OH 44081
(name and address)
4. Type 81300 R/C SA351, GR. CF8M N/A N/A 2007
(drawing no.) (mat'l. spec. no.) (tensile strength) (CRN) (year built)
5. ASME Code, Section III, Division 1: 1974 Winter, 1975 2 N/A
(edition) (addenda date) (class) (Code Case no.)
6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A Revision N/A Date N/A
(no.)
7. Remarks: DISC FOR DISC/STEM ASSY FOR 4" 300# GLOBE VALVE
8. Nom. thickness (in.) N/A Min. design thickness (in.) Per #4 Dia. ID (ft & in.) N/A Length overall (ft & in.) N/A
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) 07X164-1 | N/A | (26) | |
| (2) 07X164-2 | N/A | (27) | |
| (3) 07X164-3 | N/A | (28) | |
| (4) 07x164-4 | N/A | (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 _____ psl. Temp. _____ °F. Hydro. test pressure _____ at temp. °F
(when applicable)

* Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8½ 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.

(11/05)

Certificate Holder's Serial Nos. 07X164-1 through 07X164-4

| CERTIFICATION OF DESIGN | | | |
|------------------------------------|---------------------------------|------------|--------------------------------|
| Design specifications certified by | <u>N/A</u>
(when applicable) | P.E. State | <u>N/A</u> Reg. no. <u>N/A</u> |
| Design report* certified by | <u>N/A</u>
(when applicable) | P.E. State | <u>N/A</u> Reg. no. <u>N/A</u> |

| CERTIFICATE OF COMPLIANCE | | | |
|--|---|---------|---|
| We certify that the statements made in this report are correct and that this (these) | | | Parts |
| conforms to the rules of construction of the ASME Code, Section III, Division 1. | | | |
| NPT Certificate of Authorization No. <u>N-1563</u> | | Expires | <u>11-26-09</u> |
| Date <u>7/13/07</u> | Name <u>Flowserve Corporation</u>
(NPT Certificate Holder) | Signed | <u>[Signature]</u>
(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 <u>NC</u> and employed by <u>HSB CT</u> of <u>Hartford, CT</u> have inspected these items described in this Data Report on <u>7/13/07</u> , 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 <u>7/13/07</u> | Signed <u>[Signature]</u>
(Authorized Nuclear Inspector) | Commissions | <u>NC1435</u>
(Nat'l. Bd. (incl. endorsements) and state or prov. and no.) |

1E12-313

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

PNPP No. 9308 Rev. 9/11/00

NQL-1741

1. Owner: FIRSTENERGY CORP. Date 9/2/10
10 Center Road, Perry, Ohio 44081 Sheet 1 of 7
2. Plant: Perry Nuclear Power Plant (PNPP) Unit 1
10 Center Road, Perry, Ohio 44081 Order 200199139
 (Repair Org. P.O. No., etc.)
3. Work Performed By: FIRSTENERGY Nuclear Operating Company PNPP Type Code Symbol Stamp NR
10 Center Road, Perry, Ohio 44081 Authorization No. 33
 Expiration Date 09-28-11
4. Identification of System: 1E12 Residual Heat Removal
5. (a) Applicable Construction Code: ASME Section III Class 2, 1974 Edition
 NAME/SECTION/DIVISION/CLASS
Winter 19 75 Addenda Code Case(s) N-242, N-224, N-272, N-413, 1644-5, 1728, N-275, N
-275, N-282 *
- (b) Construction Code used for repairs, modifications, or replacements: 1974 Winter 75 *
 Edition Addenda Code Case(s)
- (c) ASME Code Section XI applicable for Inservice Inspection: 1989 no n/a
 Edition Addenda Code Case(s)
- (d) Applicable Edition of Section XI Utilized for Repairs, Modification, or Replacements:
19 89, n/a 19 n/a Addenda n/a
 Code Case(s)
- (e) Design Responsibilities First Energy Nuclear Operating Company PNPP

6. Identification of Components Repaired, Modified, or Replacement Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | Nat. Board No. | Other ID. | Year Built | Repair, Replacement, or Modification | ASME Code Stamped |
|-------------------|----------------------|-------------------------|----------------|-----------|------------|--------------------------------------|-------------------|
| Piping | Pullman | 1E12 | 83 | 1E12 | 1985 | Replacement | Yes |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: See Remarks Section

8. Test Conducted: Hydrostatic- ☐ Pneumatic- ☐ Nominal Operating Pressure- ☒ Other- ☐
 Pressure NOP psi Test Temperature NOT degrees F Code Case(s) N-416-3

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)

PNPP No. 9308 Rev. 9/11/00

NQI-1741

9. Remarks: Modifications made for the ADHR system per the requirements of ECP 04-0270-01 using the following ASME parts: (1) 300# 12" gate valve S/N BE471, 10" pipe HT# A20028/B66952, 10" 90DEG ELB HT# S307, (2) 300# 10" gate valves S/N BE463/BE550, (1) 14"x14"x 10" Reducing Tee HT# S609, (1) 12"x12"x10" Reducing Tee HT# S547, 3/4" SA-106 seamless pipe HT# 2M33358, 10" 45DEG ELB HT# S307, Sway Struts S/N 2006-137, S/N 2006-107, S/N 2006-114, S/N2006141, Liseqa Shock Absorber S/N 30500417/060, Liseqa welo on bracket HT# A3222-4, Dynamic 6" pipe clamp HT# A117-5, 2"x 2"x1/4" thk tube steel HT# B21648, 6"x3"x1/2" thk tube steel HT# 887964, 3/4' carbon steel plate HT# U2836 SLAB:39DA, 11/4" CS plate HT# 6103685, 1/2"x12"x24" plate HT# U8551/1A, 1" CS plate HT# U8493/2E, 3/4" threaded pipe cap HT# 9314, 3/4" half coupling fitting HT#9420, 10" pipe ELB 90DEG fitting HT# S307AA, 3/4" globe valve S/N 57BMQ, Sway Strut Anvil S/N 2008-156, 6"x 6"x 3/4" CS angle HT# B41206, 5/8" thk CS plate HT# 7108258-02, 8x8x1/2 steel tubing HT# A6P0791, 4" pipe clamp HT# JE7373, Sway Strut S/N 2006-102, 1/2"x 48" x 48" CS plate HT# 7472681, 1/4" thk CS plate HT# A8T2691-03.

No nameplates/stamping performed due to the interface controls of RA-2370 being in effect and jurisdictional authority concurrence having been received.

Note: Attach all applicable Manufacturer's Data Reports. Supplemental sheets such as 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 of this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded on the front of this form.

CERTIFICATE OF COMPLIANCE

I, David E. Siedlarczyk, 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 items described above conforms to Section XI of the ASME Code and to the National Board Inspection Code "NR" rules.

National Board Certificate of Authorization No. 33 to use the "NR stamp expires September 28, 2011

Date 9/10, 20 10 Signed FENOC-PNPP [Signature] NQC Supervisor
(name of repair organization) (authorized representative) (title)

CERTIFICATE OF INSPECTION/INSERVICE INSPECTION

I, Thomas G. Laps, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of OHIO and employed by HSBCT of Hartford, Conn. have inspected the repair, modification or replacement described in this report on Sept. 10, 20 10 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 ASME Code and the National Board Inspection Code "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work 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.

Date 9/10, 20 10 Signed Thomas G. Laps Commissions NB 9330 ANI Ohio Commission
(inspector) (National Board (include endorsements), and jurisdiction, and no.)

FORM NPV-1 (Back — Pg. 2 of 2)

Certificate Holder's Serial No. BE471

8. Design conditions 500 psi 358 °F or valve pressure class 300
(pressure) (temperature)
9. Cold working pressure 720 psi at 100°F
10. Hydrostatic test 1125 psi. Disk differential test pressure 750 psi
11. Remarks: Sales Order 40687 Item D01
Bolting is as follows: Studs, SA 193-B7, Ht Trace Code Z832
Nuts, SA194-2H, Heat Trace Code Z831

CERTIFICATION OF DESIGN

Design Specification certified by W. Flensburg P.E. State OH Reg. no. 49729
 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-1562 Expires 11-26-09
 Date 2/5/08 Name Flowserve Corporation 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 the State or Province of NC and employed by HSB CT

of Hartford, CT have inspected the pump, or valve, described in this Data Report on 2-5-08, 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 2-5-08 Signed [Signature] Commissions N-1549
(Authorized Nuclear Inspector) (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

Pg. 1 of 2

- [illegible]

2

FORM NPV-1 (Back — Pg. 2 of 2)

Certificate Holder's Serial No. BE463

8. Design conditions 600 psi 358 °F or valve pressure class 300
(pressure) (temperature)
 9. Cold working pressure 720 psi at 100°F
 10. Hydrostatic test 1125 psi. Disk differential test pressure 750 psi

11. Remarks: Sales Order 40687 Item 007

Bolting is as follows: Studs, SA 193-B7, Ht Trace Code Z876

Nuts, SA194-2H, Heat Trace Code Z831

CERTIFICATION OF DESIGN

Design Specification certified by W. Flensburg P.E. State OH Reg. no. 49729
 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-1562 Expires 11-26-09

Date 5/29/08 Name Flowserve Corporation Signed Charles R. Heinert
(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 the State or Province of NC and employed by HSB CT

of Hartford, CT have inspected the pump, or valve, described in this Data Report on 5/29/08, 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 5/29/08 Signed [Signature] Commissions NC1549
(Authorized Nuclear Inspector) (Natl. Bd. (incl. endorsements) and state or prov. and no.)

FORM NPV-1 (Back — Pg. 2 of 2)

Certificate Holder's Serial No. BESS0

8. Design conditions 600 psi 358 °F or valve pressure class 300
(pressure) (temperature)
 9. Cold working pressure 720 psi at 100°F
 10. Hydrostatic test 1125 psi. Disk differential test pressure 750 psi

11. Remarks: Sales Order 40687 Item 006
Bolting is as follows: Studs, SA 193-B7, Ht Trace Code Z876
Nuts, SA194-2H, Heat Trace Code Z831

CERTIFICATION OF DESIGN

Design Specification certified by W. Flensburg P.E. State OH Reg. no. 49729
 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-1562 Expires 11-26-09

Date 5/29/08 Name Flowserve Corporation Signed Clarence R. Flensburg
(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 the State or Province of NC and employed by HSB CT

of Hartford, CT have inspected the pump, or valve, described in this Data Report on 5/29/08, 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 5/29/08 Signed [Signature] Commissions NC15319
(Authorized Nuclear Inspector) (Natl. Bd. (Incl. endorsements) and state or prov. and no.)

1E12-313
Sheet 5 of 7

FORM NF-1 CERTIFICATE HOLDERS' DATA REPORT FOR COMPONENT SUPPORTS*
As Required by the Provisions of the ASME Code, Section III, Division 1 Pg. 1 of 2

| | | | | | |
|--|---|---|---|--|---------------------------------|
| 1. Manufactured by | Anvil International, Inc. - 160 Frenchtown Rd. No. Kingstown, RI 02852
<small>(name and address of NPT Certificate Holder)</small> | | | | |
| 2. Manufactured for | First Energy, Perry Nuclear Power Plant, 10 Center Road, North Perry, OH 44081
<small>(name and address of Purchaser)</small> | | | | |
| 3. Location of installation | First Energy, Perry Nuclear Power Plant, 10 Center Road, North Perry, OH 44081
<small>(name and address)</small> | | | | |
| 4. Type: | C.S.S.
<small>(describe)</small> | DRS 211 REV.3
<small>(Design Report or Load Capacity Data Sheet)</small> | | 2006
<small>(year built)</small> | |
| 5. ASME Code, Section III, Division 1: | 1974
<small>(edition)</small> | Winter 1975
<small>(addenda date)</small> | 1
<small>(class)</small> | N-249-13
<small>(Code Case no.)</small> | |
| 6. Identification | (a)
Component
Support
I.D. No. | (b)
Material
Specification
No. | (c.)
Canadian
Registration
No. | (d)
Applicable
Drawings With
Last Rev. & Date | (e)
National
Board
No. |
| (1) | 2006- 106 | Note 1 | N/A | CH-1077/I 12/31/98 | N/A |
| (2) | 2006- 107 | Note 1 | N/A | CH-1077/I 12/31/98 | N/A |
| (3) | 2006- 108 | Note 1 | N/A | CH-1077/I 12/31/98 | N/A |
| (4) | 2006- 109 | Note 1 | N/A | CH-1077/I 12/31/98 | N/A |
| (5) | 2006- 110 | Note 1 | N/A | CH-1077/I 12/31/98 | N/A |
| (6) | 2006- 111 | Note 1 | N/A | CH-1077/I 12/31/98 | N/A |
| (7) | 2006- 112 | Note 1 | N/A | CH-1077/I 12/31/98 | N/A |
| (8) | 2006- 113 | Note 1 | N/A | CH-1077/I 12/31/98 | N/A |
| (9) | 2006- 114 | Note 1 | N/A | CH-1077/I 12/31/98 | N/A |
| (10) | 2006- 115 | Note 1 | N/A | CH-1077/I 12/31/98 | N/A |

7. Remarks:

Note 1: SA36, SA106 GR.B, SA563 GR.A, SA193 GR.B7, SA216 GR.WCB, SA307 GR.A

PO#: 45194933

SO#: 41-74740

*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 1 through 4 on this Data 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.

(12/88)

This form (E00075) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

FORM NF-1 (Back - Pg. 2 of 2)

Component Support I.D. Nos. 2006-105 through 2006-115

CERTIFICATE OF DESIGN

Design Specification certified by H. R. Sonderegger P.E. State R.I. Reg. no 3537
Design Report certified by Frank J. Birch P.E. State R.I. Reg. no 4149

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that these component supports conform to the rules for construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-2802 Expires 9/29/2007

Date 7/24/06 Name Anvil International, Inc. Signed Gene Galini
(NPT Certificate Holder)

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 Rhode Island and employed by H.S.B. C.T. of Hartford, C.T. have inspected the component supports described in this Data Report on 7/24/06, and state that to the best of my knowledge and belief, the Certificate Holder has constructed these component supports 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 supports 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 7/24/06 Signed Chris Hansen Commissions RI 862 ABNI
(Authorized Inspection) (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

1E12-313
Sheet 6 of 7FORM NF-1 CERTIFICATE HOLDERS' DATA REPORT FOR COMPONENT SUPPORTS
As Required by the Provisions of the ASME Code, Section III, Division 1 Pg. 1 of 2

1. Manufactured by Anvil International, Inc. - 180 Frenchtown Rd. No. Kingstown, RI 02852
(name and address of NPT Certificate Holder)

2. Manufactured for First Energy, Perry Nuclear Power Plant, 10 Center Road, North Perry, OH 44081
(name and address of Purchaser)

3. Location of installation First Energy, Perry Nuclear Power Plant, 10 Center Road, North Perry, OH 44081
(name and address)

4. Type: C.S.S. DRS 211 REV.3 2006
(describe) (Design Report or Load Capacity Data Sheet) (year built)

5. ASME Code, Section III, Division 1: 1974 Winter 1975 1 N-249-13
(edition) (addenda date) (class) (Code Case no.)

6. Identification

| | (a)
Component
Support
I.D. No. | (b)
Material
Specification
No. | (c)
Canadian
Registration
No. | (d)
Applicable
Drawings With
Last Rev. & Date | (e)
National
Board
No. |
|------|---|---|--|--|---------------------------------|
| (1) | 2006- 136 | Note 1 | N/A | CH-1077/1 12/31/98 | N/A |
| (2) | 2006- 137 | Note 1 | N/A | CH-1077/1 12/31/98 | N/A |
| (3) | 2006- 138 | Note 1 | N/A | CH-1077/1 12/31/98 | N/A |
| (4) | 2006- 139 | Note 1 | N/A | CH-1077/1 12/31/98 | N/A |
| (5) | 2006- 140 | Note 1 | N/A | CH-1077/1 12/31/98 | N/A |
| (6) | 2006- 141 | Note 1 | N/A | CH-1077/1 12/31/98 | N/A |
| (7) | 2006- 142 | Note 1 | N/A | CH-1077/1 12/31/98 | N/A |
| (8) | | | | | |
| (9) | | | | | |
| (10) | | | | | |

7. Remarks:

Note 1: SA36, SA106 GR.B, SA563 GR.A, SA193 GR.B7, SA216 GR.WCB, SA307 GR.A

PO#: 45194933

SO#: 41-74740

*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 1 through 4 on this Data 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.

(12/88)

This form (E00075) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

FORM NF-1 (Back - Pg. 2 of 2)

Component Support I.D. Nos. 2006-136 through 2006-142

CERTIFICATE OF DESIGN

Design Specification certified by H. R. Sonderegger P.E. State R.I. Reg. no 3537
Design Report certified by Frank J. Birch P.E. State R.I. Reg. no 4149

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that these component supports conform to the rules for construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-2802 Expires 9/29/2007

Date 7/24/06 Name Anvil International, Inc. Signed *Ken Golini*
(NPT Certificate Holder)

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 Rhode Island and employed by H.S.B. C.T. of Hartford, C.T. have inspected the component supports described in this Data Report on 7/24/06, and state that to the best of my knowledge and belief, the Certificate Holder has constructed these component supports 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 supports 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 7/24/06 Signed *Carl Hansen* Commissions RI 862 ABNI
(Authorized Inspection) (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

1E12-313
Sheet 7 of 7**FORM NF-1 CERTIFICATE HOLDERS' DATA REPORT FOR COMPONENT SUPPORTS***
As Required by the Provisions of the ASME Code, Section III, Division 1 Pg. 1 of 2

1. Manufactured by Anvil International, Inc. - 160 Frenchtown Rd. No. Kingstown, RI 02852
(name and address of NPT Certificate Holder)

2. Manufactured for First Energy, Perry Nuclear Power Plant, 10 Center Road, North Perry, OH 44081
(name and address of Purchaser)

3. Location of installation First Energy, Perry Nuclear Power Plant, 10 Center Road, North Perry, OH 44081
(name and address)

4. Type: Standard Support DRS 211 REV.3 2008
(describe) (Design Report or Load Capacity Data Sheet) (year built)

5. ASME Code, Section III, Division 1: 1974 Winter 1975 1 N-249-13
(edition) (addenda date) (class) (Code Case no.)

6. Identification

| | (a)
Component
Support
I.D. No. | (b)
Material
Specification
No. | (c.)
Canadian
Registration
No. | (d)
Applicable
Drawings With
Last Rev. & Date | (e)
National
Board
No. |
|------|---|---|---|--|---------------------------------|
| (1) | 2008- 156 ✓ | Note 1 | N/A | CH-1077/J 6/26/07 | N/A |
| (2) | | | | | |
| (3) | | | | | |
| (4) | | | | | |
| (5) | | | | | |
| (6) | | | | | |
| (7) | | | | | |
| (8) | | | | | |
| (9) | | | | | |
| (10) | | | | | |

7. Remarks:

Note 1: SA36, SA106 GR.B, SA563 GR.A, SA193 GR.B7, SA216 GR.WCB, SA307 GR.A

Note 2: SA36 material was procured to the 2004 Edition or later, thereby precluding the bend test per Perry Nuclear
station PO# 45285344

PO#: 45285344

SO#: 41-88444

*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 1 through 4 on this Data 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.

(12/88)

This form (E00075) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

FORM NF-1 (Back - Pg. 2 of 2)

Support I.D. Nos. 2008-156 Through 2008-156

CERTIFICATE OF DESIGN

Design Specification certified by H.R. Sonderegger P.E. State R.I. Reg. no 3537
Design Report certified by Frank J. Birch P.E. State R.I. Reg. no 4149

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that these component supports conform to the rules for construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-2802 Expires 9/29/2010

Date 12-31-08 Name Anvil International Signed [Signature]
(NPT Certificate Holder)

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 Rhode Island and employed by H.S.B. C.T. of Hartford, C.T. have inspected the component supports described in this Data Report on 1/2/09, and state that to the best of my knowledge and belief, the Certificate Holder has constructed these component supports 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 supports 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 1/2/09 Signed [Signature] Commissions RI 862 ABNI
(Authorized Inspection) (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

6275-1958-00084 1862

1E12-314

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

1. Owner: FIRSTENERGY CORP. Date 05/13/2011
10 Center Road, Perry, Ohio 44081 Sheet 1 of 2
2. Plant: Perry Nuclear Power Plant (PNPP) Unit One
10 Center Road, Perry, Ohio 44081 200377925
 (Repair Org. P.O. No., etc.)
3. Work Performed By: FIRSTENERGY Nuclear Operating Company PNPP Type Code Symbol Stamp NR
10 Center Road, Perry, Ohio 44081 Authorization No. 33
 Expiration Date 9-28-11
4. Identification of System: 1E12 RESIDUAL HEAT REMOVAL
5. (a) Applicable Construction Code: ASME SECTION III CLASS 2, 1974 Edition
 NAME/SECTION/DIVISION/CLASS
WINTER 1975 Addenda Code Case(s) 1644-5, 1728, N224, N242, N272, N275, N282, N413
- (b) Construction Code used for repairs, modifications, or replacements: 1974 W/75 N/A
 Edition Addenda Code Case(s)
- (c) ASME Code Section XI applicable for Inservice Inspection: 2001 2003 N/A
 Edition Addenda Code Case(s)
- (d) Applicable Edition of Section XI Utilized for Repairs, Modification, or Replacements:
49, 2001 49, 2003 Addenda N/A
 TJK 05/13/2011 TJK 05/13/2011 Code Case(s)
- (e) Design Responsibilities FENOC
6. Identification of Components Repaired, Modified, or Replacement Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | Nat. Board No. | Other ID. | Year Built | Repair, Replacement, or Modification | ASME Code Stamped |
|-------------------|----------------------|-------------------------|----------------|-----------|------------|--------------------------------------|-------------------|
| Piping System | Pullman Power | 1E12 | 83 | N/A | 1985 | Replacement | YES |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: PY-1E12F0055B. See Remarks Section.
8. Test Conducted: Hydrostatic- ☐ Pneumatic- ☐ Nominal Operating Pressure- ☒ Other- ☐
 Pressure 30.8/156 psi Test Temperature 71.6/72 degrees F Code Case(s) N/A

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

9. Remarks: Replacement of 4" X 6" Flanged Relief Valve S/N 5 with 4" X 6" Flanged Relief Valve S/N 6.
Replaced 2" pipe Heat Number 26283, 2" Pipe flange Heat Number 4M38343. Weld material Heat Numbers:
CP7808, 065905.

NO NAMEPLATE/STAMPING PERFORMED DUE TO THE INTERFACE CONTROLS OF PART 3 SECTION
1.8.6 BEING IN EFFECT AND JURISDICTIONAL AUTHORITY CONCURRENCE HAVING BEEN RECEIVED.

Note: Attach all applicable Manufacturer's Data Reports. Supplemental sheets such as 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 of this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded on the front of this form.

CERTIFICATE OF COMPLIANCE

I, JOHN S DAVIS, 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 items described above conforms to Section XI of the ASME Code and to the National Board Inspection Code "NR" rules.

National Board Certificate of Authorization No. 33 to use the "NR" stamp expires 28 SEPT. 20 11
Date 5/21, 20 11 Signed FENOC-PNPP [Signature] QC SUPV.
(name of repair organization) (authorized representative) (title)

CERTIFICATE OF INSPECTION/INSERVICE INSPECTION

I, THOMAS G LAPS, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of OHIO and employed by HSB CT. of HARTFORD CT. have inspected the repair, modification or replacement described in this report on MAY 24, 20 11 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 ASME Code and the National Board Inspection Code "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work 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.

Date 5/24, 20 11 Signed Thomas G Laps Commissions NB 9330 "N" "A" OHIO COMM.
(inspector) (National Board (include endorsements), and jurisdiction, and no.)

1E12-314 Sheet 2 of 2

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 2

1. Manufactured and certified by Target Rock; 1966E Broadhollow Rd.; E. Farmingdale, NY 11735
(name and address of NV Certificate Holder)
2. Manufactured for FirstEnergy Corporation; 10 Center Rd.; Perry, OH
(name and address of Purchaser)
3. Location of installation Perry Nuclear Power Plant; 10 Center Rd.; Perry, OH
(name and address)
4. Valve 76H-013 Orifice size 2.94 Nom. Inlet size 4 Outlet size 6
(Model no., series no.) (in.) (in.) (in.)
5. ASME Code, Section III, Division 1: 1974 Summer 1975 2 None
(edition) (addenda date) (class) (Code Case no.)
6. Type Spring 485 N/A 480°F 1100 at Ambient °F
(spring, pilot or power operated) (set pressure, psig) (blowdown, psi) (rated temp) (hydro, test, plug, inlet)
7. Identification 6 N/A 76H-013 Rev. D N/A 2007
(Cert. Holder's serial no.) (CRN) (drawing no.) (Nat'l. Bd. no.) (year built)
8. Control ring settings Not Applicable
9. Pressure retaining items:
- | | Serial No. Or Identification | Mat'l. Spec. Including Type or Grade | Tensile Strength |
|------------------|------------------------------|--------------------------------------|------------------|
| Body | S/N 2 | SA105 | 70 ksi |
| Bonnet or Yoke | | | |
| Support Rods | | | |
| Nozzle Seat | S/N 8 | SA479 316L | 70 ksi |
| Disk | S/N 13 | SA564 630 H1100 | 140 ksi |
| Spring Washers | | | |
| Adjusting Screws | | | |
| Spindle | | | |
| Spring | | | |
| Bolting | Heat # 50084 | SA193 B7 | 125 ksi |
| Other Items | | | |
10. Relieving capacity 138,600 lbs/hr as certified by the National Board N/A
(3,442 gpm @ 10% overpressure) (date)
11. Remarks: Outlet Flange S/N 2 SA105 70 ksi
Cap S/N 1 SA216 WCB 70 - 95 ksi

| CERTIFICATION OF DESIGN | | | |
|--|-----------------------|------------|--|
| Design Specification certified by | <u>John S. Holton</u> | P.E. State | <u>PA</u> Reg. No. <u>027024 E</u> |
| Design Report certified by | <u>Not applicable</u> | P.E. State | <u>-</u> Reg. No. <u>-</u> |
| 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. | <u>N-1949</u> | Expires | <u>12/12/2007</u> |
| Date | <u>11/30/07</u> | Name | <u>Target Rock</u>
(NV Certificate Holder) |
| | | Signed | <u>John DeBonis</u>
John DeBonis, QA Manager
(authorized representative) |

* Supplemental information in form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 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 (BACK - Pg. 2 of 2)

Certificate Holder's Serial No. 6

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 11/30/07, 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 11/30/07 Signed [Signature] Commissions NY 5102
(Authorized Inspector) (Nat'l. Bd.(incl. endorsements) and state or prov. and no.)

1E12-315

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

1. Owner: FIRSTENERGY CORP. Date 05/19/2011
10 Center Road, Perry, Ohio 44081 Sheet 1 of 2
2. Plant: Perry Nuclear Power Plant (PNPP) Unit One
10 Center Road, Perry, Ohio 44081 200368601
 (Repair Org. P.O. No., etc.)
3. Work Performed By: FIRSTENERGY Nuclear Operating Company PNPP Type Code Symbol Stamp NR
10 Center Road, Perry, Ohio 44081 Authorization No. 33
 Expiration Date 9-28-11
4. Identification of System: PY-1E12 RESIDUAL HEAT REMOVAL
5. (a) Applicable Construction Code: ASME SECTION III CLASS 2, 1974 Edition
 NAME/SECTION/DIVISION/CLASS
WINTER 1975 Addenda Code Case(s) *1644-5, 1728, N224, N242, N272, N275, N282, N413
- (b) Construction Code used for repairs, modifications, or replacements: 1974 W/75 *
 Edition Addenda Code Case(s)
- (c) ASME Code Section XI applicable for Inservice Inspection: 2001 2003 N/A
 Edition Addenda Code Case(s)
- (d) Applicable Edition of Section XI Utilized for Repairs, Modification, or Replacements:
49-2001 49 2003 Addenda N/A
 TJK 05/13/2011 TJK 05/13/2011 Code Case(s)
- (e) Design Responsibilities FENOC

6. Identification of Components Repaired, Modified, or Replacement Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | Nat. Board No. | Other ID. | Year Built | Repair, Replacement, or Modification | ASME Code Stamped |
|-------------------|----------------------|-------------------------|----------------|-----------|------------|--------------------------------------|-------------------|
| Piping System | Pullman Power | 1E12 | 83 | N/A | 1985 | Replacement | YES |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: E12F0063C. Replace 8" Check Valve S/N 1-51906-A with 8" Check Valve S/N 2-51906-A

8. Test Conducted: Hydrostatic- ☐ Pneumatic- ☐ Nominal Operating Pressure- ☐ Other- ☐
 Pressure 155 psi Test Temperature NOT degrees F Code Case(s) N/A

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

9. Remarks: _____

NO NAMEPLATE/STAMPING PERFORMED DUE TO THE INTERFACE CONTROLS OF PART 3 SECTION
1.8.6 BEING IN EFFECT AND JURISDICTIONAL AUTHORITY CONCURRENCE HAVING BEEN RECEIVED.

Note: Attach all applicable Manufacturer's Data Reports. Supplemental sheets such as 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 of this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded on the front of this form.

CERTIFICATE OF COMPLIANCE

I, JOHN S DAVIS, 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 items described above conforms to Section XI of the ASME Code and to the National Board Inspection Code "NR" rules.

National Board Certificate of Authorization No. 33 to use the "NR" stamp expires 28 SEPT., 20 11
Date 5/28, 20 11 Signed FENOC-PNPP [Signature] QC SUPV.
(name of repair organization) (authorized representative) (title)

CERTIFICATE OF INSPECTION/INSERVICE INSPECTION

I, THOMAS G LAPS, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of OHIO and employed by HSB CT. of HARTFORD, CT have inspected the repair, modification or replacement described in this report on JUNE 3, 20 11 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 ASME Code and the National Board Inspection Code "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work 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.

Date 5/28, 20 11 Signed Thomas G Laps Commissions NB 9330 "N" "I" "A" OHIO COMM.
2. 5/28/11 (inspector) (National Board (include endorsements), and jurisdiction, and no.)

1E12-315 sheet 2 of 2

Best Available

Pg. 1 of 3

Supplemental information in form of lists, sketches, or drawings may be used provided (1) size 8 1/2 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.

12581 TNN Form E000037 may be obtained from the Order Dept., A&ME, 22 Linn Drive, Box 2300, Fairfield, NJ 07007-2000.

FORM NPV-1 (Back - Pg. 2 of 2)

Certificate Holder's Serial No. 251906

8. Design conditions: 500 psi, 430 °F, or valve pressure class 300 (1)
(pressure) (temperature)

9. Cold working pressure 740 psi at 100°F

10. Hydrostatic test 1125 psi Disk differential test pressure 875 psi

11. Remarks: Pin Retainers SA-479-410, HTB 71947, TR# 123D

CERTIFICATION OF DESIGN

Design specification certified by Hiram R. Reppen, P.E. State PA Reg. no. 24928-E

Design report certified by N/A, (when applicable) 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 pump or valve conforms to the rules for construction of the ASME Code, Section III, Division 1.

N Certificate of Authorization No. N-2506

Expires 6-13-04

Date 5/28/04 Name Weir Valves and Controls USA, 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 the state or province of MA, and employed by HSBCT of Hartford, CT, have inspected the pump, or valve, described in this Data Report on 5/28/04, 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 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 5/28/04 Signed [Signature] Commission 1611651-A-0-1
(Authorized Inspector) (N.B. Bd. Incl. endorsement; state or prov. and no.)

(1) For manually-operated valves only.

Perry Document Control

AUG 04 2011

Best Available
Copy

25804 1-5

1E12-316

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

1. Owner: FIRSTENERGY CORP. Date 5-24-11
10 Center Road, Perry, Ohio 44081 Sheet 1 of 1
2. Plant: Perry Nuclear Power Plant (PNPP) Unit One
10 Center Road, Perry, Ohio 44081 200386034
 (Repair Org. P.O. No., etc.)
3. Work Performed By: FIRSTENERGY Nuclear Operating Company PNPP Type Code Symbol Stamp NR
10 Center Road, Perry, Ohio 44081 Authorization No. 33
 Expiration Date 9-28-11
4. Identification of System: RESIDUAL HEAT REMOVAL 1E12 MIT 5/24/11
5. (a) Applicable Construction Code: ASME SECTION III CLASS 2, 1974 Edition
 NAME/SECTION/DIVISION/CLASS
WINTER 19 75 Addenda Code Case(s) *1644-5, 1728, N224, N242, N272, N275, N282, N413
- (b) Construction Code used for repairs, modifications, or replacements: 1974 W/75 *
 Edition Addenda Code Case(s)
- (c) ASME Code Section XI applicable for Inservice Inspection: 2001 2003 N/A
 Edition Addenda Code Case(s)
- (d) Applicable Edition of Section XI Utilized for Repairs, Modification, or Replacements:
49, 2001, 49, 2003 Addenda N/A
 Code Case(s)
- (e) Design Responsibilities FENOC

6. Identification of Components Repaired, Modified, or Replacement Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | Nat. Board No. | Other ID. | Year Built | Repair, Replacement, or Modification | ASME Code Stamped |
|-------------------|----------------------|-------------------------|----------------|-----------|------------|--------------------------------------|-------------------|
| PIPING | PULLMAN | 1E12 | 83 | N/A | 1985 | REPLACEMENT | YES |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: 1E12H0588 SEE REMARKS SECTION

8. Test Conducted: Hydrostatic-☐ Pneumatic-☐ Nominal Operating Pressure-☐ Other-☐
 Pressure N/A psi Test Temperature N/A degrees F Code Case(s) N/A

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

9. Remarks: ADJUST THE SUPPORT BY GRINDING THE EXISTING WELD TO TUBE STEEL AND
SHORTEN THE MEMBER THEN RE-WELD USING WELD ROD HEAT # A900319. INSTALLED NEW
PIPE CLAMP TRACE # BE-419N-3 USING (1) BOLT 3/4-10 HEAT # 71443 AND (2) NUTS 3/4-10
HEAT # 36746.
NO NAMEPLATE/STAMPING PERFORMED DUE TO THE INTERFACE CONTROLS OF PART 3 SECTION
1.8.6 BEING IN EFFECT AND JURISDICTIONAL AUTHORITY CONCURRENCE HAVING BEEN RECEIVED.

Note: Attach all applicable Manufacturer's Data Reports. Supplemental sheets such as 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 of this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded on the front of this form.

CERTIFICATE OF COMPLIANCE

I, JOHN S DAVIS, 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 items described above conforms to Section XI of the ASME Code and to the National Board Inspection Code "NR" rules.

National Board Certificate of Authorization No. 33 to use the "NR" stamp expires 28 SEPT., 20 11
Date 5/24, 20 11 Signed FENOC-PNPP [Signature] QC SUPV.
(name of repair organization) (authorized representative) (title)

CERTIFICATE OF INSPECTION/INSERVICE INSPECTION

I, THOMAS G LAPS, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of OHIO and employed by HSB CT. of HARTFORD, CT. have inspected the repair, modification or replacement described in this report on May 25, 20 11 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 ASME Code and the National Board Inspection Code "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work 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.

Date 5/25, 20 11 Signed [Signature] Commissions NB 9330 "N" "I" "A" OHIO COMM.
(inspector) (National Board (include endorsements), and jurisdiction, and no.)

1E12-317

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

1. Owner: FIRSTENERGY CORP. Date 5-25-11
10 Center Road, Perry, Ohio 44081 Sheet 1 of 2
2. Plant: Perry Nuclear Power Plant (PNPP) Unit One
10 Center Road, Perry, Ohio 44081 200369001
 (Repair Org. P.O. No., etc.)
3. Work Performed By: FIRSTENERGY Nuclear Operating Company PNPP Type Code Symbol Stamp NR
10 Center Road, Perry, Ohio 44081 Authorization No. 33
 Expiration Date 9-28-11
4. Identification of System: RESIDUAL HEAT REMOVAL 1E12
5. (a) Applicable Construction Code: ASME SECTION III CLASS 2, 1974 Edition
 NAME/SECTION/DIVISION/CLASS
WINTER 19 75 Addenda Code Case(s) *1644-5, 1728, N224, N242, N272, N275, N282, N413
- (b) Construction Code used for repairs, modifications, or replacements: 1974 W/75 *
 Edition Addenda Code Case(s)
- (c) ASME Code Section XI applicable for Inservice Inspection: 2001 2003 N/A
 Edition Addenda Code Case(s)
- (d) Applicable Edition of Section XI Utilized for Repairs, Modification, or Replacements:
19, 2001 19, 2003 Addenda N/A
 Code Case(s)
- (e) Design Responsibilities FENOC

6. Identification of Components Repaired, Modified, or Replacement Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | Nat. Board No. | Other ID. | Year Built | Repair, Replacement, or Modification | ASME Code Stamped |
|-------------------|----------------------|-------------------------|----------------|-----------|------------|--------------------------------------|-------------------|
| PIPING | PULLMAN | 1E12 | 83 | N/A | 1985 | REPLACEMENT | YES |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: 1E12F0063B. REMOVED VALVE S/N 2-51001-A AND INSTALLED VALVE S/N 3-51001-A.
8. Test Conducted: Hydrostatic- ☐ Pneumatic- ☐ Nominal Operating Pressure- ☐ Other- ☐
 Pressure 193 psi Test Temperature NOT degrees F Code Case(s) N/A

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

9. Remarks: _____

NO NAMEPLATE/STAMPING PERFORMED DUE TO THE INTERFACE CONTROLS OF PART 3 SECTION

1.8.6 BEING IN EFFECT AND JURISDICTIONAL AUTHORITY CONCURRENCE HAVING BEEN RECEIVED.

Note: Attach all applicable Manufacturer's Data Reports. Supplemental sheets such as 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 of this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded on the front of this form.

CERTIFICATE OF COMPLIANCE

I, JOHN S DAVIS, 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 items described above conforms to Section XI of the ASME Code and to the National Board Inspection Code "NR" rules.

National Board Certificate of Authorization No. 33 to use the "NR stamp expires 28 SEPT. 20 11
Date 5/28/11, 20 11 Signed FENOC-PNPP [Signature] QC SUPV.
(name of repair organization) (authorized representative) (title)

CERTIFICATE OF INSPECTION/INSERVICE INSPECTION

I, THOMAS G LAPS, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of OHIO and employed by HSB CT. of HARTFORD, CT. have inspected the repair, modification or replacement described in this report on JUNE 2, 20 11 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 ASME Code and the National Board Inspection Code "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work 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.

Date 6/2, 20 11 Signed Thomas G Laps Commissions NB 9330 "N" "A" OHIO COMM.
(inspector) (National Board (include endorsements), and jurisdiction, and no.)

1E12-317 SHEET 2 OF 2

FORM NPV-1 CERTIFICATE HOLDERS DATA REPORT FOR NUCLEAR PUMPS OR VALVES*
As Required by the Provisions of the ASME Code, Section III, Division 1

Pg. 1 of 2

1. Manufactured and certified by: Alwood & Morrill Co., Inc., 285 Canal St., Salem, MA
(name and address of N Certificate Holder)

2. Manufactured for First Energy Corporation, 10 Center Rd., P.O. Box 97, North Perry, OH 44081
(name and address of Purchaser)

3. Location of installation Perry Nuclear Power Plant, 10 Center Road, Dock No. 1, North Perry OH 44081
(name and address)

4. Model No., Series No., or Type Dual Plate Check Valve Drawing 50079-A Rev. 03 CRN N/A

5. ASME Code, Section III, Division 1: 1974 Winter 1975 2 N/A
(edition) (addenda date) (class) (Code Case no.)

6. Pump or Valve Valve Nominal inlet size 8 Outlet size 8
(in.) (in.)

7. Material: Body SA216-WCB Bonnet N/A Disk SA467-CA6NM Bolting N/A

[illegible]

Supplemental information in form of lists, sketches, or drawings may be used provided (1) size 8 1/2 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.

FORM NPV-1 (Back - Pg. 2 of 2)

Certificate Holder's Serial No. 3-51001-A

8. Design conditions 500 psi 480 °F or valve pressure class 300 (1)
(pressure) (temperature)
9. Cold working pressure 740 psi at 100°F
10. Hydrostatic test 1125 psi. Disk differential test pressure 825 psi
11. Remarks: Pin Retainers SA 479-410 HT# : 150082 TR# 117D

CERTIFICATION OF DESIGN

Design specification certified by Hiram R. Reppert P.E. State PA Reg. no. 24928-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 pump or valve conforms to the rules for construction of the ASME Code, Section III, Division 1.

N Certificate of Authorization No. N-2606 Expires 6-13-04

Date 11/22/02 Name Atwood & Morrill Co., 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 the state or province of New York and employed by HSBCT of Hartford, CT have inspected the pump, or valve, described in this Data Report on 11-22-02 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 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 11-22-02 Signed [Signature] Commission NY 5269 N, A, B, T, JS
(Authorized Inspector) (Nat'l Bd. (incl. endorsement(s) state or prov. and no.)

(1) For manually operated valves only.

1E12 - 318

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

1. Owner: FIRSTENERGY CORP. Date 6/23/2011
10 Center Road, Perry, Ohio 44081 Sheet 1 of 2
2. Plant: Perry Nuclear Power Plant (PNPP) Unit 1
10 Center Road, Perry, Ohio 44081 200280613
 (Repair Org. P.O. No., etc.)
3. Work Performed By: FIRSTENERGY Nuclear Operating Company PNPP Type Code Symbol Stamp NR
10 Center Road, Perry, Ohio 44081 Authorization No. 33
 Expiration Date 9/28/2011

4. Identification of System: PY-1E12 RHR5. (a) Applicable Construction Code: ASME SECTION III CLASS, 1974 Edition
NAME/SECTION/DIVISION/CLASSWINTER 19 75 Addenda Code Case(s) N/A(b) Construction Code used for repairs, modifications, or replacements: 1974 W/75
Edition Addenda Code Case(s)(c) ASME Code Section XI applicable for Inservice Inspection: 2001 2003 N/A
Edition Addenda Code Case(s)

(d) Applicable Edition of Section XI Utilized for Repairs, Modification, or Replacements:

~~19 XXX~~ 2001 ~~18~~ 2003 Addenda N/A
Jm 6/29/11 Jm 6/29/11 Code Case(s)(e) Design Responsibilities FENOC

6. Identification of Components Repaired, Modified, or Replacement Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | Nat. Board No. | Other ID. | Year Built | Repair, Replacement, or Modification | ASME Code Stamped |
|-------------------|----------------------|-------------------------|----------------|----------------|------------|--------------------------------------|-------------------|
| VALVE | ROCKWELL | RC-73 | 831 | 1E12F00
41C | 1982 | RPL | YES |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: REWORKED VALVE AND REPLACED DISC S/N-87709-18. Test Conducted: Hydrostatic- ☐ Pneumatic- ☐ Nominal Operating Pressure- ☒ Other- ☐
Pressure NOP psi Test Temperature NOT degrees F Code Case(s) _____

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

9. Remarks:

NO NAMEPLATE/STAMPING PERFORMED DUE TO THE INTERFACE CONTROLS OF PART 3 SECTION
1.8.6 BEING IN EFFECT AND JURISDICTIONAL AUTHORITY CONCURRENCE HAVING BEEN RECEIVED.

Note: Attach all applicable Manufacturer's Data Reports. Supplemental sheets such as 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 of this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded on the front of this form.

CERTIFICATE OF COMPLIANCE

I, JOHN DAVIS, 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 items described above conforms to Section XI of the ASME Code and to the National Board Inspection Code "NR" rules.

National Board Certificate of Authorization No. 33 to use the NR stamp expires 9/28, 20 11
Date 6/29, 20 11 Signed FENOC-PNPP QC SUPV
(name of repair organization) (authorized representative) (title)

CERTIFICATE OF INSPECTION/INSERVICE INSPECTION

I, THOMAS G. LAPS, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of OHIO and employed by HSB CT of HARTFORD CT have inspected the repair, modification or replacement described in this report on 6/23, 20 11 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 ASME Code and the National Board Inspection Code "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work 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.

Date 6/29, 20 11 Signed Thomas G. Laps Commissions NB 9330 N I A OHIO COMMISSION
(inspector) (National Board (include endorsements), and jurisdiction, and no.)

**FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL
NUCLEAR PARTS AND APPURTENANCES***
As Required by the Provisions of the ASME Code, Section III
Not to Exceed One Day's Production

Pg 2 of 2
Pg. 1 of 2

1. Manufactured and certified by Flowserve Corporation, 1900 S. Saunders St., Raleigh, NC 27603
(name and address of NPT Certificate Holder)
2. Manufactured for First Energy Corporation, P. O. Box 6100, Johnstown, PA 15907
(name and address of purchaser)
3. Location of installation First Energy Corp., Perry Nuclear Plant, 10 Center Rd., Perry, OH 44081
(name and address)
4. Type D82-24401-18, R/J SA105 N/A N/A 2006
(drawing no.) (mat'l. spec. no.) (tensile strength) (CRN) (year built)
5. ASME Code, Section III, Division 1: 1974 Winter 1975 1 N/A
(edition) (addenda date) (class) (Code Case no.)
6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A Revision N/A Date N/A
(no.)
7. Remarks: Disk for 12" 4094(WCC)JNQTY Valve
- S. O. 37287
8. Nom. thickness (in.) N/A Min. design thickness (in.) Per #4 Dia. ID (ft & in.) N/A Length overall (ft & in.) N/A
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) 87709-1 | N/A | (26) | |
| (2) 87709-2 | N/A | (27) | |
| (3) 87709-3 | N/A | (28) | |
| (4) 87709-4 | N/A | (29) | |
| (5) 87709-5 | N/A | (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 1421 psi. Temp. 573 °F. Hydro. test pressure N/A at temp. °F
(when applicable)

* Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8½ 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.

(7/98)

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

2

Certificate Holder's Serial Nos. 87709-1 through 87709-5

CERTIFICATION OF DESIGN

Design specifications certified by _____ (when applicable) P.E. State _____ Reg. no. _____
Design report* certified by _____ (when applicable) P.E. State _____ Reg. no. _____

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) Part(s) conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-1563 Expires November 26, 2006
Date 2/28/06 Name Flowserve Corporation Signed W.D. Ray
(NPT 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 the State or Province of NC and employed by HSB CT of Hartford, CT have inspected these items described in this Data Report on 2/28/06, 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 2/28/06 Signed [Signature] Commissions NC#1421
(Authorized Nuclear Inspector) (Nat'l Bd. (incl. endorsements) and state or prov. and no.)

1E12-319

SH. 1 of 2

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

1. Owner: FIRSTENERGY CORP. Date 05/27/2011
10 Center Road, Perry, Ohio 44081 Sheet 1 of 2
2. Plant: Perry Nuclear Power Plant (PNPP) Unit One
10 Center Road, Perry, Ohio 44081 200374308
 (Repair Org. P.O. No., etc.)
3. Work Performed By: FIRSTENERGY Nuclear Operating Company PNPP Type Code Symbol Stamp NR
10 Center Road, Perry, Ohio 44081 Authorization No. 33
 Expiration Date 9-28-11
4. Identification of System: E12 RESIDUAL HEAT REMOVAL
5. (a) Applicable Construction Code: ASME SECTION III CLASS 2, 1974 Edition
 NAME/SECTION/DIVISION/CLASS
WINTER 1975 Addenda Code Case(s) *1644-5, 1728, N224, N242, N272, N275, N282, N413
- (b) Construction Code used for repairs, modifications, or replacements: 1974 W/75 *
 Edition Addenda Code Case(s)
- (c) ASME Code Section XI applicable for Inservice Inspection: 2001 2003 N/A
 Edition Addenda Code Case(s)
- (d) Applicable Edition of Section XI Utilized for Repairs, Modification, or Replacements:
19 2001 19 2003 Addenda N/A
 TJK 05/13/2011 TJK 05/13/2011 Code Case(s)
- (e) Design Responsibilities FENOC

6. Identification of Components Repaired, Modified, or Replacement Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | Nat. Board No. | Other ID. | Year Built | Repair, Replacement, or Modification | ASME Code Stamped |
|-------------------|----------------------|-------------------------|----------------|-----------|------------|--------------------------------------|-------------------|
| Piping System | Pullman Power | 1E12 | 83 | N/A | 1985 | Replacement | YES |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: 1E12F0086. Replace 6" Check Valve S/N 3-52969-A with 6" Check Valve S/N 2-52969-A

8. Test Conducted: Hydrostatic- ☐ Pneumatic- ☐ Nominal Operating Pressure- ☒ Other- ☐
 Pressure 150 psi Test Temperature NOT degrees F Code Case(s) N/A

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

9. Remarks: _____

NO NAMEPLATE/STAMPING PERFORMED DUE TO THE INTERFACE CONTROLS OF PART 3 SECTION

1.8.6 BEING IN EFFECT AND JURISDICTIONAL AUTHORITY CONCURRENCE HAVING BEEN RECEIVED.

Note: Attach all applicable Manufacturer's Data Reports. Supplemental sheets such as 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 of this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded on the front of this form.

CERTIFICATE OF COMPLIANCE

I, JOHN S DAVIS, 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 items described above conforms to Section XI of the ASME Code and to the National Board Inspection Code "NR" rules.

National Board Certificate of Authorization No. 33 to use the "NR stamp" expires 28 SEPT. 20 11
Date 7/29, 20 11 Signed FENOC-PNPP QC SUPV.
(name of repair organization) (authorized representative) (title)

CERTIFICATE OF INSPECTION/INSERVICE INSPECTION

I, THOMAS G LAPS, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of OHIO and employed by HSB CT. of HARTFORD, CT. have inspected the repair, modification or replacement described in this report on AUG. 1, 20 11 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 ASME Code and the National Board Inspection Code "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work 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.

Date 8/1, 20 11 Signed Thomas G Laps Commissions NB 9330 "N" "I" "A" OHIO COMM.
(inspector) (National Board (include endorsements), and jurisdiction, and no.)

FORM NPV-1 (Back - Pg. 2 of 2)

Certificate Holder's Serial No. 2-52969-A

8. Design conditions 740 psi 100 °F or valve pressure class 300 (1)
(pressure) (temperature)

9. Cold working pressure 740 psi at 100°F

10. Hydrostatic test 1125 psi. Disk differential test pressure 825 psi

11. Remarks: Pin Retainers SA 479-410 HT# : 239575 TR# 155D

CERTIFICATION OF DESIGN

Design specification certified by Hiram R. Reppert P.E. State PA Reg. no. 24928-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 pump or valve conforms to the rules for construction of the ASME Code, Section III, Division 1.

N Certificate of Authorization No. N-2606 Expires 6-13-07

Date 11/2/06

Name WEIR VALVES & CONTROLS USA INC.

(N Certificate Holder)

Signed

(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 Massachusetts and employed by HSBCT of Hartford, CT have inspected the pump, or valve, described in this Data Report on 11/2/06 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 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 11/2/06

Signed

Commission

(Authorized Inspector)

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

(1) For manually operated valves only.

1E12 - 320

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

1. Owner: FIRSTENERGY CORP. Date 7-25-11
10 Center Road, Perry, Ohio 44081 Sheet 1 of 2
2. Plant: Perry Nuclear Power Plant (PNPP) Unit One
10 Center Road, Perry, Ohio 44081 200280612
 (Repair Org. P.O. No., etc.)
3. Work Performed By: FIRSTENERGY Nuclear Operating Company PNPP Type Code Symbol Stamp NR
10 Center Road, Perry, Ohio 44081 Authorization No. 33
 Expiration Date 9-28-11

4. Identification of System: RESIDUAL HEAT REMOVAL
5. (a) Applicable Construction Code: ASME SECTION III CLASS 1, 1974 Edition
 NAME/SECTION/DIVISION/CLASS
WINTER 19 75 Addenda Code Case(s) N/A
- (b) Construction Code used for repairs, modifications, or replacements: 1974 Edition W/75 Addenda N/A Code Case(s)
- (c) ASME Code Section XI applicable for Inservice Inspection: 2001 Edition 2003 Addenda N/A Code Case(s)
- (d) Applicable Edition of Section XI Utilized for Repairs, Modification, or Replacements:
49, 2001 49 2003 Addenda N/A Code Case(s)
 7/7 2001 7/7 2003
- (e) Design Responsibilities FENOC

6. Identification of Components Repaired, Modified, or Replacement Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | Nat. Board No. | Other ID. | Year Built | Repair, Replacement, or Modification | ASME Code Stamped |
|-------------------|----------------------|-------------------------|----------------|-----------|------------|--------------------------------------|-------------------|
| VALVE | ROCKWELL | RC-72 | 829 | N/A | 1982 | REPLACEMENT | YES |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: REBUILT VALVE USING NEW DISK S/N 87709-4.
VALVE IS 1E12F0041B.
8. Test Conducted: Hydrostatic- ☐ Pneumatic- ☐ Nominal Operating Pressure- ☒ Other- ☐
 Pressure NOP psi Test Temperature NOT degrees F Code Case(s) N/A

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

9. Remarks: _____

NO NAMEPLATE/STAMPING PERFORMED DUE TO THE INTERFACE CONTROLS OF PART 3 SECTION

1.8.6 BEING IN EFFECT AND JURISDICTIONAL AUTHORITY CONCURRENCE HAVING BEEN RECEIVED.

Note: Attach all applicable Manufacturer's Data Reports. Supplemental sheets such as 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 of this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded on the front of this form.

CERTIFICATE OF COMPLIANCE

I, JOHN S DAVIS, 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 items described above conforms to Section XI of the ASME Code and to the National Board Inspection Code "NR" rules.

National Board Certificate of Authorization No. 33 to use the "NR" stamp expires 28 SEPT., 20 11

Date 8/2, 20 11 Signed FENOC-PNPP [Signature] QC SUPV.
(name of repair organization) (authorized representative) (title)

CERTIFICATE OF INSPECTION/INSERVICE INSPECTION

I, THOMAS G LAPS, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of OHIO and employed by HSB CT. of HARTFORD, CT. have inspected the repair, modification or replacement described in this report on AUG. 3, 20 11 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 ASME Code and the National Board Inspection Code "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work 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.

Date 8/3, 20 11 Signed Thomas G Laps Commissions NB 9330 "N" "I" "A" OHIO COMM.
(inspector) (National Board (include endorsements), and jurisdiction, and no.)

1E12-320
SHEET 2 OF 2

**FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL
NUCLEAR PARTS AND APPURTENANCES***
As Required by the Provisions of the ASME Code, Section III
Not to Exceed One Day's Production

Pg. 1 of 2

1. Manufactured and certified by Flowserve Corporation, 1900 S. Saunders St., Raleigh, NC 27603
(name and address of NPT Certificate Holder)
2. Manufactured for First Energy Corporation, P. O. Box 6100, Johnstown, PA 15907
(name and address of purchaser)
3. Location of installation First Energy Corp., Perry Nuclear Plant, 10 Center Rd., Perry, OH 44081
(name and address)
4. Type D82-24401-18, R/J SA105 N/A N/A 2006
(drawing no.) (mat'l. spec. no.) (tensile strength) (CRN) (year built)
5. ASME Code, Section III, Division 1: 1974 Winter 1975 1 N/A
(edition) (addenda date) (class) (Code Case no.)
6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A Revision N/A Date N/A
(no.)
7. Remarks: Disk for 12" 4094(WCC)JNQTY Valve
- S. O. 37287
8. Nom. thickness (in.) N/A Min. design thickness (in.) Per #4 Dia. ID (ft & in.) N/A Length overall (ft & in.) N/A
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) 87709-1 | N/A | (26) | |
| (2) 87709-2 | N/A | (27) | |
| (3) 87709-3 | N/A | (28) | |
| (4) 87709-4 | N/A | (29) | |
| (5) 87709-5 | N/A | (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 1421 psi. Temp. 573 °F. Hydro. test pressure N/A at temp. °F
(when applicable)

* Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8½ 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.

(7/98)

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

FORM N-2 (Back — Pg 2 of 2)

Certificate Holder's Serial Nos. 87709-1 through 87709-5

CERTIFICATION OF DESIGN

Design specifications certified by _____ P.E. State _____ Reg. no. _____
(when applicable)
 Design report* certified by _____ P.E. State _____ Reg. no. _____
(when applicable)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) Part(s)
 conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-1563 Expires November 26, 2006

Date 2/28/06 Name Flowserve Corporation Signed L.D. Ray
(NPT 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 the State or Province
 of NC and employed by HSB CT
 of Hartford, CT have inspected these items described in this Data Report on 2/28/06, 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 2/28/06 Signed J.M. Sull Commissions NC#421
(Authorized Nuclear Inspector) [Nat'l. Bd. (incl. endorsements) and state or prov. and no.]

1E12-321
Sheet 1 of 2**NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS**

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

1. Owner: FIRSTENERGY CORP. Date 7/20/11
10 Center Road, Perry, Ohio 44081 Sheet 1 of 2
2. Plant: Perry Nuclear Power Plant (PNPP) Unit One
10 Center Road, Perry, Ohio 44081 Order 200369521
 (Repair Org. P.O. No., etc.)
3. Work Performed By: FIRSTENERGY Nuclear Operating Company PNPP Type Code Symbol Stamp NR
10 Center Road, Perry, Ohio 44081 Authorization No. 33
 Expiration Date 9-28-11
4. Identification of System: 1E12 Residual Heat Removal
5. (a) Applicable Construction Code: ASME SECTION III CLASS 2, 1974 Edition
 NAME/SECTION/DIVISION/CLASS
WINTER 1975 Addenda Code Case(s) 1744-5, 1728, N-224, N-242, N-272, N-275, N-282,
N-413.
- (b) Construction Code used for repairs, modifications, or replacements: 1974 W/75 N/A
 Edition Addenda Code Case(s)
- (c) ASME Code Section XI applicable for Inservice Inspection: 2001 2003 N/A
 Edition Addenda Code Case(s)
- (d) Applicable Edition of Section XI Utilized for Repairs, Modification, or Replacements:
49-2001 49-2003 Addenda N/A
 TJK 05/13/2011 TJK 05/13/2011 Code Case(s)
- (e) Design Responsibilities FENOC
6. Identification of Components Repaired, Modified, or Replacement Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | Nat. Board No. | Other ID. | Year Built | Repair, Replacement, or Modification | ASME Code Stamped |
|-------------------|----------------------|-------------------------|----------------|-----------|------------|--------------------------------------|-------------------|
| Piping System | Pullman Power | 1E12 | 83 | N/A | 1984 | Replacement | YES |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: Replaced Valve S/N 3-50079-A with valve S/N 2-52969-B
Plant ID 1E12 F0063A
8. Test Conducted: Hydrostatic- ☐ Pneumatic- ☐ Nominal Operating Pressure- ☒ Other- ☐
 Pressure 154 psi Test Temperature _____ degrees F Code Case(s) N/A

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

9. Remarks: _____

NO NAMEPLATE/STAMPING PERFORMED DUE TO THE INTERFACE CONTROLS OF PART 3 SECTION

1.8.6 BEING IN EFFECT AND JURISDICTIONAL AUTHORITY CONCURRENCE HAVING BEEN RECEIVED.

Note: Attach all applicable Manufacturers' Data Reports. Supplemental sheets such as 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 of this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded on the front of this form.

CERTIFICATE OF COMPLIANCE

I, JOHN S. DAVIS, 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 items described above conforms to Section XI of the ASME Code and to the National Board Inspection Code "NR" rules.

National Board Certificate of Authorization No. 33 to use the "NR" stamp expires 28 SEPT., 20 11
Date 8/1, 20 11 Signed FENOC-PNPP [Signature] QC SUPV.
(name of repair organization) (authorized representative) (title)

CERTIFICATE OF INSPECTION/INSERVICE INSPECTION

I, THOMAS G LAPS, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of OHIO and employed by HSB CT. of HARTFORD, CT have inspected the repair, modification or replacement described in this report on AUG 1, 20 11 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 ASME Code and the National Board Inspection Code "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work 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.

Date 8/1, 20 11 Signed Thomas G Laps Commissions NB 9330 "N" "A" OHIO COMM.
(inspector) (National Board (include endorsements), and jurisdiction, and no.)

Pg. 1 of 2

[illegible]

(12/88) This form (E00037) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

FORM NPV-1 (Back - Pg. 2 of 2)

Certificate Holder's Serial No. 2-52969-8

8. Design conditions 740 psi 100 °F or valve pressure class 300 (1)
(pressure) (temperature)

9. Cold working pressure 740 psi at 100°F

10. Hydrostatic test 1125 psi. Disk differential test pressure 825 psi

11. Remarks: Pin Retainers SA 479-410 HT# : 504420 TR# 151D

CERTIFICATION OF DESIGN

Design specification certified by Hiram R. Reppert P.E. State PA Reg. no. 24928-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 pump or valve conforms to the rules for construction of the ASME Code, Section III, Division 1.

N Certificate of Authorization No. N-2606 Expires 6-13-07

Date 9/29/06

Name WEIR VALVES & CONTROLS USA INC.

(N Certificate Holder)

Signed

(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 Massachusetts and employed by HSBCT of Hartford, CT have inspected the pump, or valve, described in this Data Report on 9/29/06 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 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 9/29/06

Signed

(Authorized Inspector)

Commission

MA1651 A, B, N, I
(Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

(1) For manually operated valves only.

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

1. Owner: FIRSTENERGY CORP. Date 7/26/2011
10 Center Road, Perry, Ohio 44081 Sheet 1 of 2

2. Plant: Perry Nuclear Power Plant (PNPP) Unit One
10 Center Road, Perry, Ohio 44081 200458820
(Repair Org. P.O. No., etc.)

3. Work Performed By: FIRSTENERGY Nuclear Operating Company PNPP Type Code Symbol Stamp NR
10 Center Road, Perry, Ohio 44081 Authorization No. 33
Expiration Date 9-28-11

4. Identification of System: RESIDUAL HEAT REMOVAL 1E125. (a) Applicable Construction Code: ASME SECTION III CLASS 2, 1974 Edition
NAME/SECTION/DIVISION/CLASSWINTER 1975 Addenda Code Case(s)(b) Construction Code used for repairs, modifications, or replacements: 1974 W/75 N/A
Edition Addenda Code Case(s)(c) ASME Code Section XI applicable for Inservice Inspection: 2001 2003 N/A
Edition Addenda Code Case(s)

(d) Applicable Edition of Section XI Utilized for Repairs, Modification, or Replacements:

2001 2003 Addenda N/A Code Case(s)(e) Design Responsibilities FENOC

6. Identification of Components Repaired, Modified, or Replacement Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | Nat. Board No. | Other ID. | Year Built | Repair, Replacement, or Modification | ASME Code Stamped |
|-------------------|----------------------|-------------------------|----------------|-----------|------------|--------------------------------------|-------------------|
| PUMP | BINGHAM WILLAMETTE | 1A015 | 795 | N/A | 1980 | REPLACEMENT | YES |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: Removed rotating element S/N 1A018 & installed rotating element S/N 1A022 (including stuffing box and seal gland). Note the pump casing was not changed.8. Test Conducted: Hydrostatic- ☐ Pneumatic- ☐ Nominal Operating Pressure- ☒ Other- ☐
Pressure 45-48 psi Test Temperature 78 degrees F Code Case(s) N/A

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

9. Remarks: _____

NO NAMEPLATE/STAMPING PERFORMED DUE TO THE INTERFACE CONTROLS OF PART 3 SECTION
1.8.6 BEING IN EFFECT AND JURISDICTIONAL AUTHORITY CONCURRENCE HAVING BEEN RECEIVED.

Note: Attach all applicable Manufacturer's Data Reports. Supplemental sheets such as 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 of this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded on the front of this form.

CERTIFICATE OF COMPLIANCE

I, JOHN S DAVIS, 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 items described above conforms to Section XI of the ASME Code and to the National Board Inspection Code "NR" rules.

National Board Certificate of Authorization No. 33 to use the "NR" stamp expires 28 SEPT., 20 11
Date 7/29, 20 11 Signed FENOC-PNPP [Signature] QC SUPV.
(name of repair organization) (authorized representative) (title)

CERTIFICATE OF INSPECTION/INSERVICE INSPECTION

I, THOMAS G LAPS, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of OHIO and employed by HSB CT. of HARTFORD, CT. have inspected the repair, modification or replacement described in this report on Aug. 1, 20 11 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 ASME Code and the National Board Inspection Code "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work 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.

Date 8/1, 20 11 Signed Thomas G Laps Commissions NB 9330 "N" "A" OHIO COMM.
(inspector) (National Board (include endorsements), and jurisdiction, and no.)

FORM NPV-1 (Back)

| Mark No. | Material Spec. No. | Manu. Jurer | Remarks |
|---|--------------------|-------------|------------------------|
| (c) Bolting | | | |
| 8784 | SA-193 B7 | Metrix | Stud, Case |
| 8785 | SA-194 2H | Metrix | Nut, Case |
| 0124 | SA-193 B8M | Metrix | Stud, Gland |
| 8787 | SA-194 B8M | Metrix | Nut, Gland |
| A | SA-449 C1 2 | Metrix | Capscrew Bracket, Moto |
| A | SA-325 Tp 1 | Metrix | Bolt, Pump |
| 0610 | SA-193 B7 | Metrix | Taper Pin |
| P.O. 1-45565 | SA-192 304 | Familian | Plug, Drain |
| (d) Other Parts (Seal Circulation Piping) | | | |
| TH4051 | SA-312 304 | Tube Sales | Pipe |
| V10 | SA-182 304 | Familian | Tee |
| V10 | SA-182 304 | Familian | Elbow |
| VHV | SA-182 304 | Familian | Plug |
| 0637 | SA-182 304 | Metrix | Orifice |
| VDO, VFA, VKO | SA-182 304 | Familian | Union |

9. Hydrostatic test 225/900 psi.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this pump, or valve, conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Div. I, Edition 1974.
 Addenda W'76 (Date), Code Case No. NA, Date 4-22-80.
 Signed Bingham-Willamette Company (Manufacturer) by [Signature]
 Our ASME Certificate of Authorization No. N-1654 to use the N (N) (NFV) symbol expires 2/28/83 (Date).

CERTIFICATION OF DESIGN

Design information on file at Bingham-Willamette Company
 Stress analysis report (Class 1 only) on file at NA
 Design specifications certified by (1) Hiram R. Reppert
 PE State Penn Reg. No. 24928E
 Stress analysis certified by (1) Paul Oliver - Van Gulik Assoc.
 PE State Oregon Reg. No. 6261
 (1) Signature not required. List name only.

CERTIFICATE OF SHOP 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 Oregon and employed by Department of Commerce have inspected the pump, or valve, described in this Data Report on 4.23 19 80 and state that to the best of my knowledge and belief, the Manufacturer has constructed this pump, or valve, in accordance with the ASME Code, Section III.

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 a loss of any kind arising from or connected with this inspection.

Date 4.23 19 8010 8077 19-556

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-05 Rev. 00

Date 8/13/10

Sheet 1 of 1

Unit 1

200199135,200199137,200199139
(Repair Organization P.O. No., Job No., etc.)

Type Code Symbol Stamp NR
 Authorization No. 33
 Expiration Date 28 Sept. 2011

5. (a) Applicable Construction Code: ASME III NC, 19 74 Edition, Winter 75r Addenda, SEE #7 Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 89

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Repaired, Replaced, or Replacement | ASME Code Stamped (Yes or No) |
|-------------------|----------------------|-------------------------|--------------------|----------------------|------------|------------------------------------|-------------------------------|
| PIPING SYSTEM | PULLMAN | 1E12 | 83 | 1E12 | 1985 | Replacement | YES |
| PIPING SYSTEM | PULLMAN | 1E21 | 85 | 1E12 | 1985 | Replacement | YES |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

8. Test Conducted: Hydrostatic-☐ Pneumatic-☐ Nominal Operating Pressure-☒ Other-☐
Pressure NOP psi Test Temperature NOT °F

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.

Page 1 of 2

1E21-044
Sheet 1

NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

NOP-CC-5703-05 Rev. 00

200199135, 200199137, and 200199139

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and this Replacement conforms to the rules of the ASME Code, Section XI. repair or replacement

Type Code Symbol Stamp NR

Certificate of Authorization No. 33

Expiration Date 28 September 2011

Signed [Signature]
Owner or Owner's Designee, Title

Date 9/10, 20 10

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 OHIO and employed by HSB CT of Hartford, Conn. have inspected the components described in this Owner's report during the period 4/18/09 to 5/18/09 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 the 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.

Thomas J. Lape
Inspector's Signature

Commissions NB 9330 "N" "I" "A" Ohio Commission
National Board, State, Province, and Endorsements

Date 9/10, 20 10

1E21-044
Attachment 1

FORM NR-1 REPORT OF REPAIR ☐ MODIFICATION ☒ OR REPLACEMENT ☐
TO NUCLEAR COMPONENTS AND SYSTEMS IN NUCLEAR POWER PLANTS Page 1 of 9

1. Work performed by Welding Services Inc. Job No. 105734
(name of NR certificate holder) (P.O. no., job no., etc.)
2225 Skyland Court, Norcross, GA 30071
(address)

2. Owner First Energy Corporation
(name)
76 South Main Street, Akron, Ohio
(address)

3. Name, address and identification of nuclear power plant Perry Nuclear Power Plant, 10 Center Road, Perry, Ohio 44081

4. System Alternate Decay Heat Removal, Low Pressure Core Spray, and Residual Heat Removal Systems

5a. Items Which Required Repair, Modification, or Replacement Activities

| Identification | | | | | | | | Construction Code | | | | Activity |
|----------------|--------------|-----------|-----------------|---------------|-------------|-------|------------|-----------------------|-----------------|--------------|------------|--------------------|
| No | Type of Item | Mfg. Name | Mfg. Serial No. | Nat'l Bd. No. | Jurisd. No. | Other | Year Built | Name/Section/Division | Edition/Addenda | Code Case(s) | Code Class | Repair/Mod/Replace |
| 1 | Flange | Pullman | HT. H205C3A | N-1251 | N/A | N/A | 1978 | ASME III | 1974/W75 | N/A | 2 | Mod. |
| 2 | Flange | Pullman | HT. H205C3A | N-1251 | N/A | N/A | 1978 | ASME III | 1974/W75 | N/A | 2 | Mod. |
| 3 | 14" Pipe | Pullman | HT. 46473 | N-1251 | N/A | N/A | 1978 | ASME III | 1974/W75 | N/A | 2 | Mod. |
| 4 | | | | | | | | | | | | |
| 5 | NOTE: | SEE | REMARKS | | | | | | | | | |
| 6 | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | |

5b. Items Installed During Replacement Activities

| Identification | | | | | | | | Construction Code | | | |
|----------------|-----------------------|-----------|-----------------|---------------|-------------|-------|------------|-----------------------|-----------------|--------------|------------|
| Type of Item | Installed or replaced | Mfg. Name | Mfg. Serial No. | Nat'l Bd. No. | Jurisd. No. | Other | Year Built | Name/Section/Division | Edition/Addenda | Code Case(s) | Code Class |
| Spool #1 | Installed | (*) | (*) | (*) | (*) | (*) | (*) | (*) | (*) | (*) | (*) |
| Spool #2 | Installed | (*) | (*) | (*) | (*) | (*) | (*) | (*) | (*) | (*) | (*) |
| Spool #3 | Installed | (*) | (*) | (*) | (*) | (*) | (*) | (*) | (*) | (*) | (*) |
| Spool #4 | Installed | (*) | (*) | (*) | (*) | (*) | (*) | (*) | (*) | (*) | (*) |
| Spool #5 | Installed | (*) | (*) | (*) | (*) | (*) | (*) | (*) | (*) | (*) | (*) |
| Spool #6 | Installed | (*) | (*) | (*) | (*) | (*) | (*) | (*) | (*) | (*) | (*) |
| Spool #7 | Installed | (*) | (*) | (*) | (*) | (*) | (*) | (*) | (*) | (*) | (*) |
| Spool #8 | Installed | (*) | (*) | (*) | (*) | (*) | (*) | (*) | (*) | (*) | (*) |
| Spool #9 | Installed | (*) | (*) | (*) | (*) | (*) | (*) | (*) | (*) | (*) | (*) |
| | | | | | | | | | | | |

6. ASME Code Section XI applicable for inservice inspection: 1989 None N/A
(edition) (addenda) (Code Case(s))

7. ASME Code Section XI used for repairs, modifications, or replacements: 1989 None N/A
(edition) (addenda) (Code Case(s))

8. Construction Code used for repairs, modification, or replacements: ASME III, 1974 Winter 75 N/A
(edition) (addenda) (Code Case(s))

9. Design responsibilities First Energy Corporation

10. Tests conducted: hydrostatic ☐ pneumatic ☐ design pressure ☐ pressure (**) psi Code Case(s) N/A

11. Description of work

(use of properly identified additional sheet(s) or sketch(es) is acceptable)

The Modification of Alternate Decay Heat Removal, Low Pressure Core Spray, and Residual Heat Removal Systems.

The modification involved the relocating and welding of (2) existing 14", 300# R.F., W.N. Flanges and (1) existing section of 14", Schedule 40 Pipe. The installation by welding of (1) 18"X18"X10" Reducing Tee, (1) 16"X16"X10" Reducing Tee and (1) 14"X14"X10" Reducing Tee. And the installation by welding of (9) prefabricated (By Others) Spool Sections.

Note: This Welding Services Inc. NR-1 covers only the welding, inspection and test of WSI ASME Section III, Class 2 welds as shown on Pages 2, 3, and 4 of this NR-1. All base material was supplied by the Customer. (FENOC - Perry Nuclear Plant).
(21 Total Welds)

12. Remarks

Remarks: Item 5a Above. Information above provided by Pullman Power Products NPP-1 Data Report (Existing Items).
See page 6 through 9 of this NR-1

(*) Remarks: Item 5b Above. Customer Supplied Spool Pieces (FENOC - Perry Nuclear Power Plant)
See Pages 2, 3, and 4 of this NR-1.

(**) Pressure Tests performed by others.

CERTIFICATE OF COMPLIANCE

I, Kenneth L. Crom, certify that to the best of my knowledge and belief the statements made in this report are Correct and the repair, modification or replacement activities described above conform to Section XI of the ASME Code and the National Board Inspection Code "NR" rules.
National Board Certificate of Authorization No. NR-69 to use the "NR" stamp expires Nov. 6, 2010
NR Certificate Holder Welding Services, Inc.

Date 4.2.09 Signed

K.L. Crom
(authorized representative)

WSI Site QA/QC Manager

(title)

CERTIFICATE OF INSPECTION

I, Thomas G. Laps, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of Ohio and employed by HSBCT of Hartford, Ct have inspected the repair, modification or replacement described in this report on APRIL 2, 2009 and state that to the best of my knowledge and belief, this repair, modification or replacement activity has been completed in accordance with Section XI of the ASME Code and the National Board Inspection Code "NR" rules.

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

Date 4/2/09 Signed

Thomas G. Laps
(inspector)

Commissions NB9330 N I A Ohio Comm.
(National Board (incl endorsements), jurisdiction, and no.)

WSI WELDS

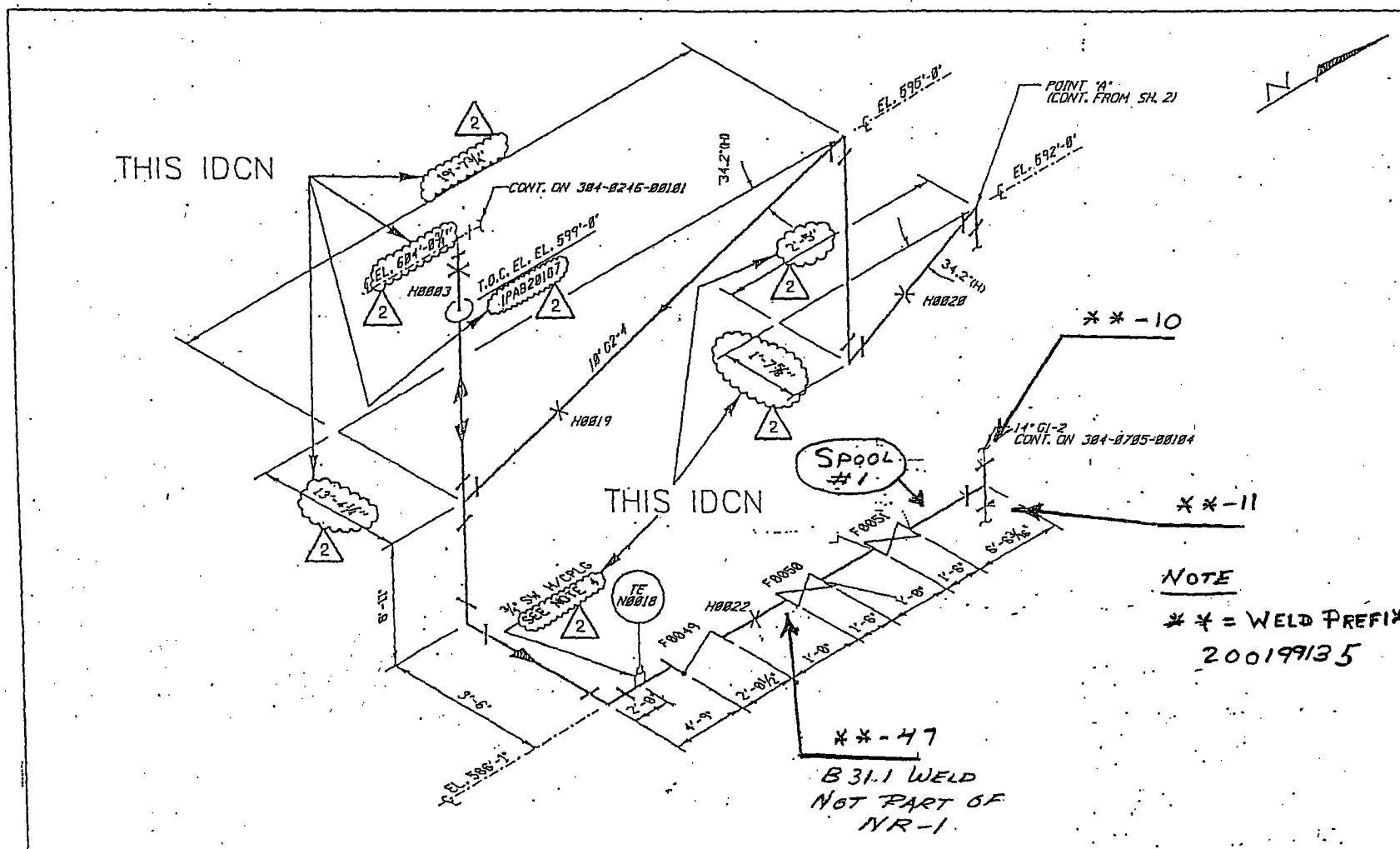
(3) TOTAL WELDS

200199.135

(1) SPOOL SECTION

Job # 105734

ALTERNATE DECAY HEAT REMOVAL
AND LOW PRESSURE CORE SPRAY.



V.12 = 7A10012C (main PREFIX#)

WSI WELDS

2001'99,137

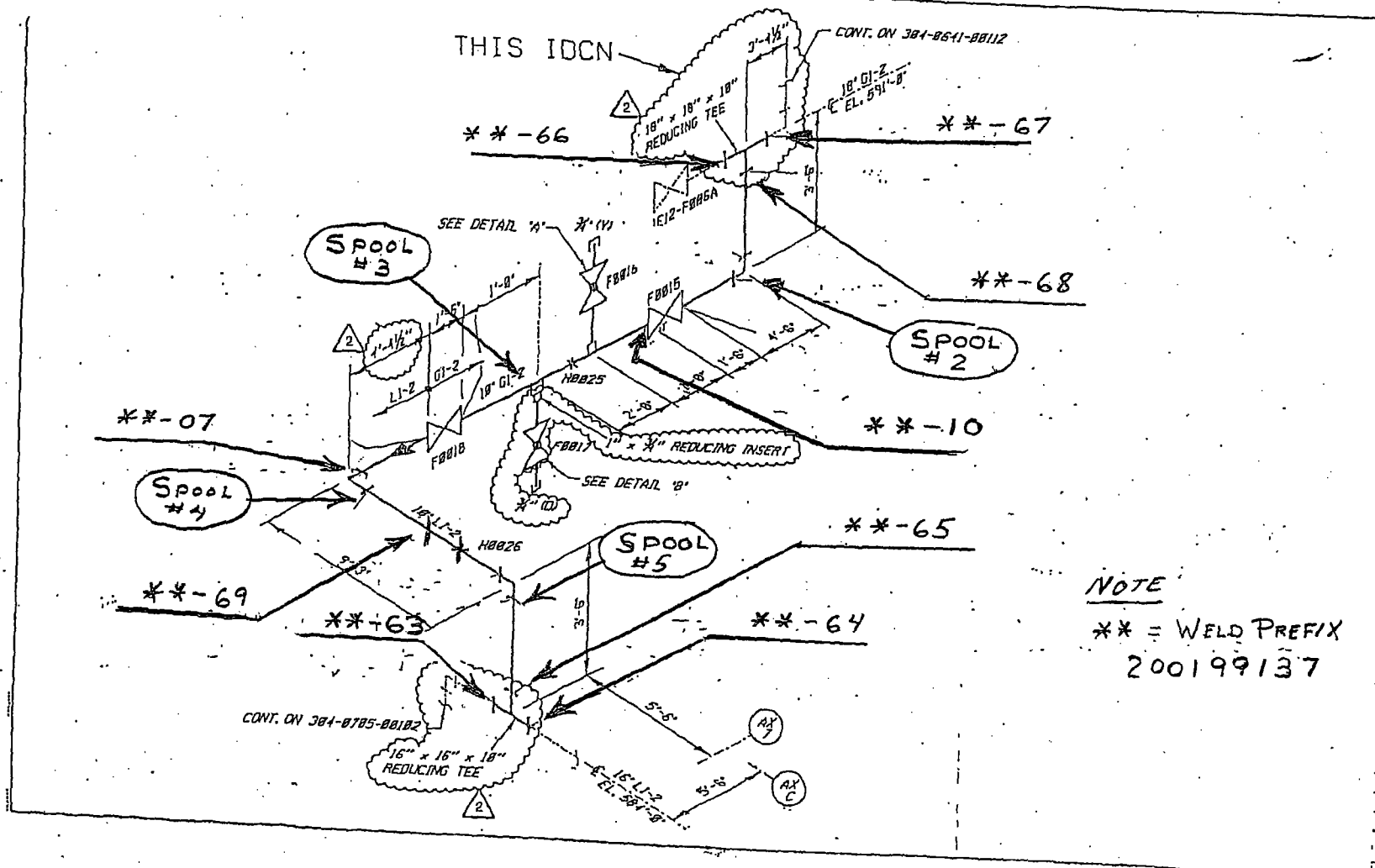
(9) TOTAL WELDS.

(4) ~~SPOOL~~ SECTIONS

ALTERNATE DECAY HEAT
AND LOW PRESSURE CORE
SPRAY

(1) 18" x 18" x 10" REDUCING TEE

(1) 16" X 16" X 10" REDUCING TEE.



WSI NR-1

PAGE 5 OF 9

WSI WELDS

200199139

JOB # 105734

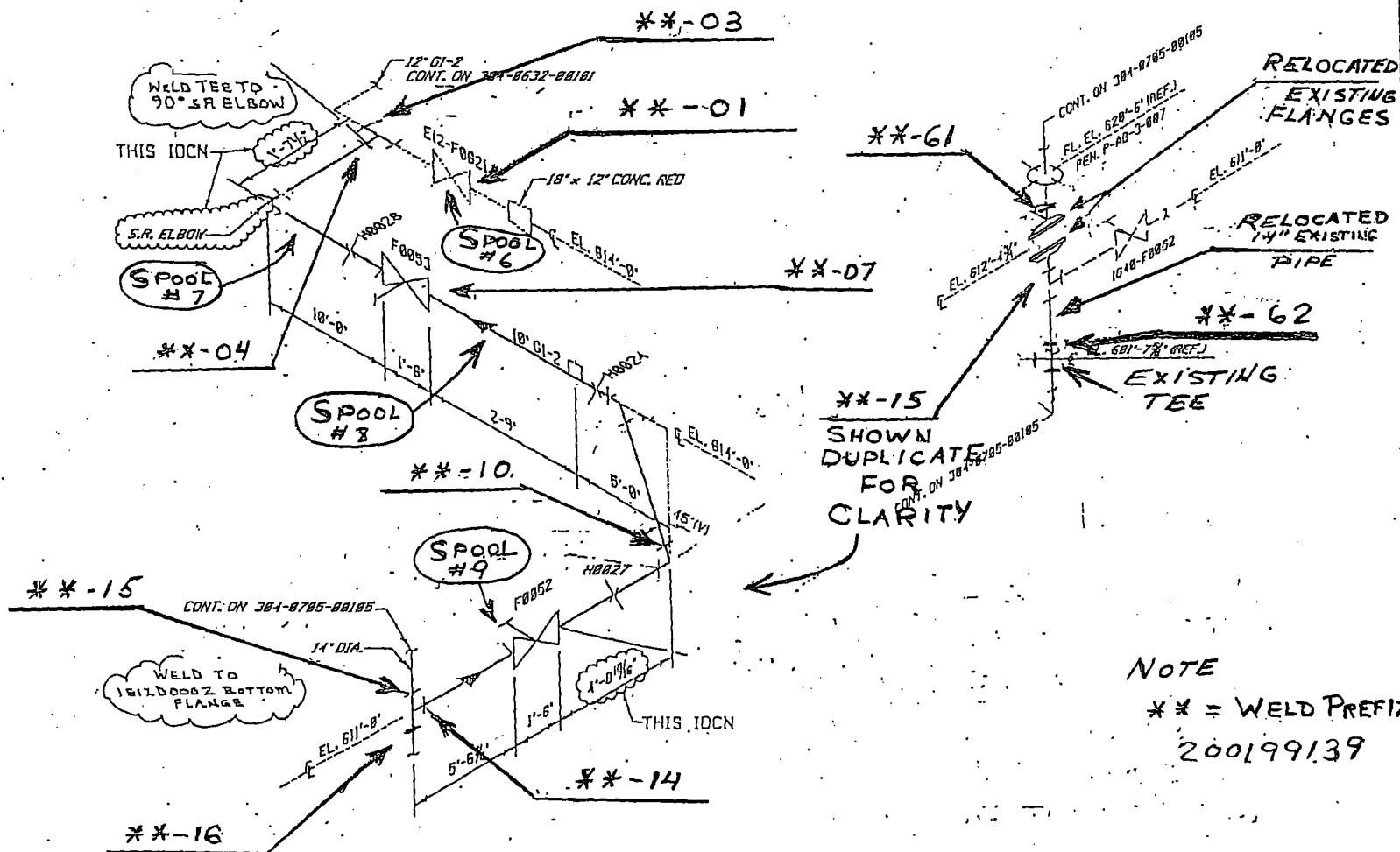
(10) TOTAL WELDS

(1) RELOCATED 14" EXISTING PIPE

(1) 14" X 14" X 10" REDUCING TE

(4) SPOOL SECTIONS

(2) EXISTING 14" FLANGES

ALTERNATE DECAY HEAT AND LOW PRESSURE CORE SPRAY

200199139

WSI NR-1 PAGE OF 9

JOB # 105734

FORM NPT-1 DATA REPORT FOR FABRICATED NUCLEAR PIPING SUBASSEMBLIES (As Required by the Provisions of the ASME Code Rule)

1. Fabricated by PULLMAN POWER PRODUCTS, 14141 W. 14TH ST., PA. JOB No. 33495
(Name and address of fabricator)
2. Fabricated for CLEVELAND ELECT. LITE. CO. (JOINT) OHIO Order No. P-1314-L
(Name and address)
3. Owner AT&T 4. Location of Plant APPROX. 7 MILES N.E. OF PATTERVILLE, OHIO
5. Piping System Identification E21-L.P. CORE SPANN
(Brief description of intended use, main coolant, etc.)
(a) Drawing No. F-2448 Prepared by PULLMAN POWER PRODUCTS
(b) National Board No. _____
6. The material, design, construction, and workmanship complies with ASME Code Section III, Class 3
Edition 1974 Addenda Date 1975 Code No. _____
Remarks: Manufacturers' Data Reports properly identified and signed by Commissioned Inspectors have been furnished for the following items of this report NONE
(Name of Part, Item number, Manufacturer's name, and identifying stamp)

7. Shop Hydrostatic Test NONE psi
8. Description of piping inspected 14" PIPE ASSAY MK# 1-E21-G-IPC-20 RB
(Include marking, full material specification, descriptive list, schedule or thickness, length)
CONSISTING OF:
ONE (1) 14" X 14" X 12" 9/10 SMLS. RED. W. TEE SA234 WPB
ONE (1) 12" 9/10 LR 90° W. EL. SA234 WPB
ONE (1) 14" - 300# RFWD FLG (5/16 BORE) SA105
APPROX LENGTH: 2'-4 1/8"

We certify that the statements made in this report are correct and that the fabrication of the described piping conforms with the requirements of SECTION III of the ASME BOILER AND PRESSURE VESSEL CODE.

Date 11/16/78 Signed PULLMAN POWER PRODUCTS by George D. Kay
(Signature)

Certificate of Authorization Expires OCTOBER 27, 1981 Certificate of Authorization No. 4-1251

CERTIFICATE OF SHOP INSPECTION
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and of the State of Province of OHIO and employed by HARTFORD STEEL BOILER WORKS have inspected the piping described in this Data Report on 11/15/78, and state that to the best of my knowledge and belief, the Manufacturer has constructed this piping in accordance with the applicable Subsections of ASME Code, Section III.
By signing this certificate, neither the Inspector nor his employer make any warranty, expressed or implied, concerning the piping 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 11 December 1978 George D. Kay Commissioned Inspector No. 62662
(Signature)

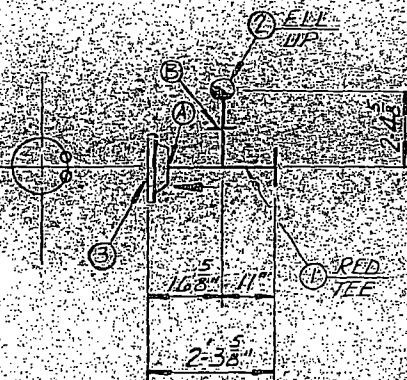
Supplemental sheets, drawings, or other data may be used provided they are clearly identified and are not used to alter the information on this report. This report is not to be used for any other purpose without the written consent of the National Board of Boiler and Pressure Vessel Inspectors.

WSI NR-1 PG 7 OF 9

JOB # 105734

| | | | | | |
|---------------------------|------------|------------------|------|----------|-------------------|
| DATE: 7-1-72 | | MARK: 8405 | | F-2448 | |
| SYSTEM: E21-LP CORE SPRAY | | JOB NO. | | SHEET 30 | |
| REF. DUES | | D-304 706 KEY 18 | | | |
| EST. WT. | INSPECTION | REVIEW | EXOS | CLEAN | PAS. SPEC. |
| 4908 | | | | | CONT. 5051/15/123 |

- NOTES**
1. ASME CODE PLATE DATA
 2. QUALITY ASSURANCE REQUIRED
 3. RADIOGRAPH ALL BUTT WELDS
 4. SHOP TO CHECK FIELD END
 5. ALL MACHINED SURFACES TO BE COATED WITH DEOX ALUMINITE
 6. MISMATCH OF I.D. ON SHOP BUTT WELDS SHALL NOT EXCEED 1/16" GRIND OR BUILD UP IF NECESSARY
 7. GRIND BUTT WELDS PER SK. 15
 8. All Shop Butt Welds to be K-Insert Welds
 9. PAINT RED OXIDE PRIMER



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AUG 04 2011

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Copy

PERY NUCLEAR POWER PLANT UNIT 1
 THE CLEVELAND ELECTRIC CO.
 DUQUESNE LIGHT CO. OHIO EDISON CO.
 PA. POWER CO. TOLEDO EDISON CO.
 CONTRACT NO. F13144
 PURCHASE ORDER NO.

LINE SPEC. 61-2

| REV | DATE | BY | DESCRIPTION | COLOR CODE | SPOTS BAND | DRW. NO. | CHG. NO. | APPROV. | PULLMAN KILLOGG |
|--------------------------|------|---|-------------------|------------|------------|----------|-----------|---------|-----------------|
| 1 | | | 14" PIPE ASSEMBLY | | | | | | |
| CARB. STL ASSY. MATERIAL | | | | | | | | | |
| ITEM | QTY | DESCRIPTION | SPEC. | SOURCE | UNIT | TOTAL | PRICE | DATE | |
| 1 | 1 | 14" X 14" X 12" SMLS RED W TEE | 1/16" WALL | WALTON | WT | 11.050 | WT-11.050 | | |
| 2 | 1 | 12" X 12" X 12" SMLS RED W TEE | 1/16" WALL | WALTON | WT | 76.373 | WT-76.373 | | |
| 3 | 1 | 14" 30107 OF W TEE | 1/16" WALL | WALTON | WT | 76.364 | WT-76.364 | | |
| 4 | 1 | 13" 149" O.D. 1/2" K-INSERT | 1/16" WALL | WALTON | WT | 77.028 | WT-77.028 | | |
| 5 | 1 | 12" 063" O.D. 1/2" K-INSERT | 1/16" WALL | WALTON | WT | 76.373 | WT-76.373 | | |
| 6 | 1 | 14" End Protector with 16 units of Silica Gel per X111-3 (FRG.D. END) | 1/16" WALL | WALTON | WT | 76.364 | WT-76.364 | | |
| 7 | 1 | 12" End Protector with 16 units of Silica Gel per X111-3 | 1/16" WALL | WALTON | WT | 76.373 | WT-76.373 | | |
| 8 | 1 | 12" End Protector with 16 units of Silica Gel per X111-3 | 1/16" WALL | WALTON | WT | 76.373 | WT-76.373 | | |
| TOTAL PRICE \$11,114.00 | | | | | | | | | |

Property or Community Control

AUG 6 1961

1, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of OHIO and employed by HEPPI CO. * of HARTFORD, CONN. have inspected the piping described in this Data Report on 11/27/1978, and advise that to the best of my knowledge and belief, the Manufacturer has constructed this piping in accordance with the applicable Subsections of ASME Code, Section III.

By signing this certificate, neither the Inspector nor his employees make any warranty, expressed or implied, concerning the piping in this Data Report. Furthermore, neither the Inspector nor his employees shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from any connection with this inspection.

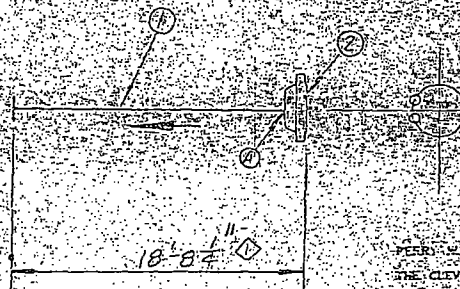
Date: 11 December 1978 HARTFORD STEAM BOILER, LSP.
R. H. Wiley OHIO COMPTROLLER CLERK
(Inspector) (Commissioner)
National Board State, Province, and Un.

This term (Eq. 1) is obtainable from the ASME, 345 E. 47th St., New York, N. Y. 10017.

WSI NR 1 Pg. 9 of 9 JOB # 105734

NOTES

1. QUANTITY ASSURANCE REQUIRED
2. MISMATCH OF TO, ON, SHOP BUTTWELDS SHALL NOT EXCEED 1/16"
3. GRIND OR EQUIVALENT NECESSARY
4. STOP TO CHECK DIMENSIONS
5. GRIND BUTTWELDS TO SK 75
6. RADIOGRAPH ALL BUTTWELDS
7. ALL MACHINED SURFACES TO BE COATED WITH GEORALUMINITE
8. ALL SHOP BUTTWELDS to be K-WISCER Weld
9. PAINT: RED OXIDE PRIMER
10. REPEAT 50%



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AUG 04 2011

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PERMANENT POWER FLUENT GUT
 THE CLEVELAND ELECTRIC BELL CO.
 DOLBY LIGHTING CO. ONE-EDISON CO.
 PA. POWER CO. COLEMAN-EDISON CO.
 PURCHASE ORDER NO.

SP577-PLANT, MINA SPEC 012

| ITEM | QUAN. | DESCRIPTION | UNIT | PRICE | TOTAL |
|------|-------|---------------------------------|------|-------|-------|
| 1 | 1 | 14" 300# P.F.W.N. FLG (5" POPE) | FLG | 76.38 | 76.38 |
| 2 | 1 | 14" 300# P.F.W.N. FLG (5" POPE) | FLG | 76.38 | 76.38 |
| 3 | 1 | 13.249" O.D. COMB. K-WISCER | COMB | 11.58 | 11.58 |
| 4 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 5 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 6 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 7 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 8 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 9 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 10 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 11 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 12 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 13 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 14 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 15 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 16 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 17 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 18 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 19 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 20 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 21 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 22 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 23 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 24 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
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| 33 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
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| 38 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
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| 40 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 41 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 42 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 43 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
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| 45 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 46 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 47 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 48 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
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| 51 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 52 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
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| 54 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 55 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 56 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 57 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 58 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 59 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 60 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 61 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 62 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 63 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 64 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 65 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 66 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 67 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 68 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 69 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 70 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 71 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 72 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 73 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 74 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 75 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 76 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 77 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
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| 79 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 80 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 81 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 82 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 83 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 84 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
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| 86 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 87 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 88 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 89 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 90 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 91 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 92 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 93 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 94 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 95 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 96 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 97 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 98 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 99 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |
| 100 | 1 | 14" End Protector with 16 units | END | 11.58 | 11.58 |

1E21-045

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

1. Owner: FIRSTENERGY CORP. Date 7/28/2011
10 Center Road, Perry, Ohio 44081 Sheet 1 of 2

2. Plant: Perry Nuclear Power Plant (PNPP) Unit One
10 Center Road, Perry, Ohio 44081 200280616
 (Repair Org. P.O. No., etc.)

3. Work Performed By: FIRSTENERGY Nuclear Operating Company PNPP Type Code Symbol Stamp NR
10 Center Road, Perry, Ohio 44081 Authorization No. 33
 Expiration Date 9-28-11

4. Identification of System: 1E21 LOW PRESSURE CORE SPRAY

5. (a) Applicable Construction Code: ASME SECTION III CLASS NB, 1974 Edition
 NAME/SECTION/DIVISION/CLASS
WINTER 1975 Addenda Code Case(s) N/A

(b) Construction Code used for repairs, modifications, or replacements: 1974 Edition W/75 Addenda N/A Code Case(s)

(c) ASME Code Section XI applicable for Inservice Inspection: 2001 Edition 2003 Addenda N/A Code Case(s)

(d) Applicable Edition of Section XI Utilized for Repairs, Modification, or Replacements:
2001 2003 Addenda N/A Code Case(s)

(e) Design Responsibilities FENOC

6. Identification of Components Repaired, Modified, or Replacement Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | Nat. Board No. | Other ID. | Year Built | Repair, Replacement, or Modification | ASME Code Stamped |
|-------------------|----------------------|-------------------------|----------------|---------------------------------|------------|--------------------------------------|-------------------|
| CHECK VALVE | ROCKWELL INTL | RC74 | 823 | 1E12500
1E21 F066 | 1982 | RPL | YES |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: REPLACED (1) VALVE DISC USING PO# 45173904 Serial # 87709-5

8. Test Conducted: Hydrostatic- ☐ Pneumatic- ☐ Nominal Operating Pressure- ☒ Other- ☐
 Pressure NOP psi Test Temperature NOT degrees F Code Case(s) N/A

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

9. Remarks:

NO NAMEPLATE/STAMPING PERFORMED DUE TO THE INTERFACE CONTROLS OF PART 3 SECTION
1.8.6 BEING IN EFFECT AND JURISDICTIONAL AUTHORITY CONCURRENCE HAVING BEEN RECEIVED.

Note: Attach all applicable Manufacturer's Data Reports. Supplemental sheets such as 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 of this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded on the front of this form.

CERTIFICATE OF COMPLIANCE

I, JOHN S DAVIS, 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 items described above conforms to Section XI of the ASME Code and to the National Board Inspection Code "NR" rules.

National Board Certificate of Authorization No. 33 to use the "NR" stamp expires 28 SEPT., 20 11
Date 7/28, 20 11 Signed FENOC-PNPP [Signature] QC SUPV.
(name of repair organization) (authorized representative) (title)

CERTIFICATE OF INSPECTION/INSERVICE INSPECTION

I, THOMAS G LAPS, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of OHIO and employed by HSB CT. of HARTFORD, CT. have inspected the repair, modification or replacement described in this report on AUG. 1, 20 11 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 ASME Code and the National Board Inspection Code "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work 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.

Date 8/1, 20 11 Signed Thomas G Laps Commissions NB 9330 "N" "A" OHIO COMM.
(inspector) (National Board (include endorsements), and jurisdiction, and no.)

1E21-045
Sheet 2 of 2

**FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL
NUCLEAR PARTS AND APPURTENANCES***
As Required by the Provisions of the ASME Code, Section III
Not to Exceed One Day's Production

Pg. 1 of 2

1. Manufactured and certified by Flowserve Corporation, 1900 S. Saunders St., Raleigh, NC 27603
(name and address of NPT Certificate Holder)
2. Manufactured for First Energy Corporation, P. O. Box 6100, Johnstown, PA 15907
(name and address of purchaser)
3. Location of installation First Energy Corp., Perry Nuclear Plant, 10 Center Rd., Perry, OH 44081
(name and address)
4. Type D82-24401-18, R/J SA105 N/A N/A 2006
(drawing no.) (mat'l. spec. no.) (tensile strength) (CRN) (year built)
5. ASME Code, Section III, Division 1: 1974 Winter 1975 1 N/A
(edition) (addenda date) (class) (Code Case no.)
6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A Revision N/A Date N/A
(no.)
7. Remarks: Disk for 12" 4094(WCC)JNQTY Valve
- S. O. 37287
8. Nom. thickness (in.) N/A Min. design thickness (in.) Per #4 Dia. ID (ft & in.) N/A Length overall (ft & in.) N/A
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) 87709-1 | N/A | (26) | |
| (2) 87709-2 | N/A | (27) | |
| (3) 87709-3 | N/A | (28) | |
| (4) 87709-4 | N/A | (29) | |
| (5) 87709-5 | N/A | (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 1421 psi. Temp. 573 °F. Hydro. test pressure N/A at temp. °F
(when applicable)

* Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8½ 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.

(7/98)

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

2

FORM N-2 (Back — Pg 2 of 2)

Certificate Holder's Serial Nos. 87709-1 through 87709-5

CERTIFICATION OF DESIGN

Design specifications certified by _____ (when applicable) P.E. State _____ Reg. no. _____
Design report* certified by _____ (when applicable) P.E. State _____ Reg. no. _____

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) _____ Part(s)
conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-1563 Expires November 26, 2006

Date 2/28/06 Name Flowserve Corporation Signed J.D. [Signature]
(NPT 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 the State or Province
of NC and employed by HSB CT
of Hartford, CT have inspected these items described in this Data Report on 2/28/06, 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 2/28/06 Signed J.M. [Signature] Commissions NC 1421
(Authorized Nuclear Inspector) (Nat'l. Bd. incl. endorsements) and state or prov. and no.]

1E22-077

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

1. Owner: FIRSTENERGY CORP. Date 05/12/2011
10 Center Road, Perry, Ohio 44081 Sheet 1 of 2
2. Plant: Perry Nuclear Power Plant (PNPP) Unit One
10 Center Road, Perry, Ohio 44081 200280617
 (Repair Org. P.O. No., etc.)
3. Work Performed By: FIRSTENERGY Nuclear Operating Company PNPP Type Code Symbol Stamp NR
10 Center Road, Perry, Ohio 44081 Authorization No. 33
 Expiration Date 9-28-11
4. Identification of System: 1E22 HIGH PRESSURE CORE SPRAY SYSTEM
5. (a) Applicable Construction Code: ASME SECTION III CLASS 1, 1974 Edition
 NAME/SECTION/DIVISION/CLASS
WINTER 19 75 Addenda Code Case(s) N/A
- (b) Construction Code used for repairs, modifications, or replacements: 1974 Edition W/75 Addenda N/A Code Case(s)
- (c) ASME Code Section XI applicable for Inservice Inspection: 2001 Edition 2003 Addenda N/A Code Case(s)
- (d) Applicable Edition of Section XI Utilized for Repairs, Modification, or Replacements:
~~19~~ ¹⁹ 2001 ~~19~~ ¹⁹ 2003 Addenda N/A Code Case(s)
~~5/12/11~~ ^{5/12/11}
- (e) Design Responsibilities FENOC

6. Identification of Components Repaired, Modified, or Replacement Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | Nat. Board No. | Other ID. | Year Built | Repair, Replacement, or Modification | ASME Code Stamped |
|-------------------|----------------------|-------------------------|----------------|-----------|------------|--------------------------------------|-------------------|
| Valve | Rockwell | RC-82 | 830 | N/A | 1982 | Replacement | YES |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: PY-1E22F0005. Replace disk 10592 with disk 101257-165890-1

8. Test Conducted: Hydrostatic-☐ Pneumatic-☐ Nominal Operating Pressure-☒ Other-☐
 Pressure NOP psi Test Temperature NOT degrees F Code Case(s) N/A

10/16
 Page 1 of 2
 5/12/11

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

9. Remarks: _____

NO NAMEPLATE/STAMPING PERFORMED DUE TO THE INTERFACE CONTROLS OF PART 3 SECTION

1.8.6 BEING IN EFFECT AND JURISDICTIONAL AUTHORITY CONCURRENCE HAVING BEEN RECEIVED.

Note: Attach all applicable Manufacturer's Data Reports. Supplemental sheets such as 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 of this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded on the front of this form.

CERTIFICATE OF COMPLIANCE

I, JOHN S DAVIS, 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 items described above conforms to Section XI of the ASME Code and to the National Board Inspection Code "NR" rules.

National Board Certificate of Authorization No. 33 to use the NR stamp expires 28 SEPT., 20 11

Date 5/12, 20 11 Signed FENOC-PNPP [Signature] QC SUPV.
(name of repair organization) (authorized representative) (title)

CERTIFICATE OF INSPECTION/INSERVICE INSPECTION

I, THOMAS G LAPS, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of OHIO and employed by HSB CT. of HARTFORD, CT have inspected the repair, modification or replacement described in this report on MAY 13, 20 11 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 ASME Code and the National Board Inspection Code "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work 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.

Date 5/13, 20 11 Signed Thomas G Laps Commissions NB 9330 "N" "I" "A" OHIO COMM.
(inspector) (National Board (include endorsements), and jurisdiction, and no.)

1E22-077

Sheet 2 of 2

**FORM N-2 CERTIFICATE HOLDER'S DATA REPORT FOR IDENTICAL
NUCLEAR PARTS AND APPURTENANCES***
As Required by the Provisions of the ASME Code, Section III
Not to Exceed One Day's Production

Pg. 1 of 2

1. Manufactured and certified by Flowserve Corporation, 1900 S. Saunders St. Raleigh, NC 27603
(name and address of NPT Certificate Holder)

2. Manufactured for First Energy Corp., PO Box 6100, Johnstown, PA 15907
(name and address of purchaser)

3. Location of Installation Perry Nuclear Power Plant, 10 Center Road, Perry OH 44801
(name and address)

4. Type D82-24401-18 Rev. J SA-105 70 PSI N/A 2011
(drawing no.) (material spec. no.) (tensile strength) (CRN) (year built)

5. ASME Code, Section III, Division 1 1974 Winter 1975 1 N/A
(edition) (addenda date) (class) (Code Case no.)

6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A Revision N/A Date N/A
(no.)

7. Remarks SO # 62422 - Disk

8. Nom. thickness 4.25" Min. design thickness 1.53" Diameter ID N/A Length overall N/A

9. When applicable, Certificate Holder's 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) | | (26) | |
| (2) | 101257-1 | (27) | |
| (3) | 101257-2 | (28) | |
| (4) | 101257-3 | (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 1421 Temperature 573 Hydro. test pressure N/A at temp. N/A
(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; and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

(09/06)

FORM N-2 (Back — Pg. 2 of 2)

Certificate Holder's Serial Nos. 101257-1 through 101257-3

CERTIFICATION OF DESIGN

Design specifications certified by Franda C. Rosch, Jr. P.E. State PA Reg. no. 002885-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) Parts
 conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-1563 Expires 11/26/12

Date 4/29/11 Name FLOWSERVE CORPORATION Signed WAPs
(NPT 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 the State or Province
 of NC and employed by HSS CT
 of HARTFORD, CT have inspected these items described in this Data Report on 4/29/11, 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 4/29/11 Signed [Signature] Commissions NB13170 AN / NC1549
(Authorized Nuclear Inspector) (National Bd. (incl. endorsements), and state or prov. and no.)

INFO FOR JUNE 1981

FORM NFV-1 N CERTIFICATE HOLDERS DATA REPORT FOR NUCLEAR PUMPS OR VALVES
As Required by the Provisions of the ASME Code, Section III, Div. 1

1. Manufactured by Rockwell International Corp., 1900 S. Saunders St., Raleigh, NC 27603
(Name and Address of N Certificate Holder)

2. Manufactured for Cleveland Electric Illuminating Co., P. O. Box 500, Cleveland, Oh, 44101
(Name and Address of Purchaser or Owner)

3. Location of Installation Ferry Nuclear Power Plant, Units 1&2, North Perry, Ohio
(Name and Address)

4. Pump or Valve Valve Nominal Inlet Size 12 Outlet Size 12
(inch) (inch)

(a) Model No. (b) N Certificate Holder's (c) Canadian
Series No. Serial Registration (d) Drawing (f) Nat'l (g) Year
or Type No. No. No. No. Bd. No. Built

(1) 4094 (WCC) RC-82 N/A DS2-24401-18 1 830 1982

(2) TRDTY Rev. B

(3)

(4)

(5)

(6)

(7)

(8)

(9)

(10)

5. Active Part Weld End Check Valve
(Brief description of service for which equipment was designed)

Heat No. 1820077-308 Rockwell S.O. 36-24401

6. Design Conditions: 1190 psi 573 °F or Valve Pressure Class N/A (1)
(Pressure) (Temperature)

7. Cold Working Pressure: 1235 psi at 100°F

8. Pressure Retaining Pieces

| Mark No. | Material Spec. No. | Manufacturer | Remarks |
|----------------|-------------------------|--------------------------|---------------------------|
| (a) Castings | | | |
| <u>1820077</u> | <u>SA-216 Gr. WCC</u> | <u>Rockwell Int'l.</u> | <u>Body</u> |
| | | <u>(SMT Div.)</u> | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| (b) Forgings | | | |
| <u>15980</u> | <u>SA-105</u> | <u>Charles E. Larson</u> | <u>Cover</u> |
| <u>10502</u> | <u>SA-105</u> | <u>Charles E. Larson</u> | <u>Disk</u> |
| <u>39796</u> | <u>SA-638 Gr. 66012</u> | <u>Charles E. Larson</u> | <u>Gasket Retainer</u> |
| <u>15980</u> | <u>SA-105</u> | <u>Charles E. Larson</u> | <u>Test Fitting</u> |
| <u>1G3766</u> | <u>SA-182 Gr. F316L</u> | <u>Charles E. Larson</u> | <u>Position Ind. Ring</u> |

(1) For manually operated valves only.

* Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8-1/2" x 11", (2) information in items 1, 2 and 5 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded at top of this form.

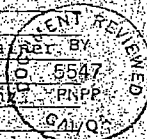
(10/77)

This form (E00037) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017

Ferry Document Cor

AUG 04, 2011

Best Ave/1966
COPY



3

FD-100 (Rev. 1-1967)

AUG 04 2011

Best Available Copy

| Mark No. | Material Spec. No. | Manufacturer | Remarks |
|-------------------|--------------------|--------------|--------------|
| (c) Bolting - N/A | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| (d) Other Parts | | | |
| 110901 | SA-106 Gr. B | Capitol Pipe | Drain Nipple |
| CDI | SA-106 Gr. B | Capitol Pipe | Equalizer |
| | | | |
| | | | |
| | | | |
| | | | |

9. Hydrostatic test 1875 psi. Disk Differential test pressure 1250 psi.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this pump, or valve, conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Div. 1, Edition 1974.

Addenda Winter 1975 Code Case No. N/A Date 12/8/82

Signed Rockwell International by John J. Anderson 12/8/82
(N Certificate Holder) Manager, Quality Assurance

Our ASME Certificate of Authorization No. N-1562 to use the N symbol expires 11/26/85
(N) (Date)

CERTIFICATION OF DESIGN

Design information on file at Rockwell International Corp., Raleigh, NC 27603

Stress analysis report (Class 1 only) on file at Rockwell International Corp., Raleigh, NC 27603

Design specifications certified by (1) Francis C. Pasch, Jr.

PE State Pa. Reg. No. 002855E

Stress analysis certified by (1) Timothy E. Finkle

PE State Pa. Reg. No. 01681RE

(1) Signature not required. List name only.

CERTIFICATE OF SHOP 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 North Carolina and employed by HSB&T Co.

at Hartford, Cr. have inspected the pump, or valve, described in this Data Report on Dec 03 1982 and state that to the best of my knowledge and belief, the N Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III.

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 a loss of any kind arising from or connected with this inspection.

Date Dec 08 1982

David B. [Signature]

Commissions

NB-8383 NC 919
(Nat'l Bd., State, Prov. and No.)

123810706

1E22-078

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

1. Owner: FIRSTENERGY CORP. Date 05/13/2011
10 Center Road, Perry, Ohio 44081 Sheet 1 of 2
2. Plant: Perry Nuclear Power Plant (PNPP) Unit One
10 Center Road, Perry, Ohio 44081 200445476
 (Repair Org. P.O. No., etc.)
3. Work Performed By: FIRSTENERGY Nuclear Operating Company PNPP Type Code Symbol Stamp NR
10 Center Road, Perry, Ohio 44081 Authorization No. 33
 Expiration Date 9-28-11

4. Identification of System: PY-1E22 HIGH PRESSURE CORE SPRAY SYSTEM

5. (a) Applicable Construction Code: ASME SECTION III CLASS 2, 1974 Edition
 NAME/SECTION/DIVISION/CLASS
WINTER 19 75 Addenda Code Case(s) 1644-5, 1683-1, N224-1, N240, N242, N272, N275, N413
- (b) Construction Code used for repairs, modifications, or replacements: 1974 W/75 N/A
 Edition Addenda Code Case(s)
- (c) ASME Code Section XI applicable for Inservice Inspection: 2001 2003 N/A
 Edition Addenda Code Case(s)
- (d) Applicable Edition of Section XI Utilized for Repairs, Modification, or Replacements:
~~19~~ 2001 ~~19~~ 2003 Addenda N/A
~~5/13/11~~ 5/13/11 Code Case(s)
- (e) Design Responsibilities FENOC

6. Identification of Components Repaired, Modified, or Replacement Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | Nat. Board No. | Other ID. | Year Built | Repair, Replacement, or Modification | ASME Code Stamped |
|-------------------|----------------------|-------------------------|----------------|-----------|------------|--------------------------------------|-------------------|
| Piping System | Pullman Power | 1E22 | 86 | N/A | 1985 | Replacement | YES |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: PY-1E22F0035. Replace 1 1/2" X 2" relief valve S/N 3 with 1 1/2" X 2" relief valve S/N 5
Valve
Q. 5/13/11

8. Test Conducted: Hydrostatic- ☐ Pneumatic- ☐ Nominal Operating Pressure- ☒ Other- ☐
 Pressure 524 psi Test Temperature NOT degrees F Code Case(s) N/A

7/11 5/13/11
 Page 1 of 2

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

9. Remarks: _____

NO NAMEPLATE/STAMPING PERFORMED DUE TO THE INTERFACE CONTROLS OF PART 3 SECTION

1.8.6 BEING IN EFFECT AND JURISDICTIONAL AUTHORITY CONCURRENCE HAVING BEEN RECEIVED.

Note: Attach all applicable Manufacturer's Data Reports. Supplemental sheets such as 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 of this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded on the front of this form.

CERTIFICATE OF COMPLIANCE

I, JOHN S DAVIS, 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 items described above conforms to Section XI of the ASME Code and to the National Board Inspection Code "NR" rules.

National Board Certificate of Authorization No. 33 to use the "NR stamp expires 28 SEPT., 20 11

Date 5/28, 20 11 Signed FENOC-PNPP [Signature] QC SUPV.
(name of repair organization) (authorized representative) (title)

CERTIFICATE OF INSPECTION/INSERVICE INSPECTION

I, THOMAS G LAPS, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of OHIO and employed by HSB CT. of HARTFORD, CT. have inspected the repair, modification or replacement described in this report on JUNE 2, 20 11 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 ASME Code and the National Board Inspection Code "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work 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.

Date 6/2, 20 11 Signed Thomas G Laps Commissions NB 9330 "N" "A" OHIO COMM.
(inspector) (National Board (include endorsements), and jurisdiction, and no.)

1E22-078

Sheet 2 of 2

FORM NV-1 MANUFACTURERS' DATA REPORT FOR SAFETY AND SAFETY RELIEF VALVES*
(As Required by the Provisions of the ASME Code, Section III, Div. I)

1. Manufactured by TARGET ROCK CORP., 1966E, Broadhollow Rd., E. Farmingdale, NY
(Name and Address of Manufacturer)

2. Manufactured for Cleveland Electric Illuminating Co., Cleveland, Ohio
(Name and Address of Purchaser or Owner)

3. Location of Installation Perry Nuclear Power Plant, Perry, Ohio
(Name and Address)

4. 1 1/2 X 2" RBH-S-3 1982
(CRN) (Drawing No.) (Nat'l. Std. No.) (Year Built)

5. Valve 76H-012 Identifying Nos. 5
(Model No., Series No.) (Manufacturers' Serial No.)
Type Relief Valve
Safety, Safety Relief; Pilot; Power Actuated

Orifice Size 500 inch Nominal Inlet Size 1 1/2 inch Outlet Size 2" inch

6. Set Pressure (PSIG) 1560 Rated Temperature 212 °F
Stamped Capacity ----- lbs/hr @ ----- % Overpressure Blowdown (PSIG) -----
Set Steam
Hydrostatic Test (PSIG) Inlet 3250 Outlet 3250
(Applicable to valves for closed systems only)

7. Pressure Retaining Pieces

| | Serial No. or Identification | Material Specification Incl. Type or Grade |
|-----------------|------------------------------|--|
| Body | <u>300424</u> | <u>ASME-SA479-316L</u> |
| Bonnet or Yoke | <u>300387</u> | <u>ASME-SA479-316</u> |
| Support Rods | <u>-----</u> | <u>-----</u> |
| Nozzle | <u>202075</u> | <u>ASME-SA479-316L</u> |
| Disc | <u>202989</u> | <u>ASME-SA564, GR. 530</u> |
| Spring Washers | <u>-----</u> | <u>-----</u> |
| Adjusting Screw | <u>-----</u> | <u>-----</u> |
| Spindle | <u>-----</u> | <u>-----</u> |
| Spring | <u>-----</u> | <u>-----</u> |
| Bolting | <u>Nut Hex 3/8-16 UNC2B</u> | <u>ASME-SA194-2H</u> |
| Other Pieces | <u>-----</u> | <u>-----</u> |
| Flange | <u>202074</u> | <u>ASME-SA479-316L</u> |
| Screw Sock. Hd. | <u>3/8-16 x-1 1/2-</u> | <u>ASME-SA193-87</u> |
| Screw Sock. Hd. | <u>102609</u> | <u>ASME-SA193-87</u> |



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

(1/76)

This form (E00042) may be obtained from the Order Dept., ASME, 345 E. 47 St., New York, N.Y. 10017

FORM NV-1 (Back)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this valve conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Div. 1, 1974 Edition, Addenda Sum. 1975 (Date)

Code Case No. ---

Date 12-13-82 Signed Target Rock Corp. by R. M. Nelson
(Manufacturer) 1949 A.G. Abruzzo, Mgr. Quality
Our ASME Certificate of Authorization No. --- to use the NV
(NV)

symbol expires 12/9/87
(Date)

CERTIFICATION OF DESIGN

Design information on file at Target Rock Corporation

Stress analysis report (Class 1 only) on file at ---

Design specifications certified by Jan Paul Sockel

PE State Pa. Reg. No. 20130E

Stress report certified by ---

PE State --- Reg. No. ---

* Signature not required—list name only.

CERTIFICATE OF SHOP 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 New York and employed by Commercial Union Ins. of Boston, Mass. have inspected the pump, or valve, described in this Data Report on 10/13 1982 and state that to the best of my knowledge and belief, the Manufacturer has constructed this pump, or valve, in accordance with the ASME Code for Nuclear Power Plant Components.

By signing this certificate, neither the Inspector nor his employer makes any warrant, 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 a loss of any kind arising from or connected with this inspection.

Date 10/13 1982 NEW YORK STATE COMMISSION NO. 2288

Signed William A. DeLuna Commissions ALSO COMMISSIONED IN Penn., Ohio & Conn.
(Inspector) (Natl. Bd., State Prov. and No.)



1E51-152

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

PNPP No. 9308 Rev. 9/11/00

NQI-1741

1. Owner: FIRSTENERGY CORP. Date 3/31/10
10 Center Road, Perry, Ohio 44081 Sheet 1 of 2
2. Plant: Perry Nuclear Power Plant (PNPP) Unit 1
10 Center Road, Perry, Ohio 44081 Order 200316940
 (Repair Org. P.O. No., etc.)
3. Work Performed By: FIRSTENERGY Nuclear Operating Company PNPP Type-Code Symbol Stamp NR
10 Center Road, Perry, Ohio 44081 Authorization No. 33
 Expiration Date 9/28/11
4. Identification of System: 1E51 RX Core Isolation Cooling
5. (a) Applicable Construction Code: ASME Section III, Class 2, 1974 Edition
 NAME/SECTION/DIVISION/CLASS
Winter 19 75 Addenda Code Case(s) N/A
- (b) Construction Code used for repairs, modifications, or replacements: 1974 Edition W1975 Addenda N/A Code Case(s)
- (c) ASME Code Section XI applicable for Inservice Inspection: 2001 Edition 2003 Addenda N/A Code Case(s)
- (d) Applicable Edition of Section XI Utilized for Repairs, Modification, or Replacements:
2001 Edition, 2003 Addenda, Code Case(s) N/A
- (e) Design Responsibilities FirstEnergy Corp.
6. Identification of Components Repaired, Modified, or Replacement Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | Nat. Board No. | Other ID. | Year Built | Repair, Replacement, or Modification | ASME Code Stamped |
|-------------------|----------------------|-------------------------|----------------|-----------|------------|--------------------------------------|-------------------|
| Pump | Bingham Willamette | 1A017 | 797 | N/A | 1980 | Replacement | Yes |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: Removed rotating element S/N 1A015 and installed rotating element S/A 1A017.
 NOTE: The pump casing was not changed.

8. Test Conducted: Hydrostatic- ☐ Pneumatic- ☐ Nominal Operating Pressure- ☒ Other- ☐
 Pressure 67.72 psig Test Temperature NOP degrees F Code Case(s) N/A
NOT BY 4/6/10

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS (Back)

PNPP No. 9308 Rev. 9/11/00

NQI-1741

9. Remarks: No nameplates/stamping performed due to the interface controls of part 3 section 1.8.6 being in effect and jurisdictional authority concurrence having been received.

Note: Attach all applicable Manufacturer's Data Reports. Supplemental sheets such as 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 of this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded on the front of this form.

CERTIFICATE OF COMPLIANCE

I, David E. Siedlarczyk, 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 items described above conforms to Section XI of the ASME Code and to the National Board Inspection Code "NR" rules.

National Board Certificate of Authorization No. 33 to use the "NR stamp expires September 28, 20 11

Date 8/6, 20 10 Signed FENOC-PNPP [Signature] NQC Supervisor
(name of repair organization) (authorized representative) (title)

CERTIFICATE OF INSPECTION/INSERVICE INSPECTION

I, Thomas G. Laps, holding a valid commission issued by The National Board of Boiler and

Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of OHIO

and employed by HSBCT of Hartford, Conn. Have

inspected the repair, modification or replacement described in this report on AUG 6, 20 10 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 ASME Code and the National Board Inspection Code "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work 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.

Date 8/6, 20 10 Signed Thomas G. Laps Commissions NB 9330 ANI Ohio Commission
(inspector) (National Board (include endorsements), and jurisdiction, and no.)

Document Control
Document Control

ANG 0042811

Best Available
Copy

FORM NPV-1 (Back)

| Mark No. | Material Spec. No. | Manufacturer | Remarks |
|--|--------------------|--------------|-------------------------|
| (c) Bolting | | | |
| 8784 | SA-193-B7 | Metrix | Stud, Case |
| 8785 | SA-194-2H | Metrix | Nut, Case |
| 0124 | SA-193-B8M | Metrix | Stud, Gland |
| 8787 | SA-194-B8M | Metrix | Nut, Gland |
| A | SA-449-G11-2 | Metrix | Cap Screw, Bracket, Mot |
| A | SA-325-1p-1 | Metrix | Bolt, Pump |
| 0610 | SA-193-B7 | Metrix | Taber Pin |
| P.O. 1-45565 | SA-192-304 | Familian | Plugs, Drain |
| (d) Other Parts (See Circulation Piping) | | | |
| TH4051 | SA-312-304 | Tube Sales | Pipe |
| V10 | SA-182-304 | Familian | Tee |
| V10 | SA-182-304 | Familian | Elbow |
| VHV | SA-182-304 | Familian | Plug |
| 0637 | SA-182-304 | Metrix | Orifice |
| VDO-VFA-VKO | SA-182-304 | Familian | Union |

9. Hydrostatic test: 225/900 psi

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this pump or valve conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Div. 1, Edition 1974.

Addenda: H-76 Code Case No. NA Date: 4-22-80

Signed: Bingham-Wilhamette Company by *W. J. Miller* (Manufacturer)

Our ASME Certificate of Authorization No. N-1654 to use the N (NPV) symbol expires 2/28/83 (Date)

CERTIFICATION OF DESIGN

Design information on file at: Bingham-Wilhamette Company

Stress analysis report (Class 1 only) on file at: NA

Design specifications certified by (1): Hiram R. Repper

PE State: Penn Reg. No. 24928E

Stress analysis certified by (1): Paul Oliver - Van Gulk Assoc.

PE State: Oregon Reg. No. 6261

(1) Signature not required. List name only.

CERTIFICATE OF SHOP 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 Oregon and employed by Department of Commerce

of Commerce have inspected the pump or valve described in this Data Report on 4-23 19 80 and state that to the best of my knowledge and belief, the Manufacturer has constructed this pump, or valve, in accordance with the ASME Code, Section III.

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 a loss of any kind arising from or connected with this inspection.

Date: 4-23 19 80
(Inspector) *A. J. Londe*

Commissions: NAB 1037 One 556
(Nat'l Bd., State, Prov. and No.)

1E51-153

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

1. Owner: FIRSTENERGY CORP. Date 7/27/2011
10 Center Road, Perry, Ohio 44081 Sheet 1 of 2
2. Plant: Perry Nuclear Power Plant (PNPP) Unit One
10 Center Road, Perry, Ohio 44081 200389452
 (Repair Org. P.O. No., etc.)
3. Work Performed By: FIRSTENERGY Nuclear Operating Company PNPP Type Code Symbol Stamp NR
10 Center Road, Perry, Ohio 44081 Authorization No. 33
 Expiration Date 9-28-11
4. Identification of System: 1E51 RX CORE ISOLATION COOLING
5. (a) Applicable Construction Code: ASME SECTION III CLASS 2, 1974 Edition
 NAME/SECTION/DIVISION/CLASS
WINTER 1975 Addenda Code Case(s) N/A
- (b) Construction Code used for repairs, modifications, or replacements: 1974 W/75 N/A
 Edition Addenda Code Case(s)
- (c) ASME Code Section XI applicable for Inservice Inspection: 2001 2003 N/A
 Edition Addenda Code Case(s)
- (d) Applicable Edition of Section XI Utilized for Repairs, Modification, or Replacements:
2001 2003 Addenda N/A Code Case(s)
- (e) Design Responsibilities FENOC
6. Identification of Components Repaired, Modified, or Replacement Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | Nat. Board No. | Other ID. | Year Built | Repair, Replacement, or Modification | ASME Code Stamped |
|-------------------|----------------------|-------------------------|----------------|-----------|------------|--------------------------------------|-------------------|
| PIPING SYSTEM | PULLMAN POWER | 1E51 | 84 | N/A | 1985 | REPLACEMENT | YES |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: SEE REMARKS
8. Test Conducted: Hydrostatic- ☐ Pneumatic- ☐ Nominal Operating Pressure- ☒ Other- ☐
 Pressure 1020 psi Test Temperature NOT degrees F Code Case(s) N/A

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

9. Remarks: Removed valve 1E51F0022 (Borg Warner 4" globe valve) S/N 60809 and replaced it with
CCI 4" Drag Valve S/N 105350-010-1. Also replaced 4" smls pipe HT # B68755. Also added weld filler metal
ER70S-2 HT#'S CP7808 & 065905 AND ER309L HT#'S X61358 & DM7772.

NO NAMEPLATE/STAMPING PERFORMED DUE TO THE INTERFACE CONTROLS OF PART 3 SECTION
1.8.6 BEING IN EFFECT AND JURISDICTIONAL AUTHORITY CONCURRENCE HAVING BEEN RECEIVED.

Note: Attach all applicable Manufacturer's Data Reports. Supplemental sheets such as 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 of this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded on the front of this form.

CERTIFICATE OF COMPLIANCE

I, JOHN S DAVIS, 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 items described above conforms to Section XI of the ASME Code and to the National Board Inspection Code "NR" rules.

National Board Certificate of Authorization No. 33 to use the "NR stamp expires 28 SEPT. 20 11
Date 8/1, 20 11 Signed FENOC-PNPP [Signature] QC SUPV.
(name of repair organization) (authorized representative) (title)

CERTIFICATE OF INSPECTION/INSERVICE INSPECTION

I, THOMAS G LAPS, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of OHIO and employed by HSB CT. of HARTFORD CT. have inspected the repair, modification or replacement described in this report on AUG. 1, 20 11 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 ASME Code and the National Board Inspection Code "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work 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.

Date 8/1, 20 11 Signed Thomas G Laps Commissions NB 9330 "N" "A" OHIO COMM.
(inspector) (National Board (include endorsements), and jurisdiction, and no.)

Pg. 1 of 2

[illegible]

This form (E00037) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

FORM NPV-1 (Back - Pg. 2 of 2)

Certificate Holder's Serial No. 105350-010-1

8. Design conditions 1525 psi 212 Deg. F or Valve pressure class N/A (1)
(pressure) (temperature)

9. Cold working pressure 2220 psi at 100 Deg. F

10. Hydrostatic test 3350 psi Disk differential pressure N/A psi

11. Remarks BONNET STUDS: MATL: SA193-B7 // HEAT NO.: 907620 // CCI TRACE CODE # R110
BONNET NUTS: MATL: SA194-2H // HEAT NO.: 3012027 // CCI TRACE CODE # R109

CERTIFICATE OF DESIGN

Design Specification certified by MARLIN CARPENTER P.E. State OHIO Reg. no. 39473
Design Report certified by HERBERT L. MILLER P.E. State OHIO Reg. no. 32776

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, Div. 1.

N Certificate of Authorization No. N-2695 Expires AUGUST 14, 2012

Date 10 MAR 11 Name Control Components Inc. (CCI) 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 the State or Province of CALIFORNIA and employed by HSB CT of HARTFORD, CONNECTICUT have inspected the pump, or valve, described in this Data Report on 3/10/11 and state that to the best of my knowledge and belief, the Certificate Holder has constructed this pump or valve, in accordance with ASME Section III, Division 1.

By signing this certificate, neither the inspector nor his employer makes 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 loss of any kind arising from or connected with this inspection.

Date 3/10/11 Signed [Signature] Commissions CA09A, 128129A
(Authorized Inspector) (Nat'l Bd. (including endorsement) and state or prov., and no.)

(1) For manually operated valves only.

1E51-154

2

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

1. Owner: FIRSTENERGY CORP. Date 7/18/2011
10 Center Road, Perry, Ohio 44081 Sheet 1 of 2
2. Plant: Perry Nuclear Power Plant (PNPP) Unit 1
10 Center Road, Perry, Ohio 44081 200288972
 (Repair Org. P.O. No., etc.)
3. Work Performed By: FIRSTENERGY Nuclear Operating Company PNPP Type Code Symbol Stamp NR
10 Center Road, Perry, Ohio 44081 Authorization No. 33
 Expiration Date 9/28/2011
4. Identification of System: Reactor Core Isolation Cooling System
5. (a) Applicable Construction Code: ASME SECTION III CLASS 2 NC, 1974 Edition
 NAME/SECTION/DIVISION/CLASS
WINTER 19 75 Addenda Code Case(s) 1728,1644-5,n-224,n241,n242,n272,n275,n413
- (b) Construction Code used for repairs, modifications, or replacements: 1974 W/75
 Edition Addenda Code Case(s)
- (c) ASME Code Section XI applicable for Inservice Inspection: 2001 2003 N/A
 Edition Addenda Code Case(s)
- (d) Applicable Edition of Section XI Utilized for Repairs, Modification, or Replacements:
 19 2001 19 2003 Addenda N/A
 Code Case(s)
- (e) Design Responsibilities FENOC

6. Identification of Components Repaired, Modified, or Replacement Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | Nat. Board No. | Other ID. | Year Built | Repair, Replacement, or Modification | ASME Code Stamped |
|-------------------|----------------------|-------------------------|----------------|-----------|------------|--------------------------------------|-------------------|
| Piping System | Pullman Standard | 1E51 | 84 | 1E51D002 | 1985 | RPL | Yes |
| Piping System | Pullman Standard | 1E51 | 84 | 1E51D0001 | 1985 | RPL | YES |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: Replaced 2 Rupture Discs S/N A1090000-01 with S/N 10090002-1.

8. Test Conducted: Hydrostatic- ☐ Pneumatic- ☐ Nominal Operating Pressure- ☒ Other- ☐
 Pressure N/A psi Test Temperature N/A degrees F Code Case(s) N/A
- NPT
Jm 8/1/11

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

9. Remarks: _____

NO NAMEPLATE/STAMPING PERFORMED DUE TO THE INTERFACE CONTROLS OF PART 3 SECTION
1.8.6 BEING IN EFFECT AND JURISDICTIONAL AUTHORITY CONCURRENCE HAVING BEEN RECEIVED.

Note: Attach all applicable Manufacturer's Data Reports. Supplemental sheets such as 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 of this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded on the front of this form.

CERTIFICATE OF COMPLIANCE

I, John Davis, 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 items described above conforms to Section XI of the ASME Code and to the National Board Inspection Code "NR" rules.

National Board Certificate of Authorization No. 33 to use the "NR" stamp expires 9/28/, 20 11
Date 7/29, 20 11 Signed FENOC-PNPP [Signature] QC Supv.
(name of repair organization) (authorized representative) (title)

CERTIFICATE OF INSPECTION/INSERVICE INSPECTION

I, Thomas G. Laps, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of OHIO and employed by HSB CT of Hartford CT. have inspected the repair, modification or replacement described in this report on Aug. 1, 2011 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 ASME Code and the National Board Inspection Code "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work 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.

Date 8/1, 20 11 Signed Thomas G. Laps Commissions NB 9330 "N" "I" "A" Ohio Comm
(inspector) (National Board (include endorsements), and jurisdiction, and no.)

1E51-154
sheet 2062

BS&B SAFETY SYSTEMS, LLC

FORM NR-1

ASME SEC III, Division 1, Class 2, 1974 Edition with all Addenda thru Winter 1975

1. MANUFACTURED BY: BS&B SAFETY SYSTEMS, TULSA, OK.
2. TYPE OF STYLE: BV LOT NO: 10090002-1 --*
3. DISK DIMENSIONAL CHARACTERISTICS:
SIZE: 8 INCH CALCULATED CAPACITY VALUE: 95,300 SCFM AIR
4. MATERIAL SPECIFICATION: 316/316
5. DRAWING NO: N/A
6. BURST PRESSURE: MIN 151 MAX 167 PSIG @ 212°F
7. COINCIDENT DISK TEMPERATURE: 212°F
8. ELEMENT USED IN TEST: AIR
9. CYCLIC TEST RESULTS: N/A
10. PLACE OF TEST: TULSA, OKLAHOMA

WE CERTIFY THE ABOVE DATA TO BE CORRECT AND THAT THESE DISKS HAVE BEEN MANUFACTURED AND TESTED TO THE REQUIREMENTS OF THE ASME CODE.

DATE: 03/08/2010ISSUED BY: BS&B SAFETY SYSTEMS, LLC.APPROVED BY: [Signature]

QUALITY ASSURANCE MANAGER

NO. OF PIECES SHIPPED: 4

BURST TEST RESULTS: 159,159 PSIG @ 212°F
190 PSIG @ 72°F

03/24/2010
002125

GE Turn Roll J. L. [Signature] 3/8/10

BS&B Safety Systems, LLC • 7455 E. 46TH Street • P.O. Box 470590 • Tulsa, OK 74147-0590
Phone 918/622-5950 • Fax 918/685-3904
Email sales@bsbsystems.com • Website www.bsbsystems.com

1 E51-155

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

1. Owner: FIRSTENERGY CORP. Date 7/26/2011
10 Center Road, Perry, Ohio 44081 Sheet 1 of 2
2. Plant: Perry Nuclear Power Plant (PNPP) Unit One
10 Center Road, Perry, Ohio 44081 200375354
 (Repair Org. P.O. No., etc.)
3. Work Performed By: FIRSTENERGY Nuclear Operating Company PNPP Type Code Symbol Stamp NR
10 Center Road, Perry, Ohio 44081 Authorization No. 33
 Expiration Date 9-28-11

4. Identification of System: 1E51 RX ISOLATION COOLING SYSTEM

5. (a) Applicable Construction Code: ASME SECTION III CLASS NB, 1974 Edition
 NAME/SECTION/DIVISION/CLASS
WINTER 1975 Addenda Code Case(s) N/A

(b) Construction Code used for repairs, modifications, or replacements: 1974 W/75 N/A
 Edition Addenda Code Case(s)

(c) ASME Code Section XI applicable for Inservice Inspection: 2001 2003 N/A
 Edition Addenda Code Case(s)

(d) Applicable Edition of Section XI Utilized for Repairs, Modification, or Replacements:

2001 2003 Addenda N/A
 Code Case(s)

(e) Design Responsibilities FENOC

6. Identification of Components Repaired, Modified, or Replacement Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | Nat. Board No. | Other ID. | Year Built | Repair, Replacement, or Modification | ASME Code Stamped |
|-------------------|----------------------|-------------------------|----------------|--------------|------------|--------------------------------------|-------------------|
| VALVE | ROCKWELL | RA-53 | 824 | 1E51F06
6 | 1982 | REPLACEMENT | YES |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: Installed new disk S/N 97526-1. Also replaced (12) 1-3/8-8 studs ht# (2) 32631 & (10) LL41 and 24 1-3/8 hex nuts HT# (6) B145, (6) TBX, (4) CDR-2, (8) CDR-1. Weld Rd. HT.# CP7808

8. Test Conducted: Hydrostatic- ☐ Pneumatic- ☐ Nominal Operating Pressure- ☒ Other- ☐
 Pressure 1030 psi Test Temperature 150 degrees F Code Case(s) N/A

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

9. Remarks: _____

NO NAMEPLATE/STAMPING PERFORMED DUE TO THE INTERFACE CONTROLS OF PART 3 SECTION

1.8.6 BEING IN EFFECT AND JURISDICTIONAL AUTHORITY CONCURRENCE HAVING BEEN RECEIVED.

Note: Attach all applicable Manufacturer's Data Reports. Supplemental sheets such as 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 of this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded on the front of this form.

CERTIFICATE OF COMPLIANCE

I, JOHN S DAVIS, 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 items described above conforms to Section XI of the ASME Code and to the National Board Inspection Code "NR" rules.

National Board Certificate of Authorization No. 33 to use the "NR" stamp expires 28 SEPT. 20 11

Date 8/3 20 11 Signed FENOC-PNPP [Signature] QC SUPV.
(name of repair organization) (authorized representative) (title)

CERTIFICATE OF INSPECTION/INSERVICE INSPECTION

I, THOMAS G LAPS, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of OHIO

and employed by HSB CT. of HARTFORD, CT. have

inspected the repair, modification or replacement described in this report on AUG. 3, 20 11 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 ASME Code and the National Board Inspection Code "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work 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.

Date 8/3 20 11 Signed Thomas G Laps Commissions NB 9330 "N"IA" OHIO COMM.
(inspector) (National Board (include endorsements), and jurisdiction, and no.)

1ES1-155
SHEET 2 OF 2
JL
8/2/10

**FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL
NUCLEAR PARTS AND APPURTENANCES***
As Required by the Provisions of the ASME Code, Section III
Not to Exceed One Day's Production

Pg. 1 of 2

1. Manufactured and certified by Flowserve Corporation 1900 S. Saunders St. Raleigh, NC
(name and address of NPT Certificate Holder)
2. Manufactured for First Energy Corp/Accounts Payable/P.O. Box 6100 Johnstown, PA 15907-6100
(name and address of purchaser)
3. Location of installation Perry Main Warehouse/Perry Nuclear Power Plant/ 10 Center Road, Perry OH 44081
(name and address)
4. Type D82-24401-17, R/F SA105 N/A N/A 2009
(drawing no.) (mat'l. spec. no.) (tensile strength) (CRN) (year built)
5. ASME Code, Section III, Division 1: 1974 Winter, 1975 1 N/A
(edition) (addenda date) (class) (Code Case no.)
6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A Revision N/A Date N/A
(no.)
7. Remarks: Disk-Piston for 6" 4094(WCC)QTY Valve
S.O. —
8. Nom. thickness (in.) N/A Min. design thickness (in.) Per #4 Dia. ID (ft & in.) N/A Length overall (ft & in.) N/A
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>97526-1</u> | <u>N/A</u> | (26) _____ | |
| (2) <u>97526-2</u> | <u>N/A</u> | (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 _____ at temp. °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.

(11/05)

Certificate Holder's Serial Nos. 97526-1 through 97526-2

CERTIFICATION OF DESIGN

Design specifications certified by N/A P.E. State N/A Reg. no. N/A
(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) Parts
conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-1563 Expires 11-26-09
Date 8/31/09 Name Flowserve Corporation Signed [Signature]
(NPT 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 the State or Province
of NC and employed by HSB CT
of Hartford, CT have inspected these items described in this Data Report on 8/31/09, 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 8/31/09 Signed [Signature] Commissions NC1549
(Authorized Nuclear Inspector) (Natl. Bd. (incl. endorsements) and state or prov. and no.)

1E51-156

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

1. Owner: FIRSTENERGY CORP. Date 08/03/2011
10 Center Road, Perry, Ohio 44081 Sheet 1 of 1
2. Plant: Perry Nuclear Power Plant (PNPP) Unit One
10 Center Road, Perry, Ohio 44081 200377205
 (Repair Org. P.O. No., etc.)
3. Work Performed By: FIRSTENERGY Nuclear Operating Company PNPP Type Code Symbol Stamp NR
10 Center Road, Perry, Ohio 44081 Authorization No. 33
 Expiration Date 9-28-11
4. Identification of System: 1E51 RX CORE ISOLATION COOLING
5. (a) Applicable Construction Code: ASME SECTION III CLASS 1, 1974 Edition
 NAME/SECTION/DIVISION/CLASS
WINTER 1975 Addenda Code Case(s) * N413, N275, N242, N241, N224, 1728, 1644-5
- (b) Construction Code used for repairs, modifications, or replacements: 1974 W/75 *
 Edition Addenda Code Case(s)
- (c) ASME Code Section XI applicable for Inservice Inspection: 2001 2003 N/A
 Edition Addenda Code Case(s)
- (d) Applicable Edition of Section XI Utilized for Repairs, Modification, or Replacements:
49, 2001 49 2003 Addenda N/A
 TJK 05/13/2011 TJK 05/13/2011 Code Case(s)
- (e) Design Responsibilities FENOC
6. Identification of Components Repaired, Modified, or Replacement Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | Nat. Board No. | Other ID. | Year Built | Repair, Replacement, or Modification | ASME Code Stamped |
|-------------------|----------------------|-------------------------|----------------|-----------|------------|--------------------------------------|-------------------|
| Piping System | Pullman Power | 1E51 | 84 | N/A | 1985 | Replacement | YES |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: 1E51. Install Head Spray Piping Using 1 3/8" Studs (12) H/N D145 (10) and 32361/SME (2) and 1 3/8" Heavy Hex Nuts H/N S663 (15) on flanges 1 and 2.
8. Test Conducted: Hydrostatic- ☐ Pneumatic- ☐ Nominal Operating Pressure- ☒ Other- ☐
 Pressure 1025 psi Test Temperature 132 degrees F Code Case(s) N/A

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

9. Remarks: N/A

NO NAMEPLATE/STAMPING PERFORMED DUE TO THE INTERFACE CONTROLS OF PART 3 SECTION

1.8.6 BEING IN EFFECT AND JURISDICTIONAL AUTHORITY CONCURRENCE HAVING BEEN RECEIVED.

Note: Attach all applicable Manufacturer's Data Reports. Supplemental sheets such as 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 of this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded on the front of this form.

CERTIFICATE OF COMPLIANCE

I, JOHN S DAVIS, 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 items described above conforms to Section XI of the ASME Code and to the National Board Inspection Code "NR" rules.

National Board Certificate of Authorization No. 33 to use the "NR" stamp expires 28 SEPT. 20 11
Date 8/4, 20 11 Signed FENOC-PNPP [Signature] QC SUPV.
(name of repair organization) (authorized representative) (title)

CERTIFICATE OF INSPECTION/INSERVICE INSPECTION

I, THOMAS G LAPS, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of OHIO and employed by HSB CT. of HARTFORD, CT. have inspected the repair, modification or replacement described in this report on Aug. 5, 20 11 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 ASME Code and the National Board Inspection Code "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work 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.

Date 8/5, 20 11 Signed Thomas G Laps Commissions NB 9330 "N" "I" "A" OHIO COMM.
(inspector) (National Board (include endorsements), and jurisdiction, and no.)

1G41-035

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

1. Owner: FIRSTENERGY CORP. Date 06/06/2011
10 Center Road, Perry, Ohio 44081 Sheet 1 of 2
2. Plant: Perry Nuclear Power Plant (PNPP) Unit One
10 Center Road, Perry, Ohio 44081 200456289
 (Repair Org. P.O. No., etc.)
3. Work Performed By: FIRSTENERGY Nuclear Operating Company PNPP Type Code Symbol Stamp NR
10 Center Road, Perry, Ohio 44081 Authorization No. 33
 Expiration Date 9-28-11
4. Identification of System: 1G41 FUEL POOL COOLING DRAIN AND CLEANUP
5. (a) Applicable Construction Code: ASME SECTION III CLASS 2, 1974 Edition
 NAME/SECTION/DIVISION/CLASS
WINTER 1975 Addenda Code Case(s) *N-242,N-282,N-272,N-413,1644-5,N240,N-32-4,
N-275
- (b) Construction Code used for repairs, modifications, or replacements: 1974 W/75 *
 Edition Addenda Code Case(s)
- (c) ASME Code Section XI applicable for Inservice Inspection: 2001 2003 N/A
 Edition Addenda Code Case(s)
- (d) Applicable Edition of Section XI Utilized for Repairs, Modification, or Replacements:
19-2001 19-2003 Addenda N/A
 TJK 05/13/2011 TJK 05/13/2011 Code Case(s)
- (e) Design Responsibilities FENOC
6. Identification of Components Repaired, Modified, or Replacement Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | Nat. Board No. | Other ID. | Year Built | Repair, Replacement, or Modification | ASME Code Stamped |
|-------------------|----------------------|-------------------------|----------------|-----------|------------|--------------------------------------|-------------------|
| Piping System | Pullman Power | 1G41 | 95 | N/A | 1985 | Replacement | YES |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: PY-1G41F0522. Replace 8" check valve with 8" check valve S/N N98696-00-0001.
8. Test Conducted: Hydrostatic- ☐ Pneumatic- ☐ Nominal Operating Pressure- ☒ Other- ☐
 Pressure 133 psi Test Temperature NOT degrees F Code Case(s) N/A

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

9. Remarks: _____

NO NAMEPLATE/STAMPING PERFORMED DUE TO THE INTERFACE CONTROLS OF PART 3 SECTION
1.8.6 BEING IN EFFECT AND JURISDICTIONAL AUTHORITY CONCURRENCE HAVING BEEN RECEIVED.

Note: Attach all applicable Manufacturer's Data Reports. Supplemental sheets such as 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 of this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded on the front of this form.

CERTIFICATE OF COMPLIANCE

William G. Morris

I, JOHN S DAVIS 8-1-11, 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 items described above conforms to Section XI of the ASME Code and to the National Board Inspection Code "NR" rules.

National Board Certificate of Authorization No. 33 to use the "NR stamp expires 28 SEPT., 20 11

Date _____, 20 ____ Signed FENOC-PNPP William G. Morris QC SUPV.
(name of repair organization) (authorized representative) (title)

CERTIFICATE OF INSPECTION/INSERVICE INSPECTION

I, THOMAS G LAPS, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of OHIO and employed by HSB CT. of HARTFORD, CT. have inspected the repair, modification or replacement described in this report on 8-6-11 20 11 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 ASME Code and the National Board Inspection Code "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work 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.

Date 8/11, 20 11 Signed Thomas G Laps Commissions NB 9330 "N" "A" OHIO COMM.
(inspector) (National Board (include endorsements), and jurisdiction, and no.)

FORM NPV-1 (Back - Pg. 2 of 2)

Certificate Holder's Serial No. N98696-00-0001

8. Design conditions 150 psi 150 ° F of valve pressure class ANSI CL150 (1)
(pressure) (temperature)
9. Cold working pressure 285 psi at 100°F
10. Hydrostatic test 450 psi Disk differential test pressure N/A psi
11. Remarks:

CERTIFICATE OF DESIGN

Design Specification certified by MILTON G. CAPIOTIS P.E. State PA Reg. No. 028303-B
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-1876 Expires 30 SEPTEMBER 2001

Date 22-FEB-02 Name ANDERSON GREENWOOD/CROSBY Signed D.E. Tux
(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 the State or Province of MASSACHUSETTS and employed by FACTORY MUTUAL INS. CO. of JOHNSTON, RI have inspected the pump, or valve, described in this Data Report on February 22, 2002, 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 2/22/02 Signed [Signature] Commissions MA-1418
(Authorized Inspector) (Nat'l. Bd. (incl. Endorsements) and state or prov. and no.)

* 8-11-11

[Signature]
ANE

MA-1420, A, B, N, I, NS

1N22-069

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

1. Owner: FIRSTENERGY CORP. Date 5-11-11
10 Center Road, Perry, Ohio 44081 Sheet 1 of 2
2. Plant: Perry Nuclear Power Plant (PNPP) Unit One
10 Center Road, Perry, Ohio 44081 200386050
 (Repair Org. P.O. No., etc.)
3. Work Performed By: FIRSTENERGY Nuclear Operating Company PNPP Type Code Symbol Stamp NR
10 Center Road, Perry, Ohio 44081 Authorization No. 33
 Expiration Date 9-28-11
4. Identification of System: MAIN, REHEAT, EXTRACTION DRAINS
5. (a) Applicable Construction Code: ASME SECTION III CLASS 2, 1974 Edition
 NAME/SECTION/DIVISION/CLASS
WINTER 19 75 Addenda Code Case(s) *N272, 1644-5.
- (b) Construction Code used for repairs, modifications, or replacements: 1974 W/75 *
 Edition Addenda Code Case(s)
- (c) ASME Code Section XI applicable for Inservice Inspection: 2001 2003 N/A
 Edition Addenda Code Case(s)
- (d) Applicable Edition of Section XI Utilized for Repairs, Modification, or Replacements:
19th, 2001 19th 2003 Addenda N/A
2011-11-11 2-11-11 Code Case(s)
- (e) Design Responsibilities FENOC

6. Identification of Components Repaired, Modified, or Replacement Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | Nat. Board No. | Other ID. | Year Built | Repair, Replacement, or Modification | ASME Code Stamped |
|-------------------|----------------------|-------------------------|----------------|-----------|------------|--------------------------------------|-------------------|
| PIPING | PULLMAN POWER | 1N22 | 112 | N/A | 1985 | REPLACEMENT | YES |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: 1N22H0146. REPLACED SNUBER S/N 18865 WITH SNUBBER S/N 18823.

8. Test Conducted: Hydrostatic- ☐ Pneumatic- ☐ Nominal Operating Pressure- ☐ Other- ☐
 Pressure N/A psi Test Temperature N/A degrees F Code Case(s) N/A

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

9. Remarks: _____

NO NAMEPLATE/STAMPING PERFORMED DUE TO THE INTERFACE CONTROLS OF PART 3 SECTION

1.8.6 BEING IN EFFECT AND JURISDICTIONAL AUTHORITY CONCURRENCE HAVING BEEN RECEIVED.

Note: Attach all applicable Manufacturer's Data Reports. Supplemental sheets such as 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 of this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded on the front of this form.

CERTIFICATE OF COMPLIANCE

I, JOHN S DAVIS, 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 items described above conforms to Section XI of the ASME Code and to the National Board Inspection Code "NR" rules.

National Board Certificate of Authorization No. 33 to use the "NR" stamp expires 28 SEPT., 20 11
Date 5/11, 20 11 Signed FENOC-PNPP [Signature] QC SUPV.
(name of repair organization) (authorized representative) (title)

CERTIFICATE OF INSPECTION/INSERVICE INSPECTION

I, THOMAS G LAPS, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of OHIO and employed by HSB CT of HARTFORD, CT have inspected the repair, modification or replacement described in this report on MAY 11, 20 11 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 ASME Code and the National Board Inspection Code "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work 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.

Date 5/11, 20 11 Signed Thomas G Laps Commissions NB 9330 "N" "A" OHIO COMM.
(inspector) (National Board (include endorsements), and jurisdiction, and no.)

IN22-069 SHEET 2 OF 2

FORM NP-1 NP7 COMPONENT HOLDERS' DATA REPORT FOR COMPONENT SUPPORTS*
As Prescribed by the Provisions of the ASME Code Rules, Section III, Division 1

KIRKPATRICK DIVISION

1. Manufactured by Pacific Scientific 1346 S. State College Blvd., Anaheim, CA 92803
(Name and address of NP7 Certificate holder)

2. Manufacturer for Power Piping Co. 829 Beaver Ave. Pittsburgh, PA 15233
(Name and address of purchaser or owner)

3. Location of installation Unknown

4. Identification

| (a)
Component
Support
I.D. No. | (b)
Canadian
Registration
No. | (c)
Applicable
Drawings with
Last Rev. & Date | (d)
Stress Report
or Load Capacity
Data Sheet | (e)
Type of
Component
Support | (f)
Class | (g)
NP7 Board
No. | (h)
Year Built |
|---|--|--|--|--|--------------|-------------------------|-------------------|
| (1) 18819 | NONE | 1801104-075 | 1801104-075 | Linear | 1 | NONE | 1980 |
| (2) thru | | | | | | | |
| (3) 18887 | | | | | | | |
| (4) | | | | | | | |
| (5) | | | | | | | |
| (6) | | | | | | | |
| (7) | | | | | | | |
| (8) | | | | | | | |
| (9) | | | | | | | |
| (10) | | | | | | | |

5. Remarks

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that these component supports conform to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Division 1, Edition 1974, Addenda 1975.

Code Case No. 1644-6

Date 6/19/83 Signed Pacific Scientific by Harold A. Nara
(NP7 Certificate holder)

Our ASME Certificate of Authorization No. 1198 to use the NP7 (NP7)

Symbol expires Aug. 4, 1984 (Date)

CERTIFICATION OF DESIGN

Design Information on File at Pacific Scientific

Stress Report or Load Capacity Data Sheets on File at Pacific Scientific
Filed Per ICA 3256

Design Specifications Certified by (1) Leo E. Ay PE State California
Reg. No. 13533

Stress Analysis Report or Load Capacity Data Sheets Certified by (1) Leo E. Ay
PE State California Reg. No. 13533

(1) Last Name only, signature not required.

* Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8 1/2 in. (2) information in items 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.

(19/77)

This form (192377) may be obtained from the Order Dept., ASME, 300 E. 47th St., New York, N.Y. 10017

FORM NF-1 (Back)

7928 276

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Pennsylvania and employed by HSRIAT Co. of Hartford, CT have inspected the component supports described in this Data Report on 6-10-83 and state that to the best of my knowledge and belief the NPT Certificate holder has constructed these component supports in accordance with the ASME Code for Nuclear Power Plant Components.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the component supports 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 6-10-83

Signed Armando F. Reyes Commission CA 1524 WC 8940
(Not to be State Phil. and No. 1)

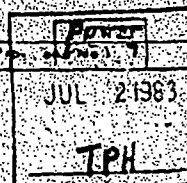
CERTIFICATION OF FIELD INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Pennsylvania and employed by HSRIAT Co. of Hartford, CT have compared the statements in this Data Report with the described component supports and state that the 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 NPT Certificate holder has constructed these component supports in accordance with the ASME Code for Nuclear Power Plant Components.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the component supports 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 _____

Signed _____ Commission _____
(Not to be State Phil. and No. 1)



U.S. Nuclear Regulatory Commission
Washington, D.C. 20545
NRC-100-1-13114

Perry Document Control

AUG 04 2011

Best Available
Copy



0 368

1N22-070

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

1. Owner: FIRSTENERGY CORP. Date 05/24/2011
10 Center Road, Perry, Ohio 44081 Sheet 1 of 1
2. Plant: Perry Nuclear Power Plant (PNPP) Unit One
10 Center Road, Perry, Ohio 44081 200414558
 (Repair Org. P.O. No., etc.)
3. Work Performed By: FIRSTENERGY Nuclear Operating Company PNPP Type Code Symbol Stamp NR
10 Center Road, Perry, Ohio 44081 Authorization No. 33
 Expiration Date 9-28-11
4. Identification of System: PY-1N22 PIPE SUPPORT - SNUBBER
5. (a) Applicable Construction Code: ASME SECTION III CLASS 1, 1974 Edition
 NAME/SECTION/DIVISION/CLASS
WINTER 1975 Addenda Code Case(s) *N272,1644-5
- (b) Construction Code used for repairs, modifications, or replacements: 1974 W/75 *
 Edition Addenda Code Case(s)
- (c) ASME Code Section XI applicable for Inservice Inspection: 2001 2003 N/A
 Edition Addenda Code Case(s)
- (d) Applicable Edition of Section XI Utilized for Repairs, Modification, or Replacements:
19 2001 19 2003 Addenda N/A
 TJK 05/13/2011 TJK 05/13/2011 Code Case(s)
- (e) Design Responsibilities FENOC

6. Identification of Components Repaired, Modified, or Replacement Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | Nat. Board No. | Other ID. | Year Built | Repair, Replacement, or Modification | ASME Code Stamped |
|-------------------|----------------------|-------------------------|----------------|-----------|------------|--------------------------------------|-------------------|
| Piping System | Pullman Power | 1N22 | 112 | N/A | 1985 | Replacement | YES |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: 1N22H0006. Replace PSA-3 Snubber S/N 27447 with PSA-3 Snubber S/N 43326

8. Test Conducted: Hydrostatic- ☐ Pneumatic- ☐ Nominal Operating Pressure- ☐ Other- ☐
 Pressure N/A psi Test Temperature N/A degrees F Code Case(s) N/A

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

9. Remarks: _____

NO NAMEPLATE/STAMPING PERFORMED DUE TO THE INTERFACE CONTROLS OF PART 3 SECTION

1.8.6 BEING IN EFFECT AND JURISDICTIONAL AUTHORITY CONCURRENCE HAVING BEEN RECEIVED.

Note: Attach all applicable Manufacturer's Data Reports. Supplemental sheets such as 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 of this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded on the front of this form.

CERTIFICATE OF COMPLIANCE

I, JOHN S DAVIS, 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 items described above conforms to Section XI of the ASME Code and to the National Board Inspection Code "NR" rules.

National Board Certificate of Authorization No. 33 to use the "NR" stamp expires 28 SEPT., 20 11
Date 5/27, 20 11 Signed FENOC-PNPP [Signature] QC SUPV.
(name of repair organization) (authorized representative) (title)

CERTIFICATE OF INSPECTION/INSERVICE INSPECTION

I, THOMAS G LAPS, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of OHIO and employed by HSB CT. of HARTFORD, CT have inspected the repair, modification or replacement described in this report on MAY 27, 20 11 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 ASME Code and the National Board Inspection Code "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work 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.

Date 5/27, 20 11 Signed Thomas G Laps Commissions NB 9330 "N" "I" "A" OHIO COMM.
(inspector) (National Board (include endorsements), and jurisdiction, and no.)

1N22-071

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

1. Owner: FIRSTENERGY CORP. Date 05/21/2011
10 Center Road, Perry, Ohio 44081 Sheet 1 of 21
214521-4

2. Plant: Perry Nuclear Power Plant (PNPP) Unit One
10 Center Road, Perry, Ohio 44081 200414547
 (Repair Org. P.O. No., etc.)

3. Work Performed By: FIRSTENERGY Nuclear Operating Company PNPP Type Code Symbol Stamp NR
10 Center Road, Perry, Ohio 44081 Authorization No. 33
 Expiration Date 9-28-11

4. Identification of System: 1N22 MAIN, REHEAT, EXTRACTION, AND MISC DRAIN

5. (a) Applicable Construction Code: ASME SECTION III CLASS 2, 1974 Edition
 NAME/SECTION/DIVISION/CLASS
WINTER 1975 Addenda Code Case(s) *N272,1644-5

(b) Construction Code used for repairs, modifications, or replacements: 1974 W/75 *
 Edition Addenda Code Case(s)

(c) ASME Code Section XI applicable for Inservice Inspection: 2001 2003 N/A
 Edition Addenda Code Case(s)

(d) Applicable Edition of Section XI Utilized for Repairs, Modification, or Replacements:
19 2001 19 2003 Addenda N/A
 TJK 05/13/2011 TJK 05/13/2011 Code Case(s)

(e) Design Responsibilities FENOC

6. Identification of Components Repaired, Modified, or Replacement Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | Nat. Board No. | Other ID. | Year Built | Repair, Replacement, or Modification | ASME Code Stamped |
|-------------------|----------------------|-------------------------|----------------|-----------|------------|--------------------------------------|-------------------|
| Piping System | Pullman Power | 1N22 | 112 | N/A | 1985 | Replacement | YES |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: Replace PSA 1/4 Snubber S/N 29943 with PSA 1/4 Snubber S/N 39115.
1N22H0087 *214521-4*

8. Test Conducted: Hydrostatic- ☐ Pneumatic- ☐ Nominal Operating Pressure- ☐ Other- ☐
 Pressure N/A psi Test Temperature N/A degrees F Code Case(s) N/A

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

9. Remarks: _____

NO NAMEPLATE/STAMPING PERFORMED DUE TO THE INTERFACE CONTROLS OF PART 3 SECTION

1.8.6 BEING IN EFFECT AND JURISDICTIONAL AUTHORITY CONCURRENCE HAVING BEEN RECEIVED.

Note: Attach all applicable Manufacturer's Data Reports. Supplemental sheets such as 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 of this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded on the front of this form.

CERTIFICATE OF COMPLIANCE

I, JOHN S DAVIS, 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 items described above conforms to Section XI of the ASME Code and to the National Board Inspection Code "NR" rules.

National Board Certificate of Authorization No. 33 to use the "NR stamp" expires 28 SEPT., 20 11
Date 5/24, 20 11 Signed FENOC-PNPP [Signature] QC SUPV.
(name of repair organization) (authorized representative) (title)

CERTIFICATE OF INSPECTION/INSERVICE INSPECTION

I, THOMAS G LAPS, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of OHIO and employed by HSB CT. of HARTFORD, CT have inspected the repair, modification or replacement described in this report on MAY 25, 20 11 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 ASME Code and the National Board Inspection Code "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work 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.

Date 5/24, 20 11 Signed Thomas G Laps Commissions NB 9330 "N" "A" OHIO COMM.
5/25 2011 (inspector) (National Board (include endorsements), and jurisdiction, and no.)

1N22-072

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

1. Owner: FIRSTENERGY CORP. Date 5-20-11
10 Center Road, Perry, Ohio 44081 Sheet 1 of 1

2. Plant: Perry Nuclear Power Plant (PNPP) Unit One
10 Center Road, Perry, Ohio 44081 200414555
 (Repair Org. P.O. No., etc.)

3. Work Performed By: FIRSTENERGY Nuclear Operating Company PNPP Type Code Symbol Stamp NR
10 Center Road, Perry, Ohio 44081 Authorization No. 33
 Expiration Date 9-28-11

4. Identification of System: MAIN, REHEAT, EXTRACTION, DRAINS 1N22

5. (a) Applicable Construction Code: ASME SECTION III CLASS 2, 1974 Edition
 NAME/SECTION/DIVISION/CLASS
WINTER 19 75 Addenda Code Case(s) *N272, 1644-5

(b) Construction Code used for repairs, modifications, or replacements: 1974 W/75 *
 Edition Addenda Code Case(s)

(c) ASME Code Section XI applicable for Inservice Inspection: 2001 2003 N/A
 Edition Addenda Code Case(s)

(d) Applicable Edition of Section XI Utilized for Repairs, Modification, or Replacements:
49, 2001 49 2003 Addenda N/A
 2/18/20-11 7/15-20-11 Code Case(s)

(e) Design Responsibilities FENOC

6. Identification of Components Repaired, Modified, or Replacement Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | Nat. Board No. | Other ID. | Year Built | Repair, Replacement, or Modification | ASME Code Stamped |
|-------------------|----------------------|-------------------------|----------------|-----------|------------|--------------------------------------|-------------------|
| PIPING | PULLMAN | 1N22 | 112 | N/A | 1985 | REPLACEMENT | YES |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: REMOVED SNUBBER S/N 29929 AND INSTALLED SNUBBER S/N 39116.

8. Test Conducted: Hydrostatic- ☐ Pneumatic- ☐ Nominal Operating Pressure- ☐ Other- ☐
 Pressure N/A psi Test Temperature N/A degrees F Code Case(s) N/A

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

9. Remarks: _____

NO NAMEPLATE/STAMPING PERFORMED DUE TO THE INTERFACE CONTROLS OF PART 3 SECTION

1.8.6 BEING IN EFFECT AND JURISDICTIONAL AUTHORITY CONCURRENCE HAVING BEEN RECEIVED.

Note: Attach all applicable Manufacturer's Data Reports. Supplemental sheets such as 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 of this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded on the front of this form.

CERTIFICATE OF COMPLIANCE

I, JOHN S DAVIS, 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 items described above conforms to Section XI of the ASME Code and to the National Board Inspection Code "NR" rules.

National Board Certificate of Authorization No. 33 to use the stamp expires 28 SEPT., 20 11
Date 5/20, 20 11 Signed FENOC-PNPP [Signature] QC SUPV.
(name of repair organization) (authorized representative) (title)

CERTIFICATE OF INSPECTION/INSERVICE INSPECTION

I, THOMAS G LAPS, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of OHIO and employed by HSB CT. of HARTFORD, CT have inspected the repair, modification or replacement described in this report on MAY 10, 20 11 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 ASME Code and the National Board Inspection Code "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work 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.

Date 5/20, 20 11 Signed Thomas G Laps Commissions NB 9330 "N" "I" "A" OHIO COMM.
(inspector) (National Board (include endorsements), and jurisdiction, and no.)

1N22-073

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

1. Owner: FIRSTENERGY CORP. Date 5-20-11
10 Center Road, Perry, Ohio 44081 Sheet 1 of 2

2. Plant: Perry Nuclear Power Plant (PNPP) Unit One
10 Center Road, Perry, Ohio 44081 200414557
 (Repair Org. P.O. No., etc.)

3. Work Performed By: FIRSTENERGY Nuclear Operating Company PNPP Type Code Symbol Stamp NR
10 Center Road, Perry, Ohio 44081 Authorization No. 33
 Expiration Date 9-28-11

4. Identification of System: MAIN, REHEAT, EXTRACTION, DRAINS 1N22

5. (a) Applicable Construction Code: ASME SECTION III CLASS 2, 1974 Edition
 NAME/SECTION/DIVISION/CLASS
WINTER 19 75 Addenda Code Case(s) *N272, 1644-5

(b) Construction Code used for repairs, modifications, or replacements: 1974 W/75 *
 Edition Addenda Code Case(s)

(c) ASME Code Section XI applicable for Inservice Inspection: 2001 2003 N/A
 Edition Addenda Code Case(s)

(d) Applicable Edition of Section XI Utilized for Repairs, Modification, or Replacements:
19, 2001 19 2003 Addenda N/A
 Code Case(s)

(e) Design Responsibilities FENOC

6. Identification of Components Repaired, Modified, or Replacement Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | Nat. Board No. | Other ID. | Year Built | Repair, Replacement, or Modification | ASME Code Stamped |
|-------------------|----------------------|-------------------------|----------------|-----------|------------|--------------------------------------|-------------------|
| PIPING | PULLMAN | 1N22 | 112 | N/A | 1985 | REPLACEMENT | YES |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: REMOVED SNUBBER S/N 18855 AND INSTALLED SNUBBER S/N 18881.
ALSO REPLACED 2 REAR BRACKET PINS WITH 2 PINS HT# N2374.

8. Test Conducted: Hydrostatic- ☐ Pneumatic- ☐ Nominal Operating Pressure- ☐ Other- ☐
 Pressure N/A psi Test Temperature N/A degrees F Code Case(s) N/A

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

9. Remarks: _____

NO NAMEPLATE/STAMPING PERFORMED DUE TO THE INTERFACE CONTROLS OF PART 3 SECTION

1.8.6 BEING IN EFFECT AND JURISDICTIONAL AUTHORITY CONCURRENCE HAVING BEEN RECEIVED.

Note: Attach all applicable Manufacturer's Data Reports. Supplemental sheets such as 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 of this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded on the front of this form.

CERTIFICATE OF COMPLIANCE

I, JOHN S DAVIS, 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 items described above conforms to Section XI of the ASME Code and to the National Board Inspection Code "NR" rules.

National Board Certificate of Authorization No. 33 to use the "NR" stamp expires 28 SEPT., 20 11
Date 5/28/11, 20 11 Signed FENOC-PNPP [Signature] QC SUPV.
(name of repair organization) (authorized representative) (title)

CERTIFICATE OF INSPECTION/INSERVICE INSPECTION

I, THOMAS G LAPS, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of OHIO and employed by HSB CT. of HARTFORD CT. have inspected the repair, modification or replacement described in this report on JUNE 1, 20 11 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 ASME Code and the National Board Inspection Code "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work 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.

Date 6/1, 20 11 Signed Thomas G Laps Commissions NB 9330 "N" "I" "A" OHIO COMM.
(inspector) (National Board (include endorsements), and jurisdiction, and no.)

00197
1N22-073 541824-2

FORM NF-1 NPT CERTIFICATE HOLDERS' DATA REPORT FOR COMPONENT SUPPORTS*
As Required by the Provisions of the ASME Code Rules, Section III, Division 1

Kin-Tech Division

1. Manufactured by Pacific Scientific 1346 S. State College Blvd. Anaheim, CA 92803
(Name and address of NPT Certificate Holder)

2. Manufacturer for Power Piping Co. 829 Beaver Ave. Pittsburgh, PA 15233
(Name and address of purchaser or owner)

3. Location of Installation Unknown

4. Identification

| (a)
Component
Support
I.D. No. | (b)
Canadian
Registration
No. | (c)
Applicable
Drawings with
Last Rev. & Date | (d)
Stress Report
or Load Capacity
Data Sheet | (e)
Type of
Component
Support | (f)
Class | (g)
Natl. Board
No. | (h)
Year Built |
|---|--|--|--|--|--------------|---------------------------|-------------------|
| (1) <u>18819</u> | <u>NONE</u> | <u>1801104-07-J</u> | <u>DR1347 Rev. B</u> | <u>Linear</u> | <u>1</u> | <u>NONE</u> | <u>1983</u> |
| (2) <u>thru</u> | | | | | | | |
| (3) <u>18887</u> | | | | | | | |
| (4) | | | | | | | |
| (5) | | | | | | | |
| (6) | | | | | | | |
| (7) | | | | | | | |
| (8) | | | | | | | |
| (9) | | | | | | | |
| (10) | | | | | | | |

5. Remarks:

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that these components supports conform to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Division 1, Edition 1974, Addenda Winter '75
Code Case No. 1644-6
Date 6/8/83 Signed Pacific Scientific by Ronald D. Davis
(NPT Certificate Holder)
Our ASME Certificate of Authorization No. 1198 to use the "NET" (NPT)
Symbol expires Aug. 4, 1984 (Date)

CERTIFICATION OF DESIGN


Design Information on File at Pacific Scientific

Stress Report or Load Capacity Data Sheets on File at:
Pacific Scientific
Filed Per NCA 3256

Design Specifications Certified by (1) Leo E. Ay PE State California
Reg. No. 13533

Stress Analysis Report or Load Capacity Data Sheets Certified by (1) Leo E. Ay
PE State California Reg. No. 13533

(1) List name only, signature not required.


 AUG 2 5 1983

*Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8 1/2 in., (2) information in items 1, 2, 4c, 4g on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded at top of this form.

00112

00197

FORM NF-1 (Back)

CERTIFICATE OF SHOP 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&T Co. of Hartford, CT have inspected the component supports described in this Data Report on 6.10.83

is and state that to the best of my knowledge and belief the NPT Certificate Holder has constructed these component supports in accordance with the ASME Code for Nuclear Power Plant Components.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the component supports 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 6.10.83

Signed David F. Ryan Commissions CA 1524 WC R970
(Nat'l Bd., State, Prov., and No.)

CERTIFICATION OF FIELD INSPECTION

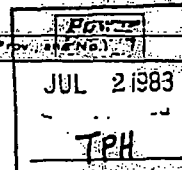
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of and employed by of

have compared the statements in this Data Report with the described component supports and state that the 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 NPT Certificate holder has constructed these component supports in accordance with the ASME Code for Nuclear Power Plant Components.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the component supports 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

Signed Commissions
(Nat'l Bd., State, Prov., and No.)



AUG 2 5 1983

00113

1N27-052

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

1. Owner: FIRSTENERGY CORP. Date 7/25/2011
10 Center Road, Perry, Ohio 44081 Sheet 1 of 21
from 8/1/11

2. Plant: Perry Nuclear Power Plant (PNPP) Unit One
10 Center Road, Perry, Ohio 44081 200377214
 (Repair Org. P.O. No., etc.)

3. Work Performed By: FIRSTENERGY Nuclear Operating Company PNPP Type Code Symbol Stamp NR
10 Center Road, Perry, Ohio 44081 Authorization No. 33
 Expiration Date 9-28-11

4. Identification of System: 1N27 FEEDWATER AND FEEDWATER LEAKAGE CONTROL SYSTEM

5. (a) Applicable Construction Code: ASME SECTION III CLASS 1 NB, 1974 Edition
 NAME/SECTION/DIVISION/CLASS
WINTER 1975 Addenda Code Case(s) NONE

(b) Construction Code used for repairs, modifications, or replacements: 1974 W/75 N/A
 Edition Addenda Code Case(s)

(c) ASME Code Section XI applicable for Inservice Inspection: 2001 2003 N/A
 Edition Addenda Code Case(s)

(d) Applicable Edition of Section XI Utilized for Repairs, Modification, or Replacements:
2001 2003 Addenda N/A
 Code Case(s)

(e) Design Responsibilities FENOC

6. Identification of Components Repaired, Modified, or Replacement Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | Nat. Board No. | Other ID. | Year Built | Repair, Replacement, or Modification | ASME Code Stamped |
|-------------------|----------------------|-------------------------|----------------|---------------|------------|--------------------------------------|-------------------|
| VALVE | ROCKWELL INTL. | PZ83 | 662 | 1N27
F559A | 1981 | REPAIR | YES |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: REMOVED TEST CONNECTION AND REPAIRED 1/8" VALVE BODY GOUGE WITH WELD ROD 7018 HT#S A900319 AND C78286.

Test Conducted: Hydrostatic- ☐ Pneumatic- ☐ Nominal Operating Pressure- ☒ Other- ☐

Pressure 1025 psi Test Temperature 132 degrees F Code Case(s) N416-2 N/A
from 8/1/11

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

9. Remarks: NONE

NO NAMEPLATE/STAMPING PERFORMED DUE TO THE INTERFACE CONTROLS OF PART 3 SECTION
1.8.6 BEING IN EFFECT AND JURISDICTIONAL AUTHORITY CONCURRENCE HAVING BEEN RECEIVED.

Note: Attach all applicable Manufacturer's Data Reports. Supplemental sheets such as 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 of this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded on the front of this form.

CERTIFICATE OF COMPLIANCE

I, JOHN S DAVIS, 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 items described above conforms to Section XI of the ASME Code and to the National Board Inspection Code "NR" rules.

National Board Certificate of Authorization No. 33 to use the "NR stamp" expires 28 SEPT. 20 11
Date 7/29, 20 11 Signed FENOC-PNPP [Signature] QC SUPV.
(name of repair organization) (authorized representative) (title)

CERTIFICATE OF INSPECTION/INSERVICE INSPECTION

I, THOMAS GLAPS, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of OHIO and employed by HSB CT. of HARTFORD, CT. have inspected the repair, modification or replacement described in this report on AUG. 1, 20 11 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 ASME Code and the National Board Inspection Code "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work 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.

Date 8/1, 20 11 Signed Thomas Glaps Commissions NB 9330 "N" "A" OHIO COMM.
(inspector) (National Board (include endorsements), and jurisdiction, and no.)

1P51-007

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

1. Owner: FIRSTENERGY CORP. Date 7/28/2011
10 Center Road, Perry, Ohio 44081 Sheet 1 of 2+2
for 8/3/11

2. Plant: Perry Nuclear Power Plant (PNPP) Unit One
10 Center Road, Perry, Ohio 44081 200328422
 (Repair Org. P.O. No., etc.)

3. Work Performed By: FIRSTENERGY Nuclear Operating Company PNPP Type Code Symbol Stamp NR
10 Center Road, Perry, Ohio 44081 Authorization No. 33
 Expiration Date 9-28-11

4. Identification of System: 1P51 SERVICE AIR

5. (a) Applicable Construction Code: ASME SECTION III CLASS 2 1974 Edition
 NAME/SECTION/DIVISION/CLASS
WINTER 1975 Addenda Code Case(s) N/A

(b) Construction Code used for repairs, modifications, or replacements: 1974 W/75 N/A
 Edition Addenda Code Case(s)

(c) ASME Code Section XI applicable for Inservice Inspection: 2001 2003 N/A
 Edition Addenda Code Case(s)

(d) Applicable Edition of Section XI Utilized for Repairs, Modification, or Replacements:
2001 2003 Addenda N/A Code Case(s)

(e) Design Responsibilities FENOC

6. Identification of Components Repaired, Modified, or Replacement Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | Nat. Board No. | Other ID. | Year Built | Repair, Replacement, or Modification | ASME Code Stamped |
|-------------------|----------------------|-------------------------|----------------|------------|------------|--------------------------------------|-------------------|
| PIPING SYSTEM | PULLMAN POWER | 1P51 | 72 | 1P51-F0530 | 1985 | REPLACEMENT | YES |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: SEE REMARKS

8. Test Conducted: Hydrostatic- ☐ Pneumatic- ☐ Nominal Operating Pressure- ☒ Other- ☐
 Pressure NOP psi Test Temperature NOT degrees F Code Case(s) N/A

NIS-2/NR-1 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As required by the Provisions of the ASME Code Section XI

NOP-CC-5703-04 Rev. 00

9. Remarks: Replaced 2 1/2" Borg Warner Class 2 valve serial # 50191 with Velan 2" class 1 valve
Serial # 101038-06 in the 1P51 system. Also (2) 2 1/2 x 2" reducer HT# 301223, 2" sch 80 pipe HT# 000026283
per ECP 11-0354. Welding rod HT# C-8046,065905, CP7808 ER70S-2 and HT# A900319 ER7018.

NO NAMEPLATE/STAMPING PERFORMED DUE TO THE INTERFACE CONTROLS OF PART 3 SECTION
1.8.6 BEING IN EFFECT AND JURISDICTIONAL AUTHORITY CONCURRENCE HAVING BEEN RECEIVED.

Note: Attach all applicable Manufacturer's Data Reports. Supplemental sheets such as 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 of this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded on the front of this form.

CERTIFICATE OF COMPLIANCE

I, JOHN S DAVIS, 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 items described above conforms to Section XI of the ASME Code and to the National Board Inspection Code "NR" rules.

National Board Certificate of Authorization No. 33 to use the "NR" stamp expires 28 SEPT., 20 11
Date 8/3, 20 11 Signed FENOC-PNPP [Signature] QC SUPV.
(name of repair organization) (authorized representative) (title)

CERTIFICATE OF INSPECTION/INSERVICE INSPECTION

I, THOMAS GLAPS, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of OHIO and employed by HSB CT. of HARTFORD, CT. have inspected the repair, modification or replacement described in this report on AUG. 3, 20 11 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 ASME Code and the National Board Inspection Code "NR" rules.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work 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.

Date 8/3, 20 11 Signed Thomas Glaps Commissions NB 9330 "N" "A" OHIO COMM.
(inspector) (National Board (include endorsements), and jurisdiction, and no.)

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FORM NPV-1 CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PUMPS OR VALVES.*
As Required by the Provisions of the ASME Code, Section III, Division 1

1. Manufactured and certified by VELAN INC. 2125 WARD AVE, MONTREAL, QUEBEC CANADA H4M1T6
(name and address of N Certificate Holder)

2. Manufactured for AREVA NP, 3315-A OLD FOREST RD., LYNCHBURG, VA., USA, 24501
(name and address of purchaser)

3. Location of installation NOT AVAILABLE
(name and address)

4. Model No., Series No., or Type: P. CHECK Drawing P1-55500-N05 Rev J CRN N/A

5. ASME Code, Section III, Division 1: 1989 NONE 1 N/A
(edition) (addenda date) (class) (Code Case no.)

6. Pump or valve VALVE Non- let size Outlet size 2
(in.) (in.)

7. Material: Body SA-105, C/S Bonnet SA-105, C/S *SFA 5. Bolting SA-193, GR B7;
SA-194, GR 2H

[illegible]

(12/88) This form (E00037) may be obtained from the Order Dept., ASME, 22 LAW DRIVE, Box 2300, Fairfield, NJ 07007-2300.

AREVA NP Inc.
OP SUP
REG

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PO# 45318172

STK# 31231806

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FORM NPV-1 (Back - Pg. 2 of 2)

Certificate-Holder's Serial No. 101038

8. Design conditions 1975 psi 100 °F or valve pressure class 800 (1)
(pressure) (temperature)

9. Cold working pressure 1975 psi at 100°F

10. Hydrostatic test 2975 psi. Disk differential test pressure 2175 psi

11. Remarks: MATERIALS MEET ASME SECTION II EDITION: 2004 ADDENDA: NONE

* ASME EXTENSION DATE: JULY 31, 2010 (SEE ATTACHED ASME LETTER OF EXTENSION)

CERTIFICATE OF DESIGN

Design Specification certified by M. LAVIGNE P.E. State QUE Reg. no. 40052
Design report certified by S. ISBITSKY P.E. State QUE Reg. no. 22115

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-2797-1 Expires * APR 20, 2010

Date JUN 16 2010

Name VELAN INC.
(N Certificate Holder)

Signed

(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 QUEBEC and employed by REGIE DU BATIMENT of QUEBEC have inspected the pump, or valve, described in this Data Report on 10-06-30, 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 10-06-30

signed

(Authorized Inspector)

Commissions

QUEBEC J. CHUPRUN

QC# 14324

(Natl. Bd. (incl. endorsements) and state or prov. and no. S)

REGIE DU BATIMENT DU QUEBEC

(1) For manually operated valves only.

AREVA NP Inc.
OP SUP
REG

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