Steven D. Capps
Vice President
McGuire Nuclear Station

Duke Energy
MG01VP | 12700 Hagers Ferry Road
Huntersville, NC 28078

o: 980.875.4805
f: 980.875.4809
Steven.Capps@duke-energy.com

Serial No: MNS-14-058

July 23, 2014

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

SUBJECT: Duke Energy Carolinas, LLC
McGuire Nuclear Station Unit 2
Docket Number 50-370
Inservice Inspection Report
End of Cycle 22 Refueling Outage

In accordance with ASME Section XI, attached is the Inservice Inspection Report for the end of cycle 22 (EOC-22) refueling outage for McGuire Nuclear Station, Unit 2. This is the last outage of the third inspection period of the third ten year interval.

Section 4.4 of the report lists the item numbers with limited examinations. A relief request will be submitted for these items.

If you have any questions or require additional information, please contact P. T. Vu at (980) 875-4302.

Sincerely,

Steven D. Capps

Attachment

A047
NRR

xc:

Victor McCree, Region II Administrator
U. S. Nuclear Regulatory Commission
Marquis One Tower
245 Peachtree Center Ave., NE Suite 1200
Atlanta, GA 30303-1257

Ed Miller, Project Manager
U. S. Nuclear Regulatory Commission
11555 Rockville Pike
Mail Stop 0-8 G9A
Rockville, MD 20852-2738

John Zeiler
NRC Senior Resident Inspector
McGuire Nuclear Station

ATTACHMENT

FORM NIS-1 OWNER'S REPORT FOR INSERVICE INSPECTIONS
As required by the Provisions of the ASME Code Rules

1. Owner: Duke Energy Carolinas, 526 S. Church St., Charlotte, NC 28201-1006
(Name and Address of Owner)

2. Plant: McGuire Nuclear Station, 12700 Hager's Ferry Road Huntersville, N.C. 28078
(Name and Address of Plant)

3. Plant Unit: 2 4. Owner Certificate of Authorization (if required) N/A

5. Commercial Service Date: March 1, 1984 6. National Board Number for Unit 84

7. Components Inspected:

Component or Appurtenance	Manufacturer or Installer	Manufacturer or Installer Serial No.	State or Province No.	National Board No.
	See Section 1.1 in the Attached Report			

Note: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is $8\frac{1}{2}$ 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.

Total number of pages contained in this report 169

8. Examination Dates November 30, 2012 to April 24, 2014

9. Inspection Period Identification: Third Period

10. Inspection Interval Identification: Third Interval

11. Applicable Edition of Section XI 1998 Addenda 2000

12. Date / Revision of Inspection Plan: June 20, 2006 / Revision 2

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 Sections 2.0, 3.0 and 6.0

14. Abstract of Results of Examinations and Tests. See Section 4.0 and 6.0

15. Abstract of Corrective Measures. See Subsection 4.3

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

Certificate of Authorization No. (if applicable) N/A Expiration Date N/A

Date 7/17/2014 Signed Duke Energy Carolina's, Owner By JOHN CHARTERINA

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 North Carolina employed by HSB Global Standards have inspected the components described in this Owner's Report during the period November 30, 2012 to April 24, 2014 and state that to the best of my knowledge and belief, the Owner has performed examinations and tests and taken corrective measures described in this Owner's Report in accordance with the Inspection Plan and as required by the ASME Code, Section XI.

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

Jerome F. Swann Commissions NB 11473 N.C.1524, N, I, NS

Inspector's Signature National Board, State, Province, and Endorsements

Date 7-21-2014

HSB Global Standards
200 Ashford Center North
Suite 205
Atlanta, GA. 30338-4860
(800) 417-3721

OWNER'S REPORT
FOR
INSERVICE INSPECTIONS

MCGUIRE UNIT 2

2014 REFUELING OUTAGE
EOC 22 (OUTAGE 7)
(Third Interval)

Plant Location: McGuire Nuclear Station
12700 Hager's Ferry Road
Huntersville, North Carolina 28078 - 9340

NRC Docket No. 50-370
National Board No. 84

Commercial Service Date: March 1, 1984

Owner: Duke Energy Carolinas
526 South Church Street
Charlotte, N.C. 28201-1006

Revision 0

Originated By: _____ Date 01/16/2014

Checked By: _____ Date 7/17/2014

Approved By: _____ Date 7/17/2014

DISTRIBUTION LIST

1. Duke Energy Carolinas
   Nuclear Engineering
   ASME Section XI Services

2. McGuire
   Inspection Services
   (ISI Coordinator)

3. NRC Document Control Desk

4. HSBCT (AIA)
   c/o ANII at McGuire

5. State of North Carolina Department of Labor
   c/o J. M. Givens, Jr.

TABLE OF CONTENTS

SECTION 1

1.0 General Information

This report describes the Inservice Inspection of Duke Energy Corporation's McGuire Nuclear Station Unit 2 during Outage 7 / EOC 22. This is the last outage of the Third Inspection Period of the Third Ten Year Interval. ASME Section XI, 1998 Edition with the 2000 Addenda, was the governing Code for selection and performance of the ISI examinations.

Included in this report are the inspection status for each examination category, the final inservice inspection plan, the inspection results for each item examined, and corrective action(s) taken when reportable conditions were found. In addition, there is an Owner's Report for the Repair / Replacement Section included for completed NIS-2 documentation of repairs and replacements.

1.1 Identification Numbers

Item	Manufacturer or Installer	Manufacturer or Installer Serial No.	State or Province No.	National Board No.
Reactor Vessel	Rotterdam	30664	NC-201819	--
Pressurizer	Westinghouse	1491	NC-201818	W10285
Steam Generator 2A	BWI	7700-02	NC-302674	159
Steam Generator 2B	BWI	7700-04	NC-302675	161
Steam Generator 2C	BWI	7700-01	NC-302676	158
Steam Generator 2D	BWI	7700-03	NC-302677	160
Centrifugal Charging Pump	Pacific Pumps	2A - 48584 2B - 48585	N/A	25 28
Containment Spray Heat Exchanger	Delta Southern Co. Joseph Oat & Sons, Inc.	2A-35005-73-3 (2B) 2514	NC-234203 NC-201822	3396 5765
Excess Letdown Heat Exchanger	Westinghouse	1810	NC-234264	1555
Letdown Heat Exchanger	Joseph Oat & Sons, Inc.	2049-2B	NC-201842	553
Reciprocating Charging Pump	Union Pump Co.	N7210318-604	N/A	N/A

1.1 Identification Numbers (Continued)

Item	Manufacturer or Installer	Manufacturer or Installer Serial No.	State or Province No.	National Board No.
Reactor Coolant Pump	Westinghouse	2A 5-114E841G02 2B 6-114E841G02 2C 7-114E841G02 2D 8-114E841G02	N/A	N/A
Reciprocating Charging Pump Accumulator	Metal Bellows Company	74730-002	N/A	002
Reciprocating Charging Pump Suction Stabilizer	Richmond Engineering Supply Co.	N-2409.20	N/A	75220
Residual Heat Removal Heat Exchanger	Joseph Oat & Sons, Inc.	2A 2046-2C 2B 2046-2D	NC-169800 NC-201823	637 638
Safety Injection Pump	Pacific Pumps	2A 49357 2B 49358	N/A	130 131
Regenerative Heat Exchanger	Joseph Oat & Sons, Inc.	2047-2B	NC-201817	628 629 630
Seal Water Heat Exchanger	Atlas Industrial Manufacturing Company	1767	NC 201827	1549
Seal Water Injection Filter	AMF Cuno	2A - 20 2B - 22	N/A	4364 4365
Main Steam Supply to Auxiliary Equipment System	Duke Power Co.	SA	N/A	62
Containment Air Release and Addition System	Duke Power Co.	VQ	N/A	56
Main Steam System	Duke Power Co.	SM	N/A	70
Main Steam Vent to Atmosphere System	Duke Power Co.	SV	N/A	67
Reactor Coolant System	Duke Power Co.	NC	N/A	82

1.1 Identification Numbers (Continued)

Item	Manufacturer or Installer	Manufacturer or Installer Serial No.	State or Province No.	National Board No.
Liquid Waste Recycle System	Duke Power Co.	WL	N/A	76
Refueling Water System	Duke Power Co.	FW	N/A	54
Auxiliary Feedwater System	Duke Power Co.	CA	N/A	73
Residual Heat Removal System	Duke Power Co.	ND	N/A	63
Nuclear Service Water System	Duke Power Co.	RN	N/A	60
Chemical & Volume Control System	Duke Power Co.	NV	N/A	80
Component Cooling System	Duke Power Co.	KC	N/A	78
Main Feedwater System	Duke Power Co.	CF	N/A	61
Containment Spray System	Duke Power Co.	NS	N/A	69
Containment Ventilation Cooling Water System	Duke Power Co.	RV	N/A	72
Safety Injection System	Duke Power Co.	NI	N/A	83
Diesel Generator Engine Cooling Water System	Duke Power Co.	KD	N/A	47
Spent Fuel Cooling System	Duke Power Co.	KF	N/A	81
Diesel Generator Engine Lube Oil System	Duke Power Co.	LD	N/A	51
Unit 2	Duke Power Co.	N/A	N/A	84

1.2 Reference Documents

The following reference documents may apply to the inservice inspections performed during this report period. A copy may be obtained by contacting the ISI Plan Manager at Duke Energy Carolina's Corporate Office in Charlotte, North Carolina:

Code Case N-460 Alternative Examination Coverage for Class 1 and Class 2 Welds, Section XI, Division 1. Applicable to items in this report where less than 100% coverage of the required weld examination volume was achieved.

Code Case N-566-2 Corrective Actions for Leakage Identified at Bolted Connections, Section XI, Division 1.

Code Case N-648-1 Alternative Requirements for Inner Radius Examination of Class 1 Reactor Vessel Nozzles, Section XI, Division 1

Code Case N-665 Alternative Requirements for Beam Angle Measurements using Refracted Longitudinal Wave Search Units

Code Case N-685 Lighting Requirements for Surface Examinations, Section XI, Division 1

Code Case N-695 Qualification Requirements for Dissimilar Metal Piping Welds, Section XI, Division 1

Code Case N-700 Alternative Rules for Selection of Classes 1, 2 and 3 Vessel Welded Attachments for Examination Section XI, Division 1 (Categories B-K, CC, and D-A)

Code Case N-706 Alternative Examination Requirements of Table 1WB-2500-1 and Table IWC-2500-1 for PWR Stainless Steel Residual and Regenerative Heat Exchangers. Applicable to Examination Category C-A, Residual Heat Removal Heat Exchangers 2A and 2B and the Regenerative Heat Exchanger.

Code Case N-722-1 Additional Examinations for PWR Pressure Retaining Welds in Class 1 Components Fabricated with Alloy 600/82/182 Materials, Section XI, Division 1, 10 CFR Part 50, Federal Register, final rule was issued September 10, 2008 mandates the use of this code case

Code Case N-729-1 Alternative Examination Requirements for PWR Reactor Vessel Upper Heads with Nozzles Having Pressure Retaining Partial Penetration Welds Section XI, Division 1, 10CFR Part 50, Federal Register, final rule was issued September 10, 2008 mandates the use of this code case

Code Case N-770-1 Alternative Examination Requirements and Acceptance Standards for Class 1PWR Piping and Vessel Nozzle Butt Welds Fabricated with UNS N06082 or UNS W86182 Weld Filler Material with or without Application of Listed Mitigation Activities, Section Xi, Division 1, ASME approval date December 25, 2009

Problem Investigation Process (PIP) No. M-12-08728 This PIP was written to document the lack of PDI-UT 2 calibration and scanning data that was created during the examination of Component ID 2NV2FW178-22 (Summary Number M2.R1.11.0277) performed in the 2EOC21 Refueling Outage. This examination was re-performed during the 2EOC22 Refueling Outage.

Problem Investigation Process (PIP) No. M-14-03153 This PIP was written to document three areas indicative of thermal fatigue conditions discovered during the UT examination on NC piping. Reference Component ID Cold Leg 2D Nozzle 4-1 (Summary Number M2.G13.1.0001) and Component ID 2NC2FW45-5 (Summary Number M2.R1.11.0051).

Problem Investigation Process (PIP) No. M-14-03388 This PIP was written to document the NDE evaluation of the previous UT examination results (Reference PIP M-14-03153) and lab reports to determine if the flaw discovered in the 2014 examination should have been identified during the previous examination in 2012.

Problem Investigation Process (PIP) No. M-14-05018 This PIP was written to document coverage limitations found during the ultrasonic examination of NC piping for thermal fatigue cracking. Although this PIP shows 4 NC Welds with limited coverage, only 2 welds are part of the 2EOC22 ISI Plan. The other 2 NC Welds were examined per MNS Engineering request as part of the Engineering Program Evaluation.

Problem Investigation Process (PIP) No. M-14-06388 This PIP was written to document coverage limitations found during the ultrasonic examination of Component ID 2RCHPA-10-1 (Summary Number M2.C1.20.0025) in 2EOC22.

Problem Investigation Process (PIP) Nos. M-14-01421, M-14-01425, M-14-01427, M-14-01661, M-14-01662, M-14-01803, and M-14-01921 These PIPs were written to document and resolve component support problems identified during 2EOC22.

Relief Request 03-002 Class 1, 2 and 3 snubber examinations under station technical specification SLC 16.9.15

Relief Request 01-005 Risk Informed Inservice Inspection Program Submittal

Relief Request 01-008 Risk Informed ISI Alternative to Use VT-2 Instead of Volumetric Examination of Socket Welds

Relief Request 11-MN-002 To Extend of the Inservice Inspection Interval for the Reactor Vessel Examination Category B-A and B-D Welds

SECTION 2

2.0 Third Ten Year Interval Inspection Status

The completion status of inspections required by the 1998 ASME Code Section XI through the 2000 Addenda is summarized in this section. The requirements are listed by the ASME Section XI Examination Category as defined in Table IWB-2500-1 for Class 1 Inspections, Table IWC-2500-1 for Class 2 Inspections and IWF-2500-1 for Class 1, 2 and 3 Component Supports. Augmented, Elective, and Risk Informed Inspections are also included.

During the McGuire Third 10 Year Interval, piping welds will be examined under the Risk Informed Inservice Inspection Program developed in accordance with methodology contained in the Westinghouse Owner's Group (WOG) Topical Report, WCAP-14572, Revision 1-NP-A and its Supplement 2 Revision 1-NP-A. Request for Relief 01-005 was submitted to the NRC seeking approval to incorporate the Risk Informed Program into the Third 10 Year Interval ISI Plan for McGuire Unit 2. The NRC approved use of this program per SER dated June 12, 2002. Previous Code Examination Categories B-F, B-J, C-F-1, and C-F-2 will now be combined under the new Risk Informed Examination Category R-A.

Class 1 Inspections

Examination Category	*Description*	*Inspections Required*	*Inspections Completed*	*Percentage Completed*	*(1)Deferral Allowed*
B-A	Pressure Retaining Welds in Reactor Vessel	15	3 **Note (8)**	20.00%	Yes
B-B	Pressure Retaining Welds in Vessels Other than Reactor Vessel	5	5	100.00%	No
B-D	Full Penetration Welded Nozzles in Vessels Inspection Program B	40	24 **Note (8)**	60.00%	Partial
B-F	Pressure Retaining Dissimilar Metal Welds in Vessel Nozzles	Reference Risk Informed Program R-A Items	N/A	N/A	**Note (2)**
B-G-1	Pressure Retaining Bolting Greater than 2" in Diameter	241	241	100.00%	Yes
B-G-2	Pressure Retaining Bolting 2" and Less in Diameter	22	22	100.00%	No

Class 1 Inspections (Continued)

Examination Category	*Description*	*Inspections Required*	*Inspections Completed*	*Percentage Completed*	*(1)Deferral Allowed*
B-J	Pressure Retaining Welds in Piping	Reference Risk Informed Program R-A Items	N/A	N/A	**Note (2)**
B-K	Welded Attachments for Vessels, Piping, Pumps and Valves	5	5	100.00%	No
B-L-1	Pressure Retaining Welds in Pump Casings	N/A	N/A	N/A	Yes
B-L-2	Pump Casings	1	0 **Note (6)**	00.00%	Yes
B-M-1	Pressure Retaining Welds in Valve Bodies	N/A	N/A	N/A	Yes
B-M-2	Valve Body > 4 in. Nominal Pipe Size	9	4 **Note (7)**	100.00%	Yes
B-N-1	Interior of Reactor Vessel	3	3	100.00%	No
B-N-2	Welded Core Support Structures and Interior Attachments to Reactor Vessel	2	2	100.00%	Yes
B-N-3	Removable Core Support Structures	1	1	100.00%	Yes
B-O	Pressure Retaining Welds in Control Rod Housings	3	3	100.00%	Yes
B-P	All Pressure Retaining Components	REREFERENCE SECTION 6.0 OF THIS REPORT			
B-Q	Steam Generator Tubing	**Note (3)**			
F-A F1.10.	Class 1 Component Supports	58	58	100.00%	No

Class 2 Inspections

Examination Category	*Description*	*Inspections Required*	*Inspections Completed*	*Percentage Completed*
C-A	Pressure Retaining Welds in Pressure Vessels	30	30	100.00% **Note (4)**
C-B	Pressure Retaining Nozzle Welds in Vessels	11	11	100.00%
C-C	Welded Attachments for Vessels, Piping, Pumps and Valves	17	17	100.00%
C-D	Pressure Retaining Bolting Greater Than 2" in Diameter	N/A	N/A	N/A
C-F-1	Pressure Retaining Welds in Austenitic Stainless Steel or High Alloy Piping	Reference Risk Informed Program R-A Items	N/A	**Note (2)**
C-F-2	Pressure Retaining Welds in Carbon or Low Alloy Steel Piping	Reference Risk Informed Program R-A Items	N/A	**Note (2)**
C-G	Pressure Retaining Welds in Pumps and Valves	8	8	100.00%
C-H	All Pressure Retaining Components	REFERENCE SECTION 6.0 OF THIS REPORT		
F-A F1.20.	Class 2 Component Supports	236	236	100.00%

Additional Component Support Examinations Class 1, 2 and 3

Examination Category	*Description*	*Inspections Required*	*Inspections Completed*	*Percentage Completed*
F-A F1.40.	Supports other than Piping Supports Class 1, 2 & 3	42	42	100.00%
F-A F1.50.	Component Supports Snubbers Class 1, 2 & 3	N/A	N/A	**Note (5)**

Risk Informed Inservice Inspection Program Class 1 and 2

Examination Category	*Description*	*Inspections Required*	*Inspections Completed*	*Percentage Completed*	*Deferral Allowed*
R-A **Note (2)**	Piping Examinations Class 1 and 2	151	151	100.00%	No

Weld Overlay Section XI Appendix Q

Examination Category	*Description*	*Inspections Required*	*Inspections Completed*	*Percentage Completed*
Q1.1	Weld Overlay	No exams Outage 7 EOC 22		

Augmented / Elective Inspections

Summary Number	*Description*	*Percentage Complete*
G1.1	Reactor Coolant Pump Flywheels	No examinations required for Outage 7 / EOC 22
G2.1	RPV Closure Head Studs and Nuts per Nuclear Guide 1.65	No examinations required for Outage 7 / EOC 22
G3.1	Pipe Rupture Protection	100% of Outage 7 / EOC 22 Requirements Met
G5.1	RPV Head Penetration Nozzles	No examinations required for Outage 7 / EOC 22
G5.2	RPV Vent Line	No examinations required for Outage 7 / EOC 22
G6.2	Pressurizer Manway	100% of Outage 7 / EOC 22 Requirements Met
G10.1	Auxiliary Head Adapter Welds per Code Case N-770-1	No examinations required for Outage 7 / EOC 22
G13.1	ERPI MRP-146 Examinations	100% of Outage 7 / EOC 22 Requirements Met
B15.80	Reactor Vessel BMI Nozzles	100% of Outage 7 / EOC 22 Requirements Met
B4.10	Reactor Vessel Head Bare Metal Visuals	100% of Outage 7 / EOC 22 Requirements Met
B4.20	Reactor Vessel Head Pen and Reactor Vessel Head Vent	No examinations required for Outage 7 / EOC 22
H1.1	RPV Head to UHI Head Adapters	No examinations required for Outage 7 / EOC 22

Notes:

(1) Deferral of inspection to the end of the interval as allowed by ASME Section XI Table IWB 2500-1. These examination categories are exempt from percentage requirements per IWB-2412 (a), Inspection Program B.

(2) Relief Request 01-005 Risk Informed Program

(3) Steam Generator Tubing is examined and documented by the Steam Generator Maintenance and Engineering Group as required by the Station Technical Specifications and is not included in this report.

(4) Code Case N-706 has been incorporated for Category C-A. This code case covers the examinations associated with the Regenerative and Residual Heat Removal Heat Exchangers.

(5) Relief Request 03-002 Snubber Program (SLC 16.9.15)

(6) No Reactor Coolant Pumps were disassembled In the 3rd Inspection Interval, therefore no inspections were performed.

(7) There are nine total valve groups. Only valves in four of the nine groups were disassembled in the 3rd Inspection Interval, therefore the required examinations were performed.

(8) Relief Request 11-MN-002 To extend the Inservice Inspection Interval for the Reactor Vessel Examination Category B-A and B-D Welds.

SECTION 3

3.0 Final Inservice Inspection Plan

The final Inservice Inspection Plan shown in this section lists all ASME Section XI Class 1, Class 2, Class 3, Augmented, and Risk Informed examinations credited for this report period.

DUKE ENERGY
NUCLEAR TECHNICAL SERVICES
Inservice Inspection Database Management System
Plan Report
McGuire 2, 3rd Interval, Outage (EOC-22)

This report includes all changes through addendum 2MNS-099

Summary Num	Component ID / Class / System	ISO/DWG Numbers	Procedure / Description / Comments	Insp Req	Material	Sched	Thick/NPS	Cal Blocks	Componenet ID 2
Category AUG									
M2.B15.80.0001	2-RPV-BMI-NOZZLES Class 1 NC	MC-ISIN4-2553-01.00 MP\0A\7150-165	NDE-69	VT-2	Inconel/SS		N/A / N/A		---

Inconel Transition Weld to Stainless Steel Tube

Note 4th Interval: CC N-722-1requires exam every other outage but will be scheduled every outage per PIP G-11-978 CA#2 per RV Engineer. Exam requirements listed below:
Beginning with 2EOC21, bare metal visual examination by a qualified VT-2 inspector of all the BMI nozzles per the requirements of ASME Code Case N-722-1. The bare metal visual examination shall include an inspection of the bottom head and Alloy 600 transition weld between the Alloy 600 tube and the stainless steel tube. Any questions concerning this exam shall be directed to the NGO Corporate Programs Group. For additional information on this change see PIP G-11-0978 CA#8 and Plan Addendum 2MNS-078. No QA-513J was originated for the changes being made per the PIP.

The Comments shown below will be retained for historical purposes for the examinations performed prior to PIP G-11-0978, CA #8 which led to the origination of Plan Addendum 2MNS-078:

Bare Metal Visual Inspection by VT-2 qualified inspector of the BMI Nozzles per the requirements of Code Case N-722 (Item B15.80). The bare metal visual inspection shall include an inspection of the bottom head and Alloy 600 transition weld between the Alloy 600 tube and the stainless steel tube. This exam added per QA-513J ER-MNS-09-01. This exam should be scheduled every other outage begining with EOC-19. Reference Footnote 4 of Code Case N-722 for type of examination. Any questions concerning this exam should be directed to the Materials and NDE Services Group (Chris Cruz or Jody Suping).

These augmented examinations are being added to the ISI Plan per QA-513-J Form, Tracking Number ER-MNS-10-03, initiated by C.A. Cruz of the Materials and NDE Services Group. All bottom mounted instrument (BMI) nozzles and transition welds will be examined every refueling outage instead of every other outage outlined in ER-MNS-09-01.

Summary Num	Component ID / Class / System	ISO/DWG Numbers	Procedure / Description / Comments	Insp Req	Material	Sched	Thick/NPS	Cal Blocks	Componenet ID 2
Category AUG									
M2.B4.10.0002	2RPV-Head-Multiple Class 1 NC	MC-ISIN4-2553-01.00 MCM 2201.01-0021 001	NDE-70	VT-2	CS-Inconel				—

RV Closure Head

This note added to begin 4th Interval:
Schedule each refueling outage that item M2.B4.10.0001 is not performed. Last exam for this item was EOC22. Will schedule EOC24, EOC25, EOC27, EOC28, and EOC29 at direction of HVD during plan developement for 4th Interval.

History comments from 3rd Interval:
Each refueling outage that the full bare metal visual (M2.B4.10.0001) is not performed. If EDY <8 and no flaws unacceptable for continued service have been detected, the reexamination frequency of the full bare metal visual may be extended to every third refueling outage or 5 calendar years, whichever is less, provided an IWA- 2212 VT-2 visual examination of the head is performed under the insulation through multiple access points in outages that the full bare metal VE is not completed. Provided EDY remains less than 8, the next full bare metal visual will be due in 2EOC20. Therefore, IWA-2212 VT-2 visuals shall be performed in 2EOC19 and continue into every outage that the full bare metal visual is not performed. EDY Calculation will continue to be updated and if EDY greater than or equal to 8 these IWA-2212 VT-2 visuals will no longer take place, because a bare metal visual per CC N-729-1 will be required every refueling outage. Schedule Flexibility: Time between inspections may be shortened, but not lengthened. For additional information reference QA-513J (ER-MNS-09-05) or contact Rachel Doss in the Materials and NDE Services Section, Nuclear Technical Services Division. Acceptance criteria specified in ASME Code Case N-729-1 subject to conditions in 10CFR 50.55a (g)(6)(ii)(D)(2) through (6). Relevant conditions for the purpose of the VE shall include areas of corrosion, boric acid deposits, discoloration, and other evidence of nozzle leakage. Once a licensee implements this requirement, the First Revised NRC Order EA-03-009 no longer applies and is deemed to be withdrawn.

Summary Num	Component ID / Class / System	ISO/DWG Numbers	Procedure / Description / Comments	Insp Req	Material	Sched	Thick/NPS	Cal Blocks	Componenet ID 2
M2.G13.1.0001	Cold Leg 2D Nozzle 4-1 Class 1 NC	MC-ISIN4-2553-01.00 MCFI-2NC-045 2NCP 82	NDE-995	UT	SS	160	0.281 / 1.500	50202	Risk Segment NC-027 —

Nozzle to Pipe

This examination is added per QA-513J Form initiated by Greg Shipley of the McGuire Civil Design/DB Group to meet the requirements of EPRI MRP-146, Revision 1. Reference QA Tracking Number ER-MNS-12-02 (QA-513J with Attachment A) for details of the areas to be examined. Perform a volumetric (UT) examination of the base metal to detect thermal fatigue cracking. The area to be examined is the 1-1/2" Boron Injection Line from the RCS Cold Leg 2D Nozzle 4-1 toward Valve 2NI0021. The UT examination to be performed will cover an approximiately 1" wide band out from the toe of fillet Weld No. NC2FW45-5 and along the bottom of the 1-1/2" Boron Injection Line for a length of 6.75" toward Valve 2NI0021. This exam is to be performed every outage starting with M2EOC21 for the life of the plant. For additional information contact Greg Shipley of the McGuire Civil Design/DB Group. Reference PIP M-09-0217, Action No. 9.

circumferential

Summary Num	Component ID / Class / System	ISO/DWG Numbers	Procedure / Description / Comments	Insp Req	Material	Sched	Thick/NPS	Cal Blocks	Componenet ID 2
Category AUG									
M2.G13.1.0003	Cold Leg 2D Nozzle 4-5 Class 1 NC	MC-ISIN4-2553-01.00 MCFI-2NC-026 2NCP 32/ 2NCP 28	NDE-995	UT	SS	160	0.438 / 3.000	50225	—
			Elbow to Pipe This examination is added per QA-513J Form initiated by Greg Shipley of the McGuire Civil Design/DB Group to meet the requirements of EPRI MRP-146, Revision 1. Reference QA Tracking Number ER-MNS-12-04 (QA-513J with Attachment A) for details of the areas to be examined.. Perform a volumetric (UT) examination of the base metal and weld to detect thermal fatigue cracking. The area to be examined is the 3" Alt. Charging Line from the RCS Cold Leg 2D Nozzle 4-5 toward Valve 2NV0018. The UT examinations to be performed will cover butt Weld No. NC2FW26-7, the base metal at the bottom of the pipe 13.5" from the tangent plane, and the elbow bend base metal using the bottom of the horizontal pipe to indicate how far to examine (Reference Subassembly 2NCP28/2NCP32). This exam is to be performed every outage starting with M2EOC21 for the life of the plant. For additional information contact Greg Shipley of the McGuire Civil Design/DB Group. Reference PIP M-09-0217, Action No. 9.							
Circumferental									
M2.G13.1.0004	Cold Leg 2A Nozzle 1-3 Class 1 NC	MC-ISIN4-2553-01.00 MCFI-2NC-026 2NCP 30	NDE-995	UT	SS	160	0.438 / 3.000	50225	—
			Elbow to Pipe This examination is added per QA-513J Form initiated by Greg Shipley of the McGuire Civil Design/DB Group to meet the requirements of EPRI MRP-146, Revision 1. Reference QA Tracking Number ER-MNS-12-05 (QA-513J with Attachment A) for details of the areas to be examined.. Perform a volumetric (UT) examination of the base metal and welds to detect thermal fatigue cracking. The area to be examined is the 3" Charging Line from the RCS Cold Leg 2A Nozzle 1-3 toward Valve 2NV0015. The UT examination to be performed will cover butt Weld Nos. NC2FW26-10 and NC2FW26-3, the base metal at the bottom of the pipe beginning at Weld No. NC2FW26-3 and running a total length of 13.5" toward Valve 2NV0015 (Reference Subassembly 2NCP-30), and the elbow base metal down to in line with the bottom of horizontal pipe to Weld No. NC2FW26-3. This exam is to be performed every outage starting with M2EOC21 for the life of the plant. For additional information contact Greg Shipley of the McGuire Civil Design/DB Group. Reference PIP M-09-0217, Action No. 9.							

Summary Num	Component ID / Class / System	ISO/DWG Numbers	Procedure	Insp Req	Material	Sched	Thick/NPS	Cal Blocks	Componenet ID 2
			Description / Comments						
Category AUG									
M2.G3.1.0003	2NC2FW22-11								
	Class 1 NC	MCFI-2NC22	NDE-35	PT	SS	140	1.000 / 10.000		G03.001.006, G03.001.006A
		MC-ISIN4-2553-01.00							
			Pipe to Elbow						
			Pipe Rupture Protection. Reference Document SRG-78-001 REV.2 (DISTRIBUTION CODE MADM-257).						
Circumferential									
M2.G3.1.0003	2NC2FW22-11								
	Class 1 NC	MCFI-2NC22	PDI-UT-2	UT	SS	140	1.000 / 10.000	PDI-UT-2-M1	G03.001.006, G03.001.006A
		MC-ISIN4-2553-01.00							
			Pipe to Elbow					PDI-UT-2A-M	
			Pipe Rupture Protection. Reference Document SRG-78-001 REV.2 (DISTRIBUTION CODE MADM-257).						
Circumferential									
M2.G6.2.0001	2PZR-Manway								
	Class 1 NC	MCM 1201.01-140	NDE-68	VT-2					—
			Pressurizer Manway						
			Pressurizer Manway Diaphram Seal Weld. Bare Metal Visual Exam by VT-2 qualified Inspector. Examine the gap between the Pressurizer Manway Cover and Manway for evidence of diaphram plate seal weld leakage. Examine every outage. (For responsible Individual, contact J.M. Shuping, Alloy 600 Engineer Nuclear Technical Services). ER-MNS-07-02 used to install in plan. Reference ELL for Duke Response to NRC for commitment to NRC Bulletin 2004-01. Letted dated July 27, 2004.						
Category B-G-1									
M2.B6.110.0001	2SGA-MW-Y1-X1								
	Class 1 NC	MCM 2201.01-0126	NDE-62	VT-1	CS		2.500 / NA		B06.110.001
		MCM 2201.01-0172							
			SG Manway Nuts						
			STEAM GENERATOR 2A PRIMARY INLET MANWAY NUTS. 20 NUTS. Y1-X1 QUADRANT. Stud Length = 26.625						

Summary Num	Component ID / Class / System	ISO/DWG Numbers	Procedure	Insp Req	Material	Sched	Thick/NPS	Cal Blocks	Componenet ID 2
			Description / Comments						
Category B-G-1									
M2.B6.110.0002	2SGA-MW-X1-Y2								
	Class 1 NC	MCM 2201.01-0126 MCM 2201.01-0172	NDE-62	VT-1	CS		2.500 / NA		B06.110.002
			SG Manway Nuts STEAM GENERATOR 2A PRIMARY OUTLET MANWAY NUTS. 20 NUTS X1-Y2 QUADRANT. Stud Length = 26.625						
M2.B6.110.0007	2SGD-MW-Y1-X2								
	Class 1 NC	MCM 2201.01-0127 MCM 2201.01-0172	NDE-62	VT-1	CS		2.500 / NA		B06.110.007
			SG Manway Nuts STEAM GENERATOR 2D PRIMARY INLET MANWAY NUTS. 20 NUTS. Y1-X2 QUADRANT. Stud Length = 26.625						
M2.B6.110.0008	2SGD-MW-X2-Y2								
	Class 1 NC	MCM 2201.01-0127 MCM 2201.01-0172	NDE-62	VT-1	CS		2.500 / NA		B06.110.008
			SG Manway Nuts STEAM GENERATOR 2D PRIMARY OUTLET MANWAY NUTS. 20 NUTS. X2-Y2 QUADRANT. Stud Length = 26.625						
M2.B6.180.0004	2RCP-2D-F								
	Class 1 NC	MCM 1201.01-120 MCM 2201.01-084	PDI-UT-5	UT	CS		4.500 / NA	13C-010	B06.180.004
			RC Main Flange Bolting REACTOR COOLANT PUMP 2D MAIN FLANGE BOLTING. 24 BOLTS. Comment added per 2MNS-079: Length of bolt = 30.500. Comments added per Plan Addendum 2MNS-088: Reference PIP No. M-12-08714, Action No. 1.						

Summary Num	Component ID Class / System	ISO/DWG Numbers	Procedure Description Comments	Insp Req	Material	Sched	Thick/NPS	Cal Blocks	Componenet ID 2
Category B-G-2									
M2.B7.70.0009	2NI-129 Class 1 NI	MCFI-2NI26 MC-ISIN4-2562-03.00 MCM 1205.00-0006	NDE-62 Valve Bolting GROUP 6. 8" WALWORTH CHECK VALVE. INSPECT ONE OF THE FOLLOWING VALVES IN GROUP 6: 2NI-125 AND 2NI-129.	VT-1	SS		1.875 / NA		B07.070.003B, B07.070.007B
M2.B7.70.0012	2NI-180 Class 1 NI	MCFI-2NI15 MC-ISIN4-2562-03.01 MCM 1205.36-0028	NDE-62 Valve Bolting GROUP 8. 6" WESTINGHOUSE SWING CHECK VALVE. INSPECT THE FOLLOWING VALVE IN GROUP 8: 2NI-180.	VT-1	SS		1.250 / NA		B07.070.004C, B07.070.008C
M2.B7.70.0023	2NI-70 Class 1 NI	MCFI-2NI18 MC-ISIN4-2562-02.00 MCM 1205.00-0009 001, 003	NDE-62 Valve Bolting GROUP 5. 10" ATWOOD-MORRILL CHECK VALVE. INSPECT ONE OF THE FOLLOWING VALVES IN GROUP 5: 2NI-70, 2NI-81, AND 2NI-93.	VT-1	SS		1.875 / NA		B07.070.002A, B07.070.006A

Summary Num	Component ID Class / System	ISO/DWG Numbers	Procedure Description Comments	Insp Req	Material	Sched	Thick/NPS	Cal Blocks	Componenet ID 2
Category C-A									
M2.C1.20.0001	2SGC-W144 Class 2 SM	MCM 2201.01-0207 MC-ISIN4-2591-01.01 MCM 2201.01-0126	NDE-640 Steam Drum to Steam Drum Head STEAM GENERATOR 2C.	UT	CS		4.125 / NA	5139385	C01.020.001, C01.020.003
Circumferential									
M2.C1.20.0001	2SGC-W144 Class 2 SM	MCM 2201.01-0207 MC-ISIN4-2591-01.01 MCM 2201.01-0126	NDE-820 Steam Drum to Steam Drum Head STEAM GENERATOR 2C.	UT	CS		4.125 / NA	5139385	C01.020.001, C01.020.003
Circumferential									
M2.C1.20.0025	2RCHPA-10-1 Class 2 NV	MCM 1201.04-197 MC-ISIN4-2554-03.00	NDE-3630 SHELL to HEAD RECIPROCATING CHARGING PUMP ACCUMULATOR. Thickness and diameter (NPS) could not be verified. If actual thickness and diameter (NPS) are required, a field measurement will be needed.	UT	SS		0.495 / 6.660	50319	C01.020.080
Circumferential									

Summary Num	Component ID / Class / System	ISO/DWG Numbers	Procedure / Description / Comments	Insp Req	Material	Sched	Thick/NPS	Cal Blocks	Componenet ID 2
Category C-B									
M2.C2.31.0007	2RHRHX-2A-INLET Class 2 ND	MCM 1201.06-22 MC-ISIN4-2561-01.00	NDE-35 Reinforcing Pads to Nozzle/Shell Please Note: Material to be verified prior schedule and exam	PT	SS		0.750 / NA		C02.031.001
Circumferential									
M2.C2.31.0008	2RHRHX-2A-OUTLET Class 2 ND	MCM 1201.06-22 MC-ISIN4-2561-01.00	NDE-35 Reinforcing Pads to Nozzle/Shell Please Note: Material to be verified prior schedule and exam	PT	SS		0.750 / NA		C02.031.002
Circumferential									
Category C-C									
M2.C3.20.0024	2MCA-NI-5048 Class 2 NI	MCSRD-2NI-350/sht. 3 MC-ISIN4-2562-03.00 2MCA-NI-5048	NDE-35 Protection Saddle to Pipe Weld WELDED ATTACHMENT. INSPECT WITH F01.020.182A. Thickness (NPS) could not be verified. If actual thickness (NPS) is required, a field measurement will be needed. Thickness is reference dimesion only	PT	UNK	80	0.125 / 4.000		C03.020.032
Rigid Support									

Summary Num	Component ID Class / System	ISO/DWG Numbers	Procedure Description Comments	Insp Req	Material	Sched	Thick/NPS	Cal Blocks	Componenet ID 2
Category C-G									
M2.C8.20.0052	2CF0126B-1 Class 2 CF	MCM 1205.00-0989 MC-ISIN4-2591-01.01	NDE-25 Valve Body To Valve Body ITEM # 6J-026. INSPECT ONE VALVE IN THIS GROUP (2A-2D) PER INTERVAL. Valve is 6" Nominal Pipe Size.	MT	CS		1.165 / NA		C06.020.002A
Circumferential									
Category D-A									
M2.D1.10.0017	2VGTK-SUPPORT-2A1 Class 3 VG	MCM 1301.00-80 MC-ISIN4-2609-04.00	NDE-65 Rigid Restraint DIESEL GENERATOR STARTING AIR TANK 2A1 SUPPORT SKIRT. WELDED ATTACHMENT. INSPECT WITH F01.040.028B. Additional exam added Outage 2 per PIP M-06-2995.	VT-1	NA		0.312 / 0.000		D01.010.009
Rigid Restraint									
M2.D1.20.0004	2MCA-SA-5075 Class 3 SA	MCSRD-2SA-350/sht. 1 MC-ISIN4-2593-01.02 2MCA-SA-5075	NDE-65 Attachment to Pipe Weld THIS ITEM WAS INSPECTED IN CLASS B 2nd INTERVAL. INSPECT WITH F01.030.201A	VT-1	UNK	80	0.218 / 6.000		D01.020.021
Rigid Support									
M2.D1.20.0005	2MCA-WN-5101 Class 3 WN	MCSRD-2WN-350/sht. 2 MC-ISIN4-2609-07.00 2MCA-WN-5101	NDE-65 Rigid Restraint INSPECT WITH F01.030.226B.	VT-1	NA		0.500 / 8.000		D01.020.031
Rigid Restraint									

Summary Num	Component ID Class / System	ISO/DWG Numbers	Procedure Description Comments	Insp Req	Material	Sched	Thick/NPS	Cal Blocks	Componenet ID 2
Category F-A									
M2.F1.10.0118	2MCR-NI-4527 Class 1 NI	MCSRD-2NI-201/sht. 1	NDE-66 Rigid Support	VT-3	NA		NA / 6.000		F01.010.090A, F01.010.6118
Rigid Support									
M2.F1.10.0167	2MCR-NV-4318 Class 1 NV	MCSRD-2NV-208/sht. 1	NDE-66 Rigid Support	VT-3	NA		NA / 2.000		F01.010.112A, F01.010.6213
Rigid Support									
M2.F1.10.0177	2MCR-NV-4381 Class 1 NV	MCSRD-2NV-209/sht. 1	NDE-66 Rigid Support	VT-3	NA		NA / 1.500		F01.010.113A, F01.010.6232
Rigid Support									
M2.F1.20.0009	2MCA-CA-H145 Class 2 CA	MCSRD-2CAP/sht. 1	NDE-66	VT-3	NA		NA / 6.000		F01.020.009A, F01.020.009B
Rigid Support									

Summary Num	Component ID / Class / System	ISO/DWG Numbers	Procedure / Description / Comments	Insp Req	Material	Sched	Thick/NPS	Cal Blocks	Componenet ID 2
Category F-A									
M2.F1.20.0010	2MCA-CA-H141 Class 2 CA	MCSRD-2CAP/sht. 1	NDE-66 Spring Hgr	VT-3	NA		NA / 6.000		F01.020.010C
Spring Hgr									
M2.F1.20.0011	2MCA-CA-H134 Class 2 CA	MCSRD-2CAP/sht. 1	NDE-66 Rigid Support	VT-3	NA		NA / 6.000		F01.020.011A
Rigid Support									
M2.F1.20.0038	2MCA-ND-5482 Class 2 ND	MCSRD-2FW-350/sht. 5	NDE-66	VT-3	NA		NA / 14.000		F01.020.106C
Mech Snubber									
M2.F1.20.0041	2MCA-ND-6127 Class 2 ND	MCSRD-2ND-350/sht. 2	NDE-66 Rigid Restraint	VT-3	NA		NA / 8.000		F01.020.109B
Rigid Restraint									

Summary Num	Component ID / Class / System	ISO/DWG Numbers	Procedure / Description / Comments	Insp Req	Material	Sched	Thick/NPS	Cal Blocks	Componenet ID 2
Category F-A									
M2.F1.20.0042	2MCA-ND-6130								
	Class 2 ND	MCSRD-2ND-350/sht. 2	NDE-66	VT-3	NA		NA / 8.000		F01.020.110B
			Rigid Restraint						
Rigid Restraint									
M2.F1.20.0045	2MCA-ND-6220								
	Class 2 ND	MCSRD-2ND-350/sht. 3	NDE-66	VT-3	NA		NA / 8.000		F01.020.113A
Rigid Support									
M2.F1.20.0046	2MCA-ND-6280								
	Class 2 ND	MCSRD-2ND-350/sht. 3	NDE-66	VT-3	NA		NA / 8.000		F01.020.114C
			Hyd Snubber						
Hyd Snubber									
M2.F1.20.0047	2MCA-ND-5502								
	Class 2 ND	MCSRD-2ND-350/sht. 3	NDE-66	VT-3	UNK		0.125 / 8.000		F01.020.115A
			Thickness is reference dimension only						
Rigid Support									

Summary Num	Component ID Class / System	ISO/DWG Numbers	Procedure Description Comments	Insp Req	Material	Sched	Thick/NPS	Cal Blocks	Componenet ID 2
Category F-A									
M2.F1.20.0050	2MCA-ND-5503 Class 2 ND	MCSRD-2ND-350/sht. 3	NDE-66	VT-3	NA		NA / 8.000		F01.020.118B, F01.020.6505, F01.020.6506
Rigid Restraint									
M2.F1.20.0052	2MCA-ND-6210 Class 2 ND	MCSRD-2ND-350/sht. 6	NDE-66 Rigid Restraint	VT-3	NA		NA / 8.000		F01.020.120B
Rigid Restraint									
M2.F1.20.0055	2MCA-ND-6009 Class 2 ND	MCSRD-2ND-362/sht. 2	NDE-66 Spring Hgr	VT-3	NA		NA / 8.000		F01.020.123C
Spring Hgr									
M2.F1.20.0056	2MCA-ND-6003 Class 2 ND	MCSRD-2ND-362/sht. 2	NDE-66 Rigid Restraint Thickness is reference dimension only	VT-3	UNK		0.125 / 8.000		F01.020.124B
Rigid Restraint									

Summary Num	Component ID Class / System	ISO/DWG Numbers	Procedure Description Comments	Insp Req	Material	Sched	Thick/NPS	Cal Blocks	Componenet ID 2
Category F-A									
M2.F1.20.0057 Spring Hgr	2MCA-NI-7004 Class 2 NI	MCSRD-2FW-350/sht. 3	NDE-66 Spring Hgr	VT-3	NA		NA / 18.000		F01.020.150C, F01.020.177C
M2.F1.20.0058 Spring Hgr	2MCA-NI-7003 Class 2 NI	MCSRD-2FW-350/sht. 4	NDE-66 Spring Hgr	VT-3	NA		NA / 18.000		F01.020.151C
M2.F1.20.0141 Mech Snubber	2MCA-NV-5013 Class 2 NV	MCSRD-2NV-350/sht. 2	NDE-66 Mech Snubber	VT-3	NA		NA / 3.000		F01.020.281C
M2.F1.20.0142 Spring Hgr	2MCA-NV-5007 Class 2 NV	MCSRD-2NV-350/sht. 2	NDE-66 Spring Hgr	VT-3	NA		NA / 2.000		F01.020.282C

Summary Num	Component ID / Class / System	ISO/DWG Numbers	Procedure / Description / Comments	Insp Req	Material	Sched	Thick/NPS	Cal Blocks	Componenet ID 2
Category F-A									
M2.F1.20.0143	2MCA-NV-5205 Class 2 NV	MCSRD-2NV-351/sht. 1	NDE-66 Mech Snubber	VT-3	NA		NA / 3.000		F01.020.283C
Mech Snubber									
M2.F1.20.0144	2MCA-NV-5104 Class 2 NV	MCSRD-2NV-351/sht. 2	NDE-66	VT-3	NA		NA / 3.000		F01.020.284B
Rigid Restraint									
M2.F1.20.0145	2MCA-NV-5225 Class 2 NV	MCSRD-2NV-351/sht. 2	NDE-66	VT-3	NA		NA / 3.000		F01.020.285A
Rigid Support									
M2.F1.20.0146	2MCA-NV-5216 Class 2 NV	MCSRD-2NV-351/sht. 3	NDE-66 Rigid Restraint	VT-3	NA		NA / 3.000		F01.020.286B
Rigid Restraint									

Summary Num	Component ID Class / System	ISO/DWG Numbers	Procedure Description Comments	Insp Req	Material	Sched	Thick/NPS	Cal Blocks	Componenet ID 2
Category F-A									
M2.F1.20.0174	2MCA-SV-H53 Class 2 SV	MCSRD-2SVA/sht. 1	NDE-66 Hyd Snubber	VT-3	NA		NA / 6.000		F01.020.475C
Hyd Snubber									
M2.F1.20.0175	2MCA-SV-H55 Class 2 SV	MCSRD-2SVA/sht. 1	NDE-66 Spring Hgr	VT-3	NA		NA / 6.000		F01.020.476C
Spring Hgr									
M2.F1.20.0180	2MCA-VQ-5017 Class 2 VQ	MCSRD-2VQ-350/sht. 1	NDE-66	VT-3	NA		NA / 6.000		F01.020.504A
Rigid Support									
M2.F1.20.0272	2MCA-ND-5017 Class 2 ND	MCSRD-2ND-350/sht. 7	NDE-66 Rigid Support	VT-3	NA		NA / 8.000		F01.020.134A, F01.020.6450
Rigid Support									

Summary Num	Component ID Class / System	ISO/DWG Numbers	Procedure Description Comments	Insp Req	Material	Sched	Thick/NPS	Cal Blocks	Componenet ID 2
Category F-A									
M2.F1.20.0405	2MCA-NI-5048 Class 2 NI	MCSRD-2NI-350/sht. 3	NDE-66 Rigid Support INSPECT WITH C03.020.032. Thickness is reference dimesion only	VT-3	UNK		0.125 / 4.000		F01.020.182A, F01.020.6711
Rigid Support									
M2.F1.20.0591	2MCA-NV-5315 Class 2 NV	MCSRD-2NV-353/sht. 3	NDE-66 Mec Snb/Spr Hgr	VT-3	NA		NA / 4.000		F01.020.304C, F01.020.7049
Mec Snb/Spr Hgr									
M2.F1.20.0606	2MCA-NV-5508 Class 2 NV	MCSRD-2NV-353/sht. 2	NDE-66 Spring Hgr	VT-3	NA		NA / 4.000		F01.020.303C, F01.020.7077
Spring Hgr									
M2.F1.20.0622	2MCA-NV-5615 Class 2 NV	MCSRD-2NV-356/sht. 1	NDE-66 Rigid Support	VT-3	NA		NA / 6.000		F01.020.300A, F01.020.7104
Rigid Support									

Summary Num	Component ID / Class / System	ISO/DWG Numbers	Procedure / Description / Comments	Insp Req	Material	Sched	Thick/NPS	Cat Blocks	Componenet ID 2
Category F-A									
M2.F1.20.0624	2MCA-NV-5620 Class 2 NV	MCSRD-2NV-356/sht. 1	NDE-66 Rigid Support	VT-3	NA		NA / 3.000		F01.020.301A, F01.020.7107
Rigid Support									
M2.F1.20.0648	2MCA-NV-5655 Class 2 NV	MCSRD-2NV-356/sht. 4	NDE-66 Rigid Support	VT-3	NA		NA / 4.000		F01.020.302A, F01.020.7150
Rigid Support									
M2.F1.20.1090	2MCR-SM-H82 Class 2 SM	MCSRD-2SMA/Sht. 4	NDE-66 Spring Hgr Support Drawing reveals that Support is Accessible. Attachment info needs to be verified in the field if required	VT-3	UNK		NA / 34.000		F01.020.430C, F01.020.7955
Spring Hgr									
M2.F1.20.1118	2MCR-WL-4068 Class 2 WL	MCSRD-2WL-207/sht. 1	NDE-66 Rigid Support	VT-3	NA		NA / 6.000		F01.020.526A, F01.020.8005
Rigid Support									

Summary Num	Component ID / Class / System	ISO/DWG Numbers	Procedure / Description / Comments	Insp Req	Material	Sched	Thick/NPS	Cal Blocks	Componenet ID 2
Category F-A									
M2.F1.30.0061	2MCA-RN-3205 Class 3 RN	MCSRD-2RN-359/sht. 1	NDE-66	VT-3	NA		NA / 8.000		F01.030.168A
Rigid Support									
M2.F1.30.0063	2MCA-RN-3393 Class 3 RN	MCSRD-2RN-364/sht. 1	NDE-66	VT-3	NA		NA / 8.000		F01.030.170A
Rigid Support									
M2.F1.30.0064	2MCA-RN-3115 Class 3 RN	MCSRD-RN-156/sht. 1	NDE-66 Rigid Restraint	VT-3	NA		NA / 36.000		F01.030.156B, F01.030.171B
Rigid Restraint									
M2.F1.30.0066	2MCA-SA-5086 Class 3 SA	MCSRD-2SA-350/sht. 2	NDE-66 Mec Snb/Spr Hgr	VT-3	NA		NA / 6.000		F01.030.200C
Mec Snb/Spr Hgr									

Summary Num	Component ID / Class / System	ISO/DWG Numbers	Procedure / Description / Comments	Insp Req	Material	Sched	Thick/NPS	Cal Blocks	Componenet ID 2
Category F-A									
M2.F1.30.0067	2MCA-WN-5005 Class 3 WN	MCSRD-2WN-350/sht. 1	NDE-66 Spring Hgr	VT-3	NA		NA / 6.000		F01.030.225C
Spring Hgr									
M2.F1.30.0068	2MCA-WN-5101 Class 3 WN	MCSRD-2WN-350/sht. 2	NDE-66 INSPECT WITH D01.020.031.	VT-3	NA		0.500 / 8.000		F01.030.226A, F01.030.226B
Rigid Restraint									
M2.F1.30.0411	2MCA-RN-3018 Class 3 RN	MCSRD-2RN-351/sht. 1	NDE-66 Rigid Support	VT-3	NA		NA / 18.000		F01.030.159A, F01.030.8602
Rigid Support									
M2.F1.30.0418	2MCA-RN-3027 Class 3 RN	MCSRD-2RN-351/sht. 1	NDE-66 Spring Hgr Thickness is reference dimension only	VT-3	UNK		0.125 / 18.000		F01.030.179C, F01.030.8615
Spring Hgr									

Summary Num	Component ID Class / System	ISO/DWG Numbers	Procedure Description Comments	Insp Req	Material	Sched	Thick/NPS	Cal Blocks	Componenet ID 2
Category F-A									
M2.F1.30.0421	2MCA-RN-3031 Class 3 RN	MCSRD-2RN-351/sht. 1	NDE-66 Rigid Support	VT-3	NA		NA / 20.000		F01.030.171A, F01.030.8620
Rigid Support									
M2.F1.30.0423	2MCA-RN-3034 Class 3 RN	MCSRD-2RN-351/sht. 1	NDE-66 Rigid Support	VT-3	NA		NA / 30.000		F01.030.177A, F01.030.8623
Rigid Support									
M2.F1.30.0426	2MCA-RN-3037 Class 3 RN	MCSRD-2RN-351/sht. 3	NDE-66 Rigid Support	VT-3	NA		NA / 18.000		F01.030.178A, F01.030.8628
Rigid Support									
M2.F1.30.0463	2MCA-RN-3103 Class 3 RN	MCSRD-RN-156/sht. 1	NDE-66 Rigid Support	VT-3	NA		NA / 36.000		F01.030.176A, F01.030.8705
Rigid Support									

Summary Num	Component ID / Class / System	ISO/DWG Numbers	Procedure / Description / Comments	Insp Req	Material	Sched	Thick/NPS	Cal Blocks	Componenet ID 2
Category F-A									
M2.F1.30.0470	2MCA-RN-3116 Class 3 RN	MCSRD-2RN-358/sht. 2	NDE-66 Rigid Support	VT-3	NA		NA / 6.000		F01.030.166A, F01.030.8719
Rigid Support									
M2.F1.30.0509	2MCA-RN-3170 Class 3 RN	MCSRD-2RN-358/sht. 1	NDE-66 Rigid Support	VT-3	NA		NA / 10.000		F01.030.173A, F01.030.8799
Rigid Support									
M2.F1.30.0525	2MCA-RN-3188 Class 3 RN	MCSRD-2RN-359/sht. 1	NDE-66 Rigid Support	VT-3	NA		NA / 10.000		F01.030.174A, F01.030.8830
Rigid Support									
M2.F1.30.0586	2MCA-RN-3330 Class 3 RN	MCSRD-2RV-350/sht. 1	NDE-66 Rigid Support	VT-3	NA		NA / 10.000		F01.030.175A, F01.030.8950
Rigid Support									

Summary Num	Component ID / Class / System	ISO/DWG Numbers	Procedure / Description / Comments	Insp Req	Material	Sched	Thick/NPS	Cal Blocks	Componenet ID 2
Category F-A									
M2.F1.30.0601	2MCA-WN-5001 Class 3 WN	MCSRD-2WN-350/sht. 1	NDE-66 Mech Snubber	VT-3	NA		0.237 / 8.000		F01.030.228C, F01.030.8984
Mech Snubber									
M2.F1.30.0603	2MCA-WN-5003 Class 3 WN	MCSRD-2WN-350/sht. 1	NDE-66	VT-3	NA		NA / 8.000		F01.030.227A, F01.030.8987
Rigid Support									
M2.F1.30.0651	2MCA-SA-5075 Class 3 SA	MCSRD-2SA-350/sht. 1	NDE-66 Rigid Support THIS ITEM WAS INSPECTED IN CLASS B 2nd INTERVAL. INSPECT WITH D01.020.021	VT-3	UNK		0.218 / 6.000		F01.030.201A
Rigid Support									
M2.F1.40.0079	2CAPTD-SUPPORT Class 3 CA	MCM 1201.05-0218 MC-ISIN4-2592-01.01	NDE-66 Rigid Restraint AUXILLARY FEEDWATER PUMP TURBINE DRIVEN SUPPORT.	VT-3	UNK		NA / NA		F01.040.036B
Rigid Restraint									

Summary Num	Component ID / Class / System	ISO/DWG Numbers	Procedure / Description / Comments	Insp Req	Material	Sched	Thick/NPS	Cal Blocks	Componenet ID 2
Category F-A									
M2.F1.40.0081	2LDST-SUPPORT-2A Class 3 LD	MCM 1218.01-0036 MC-ISIN4-2609-02.00 MC-1687-1.6	NDE-66 Rigid Restraint DIESEL GENERATOR LUBE OIL INTAKE STRAINER 2A SUPPORT.	VT-3	NA		NA / NA		F01.040.040B
Rigid Restraint									
M2.F1.40.0111	2VGTK-SUPPORT-2A1 Class 3 VG	MCM 1301.00-80 MC-ISIN4-2609-04.00	NDE-66 Rigid Restraint DIESEL GENERATOR STARTING AIR TANK 2A1 SUPPORT SKIRT.	VT-3	NA		0.312 / 0.000		F01.040.028B
Rigid Restraint									
M2.F1.40.0112	2WNP-SUPPORT-2B3 Class 3 WN	MCM 1203.04-74 MC-ISIN4-2609-07.00 MC-1231-20	NDE-66 Rigid Restraint DIESEL GENERATOR SUMP PUMP 2B3 SUPPORT.	VT-3	NA		NA / NA		F01.040.029B
Rigid Restraint									
Category R-A									
M2.R1.11.0022	2NI2F-2 Class 2 NI	MCFI-2NI01 MC-ISIN4-2562-03.00	PDI-UT-2 Tee to Pipe	UT	SS	10	0.134 / 6.000	8279-0414 PDI-UT-2-M1 PDI-UT-2A-M	Risk Segment NI-042 R01.011.062
Circumferential									

Summary Num	Component ID Class / System	ISO/DWG Numbers	Procedure Description Comments	Insp Req	Material	Sched	Thick/NPS	Cal Blocks	Componenet ID 2
Category R-A									
M2.R1.11.0048	2NC2FW39-1 Class 1 NC	MCFI-2NC39 MC-ISIN4-2553-01.00	NDE-995 Pipe to Nozzle Examined in Outage 2 (EOC-17) additional examination to be performed in Outage 4 (EOC-19) reference PIP G-08-0152. Comments per Plan Addendum 2MNS-096: Added to the 2EOC22 Examination Schedule per additional examination requirements of the WCAP-14572 and Relief Request 01-005 and its response to RAI, and SER on RRs 01-005 and 01-008 pertaining to the McGuire Risk Informed Piping Program.	UT	SS	160	0.281 / 1.500	50202	Risk Segment NC-024 R01.011.014
Circumferential									
M2.R1.11.0051	2NC2FW45-5 Class 1 NC	MCFI-2NC45 MC-ISIN4-2553-01.00	NDE-995 Pipe to Nozzle	UT	SS	160	0.281 / 1.500	50202	Risk Segment NC-027 R01.011.017
Circumferential									
M2.R1.11.0057	2SGA-OUTLET-W6SE Class 1 NC	MC-ISIN4-2553-01.00 MC-2676-4 MCM 2201.01-0194	PDI-UT-10 NOZZLE to SAFE END STEAM GENERATOR A OUTLET. Comments added per 2MNS-079: Thickness listed should be used as a reference. Drawings listed show a thickness range. If actual thickness is needed a field measurement will be required. Also use drawings MCM-2201.01-0126 and MCM-2201.01-0133 for additional reference. This examination was rescheduled from 2EOC21 (Outage 6) to 2EOC22 (Outage 7). Reference PIP Serial No. M-12-5717.	UT	SS-CS		3.905 / 31.000	5149697 5158172	Risk Segment NC-005 R01.011.005
Circumferential Terminal End Dissimilar									

Summary Num	Component ID / Class / System	ISO/DWG Numbers	Procedure / Description / Comments	Insp Req	Material	Sched	Thick/NPS	Cal Blocks	Componenet ID 2
Category R-A									
M2.R1.11.0059	2SGC-OUTLET-W6SE Class 1 NC	MC-2676-4 MC-ISIN4-2553-01.00 MCM 2201.01-0194	PDI-UT-10 NOZZLE to SAFE END STEAM GENERATOR C OUTLET. Thickness listed should be used as a reference. Drawings listed show a thickness range. If actual thickness is needed a field measurement will be required. Also use drawings MCM-2201.01-0127 and MCM-2201.01-0133 for additional reference.	UT	SS-CS		3.905 / 31.000	5149697 5158172	Risk Segment NC-007 R01.011.007
Circumferential Terminal End Dissimilar									
M2.R1.11.0060	2SGD-OUTLET-W6SE Class 1 NC	MC-ISIN4-2553-01.00 MC-2676-4 MCM 2201.01-0194	PDI-UT-10 NOZZLE to SAFE END STEAM GENERATOR D OUTLET. Comments added per 2MNS-079: Thickness listed should be used as a reference. Drawings listed show a thickness range. If actual thickness is needed a field measurement will be required. Also use drawings MCM-2201.01-0127 and MCM-2201.01-0133 for additional reference. This examination was rescheduled from 2EOC21 (Outage 6) to 2EOC22 (Outage 7). Reference PIP Serial No. M-12-5717.	UT	SS-CS		3.905 / 31.000	5149697 5158172	Risk Segment NC-008 R01.011.008
Circumferential Terminal End Dissimilar									
M2.R1.11.0091	2NV2FW180-11 Class 2 NV	MCFI-2NV180 MC-ISIN4-2554-01.00	NDE-12 Pipe to Reducer Examination to be done with M2.R1.16.0021.	RT	SS	160	0.344 / 2.000		Risk Segment NV-020IA R01.011.144
Circumferential									

Summary Num	Component ID / Class / System	ISO/DWG Numbers	Procedure / Description / Comments	Insp Req	Material	Sched	Thick/NPS	Cal Blocks	Componenet ID 2
Category R-A									
M2.R1.11.0091	2NV2FW180-11								Risk Segment NV-020IA
	Class 2 NV	MCFI-2NV180 MC-ISIN4-2554-01.00	PDI-UT-2	UT	SS	160	0.344 / 2.000	8279-0410	R01.011.144
			Pipe to Reducer					PDI-UT-2-M1	
			Examination to be done with M2.R1.16.0021.						
								PDI-UT-2A-M	
Circumferential									
M2.R1.11.0277	2NV2FW178-22								Risk Segment NV-084B
	Class 2 NV	MCFI-2NV178 MC-ISIN4-2554-01.02	PDI-UT-2	UT	SS		0.216 / 3.000	PDI-UT-2-M1	R01.011.154
			Elbow to Pipe					PDI-UT-2A-M	
			Comments added per Plan Addendum 2MNS-088: Reference PIP No. M-12-08728, Action No. 1.						
Circumferential									
M2.R1.11.0585	2NV2FW215-29								Risk Segment NV-084A
	Class 2 NV	MCFI-2NV215 MC-ISIN4-2554-01.02	PDI-UT-2	UT	SS		0.344 / 2.000	PDI-UT-2-M1	R01.011.1052
			Elbow to Pipe					PDI-UT-2A-M	
			Reference PIP M-12-09687, Action No. 2. Greater than 90% coverage of one of the welds in this RI-ISI Segment must be obtained to meet code coverage requirements in order to avoid a relief request for limited coverage. The NDE Group may substitute another weld within this segment, upon approval by the SXIP Group, in order to meet the code required examination coverage. If a substitute weld is needed for 2NV2FW215-29, which is scheduled for examination in the 2EOC22 Refueling Outage, the following Weld IDs within this RI-ISI Segment should be evaluated as alternatives in this order: 2NV2FW215-4, 2NV2FW215-28, 2NV2FW216-35, and 2NV2FW216-48.						
Circumferential									

Summary Num	Component ID Class / System	ISO/DWG Numbers	Procedure Description Comments	Insp Req	Material	Sched	Thick/NPS	Cal Blocks	Componenet ID 2
Category R-A									
M2.R1.11.0596	2NV2FW215-40								Risk Segment NV-080B
	Class 2 NV	MCFI-2NV-215 MC-ISIN4-2554-01.02	PDI-UT-2	UT	SS	160	0.344 / 2.000	PDI-UT-2-M1	R01.011.1053
			Pipe to Reducer					PDI-UT-2A-M	
			Reference PIP G-12-02002, Action No. 2. RI-ISI Segment 2NV-0080B. Greater than 90% coverage of one of the welds in RI-ISI Segment 2NV-0080B must be obtained to meet code coverage requirements in order to avoid a relief request for limited coverage. The NDE Group may substitute another weld within this segment (2NV-0080B), upon approval by the SXIP Group, in order to obtain maximum coverage to meet code coverage requirements. RI-ISI Segment 2NV-0080B consists of the following Weld IDs: 2NV2FW215-40, 2NV2FW215-41, 2NV2FW215-42, 2NV2FW215-43, 2NV2FW215-44, and 2NV2FW215-46.						
								50211	
Circumferential									
M2.R1.11.1542	2NV2F-36								Risk Segment NV-019AA
	Class 2 NV	MCFI-2NV2 MC-ISIN4-2554-03.00	PDI-UT-2	UT	SS	160	0.438 / 3.000	PDI-UT-2-M1	R01.011.135
			Tee to Pipe					PDI-UT-2A-M	
			Examination to be done with M2.R1.16.0014.						
Circumferential									
M2.R1.11.1684	2NC2FW16-7								Risk Segment NC-032
	Class 1 NC	MCFI-2NC16 MC-ISIN4-2553-01.00	PDI-UT-2	UT	SS	160	0.719 / 6.000	PDI-UT-2-M1	R01.011.9277
			Pipe to Elbow					PDI-UT-2A-M	
								50211	
Circumferential									

Summary Num	Component ID / Class / System	ISO/DWG Numbers	Procedure / Description / Comments	Insp Req	Material	Sched	Thick/NPS	Cal Blocks	Componenet ID 2
Category R-A									
M2.R1.16.0014	2NV2F-36 Class 2 NV	MCFI-2NV2 MC-ISIN4-2554-03.00	PDI-UT-2 Tee to Pipe This weld is considered (IGSCC) for the Risk Informed Inservice Inspection Program, Procedure PDI-UT-2 to be used reference PIP M-10-3538. Examination to be done with M2.R1.11.1542.	UT	SS	160	0.438 / 3.000	PDI-UT-2-M1 PDI-UT-2A-M	Risk Segment NV-019AA —
M2.R1.16.0021	2NV2FW180-11 Class 2 NV	MCFI-2NV180 MC-ISIN4-2554-01.00	NDE-12 Pipe to Reducer This weld is considered (IGSCC) for the Risk Informed Inservice Inspection Program. Examination to be done with M2.R1.11.0091.	RT	SS	160	0.344 / 2.000		Risk Segment NV-020IA —
M2.R1.16.0021	2NV2FW180-11 Class 2 NV	MCFI-2NV180 MC-ISIN4-2554-01.00	PDI-UT-2 Pipe to Reducer This weld is considered (IGSCC) for the Risk Informed Inservice Inspection Program. Examination to be done with M2.R1.11.0091.	UT	SS	160	0.344 / 2.000	8279-0410 PDI-UT-2-M1 PDI-UT-2A-M	Risk Segment NV-020IA —

End of Report

SECTION 4

4.0 Results of Inspections Performed

The results of each examination shown in the final Inservice Inspection Plan (Section 3 of this report) are included in this section. The completion date and status for each examination are shown. All examinations revealing reportable indications and any corrective action required as a result are described in further detail in Subsections 4.1 and 4.2. Corrective measures performed and limited examinations are described in further detail in Subsections 4.3 and 4.4.

4.1 Reportable Indications

There was a reportable condition discovered by Ultrasonic (UT) examination during the ISI inspection of Piping Weld ID 2NC2FW45-5 (Summary Number M2.R1.11.0051) and the Augmented inspection of Cold Leg 2D Nozzle 4-1 (Summary Number M2.G13.1.0001).

4.2 Corrective Action

Corrective action is action taken to resolve flaws and relevant conditions, including supplemental examinations, analytical evaluations, repair / replacement activities, and corrective measures.

PIP M-14-03153 was written to document the reportable condition found during the Ultrasonic examination performed on Weld ID 2NC2FW45-5 (Summary Number M2.R1.11.0051) and Cold Leg 2D Nozzle 4-1 (Summary Number M2.G13.1.0001). Plan Addendum 2MNS-096 was written to add one additional sample weld (Weld ID 2NC2FW39-1 / Summary Number M2.R1.11.0048) to the 2EOC22 examination schedule per the requirements of the McGuire ISI Risk Informed Program.

4.3 Corrective Measures

Corrective measures are actions (such as maintenance) taken to resolve relevant conditions, but not including supplemental examinations, analytical evaluations, and repair / replacement activities. Any corrective measures performed for examinations associated with this report period will be shown on the examination data sheets which are on file at the Duke's Corporate Office in Charlotte, North Carolina.

4.4 Limited Examinations

Limitations (i.e., 90% or less of the required examination coverage obtained) identified for examinations associated with this report period are shown below. A relief request will be submitted to seek NRC acceptance of the limited coverage. This information will be on file at the Duke's Corporate Office in Charlotte, North Carolina.

Item Number	PIP Number
M2.R1.11.0048	M-14-05018
M2.R1.11.0051	M-14-05018
M2.C1.20.0025	M-14-06388

DUKE ENERGY CORPORATION
QUALITY ASSURANCE TECHNICAL SERVICES
Inservice Inspection Database Management System
Inspection Results
McGuire 2, 3rd Interval, Outage 7 (EOC-22)

McGuire 2EOC22 Inspection Results

Summary No	Component ID	System	Insp Date	Insp Status	Insp Limited	Geo Ref	RFR	Comment
M2.B15.80.0001	2-RPV-BMI-NOZZLES	NC	03/25/14	CLR	N	N	N	VT-14-942
M2.B4.10.0002	2RPV-Head-Multiple	NC	04/06/14	CLR	N	N	N	VT-14-946
M2.B6.110.0001	2SGA-MW-Y1-X1	NC	03/25/14	CLR	N	N	N	VT-14-952
M2.B6.110.0002	2SGA-MW-X1-Y2	NC	03/25/14	CLR	N	N	N	VT-14-953
M2.B6.110.0007	2SGD-MW-Y1-X2	NC	03/25/14	CLR	N	N	N	VT-14-954
M2.B6.110.0008	2SGD-MW-X2-Y2	NC	03/25/14	CLR	N	N	N	VT-14-955
M2.B6.180.0004	2RCP-2D-F	NC	04/02/14	CLR	N	N	N	UT-14-379
M2.B7.70.0009	2NI-129	NI	03/31/14	CLR	N	N	N	VT-14-943
M2.B7.70.0012	2NI-180	NI	03/31/14	CLR	N	N	N	VT-14-944
M2.B7.70.0023	2NI-70	NI	03/31/14	CLR	N	N	N	VT-14-945
M2.C1.20.0001	2SGC-W144	SM	04/04/14	CLR	N	N	N	UT-14-384
		SM	04/04/14	CLR	N	N	N	UT-14-385 (Page 1)

Summary No	Component ID	System	Insp Date	Insp Status	Insp Limited	Geo Ref	RFR	Comment
M2.C1.20.0001	2SGC-W144	SM	04/04/14	CLR	N	N	N	UT-14-385 (Page 2)
		SM	04/04/14	CLR	N	N	N	UT-14-385 (Page 3)
M2.C1.20.0025	2RCHPA-10-1	NV	03/25/14	CLR	Y	N	Y	UT-14-389 (Page 1) Percent of coverage <90%. Relief Request is required. Reference PIP M-14-6388.
		NV	03/25/14	CLR	Y	N	Y	UT-14-389 (Page 2) Percent of coverage <90%. Relief Request is required. Reference PIP M-14-6388.
		NV	03/25/14	CLR	Y	N	Y	UT-14-389 (Page 3) Percent of coverage <90%. Relief Request is required. Reference PIP M-14-6388.
M2.C2.31.0007	2RHRHX-2A-INLET	ND	03/13/14	CLR	N	N	N	PT-14-056
M2.C2.31.0008	2RHRHX-2A-OUTLET	ND	03/13/14	CLR	N	N	N	PT-14-057
M2.C3.20.0024	2MCA-NI-5048	NI	03/06/14	CLR	N	N	N	PT-14-055
M2.C6.20.0052	2CF0126B-1	CF	04/08/14	CLR	N	N	N	MT-14-068
M2.D1.10.0017	2VGTK-SUPPORT-2A1	VG	02/10/14	CLR	N	N	N	VT-14-918
M2.D1.20.0004	2MCA-SA-5075	SA	02/26/14	CLR	N	N	N	VT-14-920
M2.D1.20.0005	2MCA-WN-5101	WN	02/10/14	CLR	N	N	N	VT-14-919
M2.F1.10.0118	2MCR-NI-4527	NI	03/25/14	CLR	N	N	N	VT-14-937

Summary No	Component ID	System	Insp Date	Insp Status	Insp Limited	Geo Ref	RFR	Comment
M2.F1.10.0167	2MCR-NV-4318	NV	03/25/14	CLR	N	N	N	VT-14-936
M2.F1.10.0177	2MCR-NV-4381	NV	03/25/14	CLR	N	N	N	VT-14-935
M2.F1.20.0009	2MCA-CA-H145	CA	02/25/14	CLR	N	N	N	VT-14-928
M2.F1.20.0010	2MCA-CA-H141	CA	02/25/14	CLR	N	N	N	VT-14-929
M2.F1.20.0011	2MCA-CA-H134	CA	02/24/14	CLR	N	N	N	VT-14-927
M2.F1.20.0038	2MCA-ND-5482	ND	02/19/14	REC	N	N	N	VT-14-951 Acceptable per Engineering Evaluation dated 02/25/14. Reference PIP M-14-01427.
M2.F1.20.0041	2MCA-ND-6127	ND	02/26/14	CLR	N	N	N	VT-14-934
M2.F1.20.0042	2MCA-ND-6130	ND	03/03/14	REC	N	N	N	VT-14-947 Acceptable per Engineering Evaluation dated 03/05/14. Reference PIP M-14-01803.
M2.F1.20.0045	2MCA-ND-6220	ND	02/20/14	CLR	N	N	N	VT-14-902
M2.F1.20.0046	2MCA-ND-6280	ND	02/19/14	CLR	N	N	N	VT-14-889
M2.F1.20.0047	2MCA-ND-5502	ND	03/05/14	CLR	N	N	N	VT-14-899
M2.F1.20.0050	2MCA-ND-5503	ND	02/18/14	CLR	N	N	N	VT-14-923

Summary No	Component ID	System	Insp Date	Insp Status	Insp Limited	Geo Ref	RFR	Comment
M2.F1.20.0052	2MCA-ND-6210	ND	02/19/14	REC	N	N	N	VT-14-950 Acceptable per Engineering Evaluation dated 02/24/14. Reference PIP M-14-01421.
M2.F1.20.0055	2MCA-ND-6009	ND	02/17/14	CLR	N	N	N	VT-14-908
M2.F1.20.0056	2MCA-ND-6003	ND	02/18/14	CLR	N	N	N	VT-14-922
M2.F1.20.0057	2MCA-NI-7004	NI	02/24/14	CLR	N	N	N	VT-14-926
M2.F1.20.0058	2MCA-NI-7003	NI	02/17/14	CLR	N	N	N	VT-14-886
M2.F1.20.0141	2MCA-NV-5013	NV	02/17/14	CLR	N	N	N	VT-14-904
M2.F1.20.0142	2MCA-NV-5007	NV	02/18/14	CLR	N	N	N	VT-14-888
M2.F1.20.0143	2MCA-NV-5205	NV	02/24/14	CLR	N	N	N	VT-14-924
M2.F1.20.0144	2MCA-NV-5104	NV	02/17/14	CLR	N	N	N	VT-14-905
M2.F1.20.0145	2MCA-NV-5225	NV	02/17/14	CLR	N	N	N	VT-14-907
M2.F1.20.0146	2MCA-NV-5216	NV	02/18/14	CLR	N	N	N	VT-14-921
M2.F1.20.0174	2MCA-SV-H53	SV	02/25/14	CLR	N	N	N	VT-14-901
M2.F1.20.0175	2MCA-SV-H55	SV	02/25/14	CLR	N	N	N	VT-14-930
M2.F1.20.0180	2MCA-VQ-5017	VQ	02/24/14	CLR	N	N	N	VT-14-925

Summary No	Component ID	System	Insp Date	Insp Status	Insp Limited	Geo Ref	RFR	Comment
M2.F1.20.0272	2MCA-ND-5017	ND	02/24/14	REC	N	N	N	VT-14-948 Acceptable per Engineering Evaluation dated 02/25/14. Reference PIP M-14-01421.
M2.F1.20.0405	2MCA-NI-5048	NI	02/17/14	CLR	N	N	N	VT-14-887
M2.F1.20.0591	2MCA-NV-5315	NV	02/18/14	CLR	N	N	N	VT-14-911
M2.F1.20.0606	2MCA-NV-5508	NV	02/17/14	CLR	N	N	N	VT-14-906
M2.F1.20.0622	2MCA-NV-5615	NV	02/17/14	CLR	N	N	N	VT-14-909
M2.F1.20.0624	2MCA-NV-5620	NV	02/17/14	CLR	N	N	N	VT-14-910
M2.F1.20.0648	2MCA-NV-5655	NV	02/19/14	REC	N	N	N	VT-14-949 Acceptable per Engineering Evaluation dated 02/24/14. Reference PIP M-14-01425.
M2.F1.20.1090	2MCR-SM-H82	SM	04/08/14	CLR	N	N	N	VT-14-957
M2.F1.20.1118	2MCR-WL-4068	WL	03/25/14	CLR	N	N	N	VT-14-938
M2.F1.30.0061	2MCA-RN-3205	RN	06/17/13	CLR	N	N	N	VT-14-891
M2.F1.30.0063	2MCA-RN-3393	RN	02/26/14	REC	N	N	N	VT-14-939 Acceptable per Engineering Evaluation dated 02/27/14. Reference PIP M-14-01661.
M2.F1.30.0064	2MCA-RN-3115	RN	02/26/14	CLR	N	N	N	VT-14-933

Summary No	Component ID	System	Insp Date	Insp Status	Insp Limited	Geo Ref	RFR	Comment
M2.F1.30.0066	2MCA-SA-5086	SA	02/26/14	CLR	N	N	N	VT-14-931
M2.F1.30.0067	2MCA-WN-5005	WN	02/10/14	CLR	N	N	N	VT-14-917
M2.F1.30.0068	2MCA-WN-5101	WN	02/10/14	CLR	N	N	N	VT-14-913
M2.F1.30.0411	2MCA-RN-3018	RN	03/05/14	REC	N	N	N	VT-14-940 Acceptable per Engineering Evaluation dated 03/10/14. Reference PIP M-14-01921.
M2.F1.30.0418	2MCA-RN-3027	RN	02/25/14	CLR	N	N	N	VT-14-892
M2.F1.30.0421	2MCA-RN-3031	RN	03/10/14	CLR	N	N	N	VT-14-900
M2.F1.30.0423	2MCA-RN-3034	RN	02/27/14	CLR	N	N	N	VT-14-898
M2.F1.30.0426	2MCA-RN-3037	RN	02/26/14	CLR	N	N	N	VT-14-896
M2.F1.30.0463	2MCA-RN-3103	RN	02/26/14	CLR	N	N	N	VT-14-932
M2.F1.30.0470	2MCA-RN-3116	RN	02/26/14	CLR	N	N	N	VT-14-897
M2.F1.30.0509	2MCA-RN-3170	RN	02/25/14	CLR	N	N	N	VT-14-893
M2.F1.30.0525	2MCA-RN-3188	RN	02/26/14	CLR	N	N	N	VT-14-895
M2.F1.30.0586	2MCA-RN-3330	RN	02/26/13	CLR	N	N	N	VT-14-894
M2.F1.30.0601	2MCA-WN-5001	WN	02/10/14	CLR	N	N	N	VT-14-914

Summary No	Component ID	System	Insp Date	Insp Status	Insp Limited	Geo Ref	RFR	Comment
M2.F1.30.0603	2MCA-WN-5003	WN	02/10/14	CLR	N	N	N	VT-14-916
M2.F1.30.0651	2MCA-SA-5075	SA	02/26/14	REC	N	N	N	VT-14-941 Acceptable per Engineering Evaluation dated 02/27/14. Reference PIP M-14-01662.
M2.F1.40.0079	2CAPTD-SUPPORT	CA	02/12/14	CLR	N	N	N	VT-14-903
M2.F1.40.0081	2LDST-SUPPORT-2A	LD	02/10/14	CLR	N	N	N	VT-14-915
M2.F1.40.0111	2VGTK-SUPPORT-2A1	VG	02/10/14	CLR	N	N	N	VT-14-912
M2.F1.40.0112	2WNP-SUPPORT-2B3	WN	02/12/14	CLR	N	N	N	VT-14-890
M2.G13.1.0001	Cold Leg 2D Nozzle 4-1	NC	04/01/14	REP	Y	N	N	UT-14-374 Percent of coverage >90%. No Relief Request is required.
M2.G13.1.0003	Cold Leg 2D Nozzle 4-5	NC	04/01/14	CLR	N	N	N	UT-14-382 (Page 1)
		NC	04/01/14	CLR	N	N	N	UT-14-382 (Page 2)
		NC	04/01/14	CLR	N	N	N	UT-14-382 (Page 3)
M2.G13.1.0004	Cold Leg 2A Nozzle 1-3	NC	04/01/14	CLR	N	N	N	UT-14-383 (Page 1)
		NC	04/01/14	CLR	N	N	N	UT-14-383 (Page 2)
		NC	04/01/14	CLR	N	N	N	UT-14-383 (Page 3)
M2.G3.1.0003	2NC2FW22-11	NC	03/27/14	CLR	N	N	N	PT-14-058

Summary No	Component ID	System	Insp Date	Insp Status	Insp Limited	Geo Ref	RFR	Comment
M2.G3.1.0003	2NC2FW22-11	NC	03/27/14	CLR	N	N	N	UT-14-380 (Page 1)
		NC	03/27/14	CLR	N	N	N	UT-14-380 (Page 2)
M2.G8.2.0001	2PZR-Manway	NC	03/24/14	CLR	N	N	N	VT-14-856
M2.R1.11.0022	2NI2F-2	NI	04/09/14	CLR	N	N	N	UT-14-392 (Page 1)
		NI	04/09/14	CLR	N	N	N	UT-14-392 (Page 2)
		NI	04/09/14	CLR	N	N	N	UT-14-392 (Page 3)
		NI	04/09/14	CLR	N	N	N	UT-14-392 (Page 4)
M2.R1.11.0048	2NC2FW39-1	NC	04/03/14	CLR	Y	N	Y	UT-14-388 (Page 1) Percent of coverage <90%. Relief Request is required. Reference PIP M-14-5018.
		NC	04/03/14	CLR	Y	N	Y	UT-14-388 (Page 2) Percent of coverage <90%. Relief Request is required. Reference PIP M-14-5018.
		NC	04/03/14	CLR	Y	N	Y	UT-14-388 (Page 3) Percent of coverage <90%. Relief Request is required. Reference PIP M-14-5018.
		NC	04/03/14	CLR	N	Y		UT-14-388 (Page 4) Percent of coverage <90%. Relief Request is required. Reference PIP M-14-5018.
		NC	04/03/14	CLR	Y	N	Y	UT-14-388 (Page 5) Percent of coverage <90%. Relief Request is required. Reference PIP M-14-5018.
M2.R1.11.0051	2NC2FW45-5	NC	04/01/14	REP	Y	N	Y	UT-14-375 (Page 1) Percent of coverage <90%. Relief Request is required. Reference PIP M-14-5018.

Summary No	Component ID	System	Insp Date	Insp Status	Insp Limited	Geo Ref	RFR	Comment
M2.R1.11.0051	2NC2FW45-5	NC	04/01/14	REP	Y	N	Y	UT-14-375 (Page 2) Percent of coverage <90%. Relief Request is required. Reference PIP M-14-5018.
		NC	04/01/14	REP	Y	N	Y	UT-14-375 (Page 3) Percent of coverage <90%. Relief Request is required. Reference PIP M-14-5018.
		NC	04/01/14	REP	Y	N	Y	UT-14-375 (Page 4) Percent of coverage <90%. Relief Request is required. Reference PIP M-14-5018.
		NC	04/01/14	REP	Y	N	Y	UT-14-375 (Page 5) Percent of coverage <90%. Relief Request is required. Reference PIP M-14-5018.
M2.R1.11.0057	2SGA-OUTLET-W6SE	NC	03/31/14	CLR	Y	N	N	UT-14-372 (Page 1) Percent of coverage >90%. No Relief Request is required.
		NC	03/31/14	CLR	Y	N	N	UT-14-372 (Page 2) Percent of coverage >90%. No Relief Request is required.
		NC	03/31/14	CLR	Y	N	N	UT-14-372 (Page 3) Percent of coverage >90%. No Relief Request is required.
		NC	03/31/14	CLR	Y	N	N	UT-14-372 (Page 4) Percent of coverage >90%. No Relief Request is required.
		NC	03/31/14	CLR	Y	N	N	UT-14-372 (Page 5) Percent of coverage >90%. No Relief Request is required.
M2.R1.11.0059	2SGC-OUTLET-W6SE	NC	03/31/14	CLR	Y	N	N	UT-14-373 (Page 1) Percent of coverage >90%. No Relief Request is required.

Summary No	Component ID	System	Insp Date	Insp Status	Insp Limited	Geo Ref	RFR	Comment
M2.R1.11.0059	2SGC-OUTLET-W6SE	NC	03/31/14	CLR	Y	N	N	UT-14-373 (Page 2)
								Percent of coverage >90%. No Relief Request is required.
		NC	03/31/14	CLR	Y	N	N	UT-14-373 (Page 3)
								Percent of coverage >90%. No Relief Request is required.
		NC	03/31/14	CLR	Y	N	N	UT-14-373 (Page 4)
								Percent of coverage >90%. No Relief Request is required.
		NC	03/31/14	CLR	Y	N	N	UT-14-373 (Page 5)
								Percent of coverage >90%. No Relief Request is required.
M2.R1.11.0060	2SGD-OUTLET-W6SE	NC	03/30/14	CLR	Y	N	N	UT-14-369 (Page 1)
								Percent of coverage >90%. No Relief Request is required.
		NC	03/30/14	CLR	Y	N	N	UT-14-369 (Page 2)
								Percent of coverage >90%. No Relief Request is required.
		NC	03/30/14	CLR	Y	N	N	UT-14-369 (Page 3)
								Percent of coverage >90%. No Relief Request is required.
		NC	03/30/14	CLR	Y	N	N	UT-14-369 (Page 4)
								Percent of coverage >90%. No Relief Request is required.
		NC	03/30/14	CLR	Y	N	N	UT-14-369 (Page 5)
								Percent of coverage >90%. No Relief Request is required.
M2.R1.11.0091	2NV2FW180-11	NV	04/05/14	CLR	N	N	N	RT-14-017

Summary No	Component ID	System	Insp Date	Insp Status	Insp Limited	Geo Ref	RFR	Comment
M2.R1.11.0091	2NV2FW180-11	NV	04/05/14	CLR	Y	N	N	UT-14-390 (Page 1) This was performed as a supplemental exam. No Relief Request is required since 100% coverage was obtained by RT exam.
		NV	04/05/14	CLR	Y	N	N	UT-14-390 (Page 2) This was performed as a supplemental exam. No Relief Request is required since 100% coverage was obtained by RT exam.
		NV	04/05/14	CLR	Y	N	N	UT-14-390 (Page 3) This was performed as a supplemental exam. No Relief Request is required since 100% coverage was obtained by RT exam.
		NV	04/05/14	CLR	Y	N	N	UT-14-390 (Page 4) This was performed as a supplemental exam. No Relief Request is required since 100% coverage was obtained by RT exam.
M2.R1.11.0277	2NV2FW178-22	NV	03/30/14	CLR	N	N	N	UT-14-381 (Page 1)
		NV	03/30/14	CLR	N	N	N	UT-14-381 (Page 2)
M2.R1.11.0585	2NV2FW215-29	NV	03/28/14	CLR	N	Y	N	UT-14-378 (Page 1)
		NV	03/28/14	CLR	N	Y	N	UT-14-378 (Page 2)
		NV	03/28/14	CLR	N	Y	N	UT-14-378 (Page 3)
M2.R1.11.0596	2NV2FW215-40	NV	03/28/14	CLR	N	Y	N	UT-14-387 (Page 1)
		NV	03/28/14	CLR	N	Y	N	UT-14-387 (Page 2)
		NV	03/28/14	CLR	N	Y	N	UT-14-387 (Page 3)

Summary No	Component ID	System	Insp Date	Insp Status	Insp Limited	Geo Ref	RFR	Comment
M2.R1.11.0596	2NV2FW215-40	NV	03/28/14	CLR	N	Y	N	UT-14-387 (Page 4)
M2.R1.11.1542	2NV2F-36	NV	03/25/14	CLR	Y	N	N	UT-14-377 (Page 1)
								Percent of coverage >90%. No Relief Request required.
		NV	03/25/14	CLR	Y	N	N	UT-14-377 (Page 2)
								Percent of coverage >90%. No Relief Request required.
		NV	03/25/14	CLR	Y	N	N	UT-14-377 (Page 3)
								Percent of coverage >90%. No Relief Request required.
M2.R1.11.1684	2NC2FW16-7	NC	04/02/14	CLR	N	N	N	UT-14-386 (Page 1)
		NC	04/02/14	CLR	N	N	N	UT-14-386 (Page 2)
M2.R1.16.0014	2NV2F-36	NV	03/25/14	CLR	Y	N	N	UT-14-376 (Page 1)
								Percent of coverage >90%. No Relief Request required.
		NV	03/25/14	CLR	Y	N	N	UT-14-376 (Page 2)
								Percent of coverage >90%. No Relief Request required.
		NV	03/25/14	CLR	Y	N	N	UT-14-376 (Page 3)
								Percent of coverage >90%. No Relief Request required.
M2.R1.16.0021	2NV2FW180-11	NV	04/05/14	CLR	N	N	N	RT-14-018
		NV	04/05/14	CLR	Y	N	N	UT-14-391 (Page 1)
								This was performed as a supplemental exam. No Relief Request is required since 100% coverage was obtained by RT exam.

Summary No	Component ID	System	Insp Date	Insp Status	Insp Limited	Geo Ref	RFR	Comment
M2.R1.16.0021	2NV2FW180-11	NV	04/05/14	CLR	Y	N	N	UT-14-391 (Page 2) This was performed as a supplemental exam. No Relief Request is required since 100% coverage was obtained by RT exam.
		NV	04/05/14	CLR	Y	N	N	UT-14-391 (Page 3) This was performed as a supplemental exam. No Relief Request is required since 100% coverage was obtained by RT exam.
		NV	04/05/14	CLR	Y	N	N	UT-14-391 (Page 4) This was performed as a supplemental exam. No Relief Request is required since 100% coverage was obtained by RT exam.

SECTION 5

5.0 Owner's Report for Repair / Replacement Activities

As required by the applicable code, records of Class 1, Class 2, and Class 3 Repair and Replacement work are included on NIS-2 forms in this section. Attachment A lists the NIS-2 Forms that were completed during EOC22.

The NIS-2 forms included in this section were completed for work performed during this report period. No items were determined to have work performed outside this report period. The individual work request documents and manufacturers' data reports are on file at McGuire Nuclear Station.

5.1 Class 1 and 2 Preservice Examinations

As required by the applicable code, Preservice Inspection (PSI) Examinations were performed on ISI Class 1 and 2 items during this report period. PSI examination data for items examined during EOC22 are filed with the work order and can be viewed in NEDL Portal.

Work Order#	Task #	Class	Description of work NIS2's for 2EOC22
592076	13	B	Replaced piping and valve 2B87
1768930	13	B	Replaced poppet in valve 2SM7
1924311	2	B	Replaced bonnet assembly on valve 2FW75
2054476	17	C	Replaced 2 inch flat bar and welds between items 4 and 8 on hanger 2MCA-NV-5921 per EC105234
2054476	19	C	Replaced piping and valves 2NV359 and 371 per EC105234
2062428	1	C	Deleted hanger 2MCA-VN-5160 and installed hanger 2MCA-VN-5162 per EC108848
2062430	13	C	Installed hanger 2MCA-RN-3414 per EC108781
2062430	21	C	Added piping and valve 2RN448 per EC108781
2069269	15	B	Replaced U bolt and nuts on hanger 2MCA-S-VS-500-01-C
2086845	2	B	Replaced disc in valve 2NV248
2095049	4	B	Replaced plug in valve 2SV1
2098293	6	B	Replaced bolting material in body to bonnet on valve 2NV7
2099275	2	B	Replaced disc, bonnet, and yoke on valve 2NV246
2099364	20	B	Replaced pivot pin on hanger 2MCA-NV-7020
2099364	60	A	Replaced load stud and nuts in hanger 2MCR-NC-4297
2100327	2	B	Replaced control valves 4 & 5 in S/G 2B lateral support
2101773	6	C	Replaced end bell bolting material on the component cooling heat exchanger 2A
2101794	10	A	Replaced bolting material on 1 1/2" seal injection line at 2C NC Pump
2102328	4	A	Replaced valve 2NC3
2102480	3	B	Replaced disc in valve 2NV1002
2102514	2	B	Replaced plug in valve 2NV238
2102522	9	C	Replaced bolting material on hanger 2MCA-RN-4244
2116167		C	Replaced piping and valves 2NV331 and 2NV344
2117680	16	C	Added piping and valve 2CA291 per EC111274
2124934	11	C	Installed hanger 2MCA-CA-5571 per EC111274
2124934	16	C	Added piping , bolting material at 2" blind flange, and valve 2CA294 per EC 111274
2124935	16	C	Added piping and valve 2CA297 per EC111274
2139324	2	B	Replaced snubber on hanger 2MCA-SM-11
2144518	2	B	Replaced bolting material in manway of Containment Spray Heat Exchanger
2145700	10	B	Replaced body to bonnet bolting on valve 2CF121
2146084	1	C	Replaced snubber on hanger 2MCA-RN-3130
2146133	1	C	Replaced snubber on hanger 2MCA-S-RN-530-01-H
2146430	1	C	Replaced snubber on hanger 2MCA-KC-3041, snubber was removed on w/o 2099364
2146542	1	C	Replaced snubber on hanger 2MCA-S-RN-532-1-PP
2147122	20	A	Replaced 1 1/2" bent piping at "D" Loop cold leg
2147306	1	B	Replaced snubber on hanger 2MCA-S-NV-504-1-II
2148547	1	A	Replaced two snubbers on hanger 2MCR-NI-4570

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Duke Energy Carolinas, LLC — Date 4/30/2014

526 South Church Street, Charlotte, NC, 28201 (Address) — Sheet 1 of 2

2. Plant McGuire Nuclear Station (Name) — Unit 2

12700 Hagers Ferry Road, Huntersville, NC 28078 (Address) — 592076-13 (Work Order # (or Repair/Replacement Organization P.O. No., Job No., etc.))

3. Work Performed by Duke Energy Carolinas, LLC (Name) — Type Code Symbol Stamp: N/A

526 South Church Street, Charlotte, NC 28201-1006 (Address) — Authorization No.: N/A

Expiration Date: N/A

4. Identification of System BB - Steam Generator Blowdown Recycle

5. (a) Applicable Construction Code ASME III 19 71 Edition, Summer and Winter Addenda, N/A Code Case

(b) Applicable Edition of Section XI used for Repair/Replacement Activity 1998 Edition with the 1999 and 2000 Addenda

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

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
2BB7	Borg Warner	9083	92	N/A	1976	Removed	Yes
2BB7	Flow Serve	92 BUW	2941	sc 866577, utc 2008627	2012	Installed	Yes

7. Description of Work Replaced Component/Part/Appurtenance

Additional Description Replaced piping and valve 2BB7

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operation Pressure ☑ Exempt ☐ Other ☐ Pressure 1060 PSI Test Temp. 110 °F

Description (Optional): Test performed per procedure MP/0/A/7650/076.

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

As Required by the Provisions of the ASME Code Section XI

9. Remarks (Should Include the Following Information, as Applicable): Sheet 2 of 2

Component Line Size: 2 in. (nominal) System Class: ASME Class 2

Weld Isometric Drawing No(s).: MCFI-2BB60 & 2BB61

Flow Diagram No(s).: MCFD-2580-01.00

Support/Restraint Sketch/Drawing No(s).: N/A

Other Applicable Information (e.g., W.O. No., EC No.) if not included elsewhere on NIS-2 Form:

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed FL Grass, Quality Assurance Technical Specialist Date April 30, 2014

Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of North Carolina and employed by The Hartford Steam Boiler Inspection and Insurance Company of Connecticut have inspected the components described in this Owner's Report during the period 2-20-14 to 5-1-14, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

JF Swan Jerome F. Swan Commissions NB11473-NC1524, N-I

Inspector's Signature National Board, State, Province, and Endorsements

Date 5-1, 2014

FORM NPV-1 CERTIFICATE HOLDER'S 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 Flowserve Corporation, 1900 South Saunders Street, Raleigh, N.C. 27603
(name and address of N Certificate Holder)

2. Manufactured for Duke Energy Carolinas, LLC, P.O. Box 37925, Charlotte, NC 28237
(name and address of Purchaser)

3. Location of installation McGuire Nuclear Station, 13225 Hagers Ferry Road, Hwy. 73, Huntersville, NC, 28078-8985
(name and address)

4. Model No., Series No., or Type 1500 GATE Drawing 74458 Rev. E CRN N/A

5. ASME Code, Section III, Division 1 1971 (edition) SUMMER 1973 (Addenda if applicable) (date)) 2 (class) N/A (Code Case no.)

6. Pump or valve VALVE Nominal inlet size 2.00" Outlet size 2.00"

7. Material
(a) valve Body SA182-F316 Bonnet SA182-F316 Disk SA351-CF8M Bolting N/A
(b) pump Casing ___ Cover ___ Bolting ___

(a) Certificate Holder's Serial No.	(b) National Board No.	(c) Body/Casing Serial No.	(d) Bonnet/Cover Serial No.	(e) Disk Serial No.
92BUW	29410	A4-78	M7923-1-1	P9850-3

*Supplemental information in the form of lists, sketches, or drawings may be used provided: (1) size is 8½ x 11; (2) information in items 1 through 4 on this Data Report is included on each sheet; and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

(07/10)

JA ANII 5-1-14

2

2008627

Certificate Holder's Serial No. 92BUW

Nuclear Pressure Relief Report

8. Design conditions 1200 psig (pressure) 567 F (temperature) or valve pressure class 1500

9. Cold working pressure 3600 psig

10. Hydrostatic test 5400 psig . Disk differential test pressure 4000 psig

11. Remarks S.O. 68668-03

DRAIN PIPE- MATL: SA312-GR.304, HEAT NO: V00419, S/N: 3

CERTIFICATION OF DESIGN

Design Specification certified by Robert Eugene Miller P.E. State SC Reg. no. 4237

Design Report certified by N/A P.E. State N/A Reg. no. N/A

CERTIFICATE OF COMPLIANCE

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

N Certificate of Authorization No. N-1562 Expires 11-26-2015

Date 11/30/2012 Name FLOWSERVE CORPORATION (of 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 employed by HSB CT of Hartford, Connecticut have inspected the pump, or valve, described in this Data Report on 11/30/12, 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 11/30/12 Signed (Authorized Inspector) Commission (National Board Number and Endorsement)

(07/11)

3

2008627

Receiving Inspection Report

Form SCD-311A Rev.: 10 — Page 1 of 2

Purchase Order No: 158030 ☐ SCD-288 Stock/Cat ID: 866577 ID: 124410

Station: MC MEDB ID.: NA Part No.: NA QA Shop No.: 0361

Vendor: FLOWSERVE CORPORATION Manufacturer: FLOWSERVE CORPORATION

Item No.	Total	Quan.	UTC No.	Heat No.	Lot No./Batch No.	Serial No.
2	1	1	2008627	NA	NA	92BUW

Description: VALVE, GATE, LESS ACTUATOR, 2", 09J-234, 1500#, SW, SS, ASME SA-182 F316

CK'd By	SAMPLE Size	Pass	Fail	Duke/ Vendor	Inspection, Examination, and Testing Performed - Specify
TMG	1	1	0	D	☑ Visual/Configuration/Workmanship
TMG	1	1	0	D	☑ Dimensional ☐ Approx. ☑ Tolerance
					☐ Electrical
TMG	1	1	0	D	☑ Magnetic ○ Yes ◉ No
					☐ Weight
					☐ Pressure:
					☐ Chem. Analysis:
					☐ Physical Properties
					☐ Other

Procedures/Standards Used: SCD-311 Rev.: 10

☑ QA Condition: 1

☐ Commercial Grade

☐ Over-Check

Comments:

Calibrated Test, Examination, and Inspection Equipment Used:

Instrument Type	Model Number	Serial Number	Calibration Due
Dial Caliper	120	MCQUA32758	12/4/2013

I. Description of Problem

☐ Problems Sent To: S V:

Originator: Phone #: FAX #: Date:

Accepted By: Tommy M. Gilmore Date: 2/11/2013

(Level II Receiving Inspector)

Final QA Approval: Date:

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Duke Energy Carolinas, LLC — Date 5/6/2014

526 South Church Street, Charlotte, NC, 28201 (Address) — Sheet 1 of 2

2. Plant McGuire Nuclear Station (Name) — Unit 2

12700 Hagers Ferry Road, Huntersville, NC 28078 (Address) — 1768930-13 (Work Order # (or Repair/Replacement Organization P.O. No., Job No., etc.))

3. Work Performed by Duke Energy Carolinas, LLC (Name)

526 South Church Street, Charlotte, NC 28201-1006 (Address)

Type Code Symbol Stamp: N/A

Authorization No.: N/A

Expiration Date: N/A

4. Identification of System SM - Main Steam

5. (a) Applicable Construction Code ASME III 19 71 Edition, Summer and Winter Addenda, N/A Code Case

(b) Applicable Edition of Section XI used for Repair/Replacement Activity 1998 Edition with the 1999 and 2000 Addenda

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

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
2SM7	Attwood - Morrell	8-623	N/A	N/A	1976	Corrected	Yes

7. Description of Work Replaced Component/Part/Appurtenance

Additional Description Replaced poppet in valve 2SM7

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operation Pressure ☑ Exempt ☐ Other ☐ Pressure ____ PSI Test Temp. ____ °F

Description (Optional):

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

As Required by the Provisions of the ASME Code Section XI

9. Remarks (Should Include the Following Information, as Applicable): Sheet 2 of 2

Component Line Size: 34 in. (nominal) System Class: ASME Class 2

Weld Isometric Drawing No(s).: MCFI-2SM8

Flow Diagram No(s).: MCFD-2605-01.13

Support/Restraint Sketch/Drawing No(s).: N/A

Other Applicable Information (e.g., W.O. No., EC No.) if not included elsewhere on NIS-2 Form:

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed FL Grass, Quality Assurance Technical Specialist Date May 6, 20 14

Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of North Carolina and employed by The Hartford Steam Boiler Inspection and Insurance Company of Connecticut have inspected the components described in this Owner's Report during the period 4-2-14 to 5-13-14, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

JF Swan Inspector's Signature Commissions NB11473-NC1524, N-I

National Board, State, Province, and Endorsements

Date 5-13-, 20 14

FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

1. Owner Duke Energy Carolinas, LLC — Date 1/29/2013
526 South Church Street, Charlotte, NC, 28201 (Address) — Sheet 1 of 2

2. Plant McGuire Nuclear Station (Name) — Unit 2
12700 Hagers Ferry Road, Huntersville, NC 28078 (Address) — 1924311-02 (Work Order # (or Repair/Replacement Organization P.O. No., Job No., etc.))

3. Work Performed by Duke Energy Carolinas, LLC (Name)
526 South Church Street, Charlotte, NC 28201-1006 (Address)
Type Code Symbol Stamp: N/A
Authorization No.: N/A
Expiration Date: N/A

4. Identification of System FW - Refueling Water

5. (a) Applicable Construction Code ASME III 1971 Edition, Summer and Winter Addenda, N/A Code Case
(b) Applicable Edition of Section XI used for Repair/Replacement Activity 1998 Edition with the 1999 and 2000 Addenda
(c) Applicable Section XI Code Case(s) N/A

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
2FW75	ITT Grinnell	80-52815-1-8	WR6321	V File# 1354	1980	Corrected	Yes

7. Description of Work Replaced Component/Part/Appurtenance
Additional Description Replaced bonnet assembly on valve 2FW75

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operation Pressure ☑ Exempt ☐ Other ☐ Pressure ____ PSI Test Temp. ____ °F
Description (Optional): test performed per procedure MP/0/A/7700/045

FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

9. Remarks (Should Include the Following Information, as Applicable): Sheet 2 of 2

Component Line Size: 2 in. (nominal) System Class: ASME Class 2

Weld Isometric Drawing No(s).: MCFI-2FW6

Flow Diagram No(s).: MCFD-2571-01.00

Support/Restraint Sketch/Drawing No(s).: N/A

Other Applicable Information (e.g., W.O. No., EC No.) if not included elsewhere on NIS-2 Form: N/A

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed FL Grass, Quality Assurance Technical Specialist Date January 29, 2013
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of North Carolina and employed by Hartford Steam Boiler Inspection & Insurance Company of Connecticut have inspected the components described in this Owner's Report during the period 3-28-11 to 1-29-13, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

JF Swan Jerome F. Swan Commissions NB11473-NC1524, N-I
Inspector's Signature National Board, State, Province, and Endorsements

Date 1-29, 2013

FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

1. Owner Duke Energy Carolinas, LLC — Date 8/26/2013
526 South Church Street, Charlotte, NC, 28201 (Address) — Sheet 1 of 2

2. Plant McGuire Nuclear Station (Name) — Unit 2
12700 Hagers Ferry Road, Huntersville, NC 28078 (Address) — 2054476-17 (Work Order # (or Repair/Replacement Organization P.O. No., Job No., etc.))

3. Work Performed by Duke Energy Carolinas, LLC (Name) — Type Code Symbol Stamp: N/A
526 South Church Street, Charlotte, NC 28201-1006 (Address) — Authorization No.: N/A
Expiration Date: N/A

4. Identification of System NV - Chemical and Volume Control

5. (a) Applicable Construction Code ASME III 1971 Edition, Summer and Winter Addenda, N/A Code Case
(b) Applicable Edition of Section XI used for Repair/Replacement Activity 1998 Edition with the 1999 and 2000 Addenda
(c) Applicable Section XI Code Case(s) N/A

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
2MCA-NV5921	Duke Energy	N/A	N/A	N/A	N/A	Installed	No

7. Description of Work Replaced Component/Part/Appurtenance

Additional Description Replaced 2 inch flat bar and welds between items 4 and 8 on hanger 2MCA-NV-5921 per EC105234.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operation Pressure ☐ Exempt ☑ Other ☐ Pressure ____ PSI Test Temp. ____ °F

Description (Optional):

FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

9. Remarks (Should Include the Following Information, as Applicable): Sheet 2 of 2

Component Line Size: 2 in. (nominal) System Class: ASME Class 3

Weld Isometric Drawing No(s).: MCFI-2NV250

Flow Diagram No(s).: MCFD-2554-04.00

Support/Restraint Sketch/Drawing No(s).: 2MCA-NV-5921

Other Applicable Information (e.g., W.O. No., EC No.) if not included elsewhere on NIS-2 Form: EC105234

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed FL Grass, Quality Assurance Technical Specialist Date August 26, 2013
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of North Carolina and employed by Hartford Steam Boiler Inspection & Insurance Company of Connecticut have inspected the components described in this Owner's Report during the period 7-18-13 to 8-26-13, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

JF Swan Jerome F. Swan Commissions NB11473-NC1524, N-I
Inspector's Signature National Board, State, Province, and Endorsements

Date 8-26, 2013

FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

1. Owner Duke Energy Carolinas, LLC — Date 8/26/2013
526 South Church Street, Charlotte, NC, 28201 (Address) — Sheet 1 of 2

2. Plant McGuire Nuclear Station (Name) — Unit 2
12700 Hagers Ferry Road, Huntersville, NC 28078 (Address) — 2054476-19 (Work Order # (or Repair/Replacement Organization P.O. No., Job No., etc.))

3. Work Performed by Duke Energy Carolinas, LLC (Name) — Type Code Symbol Stamp: N/A
526 South Church Street, Charlotte, NC 28201-1006 (Address) — Authorization No.: N/A
Expiration Date: N/A

4. Identification of System NV - Chemical and Volume Control

5. (a) Applicable Construction Code ASME III 19 71 Edition, Summer and Winter Addenda, N/A Code Case
(b) Applicable Edition of Section XI used for Repair/Replacement Activity 1998 Edition with the 1999 and 2000 Addenda
(c) Applicable Section XI Code Case(s) N/A

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
NV System	Duke Energy	N/A	80	N/A	1982	Corrected	Yes
2NV359	ITT Grinnell	74-4770-5-6	810	N/A	1975	Removed	Yes
2NV359	BNL Industries	A120803-2-6	N/A	N/A	2012	Installed	Yes
2NV371	ITT Grinnell	74-4770-5-7	811	N/A	1975	Removed	Yes
2NV371	BNL Industries	A120803-2-9	N/A	N/A	2012	Installed	Yes

7. Description of Work Replaced Component/Part/Appurtenance
Additional Description Replaced piping and valved 2NV359 and 371 per EC105234.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operation Pressure ☑ Exempt ☐ Other ☐ Pressure 57 PSI Test Temp. 105.4 °F
Description (Optional): test performed per procedure MP/0/A/7650/076.

FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code Section XI

9. Remarks (Should Include the Following Information, as Applicable): Sheet 2 of 2

Component Line Size: 2 in. (nominal) System Class: ASME Class 3

Weld Isometric Drawing No(s).: MCFI-2NV250

Flow Diagram No(s).: MCFD-2554-04.00

Support/Restraint Sketch/Drawing No(s).: N/A

Other Applicable Information (e.g., W.O. No., EC No.) if not included elsewhere on NIS-2 Form: EC105234

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed FL Grass, Quality Assurance Technical Specialist Date August 26, 2013
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of North Carolina and employed by Hartford Steam Boiler Inspection & Insurance Company of Connecticut have inspected the components described in this Owner's Report during the period 4-30-13 to 8-26-13, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

JF Swan Jerome F. Swan Commissions NB11473-NC1524, N-I
Inspector's Signature National Board, State, Province, and Endorsements

Date 8-26, 2013

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 SNL INDUSTRIES, INC., 38 INDUSTRIAL PARK ROAD, VERNON, CT, 06066
(name and address of N Certificate Holder)

2. Manufactured for DUKE POWER CO. PO BOX 1015, CHARLOTTE, NC 28201-1015
(name and address of Purchaser)

3. Location of installation MCGUIRE SITE, 13225 HAGERS FERRY RD HWY 73, HUNTERSVILLE, NC 28078
(name and address)

4. Model No., Series No., or Type VALVE Drawing ASV-42-20-0010 Rev. C CRN

5. ASME Code, Section III, Division 1: 2007 (edition) 2008 (addenda date) 2 (class) (Code Case no.)

6. Pump or valve VALVE Nominal inlet size 2" (in.) Outlet size 2" (in.)

7. Materials: Body SA479 TY316 Bonnet SA479 TY316 Disk SA479 TY316 Bolting SA-453 GR. 660

(a) Cert. Holder's Serial No.	(b) Nat'l Board No.	(c) Body Spool No.	(d) Bonnet Serial No.	(e) Disk Serial No.
A120803-2-(1 THRU 9)		655E	976E	954E

* Supplemental information in form of lists, sketches, or drawings may be used provided (1) size is 8½ x 11, (2) information in items 1 through 4 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

(12/98) This form (E00097) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

8-26-B

2009763 2012877 — 2012884

FORM NPV-1 (Back — Pg. 2 of 2)

Certificate Holder's Serial No. A120803-2-(1 THRU 9)

8. Design conditions ____________ psi ____________ °F or valve pressure class 300 (1)
(pressure) (temperature)

9. Cold working pressure 720 psi at 100°F

10. Hydrostatic test 1100 psi. Disk differential test pressure 800 psi

11. Remarks: ____________

CERTIFICATION OF DESIGN

Design Specification certified by JESSE M. HAWKINS P.E. State NC Reg. no. 20199

Design Report certified by ____________ P.E. State ________ Reg. no. ________

CERTIFICATE OF COMPLIANCE

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

N Certificate of Authorization No. N-2882 Expires 1/10/13

Date 12/20/12 Name BNL INDUSTRIES, INC. Signed ____________
(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 ONEBEACON AMERICA INS. of LYNN, MASS have inspected the pump, or valve, described in this Data Report on 12/20/12, 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 12/20/12 Signed ____________ Commissions [illegible]
(Authorized Inspector) (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

(1) For manually operated valves only.

2009763 2012877 — . 12884

BNL INDUSTRIES, INC. NUCLEAR POWER ASSEMBLY & TEST REPORT
SHEET 1: COMPONENT IDENTIFICATION

CUSTOMER: DUKE DESC: 2" Sch. 40 SW Actuated BV 300# DATE: DEC 2 0 2012

CONTRACT: 00161951 DWG: ABV-A2-20-0010 R/C CLASS 2 ITEM: 0002 QTY: 9

SALES ORDER #: A120803 NDE PROCEDURE: N/R UNIT: DUKE

DESIGN SPECIFICATION: MCS-1205.28-00-0002 R/1 & ECV-0601.00-00-0003 R/1

ANI REVIEW: _____ DATE: 12/20/12

VALVE SERIAL NO.	BNL INDUSTRIES, INC. TRACEABILITY NUMBER FOR PRESSURE RETAINING COMPONENTS									
	BODY	END CAP	POPT/BALL	STEM	BOLT	STUD	NUT	PRE-ASSY	ANI HP	
A120803-2- 1	655E	676E	654E	659E	7S08 (2) 7S10 (2)		RR77	B20		
A120803-2- 2	655E	676E	654E	659E	7S08 (2) 7S10 (2)		RR77	B20		
A120803-2- 3	655E	676E	654E	659E	7S08 (2) 7S10 (2)		RR77	B20		
A120803-2- 4	655E	676E	654E	659E	7S08 (2) 7S10 (2)		RR77	B20		
A120803-2- 5	655E	676E	654E	659E	7S08 (2) 7S10 (2)		RR77	B20		
A120803-2- 6	655E	676E	654E	659E	7S08 (2) 7S10 (2)		RR77	B20		
A120803-2- 7	655E	676E	654E	659E	7S08 (2) 7S10 (2)		RR77	B20		
A120803-2- 8	655E	676E	654E	659E	7S08 (2) 7S10 (2)		RR77	B20		
A120803-2- 9	655E	676E	654E	659E	7S08 (2) 7S10 (2)		RR77	B20		

2009763 — 2012877 — 2012884

BNL INDUSTRIES, INC. NUCLEAR POWER ASSEMBLY & TEST REPORT
SHEET 2: INSPECTION & TEST RESULTS

CUSTOMER: DUKE
CONTRACT: 00161951
SALES ORDER # A120803

DESC: 2" Sch. 40 SW Actuated BV 300#
DWG: ABV-A2-20-0010 R/C CLASS 2
HYDRO PROCEDURE # HTP-A120803 R/0
SEAT LEAK PROCEDURE# N/R

DATE: DEC 20 2012
ITEM: 0002 QTY: 9
GAGE# PG-34 DC-29
TW-4

DESIGN SPECIFICATION: MCS-1205.28-00-0002 R/1 & ECV-0601.00-00-0003 R/1

VALVE SERIAL NUMBER	A120803-2- 1		2		3		4		5		6	
PRESSURE TESTS	STAMP	CUST ANI	STAMP	CUST ANI	STAMP	CUST ANI	STAMP	CUST ANI	STAMP	CUST ANI	STAMP	CUST ANI
ACTUAL MIN WALL DIM	.313"		.312"		.311"		.311"		.313"		.311"	
REQ'D MIN WALL DIM	.300"		.300"		.300"		.300"		.300"		.300"	
ASSEMBLY INSPECTION	B20		B20		B20		B20		B20		B20	
HYDRO SHELL TEST 1100 PSI FOR 10 MIN	B5		B5		B5		B5		B5		B5	
HYDRO DISC TEST 800 PSI FOR 1 MIN	B5		B5		B5		B5		B5		B5	
HYDRO SEAT TEST 800 PSI FOR 1 MIN	B5		B5		B5		B5		B5		B5	
LOW PRESSURE SEAT TEST 60-100 PSIG FOR 1 MIN W/ AIR	B13		B13		B13		B13		B13		B13	
FINAL VIS/DIM INSP	B20		B20		B20		B20		B20		B20	
STAMPING	SEE BELOW											

INSPECTORS STAMP SIGNIFIES ACCEPTANCE & NO LEAKAGE

ANI SIGNATURE: _____ DATE: 12/20/12

TEST WITNESSED BY _____ DATE: DEC 20 2012

REPORT REVIEWED BY: _____ DATE: DEC 20 2012

2009763 : 12877 - 2012884

BNL INDUSTRIES, INC. NUCLEAR POWER ASSEMBLY & TEST REPORT
SHEET 2: INSPECTION & TEST RESULTS

CUSTOMER: DUKE
CONTRACT: 00161951
SALES ORDER #: A120803

DESC: 2" Sch. 40 SW Actuated BV 300#
DWG: ABV-A2-20-0010 R/C CLASS 2
HYDRO PROCEDURE # HTP-A120803 R/0
SEAT LEAK PROCEDURE# N/R

DATE DEC 20 2012
ITEM: 0002 QTY: 9
GAGE# PG-34 DC-29
TW-4

DESIGN SPECIFICATION: MCS-1205.28-00-0002 R/1 & ECV-0601.00-00-0003 R/1

VALVE SERIAL NUMBER	A120803-2- 7		8 -		9 -							
PRESSURE TESTS	STAMP	CUST ANI	STAMP	CUST ANI	STAMP	CUST ANI	STAMP	CUST ANI	STAMP	CUST ANI	STAMP	CUST ANI
ACTUAL MIN WALL DIM	.312"		.312"		.311"							
REQ'D MIN WALL DIM	.300"		.300"		.300"							
ASSEMBLY INSPECTION	B20		B20		B20							
HYDRO SHELL TEST 1100 PSI FOR 10 MIN	B5		B5		B5							
HYDRO DISC TEST 800 PSI FOR 1 MIN	B5		B5		B5							
HYDRO SEAT TEST 800 PSI FOR 1 MIN	B5		B5		B5							
LOW PRESSURE SEAT TEST 60-100 PSIG FOR 1 MIN W/ AIR	B13		B13		B13							
FINAL VIS/DIM INSP	B20		B20		B20							
STAMPING	---------- SEE BELOW ----------											

INSPECTORS STAMP SIGNIFIES ACCEPTANCE & NO LEAKAGE

ANI SIGNATURE: _____ DATE: 12/20/12

TEST WITNESSED BY _____ DATE: DEC 20 2012

REPORT REVIEWED BY: _____ DATE: DEC 20 2012

Receiving Inspection Report

Form SCD-311A Rev.: 10 — Page 1 of 2

Purchase Order No: 161951 ☐ SCD-350 Stock/Cat ID: 882907 ID: 124658

Station: MC MEDB ID.: NA Part No.: 05B-844 QA Shop No.: 0901

Vendor: BNL INDUSTRIES INC Manufacturer: BNL INDUSTRIES INC

Item No.	Total	Quan.	UTC No.	Heat No.	Lot No./Batch No.	Serial No.
2	9	See Attachment for complete listing of these entries.				

Description: VALVE, BALL, FULL PORT, 2", 05B-844, ANSI 300, AIR, 2" SW, SS, SA479, 316, UHMWPE

CK'd By	SAMPLE Size	Pass	Fail	Duke/ Vendor	Inspection, Examination, and Testing Performed - Specify	Procedures/Standards Used
TMG	9	9	0	D	☑ Visual/Configuration/Workmanship	SCD-311 Rev.: 10
TMG	9	9	0	D	☑ Dimensional ☐ Approx. ☑ Tolerance	I033 PANEL
					☐ Electrical	
TMG	9	9	0	D	☑ Magnetic ○ Yes ◉ No	
					☐ Weight	
					☐ Pressure:	
					☐ Chem. Analysis:	☑ QA Condition: 1
					☐ Physical Properties:	☐ Commercial Grade
					☐ Other	☐ Over-Check

Comments

Calibrated Test, Examination, and Inspection Equipment Used:

Instrument Type	Model Number	Serial Number	Calibration Due
Dial Caliper	120	MCQUA32758	12/4/2013

I. Description of Problem

☑ Problems Sent To: Travis Brown S V:

Per O notes RI to verify deviation letter has been removed.

Originator: Tommy M. Gilmore Phone #: (980) 875-3212 FAX #: (980) 875-4003 Date: 2/25/2013

Accepted By: Tommy M. Gilmore Date: 2/26/2013

(Level II Receiving Inspector)

Final QA Approval: Date:

Receiving Inspection Report

Purchase Order No.	161951	MEDB ID.:	NA	Stock/Cat ID:	882907	ID:	124658

II. Disposition of Item(s)

- ○ A. Reject (See below)
- ◉ B. Accept Lot
- ○ C. Test/Inspect Additional Sample
  - ☐ Use original CGPA/SCS Catalog test requirements
  - ☐ Special test requirements attached

Justification:

Deviation letter specific to PO 161951 has been removed. Items are acceptable.

III. Disposition of CGPA Document and SCS Catalog

☐ **Revision to CGPA Required:**

Justification: (If revision to CGPA is NOT Required)

N/A. Item is not Commercial Grade

☑ **Revision to SCS Catalog Required:**

Justification: (If revision to SCS Catalog is NOT Required)

'O' print code note to ensure deviation letter has been removed was deleted.

IV. Approval

Sponsor:	Travis Brown	Date:	2/26/2013
Approved By:	Terry Cox	Date:	2/26/2013

Receiving Inspection Report

Form SCD-311A Rev.: 10

Attachment - UTC Entry Listing

Purchase Order No. 161951 **MEDB ID.:** NA **Stock/Cat ID:** 882907 **ID:** 124658

Quan.	UTC No.	Heat No.	Lot No./Batch No.	Serial No.
1	2009763	NA	NA	A120803-2-1
1	2012877	NA	NA	A120803-2-2
1	2012878	NA	NA	A120803-2-3
1	2012879	NA	NA	A120803-2-4
1	2012880	NA	NA	A120803-2-5
1	2012881	NA	NA	A120803-2-6
1	2012882	NA	NA	A120803-2-7
1	2012883	NA	NA	A120803-2-8
1	2012884	NA	NA	A120803-2-9

Accepted By: Tommy M. Gilmore **Date:** 2/26/2013

(Level II Receiving Inspector)

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Duke Energy Carolinas, LLC — Date 10/14/2013

526 South Church Street, Charlotte, NC 28201 (Address) — Sheet 1 of 2

2. Plant McGuire Nuclear Station (Name) — Unit 2

12700 Hagers Ferry Road, Huntersville, NC 28078 (Address) — 2062428-01 (Work Order # (or Repair/Replacement Organization P.O. No., Job No., etc.))

3. Work Performed by Duke Energy Carolinas, LLC (Name)

526 South Church Street, Charlotte, NC 28201-1006 (Address)

Type Code Symbol Stamp: N/A

Authorization No.: N/A

Expiration Date: N/A

4. Identification of System VN - Diesel Generator Engine Air Intake and Exhaust System

5. (a) Applicable Construction Code ASME III 1971 Edition, Summer and Winter Addenda, N/A Code Case

(b) Applicable Edition of Section XI used for Repair/Replacement Activity 1998 Edition with the 1999 and 2000 Addenda

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

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
2MCA-VN-5160	Duke Energy	N/A	N/A	N/A	N/A	Removed	No
2MCA-VN-5162	Duke Energy	N/A	N/A	N/A	N/A	Installed	No

7. Description of Work Add New Component/Part/Appurtenance/Weld

Additional Description Deleted hanger 2MCA-VN-5160 and installed hanger 2MCA-VN-5162 per EC108848

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operation Pressure ☐ Exempt ☑ Other ☐ Pressure ____ PSI Test Temp. ____ °F

Description (Optional):

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

As Required by the Provisions of the ASME Code Section XI

9. Remarks (Should Include the Following Information, as Applicable): Sheet 2 of 2

Component Line Size: 30 in. (nominal) System Class: ASME Class 3

Weld Isometric Drawing No(s).: N/A

Flow Diagram No(s).: N/A

Support/Restraint Sketch/Drawing No(s).: MCSRD-2VN-351

Other Applicable Information (e.g., W.O. No., EC No.) if not included elsewhere on NIS-2 Form: EC108848

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed FL Grass, Quality Assurance Technical Specialist Date October 10, 2013

Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of North Carolina and employed by Hartford Steam Boiler Inspection & Insurance Company of Connecticut have inspected the components described in this Owner's Report during the period 10-1 to 10-14-13, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

JF Swan Jerome F. Swan Commissions NB11473-NC1524, N-I

Inspector's Signature National Board, State, Province, and Endorsements

Date 10-14, 2013

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Duke Energy Carolinas, LLC — Date 5/6/2014

526 South Church Street, Charlotte, NC, 28201 (Address) — Sheet 1 of 2

2. Plant McGuire Nuclear Station (Name) — Unit 2

12700 Hagers Ferry Road, Huntersville, NC 28078 (Address) — 2062430-13 (Work Order # (or Repair/Replacement Organization P.O. No., Job No., etc.))

3. Work Performed by Duke Energy Carolinas, LLC (Name)

526 South Church Street, Charlotte, NC 28201-1006 (Address)

Type Code Symbol Stamp: N/A

Authorization No.: N/A

Expiration Date: N/A

4. Identification of System RN - Nuclear Service Water

5. (a) Applicable Construction Code ASME III 19 71 Edition, Summer and Winter Addenda, N/A Code Case

(b) Applicable Edition of Section XI used for Repair/Replacement Activity 1998 Edition with the 1999 and 2000 Addenda

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

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
2MCA-RN-3414	Duke Energy	N/A	N/A	N/A	N/A	Installed	Yes

7. Description of Work Add New Component/Part/Appurtenance/Weld

Additional Description Installed hanger 2MCA-RN-3414 per EC108781

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operation Pressure ☐ Exempt ☑ Other ☐ Pressure ____ PSI Test Temp. ____ °F

Description (Optional):

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

As Required by the Provisions of the ASME Code Section XI

9. Remarks (Should Include the Following Information, as Applicable): Sheet 2 of 2

Component Line Size: 8 in. (nominal) System Class: ASME Class 3

Weld Isometric Drawing No(s).: N/A

Flow Diagram No(s).: MCFD-2574-03.00

Support/Restraint Sketch/Drawing No(s).: 2MCA-RN-3414

Other Applicable Information (e.g., W.O. No., EC No.) if not included elsewhere on NIS-2 Form:

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed FL Grass, Quality Assurance Technical Specialist FL Grass Date May 6, 20 14

Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of North Carolina and employed by The Hartford Steam Boiler Inspection and Insurance Company of Connecticut have inspected the components described in this Owner's Report during the period 1-22-14 to 5-6-14, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

JF Swan Inspector's Signature Commissions NB11473-NC1524, N-I

National Board, State, Province, and Endorsements

Date 5-6, 20 14

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Duke Energy Carolinas, LLC — Date 5/6/2014

526 South Church Street, Charlotte, NC, 28201 (Address) — Sheet 1 of 2

2. Plant McGuire Nuclear Station (Name) — Unit 2

12700 Hagers Ferry Road, Huntersville, NC 28078 (Address)

2062430-21 (Work Order # (or Repair/Replacement Organization P.O. No., Job No., etc.))

3. Work Performed by Duke Energy Carolinas, LLC (Name)

526 South Church Street, Charlotte, NC 28201-1006 (Address)

Type Code Symbol Stamp: N/A

Authorization No.: N/A

Expiration Date: N/A

4. Identification of System RN - Nuclear Service Water

5. (a) Applicable Construction Code ASME III 19 71 Edition, Summer and Winter Addenda, N/A Code Case

(b) Applicable Edition of Section XI used for Repair/Replacement Activity 1998 Edition with the 1999 and 2000 Addenda

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

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
RN Piping	Duke Energy	N/A	60	N/A	1982	Corrected	Yes
2RN448	Crane	E2556	N/A	N/A	2013	Installed	Yes

7. Description of Work Add New Component/Part/Appurtenance/Weld

Additional Description Added piping and valve 2RN448 per EC 108781

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operation Pressure ☑ Exempt ☐ Other ☐ Pressure 91 PSI Test Temp. 50 °F

Description (Optional): Test performed per procedure MP/0/A/7650/076.

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

As Required by the Provisions of the ASME Code Section XI

9. Remarks (Should Include the Following Information, as Applicable): Sheet 2 of 2

Component Line Size: 8 & 10 in. (nominal) System Class: ASME Class 3

Weld Isometric Drawing No(s).: MCFI-2RN205

Flow Diagram No(s).: MCFD-2574-03.00

Support/Restraint Sketch/Drawing No(s).: N/A

Other Applicable Information (e.g., W.O. No., EC No.) if not included elsewhere on NIS-2 Form:

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed FL Grass, Quality Assurance Technical Specialist Date May 6, 2014

Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of North Carolina and employed by The Hartford Steam Boiler Inspection and Insurance Company of Connecticut have inspected the components described in this Owner's Report during the period 8-20-13 to 5-6-14, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

JF Swan Jerome F. Swan Commissions NB11473-NC1524, N-I

Inspector's Signature National Board, State, Province, and Endorsements

Date 5-6, 2014

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 CRANE Nuclear, Inc., 860 Remington Boulevard, Bolingbrook, IL 60440
(name and address of N Certificate Holder)

2. Manufactured for Duke Energy Carolinas, LLC Po Box 37926 Charlotte, NC 28237
(name and address of purchaser)

3. Location of installation McGuire Nuclear Station 13225 Hagers Ferry Rd Hwy 73 Huntersville, NC 28078-8985
(name and address)

4. Model No., Series No., or Type 47 1/2UF – SPL Drawing CC03982 Rev. C CRN N/A

5. ASME Code, Section III, Division 1: 1998 (edition) 2000 (addenda date) 3 (class) N/A (Code Case no.)

6. Pump or valve Valve Nominal inlet size 6" Outlet size 6"

7. Material:

(a) valve Body SA216 WCB Bonnet SA216 WCB Disk SA351 CF8M Bolting See Page 2
(b) pump Casting Cover Bolting

(a) Cert. Holder's Serial No.	(b) Nat'l Board No.	(c) Body/Casing Serial No.	(d) Bonnet/Cover Serial No.	(e) Disk Serial No.
E2556	N/A	E2557	E2560	E2562

* Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 ½ 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.

2022730

FORM NPV-1 (Back) --- Pg. 2 of 2

Certificate Holder's Serial No. E2556

8. Design conditions 135 PSIG (pressure) 180 (temperature) or valve pressure class N/A

9. Cold working pressure 285

10. Hydrostatic test 450 Disk differential test pressure 315

11. Remarks: Bonnet Studs: SA193 Gr. B7, Heat Number NF11203443, Trace Code 8G37
Bonnet Stud Nuts : SA194 Gr. 2H, Heat Number 5082414, Trace Code 8G38
PO# 00158309 Po Item No. 0002 Duke Item No. 1MV-557
CN# So# 41856-01

CERTIFICATION OF DESIGN

Design Specifications certified by Jesse M. Hawkins P.E. State NC Reg. no. 20159

Design Report certified by N/A P.E. State N/A Reg. no. N/A

CERTIFICATE OF COMPLIANCE

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

N Certificate of Authorization No. N-2899 Expires September 9, 2014

Date 8/30/13 Name CRANE Nuclear, 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 and employed by HSB CT of Hartford, CT have inspected the pump, or valve, described in this Data Report on August 30, 2013 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 8/30/13 Signed (Authorized Boiler Inspector) Todd Ward Commissions NB 11557 ABIN (National Board Number and Endorsements)

(07/11)

2022730

TELEPHONE (630) 226-4900
FAX (630) 226-4946
www.cranenuclear.com

CRANE NUCLEAR

CRANE NUCLEAR • 859 REMINGTON BOULEVARD • BOLINGBROOK, ILLINOIS 60440

*Corrected
CERTIFICATE OF COMPLIANCE

CUSTOMER:	Duke Energy Carolinas, LLC	**CUSTOMER P.O. NO.:**	00166309 Rev. 002
PLANT SITE:	McGuire Nuclear Station	**CNI ORDER NUMBER:**	41856-01
CODE EDITION/ ADDENDA, CL:	ASME Section III 1998 Edition 2000 Addenda, Class 3	**SPECIFICATION:**	MCS-1205.22-00-0003 Rev. 001 ECV-0601.00-00-0003 Rev. 002*

ITEM	QTY.	PART NUMBER	DESCRIPTION
0002	1	CC03962	8" Class 150 Gate Valve DE Item Number: 1MV-557 Assembly Drawing: CC03962 Rev. C Serial Number: E2558 Ref.: Design Report DR-118 Rev. 1

Documentation provided for the following:
C-of-C, Code Data Report, Hydrostatic Test Report, Minimum Wall Records, CMTR's, Heat Treat Records, Weld Repair Records & Weld Material CMTR's, MT & PT Reports

The above has been supplied in accordance with the CRANE Nuclear Inc. NQAM 11th Edition Rev. 1 dated 12/07/11 and "N" Certificate of Authorization Number N-2899, which expires September 09, 2014. This also certifies that materials used, and all processing and manufacturing of part(s) identified, conform to the specifications, drawings and other technical requirements set forth in the subject purchase order including all codes, tests, standards and quality assurance requirements invoked therein.

DUKE ENERGY
QA RECORDS APPROVED
QA REPRESENTATIVE
DATE: 11/4/13

Chris Nelsen
Quality Assurance Engineer
11/4/13
Date

2022730

Receiving Inspection Report

Form SCD-311A Rev.: 12 — Page 1 of 2

Purchase Order No: 166309 ☐ SCD-350 Stock/Cat ID: 593794 ID: 128724

Station: MC MEDB ID.: NA Part No.: 1MV-557 QA Shop No.: 0692

Vendor: CRANE NUCLEAR INC Manufacturer: CRANE NUCLEAR INC

Item No.	Total	Quan.	UTC No.	Heat No.	Lot No./Batch No.	Serial No.
2	1	1	2022730	NA	NA	E2556

Description: VALVE, GATE, BOLTED BONNET, 8", 1MV-557, 150 LB, MANUAL, BW SCH 40, CARBON STL, SA-216, WCB, SS

CK'd By	SAMPLE Size	Pass	Fail	Duke/ Vendor	Inspection, Examination, and Testing Performed - Specify
CGW	1	1	0	D	☑ Visual/Configuration/Workmanship
CGW	1	1	0	D	☑ Dimensional ☑ Approx. ☐ Tolerance
					☐ Electrical
CGW	1	1	0	D	☑ Magnetic ◉ Yes ○ No
					☐ Weight
					☐ Pressure:
					☐ Chem. Analysis:
					☐ Physical Properties
					☐ Other

Procedures/Standards Used: SCD-311 Rev.: 12; 1033 PANEL

☑ QA Condition: 1

☐ Commercial Grade

☐ Over-Check

Comments:

Calibrated Test, Examination, and Inspection Equipment Used:

Instrument Type	Model Number	Serial Number	Calibration Due

1. Description of Problem

☑ Problems Sent To: S V:

vendor e-mailed corrected c of c

Originator: Phone #: FAX #: Date:

Accepted By: Christopher G. Weant Chris Weant Date: 10/30/2013

(Level II Receiving Inspector)

Final QA Approval: Date: 11-6-13

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Duke Energy Carolinas, LLC — Date 4/21/2014

526 South Church Street, Charlotte, NC, 28201 (Address) — Sheet 1 of 2

2. Plant McGuire Nuclear Station (Name) — Unit 2

12700 Hagers Ferry Road, Huntersville, NC 28078 (Address) — 2069269-15 (Work Order # (or Repair/Replacement Organization P.O. No., Job No., etc.))

3. Work Performed by Duke Energy Carolinas, LLC (Name)

526 South Church Street, Charlotte, NC 28201-1006 (Address)

Type Code Symbol Stamp: N/A

Authorization No.: N/A

Expiration Date: N/A

4. Identification of System VS - VS - Station Air System - Station Air System (High Pressure)

5. (a) Applicable Construction Code ASME III 1971 Edition, Summer and Winter Addenda, N/A Code Case

(b) Applicable Edition of Section XI used for Repair/Replacement Activity 1998 Edition with the 1999 and 2000 Addenda

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

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
see section 7	Duke Energy	N/A	N/A	N/A	N/A	Corrected	Yes

7. Description of Work Replaced Component/Part/Appurtenance

Additional Description Replaced u bolt and nuts on hanger 2MCA-S-VS-500-01-C

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operation Pressure ☐ Exempt ☑ Other ☐ Pressure ____ PSI Test Temp. ____ °F

Description (Optional):

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

As Required by the Provisions of the ASME Code Section XI

9. Remarks (Should Include the Following Information, as Applicable): Sheet 2 of 2

Component Line Size: 2 in. (nominal) System Class: ASME Class 2

Weld Isometric Drawing No(s).: n/A

Flow Diagram No(s).: N/A

Support/Restraint Sketch/Drawing No(s).: 2MCA-S-VS-500-01-C

Other Applicable Information (e.g., W.O. No., EC No.) if not included elsewhere on NIS-2 Form:

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed FL Grass, Quality Assurance Technical Specialist Date April 21, 20 14

Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of North Carolina and employed by The Hartford Steam Boiler Inspection and Insurance Company of Connecticut have inspected the components described in this Owner's Report during the period 4-18-14 to 4-22-14, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

JF Swan Jerome F. Swan Commissions NB11473-NC1524, N-I

Inspector's Signature National Board, State, Province, and Endorsements

Date 4-22, 20 14

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Duke Energy Carolinas, LLC — Date 5/6/2014

526 South Church Street, Charlotte, NC 28201 (Address) — Sheet 1 of 2

2. Plant McGuire Nuclear Station (Name) — Unit 2

12700 Hagers Ferry Road, Huntersville, NC 28078 (Address)

2086845-02 (Work Order # (or Repair/Replacement Organization P.O. No., Job No., etc.))

3. Work Performed by Duke Energy Carolinas, LLC (Name)

526 South Church Street, Charlotte, NC 28201-1006 (Address)

Type Code Symbol Stamp: N/A

Authorization No.: N/A

Expiration Date: N/A

4. Identification of System NV - Chemical and Volume Control

5. (a) Applicable Construction Code ASME III 19 71 Edition, Summer and Winter Addenda, N/A Code Case

(b) Applicable Edition of Section XI used for Repair/Replacement Activity 1998 Edition with the 1999 and 2000 Addenda

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

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
2NV248	Kerotest	ATH7-4	38542	N/A	14991	Corrected	Yes

7. Description of Work Replaced Component/Part/Appurtenance

Additional Description Replaced disc in valve 2NV248

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operation Pressure ☑ Exempt ☐ Other ☐ Pressure ____ PSI Test Temp. ____ °F

Description (Optional):

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

As Required by the Provisions of the ASME Code Section XI

9. Remarks (Should Include the Following Information, as Applicable): Sheet 2 of 2

Component Line Size: 2 in. (nominal) System Class: ASME Class 2

Weld Isometric Drawing No(s).: MCFI-2NV294

Flow Diagram No(s).: MCFD-2554-03.00

Support/Restraint Sketch/Drawing No(s).: N/A

Other Applicable Information (e.g., W.O. No., EC No.) if not included elsewhere on NIS-2 Form:

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed FL Grass, Quality Assurance Technical Specialist Date May 6, 20 14

Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of North Carolina and employed by The Hartford Steam Boiler Inspection and Insurance Company of Connecticut have inspected the components described in this Owner's Report during the period 4-2-14 to 5-13-14, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

JF Swan Jerome F. Swan Commissions NB11473-NC1524, N-I

Inspector's Signature National Board, State, Province, and Endorsements

Date 5-13-, 20 14

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Duke Energy Carolinas, LLC — Date 5/6/2014

526 South Church Street, Charlotte, NC, 28201 (Address) — Sheet 1 of 2

2. Plant McGuire Nuclear Station (Name) — Unit 2

12700 Hagers Ferry Road, Huntersville, NC 28078 (Address)

2095049 - 04 (Work Order # (or Repair/Replacement Organization P.O. No., Job No., etc.))

3. Work Performed by Duke Energy Carolinas, LLC (Name)

526 South Church Street, Charlotte, NC 28201-1006 (Address)

Type Code Symbol Stamp: N/A

Authorization No.: N/A

Expiration Date: N/A

4. Identification of System SV - Main Steam Vent to Atmosphere

5. (a) Applicable Construction Code ASME III 19 71 Edition, Summer and Winter Addenda, N/A Code Case

(b) Applicable Edition of Section XI used for Repair/Replacement Activity 1998 Edition with the 1999 and 2000 Addenda

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

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
2SV1	Crosby	N56937-00-0001	31	N/A	1974	Corrected	Yes

7. Description of Work Replaced Component/Part/Appurtenance

Additional Description Replaced plug in valve 2SV1.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operation Pressure ☑ Exempt ☐ Other ☐ Pressure ____ PSI Test Temp. ____ °F

Description (Optional):

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

As Required by the Provisions of the ASME Code Section XI

9. Remarks (Should Include the Following Information, as Applicable): Sheet 2 of 2

Component Line Size: 36 in. (nominal) System Class: ASME Class 2

Weld Isometric Drawing No(s).: MCFI-2SV9

Flow Diagram No(s).: MCFD-2593-01.03

Support/Restraint Sketch/Drawing No(s).: N/A

Other Applicable Information (e.g., W.O. No., EC No.) if not included elsewhere on NIS-2 Form:

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed FL Grass, Quality Assurance Technical Specialist Date May 6, 2014

Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of North Carolina and employed by The Hartford Steam Boiler Inspection and Insurance Company of Connecticut have inspected the components described in this Owner's Report during the period 4-6-14 to 5-13-14, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

JF Swan Jerome F. Swan Commissions NB11473-NC1524, N-I

Inspector's Signature National Board, State, Province, and Endorsements

Date 5-13-, 2014

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Duke Energy Carolinas, LLC — Date 4/30/2014

526 South Church Street, Charlotte, NC, 28201 (Address) — Sheet 1 of 2

2. Plant McGuire Nuclear Station (Name) — Unit 2

12700 Hagers Ferry Road, Huntersville, NC 28078 (Address)

2098293-06 (Work Order # (or Repair/Replacement Organization P.O. No., Job No., etc.))

3. Work Performed by Duke Energy Carolinas, LLC (Name)

526 South Church Street, Charlotte, NC 28201-1006 (Address)

Type Code Symbol Stamp: N/A

Authorization No.: N/A

Expiration Date: N/A

4. Identification of System NV - Chemical and Volume Control

5. (a) Applicable Construction Code ASME III 19 71 Edition, Summer and Winter Addenda, N/A Code Case

(b) Applicable Edition of Section XI used for Repair/Replacement Activity 1998 Edition with the 1999 and 2000 Addenda

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

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
2NV7	Walworth	A1853	608	N/A	1976	Corrected	Yes

7. Description of Work Replaced Component/Part/Appurtenance

Additional Description Replaced bolting material in body to bonnet on valve 2NV7

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operation Pressure ☑ Exempt ☐ Other ☐ Pressure ____ PSI Test Temp. ____ °F

Description (Optional): Test performed per procedure MP/0/A/7700/045.

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

As Required by the Provisions of the ASME Code Section XI

9. Remarks (Should Include the Following Information, as Applicable): Sheet 2 of 2

Component Line Size: 3 in. (nominal) System Class: ASME Class 2

Weld Isometric Drawing No(s).: MCFI-2NV189

Flow Diagram No(s).: MCFD-2554-01.02

Support/Restraint Sketch/Drawing No(s).: N/A

Other Applicable Information (e.g., W.O. No., EC No.) if not included elsewhere on NIS-2 Form:

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed FL Grass, Quality Assurance Technical Specialist FL Grass Date April 30, 20 14

Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of North Carolina and employed by The Hartford Steam Boiler Inspection and Insurance Company of Connecticut have inspected the components described in this Owner's Report during the period 4-4-14 to 4-30-14, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

JF Swan Jerome F. Swan Commissions NB11473-NC1524, N-I

Inspector's Signature National Board, State, Province, and Endorsements

Date 4-30, 20 14

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Duke Energy Carolinas, LLC — Date 4/30/2014

526 South Church Street, Charlotte, NC, 28201 (Address) — Sheet 1 of 2

2. Plant McGuire Nuclear Station (Name) — Unit 2

12700 Hagers Ferry Road, Huntersville, NC 28078 (Address)

2099275-02 (Work Order # (or Repair/Replacement Organization P.O. No., Job No., etc.))

3. Work Performed by Duke Energy Carolinas, LLC (Name)

526 South Church Street, Charlotte, NC 28201-1006 (Address)

Type Code Symbol Stamp: N/A

Authorization No.: N/A

Expiration Date: N/A

4. Identification of System NV - Chemical and Volume Control

5. (a) Applicable Construction Code ASME III 19 71 Edition, Summer and Winter Addenda, N/A Code Case

(b) Applicable Edition of Section XI used for Repair/Replacement Activity 1998 Edition with the 1999 and 2000 Addenda

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

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
2NV246	Kerotest	ABH13-14	3488	N/A	1982	Corrected	Yes

7. Description of Work Replaced Component/Part/Appurtenance

Additional Description Replaced Disc, bonnet, and yoke on valve 2NV246

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operation Pressure ☑ Exempt ☐ Other ☐ Pressure ____ PSI Test Temp. ____ °F

Description (Optional): Test performed per procedure MP/0/A/7700/045.

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

As Required by the Provisions of the ASME Code Section XI

9. Remarks (Should Include the Following Information, as Applicable): Sheet 2 of 2

Component Line Size: 2 in. (nominal) System Class: ASME Class 2

Weld Isometric Drawing No(s).: MCFI-2NV293

Flow Diagram No(s).: MCFD-2554-03.00

Support/Restraint Sketch/Drawing No(s).: N/A

Other Applicable Information (e.g., W.O. No., EC No.) if not included elsewhere on NIS-2 Form:

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed FL Grass, Quality Assurance Technical Specialist Date April 30, 2014

Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of North Carolina and employed by The Hartford Steam Boiler Inspection and Insurance Company of Connecticut have inspected the components described in this Owner's Report during the period 3-30-14 to 4-30-14, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

JF Swan Jerome F. Swan Commissions NB11473-NC1524, N-I

Inspector's Signature National Board, State, Province, and Endorsements

Date 4-30, 2014

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Duke Energy Carolinas, LLC — Date 4/10/2014

526 South Church Street, Charlotte, NC, 28201 (Address) — Sheet 1 of 2

2. Plant McGuire Nuclear Station (Name) — Unit 2

12700 Hagers Ferry Road, Huntersville, NC 28078 (Address)

2099364-20 (Work Order # (or Repair/Replacement Organization P.O. No., Job No., etc.))

3. Work Performed by Duke Energy Carolinas, LLC (Name)

526 South Church Street, Charlotte, NC 28201-1006 (Address)

Type Code Symbol Stamp: N/A

Authorization No.: N/A

Expiration Date: N/A

4. Identification of System NV - Chemical and Volume Control

5. (a) Applicable Construction Code ASME III 19 71 Edition, Summer and Winter Addenda, N/A Code Case

(b) Applicable Edition of Section XI used for Repair/Replacement Activity 1998 Edition with the 1999 and 2000 Addenda

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

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
2MCA-NV-7020	Duke Energy	N/A	N/A	N/A	N/A	Corrected	Yes

7. Description of Work Replaced Component/Part/Appurtenance

Additional Description Replaced pivot pin on hanger 2MCA-NV-7020

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operation Pressure ☐ Exempt ☑ Other ☐ Pressure ____ PSI Test Temp. ____ °F

Description (Optional):

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

As Required by the Provisions of the ASME Code Section XI

9. Remarks (Should Include the Following Information, as Applicable): Sheet 2 of 2

Component Line Size: 3 in. (nominal) System Class: ASME Class 2

Weld Isometric Drawing No(s).: N/A

Flow Diagram No(s).: MCFD-2554-02.00

Support/Restraint Sketch/Drawing No(s).: 2MCA-NV-7020

Other Applicable Information (e.g., W.O. No., EC No.) if not included elsewhere on NIS-2 Form:

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed FL Grass, Quality Assurance Technical Specialist FL Grass Date April 10, 2014

Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of North Carolina and employed by The Hartford Steam Boiler Inspection and Insurance Company of Connecticut have inspected the components described in this Owner's Report during the period 4-1-14 to 4-14-14, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

JF Swan Jerome F. Swan Commissions NB11473-NC1524, N-I

Inspector's Signature National Board, State, Province, and Endorsements

Date 4-14, 2014

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Duke Energy Carolinas, LLC — Date 4/7/2014

526 South Church Street, Charlotte, NC, 28201 (Address) — Sheet 1 of 2

2. Plant McGuire Nuclear Station (Name) — Unit 2

12700 Hagers Ferry Road, Huntersville, NC 28078 (Address)

2099364-60 (Work Order # (or Repair/Replacement Organization P.O. No., Job No., etc.))

3. Work Performed by Duke Energy Carolinas, LLC (Name)

526 South Church Street, Charlotte, NC 28201-1006 (Address)

Type Code Symbol Stamp: N/A

Authorization No.: N/A

Expiration Date: N/A

4. Identification of System NC - Reactor Coolant

5. (a) Applicable Construction Code ASME III 19 71 Edition, Summer and Winter Addenda, N/A Code Case

(b) Applicable Edition of Section XI used for Repair/Replacement Activity 1998 Edition with the 1999 and 2000 Addenda

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

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
2MCR-NC-4297	Duke Energy	N/A	N/A	N/A	N/A	Corrected	Yes

7. Description of Work Replaced Component/Part/Appurtenance

Additional Description Replaced load stud and nuts in hanger 2MCR-NC4297

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operation Pressure ☐ Exempt ☑ Other ☐ Pressure ____ PSI Test Temp. ____ °F

Description (Optional):

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

As Required by the Provisions of the ASME Code Section XI

9. Remarks (Should Include the Following Information, as Applicable): Sheet 2 of 2

Component Line Size: 6 in. (nominal) System Class: ASME Class 1

Weld Isometric Drawing No(s).: N/A

Flow Diagram No(s).: MCFD-2553-02.00

Support/Restraint Sketch/Drawing No(s).: 2MCR-NC-4297

Other Applicable Information (e.g., W.O. No., EC No.) if not included elsewhere on NIS-2 Form:

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed FL Grass, Quality Assurance Technical Specialist Date April, 7, 2014

Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of North Carolina and employed by The Hartford Steam Boiler Inspection and Insurance Company of Connecticut have inspected the components described in this Owner's Report during the period 4-1-14 to 4-8-14, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

JF Swan Jerome F. Swan Commissions NB11473-NC1524, N-I

Inspector's Signature National Board, State, Province, and Endorsements

Date 4-8-, 2014

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Duke Energy Carolinas, LLC — Date 4/9/2014

526 South Church Street, Charlotte, NC, 28201 (Address) — Sheet 1 of 2

2. Plant McGuire Nuclear Station (Name) — Unit 2

12700 Hagers Ferry Road, Huntersville, NC 28078 (Address)

2100327-02 (Work Order # (or Repair/Replacement Organization P.O. No., Job No., etc.))

3. Work Performed by Duke Energy Carolinas, LLC (Name)

526 South Church Street, Charlotte, NC 28201-1006 (Address)

Type Code Symbol Stamp: N/A

Authorization No.: N/A

Expiration Date: N/A

4. Identification of System NC - Reactor Coolant

5. (a) Applicable Construction Code ASME III 19 71 Edition, Summer and Winter Addenda, N/A Code Case

(b) Applicable Edition of Section XI used for Repair/Replacement Activity 1998 Edition with the 1999 and 2000 Addenda

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

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
NC S/G 2B (A)	Duke Energy	8	N/A	N/A	N/A	Corrected	No

7. Description of Work Replaced Component/Part/Appurtenance

Additional Description Replaced control valves 4 & 5 in S/G 2B lateral support.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operation Pressure ☐ Exempt ☑ Other ☐ Pressure ____ PSI Test Temp. ____ °F

Description (Optional):

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

As Required by the Provisions of the ASME Code Section XI

9. Remarks (Should Include the Following Information, as Applicable): Sheet 2 of 2

Component Line Size: N/A in. (nominal) System Class: ASME Class 2

Weld Isometric Drawing No(s).: N/A

Flow Diagram No(s).: N/A

Support/Restraint Sketch/Drawing No(s).: N/A

Other Applicable Information (e.g., W.O. No., EC No.) if not included elsewhere on NIS-2 Form:

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed FL Grass, Quality Assurance Technical Specialist Date April 9, 2014

Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of North Carolina and employed by The Hartford Steam Boiler Inspection and Insurance Company of Connecticut have inspected the components described in this Owner's Report during the period 3-26-14 to 4-14-14, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

JF Swan Jerome F. Swan Commissions NB11473-NC1524, N-I

Inspector's Signature National Board, State, Province, and Endorsements

Date 4-14, 2014

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Duke Energy Carolinas, LLC — Date 5/28/2014

526 South Church Street, Charlotte, NC, 28201 (Address) — Sheet 1 of 2

2. Plant McGuire Nuclear Station (Name) — Unit 2

12700 Hagers Ferry Road, Huntersville, NC 28078 (Address)

2101773-06 (Work Order # (or Repair/Replacement Organization P.O. No., Job No., etc.))

3. Work Performed by Duke Energy Carolinas, LLC (Name)

526 South Church Street, Charlotte, NC 28201-1006 (Address)

Type Code Symbol Stamp: N/A

Authorization No.: N/A

Expiration Date: N/A

4. Identification of System KC - Component Cooling

5. (a) Applicable Construction Code ASME III 19 71 Edition, Summer and Winter Addenda, N/A Code Case

(b) Applicable Edition of Section XI used for Repair/Replacement Activity 1998 Edition with the 1999 and 2000 Addenda

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

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
2A KC HX	Delta Southern Co	23801-73-3	3387	N/A	1973	Corrected	Yes

7. Description of Work Replaced Component/Part/Appurtenance

Additional Description Replaced end bell bolting material on the component cooling heat exchanger 2A.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operation Pressure ☑ Exempt ☐ Other ☐ Pressure ____ PSI Test Temp. ____ °F

Description (Optional): test performed per procedure MP/0/A/7700/045

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

As Required by the Provisions of the ASME Code Section XI

9. Remarks (Should Include the Following Information, as Applicable): Sheet 2 of 2

Component Line Size: N/A in. (nominal) System Class: ASME Class 3

Weld Isometric Drawing No(s).: MCFI-2KC5

Flow Diagram No(s).: MCFD-2573-01.00

Support/Restraint Sketch/Drawing No(s).: N/A

Other Applicable Information (e.g., W.O. No., EC No.) if not included elsewhere on NIS-2 Form:

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed FL Grass, Quality Assurance Technical Specialist Date May 28, 20 14

Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of North Carolina and employed by The Hartford Steam Boiler Inspection and Insurance Company of Connecticut have inspected the components described in this Owner's Report during the period 4-6-14 to 6-2-14, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

JF Swan Jerome F. Swan Commissions NB11473-NC1524, N-I

Inspector's Signature National Board, State, Province, and Endorsements

Date 6-2, 20 14

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Duke Energy Carolinas, LLC — Date 5/6/2014

526 South Church Street, Charlotte, NC, 28201 (Address) — Sheet 1 of 2

2. Plant McGuire Nuclear Station (Name) — Unit 2

12700 Hagers Ferry Road, Huntersville, NC 28078 (Address)

2101794-10 (Work Order # (or Repair/Replacement Organization P.O. No., Job No., etc.))

3. Work Performed by Duke Energy Carolinas, LLC (Name)

526 South Church Street, Charlotte, NC 28201-1006 (Address)

Type Code Symbol Stamp: N/A

Authorization No.: N/A

Expiration Date: N/A

4. Identification of System NV - Chemical and Volume Control

5. (a) Applicable Construction Code ASME III 19 71 Edition, Summer and Winter Addenda, N/A Code Case

(b) Applicable Edition of Section XI used for Repair/Replacement Activity 1998 Edition with the 1999 and 2000 Addenda

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

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
NV Piping	Duke Energy	N/A	80	N/A	1982	Corrected	Yes

7. Description of Work Replaced Component/Part/Appurtenance

Additional Description Replaced bolting material on 1 1/2" seal injection line at 2C NC Pump.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operation Pressure ☑ Exempt ☐ Other ☐ Pressure ____ PSI Test Temp. ____ °F

Description (Optional): test performed per procedure MP/0/A/7700/045.

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

As Required by the Provisions of the ASME Code Section XI

9. Remarks (Should Include the Following Information, as Applicable): Sheet 2 of 2

Component Line Size: 1 1/2 in. (nominal) System Class: ASME Class 1

Weld Isometric Drawing No(s).: N/A

Flow Diagram No(s).: MCFD-2553-01.00

Support/Restraint Sketch/Drawing No(s).: N/A

Other Applicable Information (e.g., W.O. No., EC No.) if not included elsewhere on NIS-2 Form:

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed FL Grass, Quality Assurance Technical Specialist FL Grass Date May 6, 2014

Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of North Carolina and employed by The Hartford Steam Boiler Inspection and Insurance Company of Connecticut have inspected the components described in this Owner's Report during the period 4-23-14 to 5-12-14, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

JF Swan Jerome F. Swan Commissions NB11473-NC1524, N-I

Inspector's Signature National Board, State, Province, and Endorsements

Date 5-12, 2014

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Duke Energy Carolinas, LLC — Date 5/6/2014

526 South Church Street, Charlotte, NC 28201 (Address) — Sheet 1 of 2

2. Plant McGuire Nuclear Station (Name) — Unit 2

12700 Hagers Ferry Road, Huntersville, NC 28078 (Address) — 2102328 - 04 (Work Order # (or Repair/Replacement Organization P.O. No., Job No., etc.)

3. Work Performed by Duke Energy Carolinas, LLC (Name)

526 South Church Street, Charlotte, NC 28201-1006 (Address)

Type Code Symbol Stamp: N/A

Authorization No.: N/A

Expiration Date: N/A

4. Identification of System NC - Reactor Coolant

5. (a) Applicable Construction Code ASME III 19 71 Edition, Summer and Winter Addenda, N/A Code Case

(b) Applicable Edition of Section XI used for Repair/Replacement Activity 1998 Edition with the 1999 and 2000 Addenda

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

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
2NC3	Crosby	N56925-00-0008	524	N/A	1978	Removed	Yes
2NC3	Crosby	N56925-00-0006	30	N/A	1974	Installed	Yes

7. Description of Work Replaced Component/Part/Appurtenance

Additional Description replaced valve 2NC3.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operation Pressure ☑ Exempt ☐ Other ☐ Pressure ____ PSI Test Temp. ____ °F

Description (Optional):

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

As Required by the Provisions of the ASME Code Section XI

9. Remarks (Should Include the Following Information, as Applicable): Sheet 2 of 2

Component Line Size: 6 in. (nominal) System Class: ASME Class 1

Weld Isometric Drawing No(s).: MCFI-2NC53 & 59

Flow Diagram No(s).: MCFD-2553-02.00

Support/Restraint Sketch/Drawing No(s).: N/A

Other Applicable Information (e.g., W.O. No., EC No.) if not included elsewhere on NIS-2 Form:

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed FL Grass, Quality Assurance Technical Specialist Date May 6, 2014

Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of North Carolina and employed by The Hartford Steam Boiler Inspection and Insurance Company of Connecticut have inspected the components described in this Owner's Report during the period 4-16-14 to 5-13-14, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

JF Swan Inspector's Signature Commissions NB11473-NC1524, N-I

National Board, State, Province, and Endorsements

Date 5-13-, 2014

CROSBY

CROSBY VALVE & GAGE COMPANY
WRENTHAM MASS

FORM NV-1 FOR SAFETY AND SAFETY RELIEF VALVES
As required by the Provisions of the ASME Code Rules

S.C.-448
NB-30

DATA REPORT
Safety and Safety Relief Valves

1. Manufactured By Crosby Valve & Gage Company, 43 Kendrick St. Wrentham, Mass. 02093
6M6 HB-BP-86
Name and Address
Model No. N-56925 Order No. N-300580-A Contract Date 6/20/73

2. Manufactured For Duke Power Company
Charlotte, North Carolina Order No. A-33957
Name and Address

3. Owner Duke Power Company, 422 South Church St., Charlotte, North Carolina 28201
Name and Address

4. Location of Plant McGuire Nuclear Station Unit #1, Cowans Ford, North Carolina

5. Valve Identification 2-NC-3 Serial No N56925-00-0006 Drawing No DS-C-56925 Rev. 0
2.154

Type Safety Orifice Size M Pipe Size ____ Inlet 6 Outlet 6
Safety, Safety Relief, Pilot, Power Actuated inch inch inch inch

6. Set Pressure (PSIG) 2485# 700 F
Rated Temperature

Stamped Capacity 420006#/Hr. 3 % Overpressure 3 Blowdown (PSIG) 124

Hydrostatic Test (PSIG) Inlet 4575 Complete Valve 750

7. The material, design, construction and workmanship comply with ASME Code, Section III.

Class 1 Edition 1971 Addenda Date Winter 1972

Pressure Containing or Pressure Retaining Components

	Serial No. Identification	Material Specification Including Type or Grade
a. Castings		
Body	N90397-32-0006	ASTM A-351-72 Gr. CF8M ASME SA-351 Gr. CF8M
Bonnet	N90353-33-0001	ASTM A-105-71 Gr. II ASME SA-105 Gr. II
b. Bar Stock and Forgings		
Support Rods		
Nozzle	N90399-31-0007	ASTM A-182-71 Gr. F ASME SA-182 Gr. F
Disc Insert	N90426-31-0003	Haynes Stellite Gr. 6B
Spring Washers Top	N90350-33-0089	ASTM A-105-71 Gr. II ASME SA-105 Gr. II
Spring Washers Bottom	N90350-33-0090	
Adjusting Bolt	N90351-35-0056	ASTM A-193-70 Gr. B6 ASME SA-193 Gr. B6
Spindle	N90354-34-0039	ASTM A-193-71 Gr. B6 ASME SA-193 Gr. B6
Spindle Ball	N90355-0039	ASTM A-276-72 Type 440C ASME SA-276 Type 440C

5-13-14

	Serial No. or Identification	Material Specification Including Type or Grade
c. Spring	NX-2761-0020	ASTM-A-304 Gr. 51B60N
d. Bolting		
e. Other Parts such as Pilot Components		
Disc Holder	N90356-34-0015	Inconel 718
Bonnet Stud	87589	ASTM A-193-71 Gr. B7 ASME SA-193 Gr. B7
Bonnet Stud Nut	2371	ASTM A-194-71 Gr. 2H ASME SA-194 Gr. 2H

We certify that the statements made in this report are correct.

Date 9-18 19 74 Signed Crosby Valve & Gage Co By [signature]
Manufacturer

Certificate of Authorization No. 331 expires Nov. 9, 1974

DESIGN INFORMATION ON FILE AT CROSBY VALVE & GAGE COMPANY
DESIGN REPORT No. EC-158

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 Mass. and employed by Mutual Boiler & Machinery Insurance Co. of Waltham, Mass. have inspected the equipment described in this Data Report on September 19 19 74 and state that to the best of my knowledge and belief, the Manufacturer has constructed this equipment in accordance with the applicable Subsections of ASME 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.

*Factory Mutual Group of Insurance Co.

Date September 19 19 74

[signature] Commissions NB 6065 Mass. 1020
(Inspector) National Board, State, Province and No.

DUKE POWER COMPANY
DESIGN ENGINEERING DEPARTMENT
VENDOR QUALITY ASSURANCE CERTIFICATION

Name of Vendor Crosby Valve & Gage Company Item No. _____

Address of Vendor Plant Wrentham, Mass. 02093 Spec. No. MCS-1205.09 Rev. 1

Component(s) or Material Steel Safety Valve Date 12/18/75

_____ Shipping ID No. _____

_____ Release No. N/A

Mill Power Order No. A-33957

Certification Included Yes Full X Partial _____

The following listed tests and inspections have been completed as required by specification: (If partial certification, list materials or components for which certification applies.)

1) Tested in accordance with Crosby Procedure T-16065-0

2) _____

3) _____

Physical and Chemical Analysis	X	Major Repair Records and Chart	X
Design Report	N/A	Repair NDT	X
Stress Report	N/A	Hydro (Test Press.-PSIG ____)	X
Heat Treatment	X	Cleanliness	X
Radiographic Test	X	Operating Test	X
Ultrasonic Test	X	Performance Curve	N/A
Magnetic Particle	X	ASME Data Report	X
Penetrant Tests	X	Personnel Qualifications on Record	X

Deviation Record None

The following QA Documentation as required by the specification is attached to the original copy of this form: (If partial certification, include documentation applicable only to this specific shipment.)

Valve Documentation Package

DUKE POWER COMPANY
DESIGN ENGINEERING DEPARTMENT
VENDOR QUALITY ASSURANCE CERTIFICATION

The listed component(s) or material(s) conform to the requirements of Duke Power Company Specification MCS-1205.09 Rev. 1 with the approved deviations noted above. The QA documentation has been completed and attached to this form. No later than component or material shipment, the complete QA documentation packet is being transmitted to Duke Power Company

__x__ S. K. Blackley, Jr., Chief Engineer, Mechanical & Nuclear Division

____ C. J. Wylie, Chief Engineer, Electrical Division

____ L. C. Dail, Chief Engineer, Civil &Environmental Division

Design Engineering Department
P. O. Box 2178
Charlotte, N. C. 28242

A copy of this completed Vendor Quality Assurance Certification form will be included with shipping papers and shipped with the component to Duke Power Company, at the address designated in the specification. This is to certify that the item of equipment identified above fully meets the requirements of the above listed specification including all of the codes, standards, test requirements, and quality assurance requirements invoked therein.

W. F. Lavoque
Vendor Representative Authorized Signature

Title Q.A. Supervisor Date 12/18/75

Form 930.1 Rev. 1

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Duke Energy Carolinas, LLC — Date 5/6/2014

526 South Church Street, Charlotte, NC, 28201 (Address) — Sheet 1 of 2

2. Plant McGuire Nuclear Station (Name) — Unit 2

12700 Hagers Ferry Road, Huntersville, NC 28078 (Address)

2102480-03 (Work Order # (or Repair/Replacement Organization P.O. No., Job No., etc.))

3. Work Performed by Duke Energy Carolinas, LLC (Name)

526 South Church Street, Charlotte, NC 28201-1006 (Address)

Type Code Symbol Stamp: N/A

Authorization No.: N/A

Expiration Date: N/A

4. Identification of System NV - Chemical and Volume Control

5. (a) Applicable Construction Code ASME III 19 71 Edition, Summer and Winter Addenda, N/A Code Case

(b) Applicable Edition of Section XI used for Repair/Replacement Activity 1998 Edition with the 1999 and 2000 Addenda

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

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
2NV1002	Kerotest	EAU4-7	31604	N/A	1980	Corrected	Yes

7. Description of Work Replaced Component/Part/Appurtenance

Additional Description Replaced disc in valve 2NV1002

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operation Pressure ☑ Exempt ☐ Other ☐ Pressure ____ PSI Test Temp. ____ °F

Description (Optional):

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

As Required by the Provisions of the ASME Code Section XI

9. Remarks (Should Include the Following Information, as Applicable):

Sheet 2 of 2

Component Line Size: 2 in. (nominal) System Class: ASME Class 2

Weld Isometric Drawing No(s).: MCFI-2NV235 / 2NV239

Flow Diagram No(s).: MCFD-2554-01.03

Support/Restraint Sketch/Drawing No(s).: N/A

Other Applicable Information (e.g., W.O. No., EC No.) if not included elsewhere on NIS-2 Form:

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed FL Grass, Quality Assurance Technical Specialist Date May 6, 20 14

Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of North Carolina and employed by The Hartford Steam Boiler Inspection and Insurance Company of Connecticut have inspected the components described in this Owner's Report during the period 3-29-14 to 5-13-14, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

JF Swan Jerome F. Swan Commissions NB11473-NC1524, N-I

Inspector's Signature National Board, State, Province, and Endorsements

Date 5-13-, 20 14

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Duke Energy Carolinas, LLC — Date 5/6/2014

526 South Church Street, Charlotte, NC, 28201 (Address) — Sheet 1 of 2

2. Plant McGuire Nuclear Station (Name) — Unit 2

12700 Hagers Ferry Road, Huntersville, NC 28078 (Address)

2102514-02 (Work Order # (or Repair/Replacement Organization P.O. No., Job No., etc.))

3. Work Performed by Duke Energy Carolinas, LLC (Name)

526 South Church Street, Charlotte, NC 28201-1006 (Address)

Type Code Symbol Stamp: N/A

Authorization No.: N/A

Expiration Date: N/A

4. Identification of System NV - Chemical and Volume Control

5. (a) Applicable Construction Code ASME III 19 71 Edition, Summer and Winter Addenda, N/A Code Case

(b) Applicable Edition of Section XI used for Repair/Replacement Activity 1998 Edition with the 1999 and 2000 Addenda

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

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
2NV238	Fisher	AA0894-01	N/A	N/A	2002	Corrected	Yes

7. Description of Work Replaced Component/Part/Appurtenance

Additional Description Replaced plug in valve 2NV238

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operation Pressure ☑ Exempt ☐ Other ☐ Pressure ____ PSI Test Temp. ____ °F

Description (Optional):

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

As Required by the Provisions of the ASME Code Section XI

9. Remarks (Should Include the Following Information, as Applicable): Sheet 2 of 2

Component Line Size: 3 in. (nominal) System Class: ASME Class 2

Weld Isometric Drawing No(s).: MCFI-2NV31

Flow Diagram No(s).: MCFD-2554-03.01

Support/Restraint Sketch/Drawing No(s).: N/A

Other Applicable Information (e.g., W.O. No., EC No.) if not included elsewhere on NIS-2 Form:

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed FL Grass, Quality Assurance Technical Specialist Date May 6, 20 14

Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of North Carolina and employed by The Hartford Steam Boiler Inspection and Insurance Company of Connecticut have inspected the components described in this Owner's Report during the period 4-3-14 to 5-13-14, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

JF Swan Commissions NB11473-NC1524, N-I

Inspector's Signature National Board, State, Province, and Endorsements

Date 5-13-, 20 14

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Duke Energy Carolinas, LLC — Date 4/19/2014

526 South Church Street, Charlotte, NC, 28201 (Address) — Sheet 1 of 2

2. Plant McGuire Nuclear Station (Name) — Unit 2

12700 Hagers Ferry Road, Huntersville, NC 28078 (Address)

2102522-09 (Work Order # (or Repair/Replacement Organization P.O. No., Job No., etc.))

3. Work Performed by Duke Energy Carolinas, LLC (Name)

526 South Church Street, Charlotte, NC 28201-1006 (Address)

Type Code Symbol Stamp: N/A

Authorization No.: N/A

Expiration Date: N/A

4. Identification of System RN - Nuclear Service Water

5. (a) Applicable Construction Code ASME III 19 71 Edition, Summer and Winter Addenda, N/A Code Case

(b) Applicable Edition of Section XI used for Repair/Replacement Activity 1998 Edition with the 1999 and 2000 Addenda

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

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
2MCA-RN-4244	Duke Energy	N/A	N/A	N/A	N/A	Corrected	Yes

7. Description of Work Replaced Component/Part/Appurtenance

Additional Description Replaced bolting material on hanger 2MCA-RN-4244

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operation Pressure ☐ Exempt ☑ Other ☐ Pressure ____ PSI Test Temp. ____ °F

Description (Optional):

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

As Required by the Provisions of the ASME Code Section XI

9. Remarks (Should Include the Following Information, as Applicable): Sheet 2 of 2

Component Line Size: 20 in. (nominal) System Class: ASME Class 3

Weld Isometric Drawing No(s).: N/A

Flow Diagram No(s).: MCFD-2574-02.00

Support/Restraint Sketch/Drawing No(s).: 2MCA-RN-4244

Other Applicable Information (e.g., W.O. No., EC No.) if not included elsewhere on NIS-2 Form:

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed FL Grass, Quality Assurance Technical Specialist Date April 19, 2014

Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of North Carolina and employed by The Hartford Steam Boiler Inspection and Insurance Company of Connecticut have inspected the components described in this Owner's Report during the period 4-11-14 to 4-22-14, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

JF Swan Jerome F. Swan Commissions NB11473-NC1524, N-I

Inspector's Signature National Board, State, Province, and Endorsements

Date 4-22-, 2014

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Duke Energy Carolinas, LLC — Date 1/2/2014

526 South Church Street, Charlotte, NC, 28201 (Address) — Sheet 1 of 2

2. Plant McGuire Nuclear Station (Name) — Unit 2

12700 Hagers Ferry Road, Huntersville, NC 28078 (Address) — 2116167 (Work Order # (or Repair/Replacement Organization P.O. No., Job No., etc.))

3. Work Performed by Duke Energy Carolinas, LLC (Name)

526 South Church Street, Charlotte, NC 28201-1006 (Address)

Type Code Symbol Stamp: N/A

Authorization No.: N/A

Expiration Date: N/A

4. Identification of System NV - Chemical and Volume Control

5. (a) Applicable Construction Code ASME III 1971 Edition, Summer and Winter Addenda, N/A Code Case

(b) Applicable Edition of Section XI used for Repair/Replacement Activity 1998 Edition with the 1999 and 2000 Addenda

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

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
NV Piping	Duke Energy	N/A	80	N/A	1982	Corrected	Yes
2NV331	ITT Grinnell	74-4770-6-10	WR798	V File# 320	1974	Removed	Yes
2NV331	BNL Industries	A120803-2-1	N/A		2012	Installed	Yes
2NV344	ITTB Grinnell	74-4770-6-8	WR796	V File# 320 & 46	1974	Removed	Yes
2NV344	BNL Industries	A120803-2-5	N/A		2012	Installed	Yes

7. Description of Work Replaced Component/Part/Appurtenance

Additional Description Replaced piping and valves 2NV331 and 2NV344.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operation Pressure ☑ Exempt ☐ Other ☐ Pressure 350 PSI Test Temp. 104.9 °F

Description (Optional): test performed per procedure MP/0/A/7650/076

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

As Required by the Provisions of the ASME Code Section XI

9. Remarks (Should Include the Following Information, as Applicable):

Sheet 2 of 2

Component Line Size: 3 in. (nominal) System Class: ASME Class 3

Weld Isometric Drawing No(s).: MCFI-2NV201 and 2NV268

Flow Diagram No(s).: MCFD-2554-04.00

Support/Restraint Sketch/Drawing No(s).: N/A

Other Applicable Information (e.g., W.O. No., EC No.) if not included elsewhere on NIS-2 Form:

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed FL Grass, Quality Assurance Technical Specialist FL Grass Date January 2, 2014

Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of North Carolina and employed by Hartford Steam Boiler Inspection & Insurance Company of Connecticut have inspected the components described in this Owner's Report during the period 11-12-13 to 1-7-14, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

JF Swan Jerome F. Swan Commissions NB11473-NC1524, N-I

Inspector's Signature National Board, State, Province, and Endorsements

Date 1-7, 2014

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 BNL INDUSTRIES, INC., 30 INDUSTRIAL PARK ROAD, VERNON, CT, 06066
(name and address of N Certificate Holder)
2. Manufactured for DUKE POWER CO. PO BOX 1015, CHARLOTTE, NC 28201-1015
(name and address of Purchaser)
3. Location of installation MCGUIRE SITE, 13225 HAGERS FERRY RD HWY 73, HUNTERSVILLE, NC 28078
(name and address)
4. Model No., Series No., or Type VALVE Drawing ABV-A2-20-6610 Rev. C CRN ______
5. ASME Code, Section III, Division 1: 2007 (edition) 2008 (addenda date) 2 (class) ______ (Code Case no.)
6. Pump or valve VALVE Nominal inlet size 2" (in.) Outlet size 2" (in.)
7. Materials: Body SA479 TY316 Bonnet SA479 TY316 Disk SA479 TY316 Bolting SA-453 GR. 660

(a) Cert. Holder's Serial No.	(b) Nat'l Board No.	(c) Body Serial No.	(d) Bonnet Serial No.	(e) Disk Serial No.
A120609-2-(1 THRU 9)		685E	676E	684E

* Supplemental information in form of lists, sketches, or drawings may be used provided (1) size is 8½ x 11, (2) information in items 1 through 4 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

1-7-14

2009763 2012877 — 2012884

FORM NPV-1 (Back -- Pg. 2 of 2)

Certificate Holder's Serial No. A120813-2(1 THRU 9)

8. Design conditions ____ psi ____ °F or valve pressure class 300# (1)
(pressure) (temperature)

9. Cold working pressure 720 psi at 100°F

10. Hydrostatic test 1109 psi. Disk differential burst pressure 900 psi

11. Remarks: ____

CERTIFICATES OF DESIGN

Design Specification certified by JESSE M. HAWKINS P.E. State NC Reg. no. 20189

Design Report certified by ____ P.E. State ____ Reg. no. ____

CERTIFICATE OF COMPLIANCE

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

N Certificate of Authorization No. N-2882 Expires 10/10/13

Date 12/20/12 Name BNL INDUSTRIES, INC. Signed ____
(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 CONSTRUCCION AMERICA INS. of LYNN, MASS. have inspected the pump, or valve, described in this Data Report on 12/20/12, 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 12/20/12 Signed ____ Commissions ____
(authorized inspector) (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

(1) For manually operated valves only.

2009763 2012877 — 12884

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Duke Energy Carolinas, LLC — Date 5/6/2014

526 South Church Street, Charlotte, NC, 28201 (Address) — Sheet 1 of 2

2. Plant McGuire Nuclear Station (Name) — Unit 2

12700 Hagers Ferry Road, Huntersville, NC 28078 (Address) — 2117680-16 (Work Order # (or Repair/Replacement Organization P.O. No., Job No., etc.))

3. Work Performed by Duke Energy Carolinas, LLC (Name)

526 South Church Street, Charlotte, NC 28201-1006 (Address)

Type Code Symbol Stamp: N/A

Authorization No.: N/A

Expiration Date: N/A

4. Identification of System CA - Auxiliary Feedwater

5. (a) Applicable Construction Code ASME III 19 71 Edition, Summer and Winter Addenda, N/A Code Case

(b) Applicable Edition of Section XI used for Repair/Replacement Activity 1998 Edition with the 1999 and 2000 Addenda

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

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
CA Piping	Duke Energy	N/A	73	N/A	1982	Corrected	Yes
2CA291	Velan	142007-1	N/A	N/A	2014	Installed	Yes

7. Description of Work Add New Component/Part/Appurtenance/Weld

Additional Description Added piping and valve 2CA291 per EC111274.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operation Pressure ☑ Exempt ☐ Other ☐ Pressure 1500 PSI Test Temp. 66.7 °F

Description (Optional): Test performed per procedure MP/0/A/7650/076.

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

As Required by the Provisions of the ASME Code Section XI

9. Remarks (Should Include the Following Information, as Applicable): Sheet 2 of 2

Component Line Size: 1, 2, & 3 in. (nominal) System Class: ASME Class 3

Weld Isometric Drawing No(s).: MCFI-2CA55 & 2CA62

Flow Diagram No(s).: MCFD-2592-01.01

Support/Restraint Sketch/Drawing No(s).: N/A

Other Applicable Information (e.g., W.O. No., EC No.) if not included elsewhere on NIS-2 Form:

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed FL Grass, Quality Assurance Technical Specialist Date May 6, 2014

Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of North Carolina and employed by The Hartford Steam Boiler Inspection and Insurance Company of Connecticut have inspected the components described in this Owner's Report during the period 3-17-14 to 5-12-14, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

JF Swan Jerome F. Swan Commissions NB11473-NC1524, N-I

Inspector's Signature National Board, State, Province, and Endorsements

Date 5-12-, 2014

142007-1 THRU-2

FORM NPV-1 CERTIFICATE HOLDER'S 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., 550 MC ARTHUR STREET, MONTREAL, QUEBEC, H4T 1X8, CANADA.
(name and address of N Certificate holder)

2. Manufactured for Duke Energy Carolinas, LLC, Dept ID: DPNMNS, P.O. Box 37925, Charlotte, NC., 28237-7925, United States.
(name and address of Purchaser)

3. Location of Installation McGuire Nuclear Station / Duke Energy Carolinas, LLC 13225 Hagers Ferry Road, Hwy 73, Huntersville, NC, 28078-8985, United States.
(name and address)

4. Model No., Series No., or Type W08-7064B-02MSN-W Drawing P012-870123-N01 Rev. D CRN N/A

5. ASME Code, Section III, Division 1 1971 (edition) Summer 1973 (Addenda (if applicable) (date)) 3 (class) N/A (Code Case no.)

6. Pump or valve 900 Cl. Bolted Bonnet Gate Valve Nominal inlet size 2.00" Outlet size 2.00"

7. Material

(a) valve (b) pump	Body Casing	ASME SA 105 (*1)	Bonnet Cover	ASME SA 105 (*1)	Disk Bolting	ASME SA 105 (*1)	Bolting	ASME SA 193, Gr.B7 (*1) ASME SA 194, Gr.2H (*1)	

(a) Certificate Holder's Serial No.	(b) National Board No.	(c) Body/Casing Serial No.	(d) Bonnet/Cover Serial No.	(e) Disk / WEDGE Serial No.
142007-1	N/A	4007	19495	7703
142007-2	N/A	4010	19496	7701

*Supplemental information in the form of lists, sketches, or drawings may be used provided: (1) size is 8½ x 11; (2) information in items 1 through 4 on this Data Report is included on each sheet; and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

(07/10)

2031411/2

FORM NPV-1 (Back - Pg. 2 of 2)

Certificate Holder's Serial No. 142007-1 Thru -2

8. Design conditions 2100 psig (pressure) 160 °F (temperature) or valve pressure class 900 Class

9. Cold working pressure 2160 psig

10. Hydrostatic test Shell - 3250 psig. Disk differential test pressure N/A psig

11. Remarks AS BUILT VALVE DRAWING.
(*1) Material conforms to ASME code section II part 'A' 2007 Edition, None Addenda.

CERTIFICATION OF DESIGN

Design Specification certified by R.E. Miller P.E. State NC Reg. no. 4860

Design Report certified by M. Murphy P.E. State QUEBEC Reg. no. 112521

CERTIFICATION 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-2797-2 Expires 04 May 2016

Date 04 March 2014 Name VELAN INC. (N Certificate Holder) Signed (authorized representative)

CERTIFICATION OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by RÉGIE DU BÂTIMENT DU QUÉBEC

of Québec have inspected the pump, or valve, described in this Data Report on Valve(s) / Valve part(s), 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 2014-03-04 Signed (Authorized Nuclear Inspector) Commission 12460 J. CHUPRUN (National Board Number and Endorsement) QC # 14324 RÉGIE DU BÂTIMENT DU QUÉBEC (S)

(07/11)

2031411/2

Receiving Inspection Report

Form SCD-311A Rev.: 13 — Page 1 of 2

Purchase Order No: 174549 ☐ SCD-250 Stock/Cat ID: 887364 ID: 130566

Station: MC MEDB ID.: NA Part No.: BY DESCRIPTION QA Shop No.: 0973

Vendor: VELAN VALVE CORP Manufacturer: VELAN VALVE CORP

Item No.	Total	Quan.	UTC No.	Heat No.	Lot No./Batch No.	Serial No.
1	2	---------- See Attachment for complete listing of these entries. ----------				

Description: VALVE, GATE, N, FLEX WEDGE, 2", 06H-219, 900 LB, MANUAL, CARBON STEEL

CK'd By	SAMPLE Size	Pass	Fail	Duke/ Vendor	Inspection, Examination, and Testing Performed - Specify	Procedures/Standards Used
DLW	2	2	0	D	☑ Visual/Configuration/Workmanship	SCD-311 Rev.: 13
DLW	2	2	0	D	☑ Dimensional ☑ Approx. ☐ Tolerance	I033 PANEL
					☐ Electrical	
DLW	2	2	0	D	☑ Magnetic ◉ Yes ○ No	
					☐ Weight	
					☐ Pressure:	
					☐ Chem. Analysis:	
					☐ Physical Properties	
					☐ Other	

☑ QA Condition: 1

☐ Commercial Grade

☐ Over-Check

Comments

All drwgs. Etc. were approved per Terry Cox-RI. "O" to be removed by T Cox.

Calibrated Test, Examination, and Inspection Equipment Used:

Instrument Type	Model Number	Serial Number	Calibration Due

I. Description of Problem

☐ Problems Sent To: S V:

Originator: Phone #: FAX #: Date:

Accepted By: David L. Wright, Jr. Date: 3/7/2014

(Level II Receiving Inspector)

Final QA Approval: Date:

Receiving Inspection Report

Form SCD-311A Rev.: 13

Attachment - UTC Entry Listing

Purchase Order No.	174549	MEDB ID.:	NA	Stock/Cat ID:	887364	ID:	130566

Quan.	UTC No.	Heat No.	Lot No./Batch No.	Serial No.
1	2031411	NA	NA	142007-1
1	2031412	NA	NA	142007-2

Accepted By:	David L. Wright, Jr.	Date:	3/7/2014

(Level II Receiving Inspector)

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Duke Energy Carolinas, LLC — Date 5/6/2014

526 South Church Street, Charlotte, NC, 28201 (Address) — Sheet 1 of 2

2. Plant McGuire Nuclear Station (Name) — Unit 2

12700 Hagers Ferry Road, Huntersville, NC 28078 (Address)

2124934-11 (Work Order # (or Repair/Replacement Organization P.O. No., Job No., etc.))

3. Work Performed by Duke Energy Carolinas, LLC (Name)

526 South Church Street, Charlotte, NC 28201-1006 (Address)

Type Code Symbol Stamp: N/A

Authorization No.: N/A

Expiration Date: N/A

4. Identification of System CA - Auxiliary Feedwater

5. (a) Applicable Construction Code ASME III 19 71 Edition, Summer and Winter Addenda, N/A Code Case

(b) Applicable Edition of Section XI used for Repair/Replacement Activity 1998 Edition with the 1999 and 2000 Addenda

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

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
2MCA-CA-5571	Duke Energy	N/A	N/A	N/A	N/A	Installed	Yes

7. Description of Work Add New Component/Part/Appurtenance/Weld

Additional Description Installed hanger 2MCA-CA-05571 per EC111274.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operation Pressure ☐ Exempt ☑ Other ☐ Pressure ____ PSI Test Temp. ____ °F

Description (Optional):

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

As Required by the Provisions of the ASME Code Section XI

9. Remarks (Should Include the Following Information, as Applicable): Sheet 2 of 2

Component Line Size: 2 in. (nominal) System Class: ASME Class 3

Weld Isometric Drawing No(s).: N/A

Flow Diagram No(s).: MCFD-2592-01.01

Support/Restraint Sketch/Drawing No(s).: 2MCA-CA-5571

Other Applicable Information (e.g., W.O. No., EC No.) if not included elsewhere on NIS-2 Form:

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed FL Grass, Quality Assurance Technical Specialist Date May 6, 2014

Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of North Carolina and employed by The Hartford Steam Boiler Inspection and Insurance Company of Connecticut have inspected the components described in this Owner's Report during the period 3-22-14 to 5-6-14, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

JF Swan Jerome F. Swan Commissions NB11473-NC1524, N-I

Inspector's Signature National Board, State, Province, and Endorsements

Date 5-6, 2014

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Duke Energy Carolinas, LLC — Date 5/8/2014

526 South Church Street, Charlotte, NC, 28201 (Address) — Sheet 1 of 2

2. Plant McGuire Nuclear Station (Name) — Unit 2

12700 Hagers Ferry Road, Huntersville, NC 28078 (Address)

2124934-16 (Work Order # (or Repair/Replacement Organization P.O. No., Job No., etc.))

3. Work Performed by Duke Energy Carolinas, LLC (Name)

526 South Church Street, Charlotte, NC 28201-1006 (Address)

Type Code Symbol Stamp: N/A

Authorization No.: N/A

Expiration Date: N/A

4. Identification of System CA - Auxiliary Feedwater

5. (a) Applicable Construction Code ASME III 19 71 Edition, Summer and Winter Addenda, N/A Code Case

(b) Applicable Edition of Section XI used for Repair/Replacement Activity 1998 Edition with the 1999 and 2000 Addenda

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

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
CA Piping	Duke Energy	N/A	73	N/A	1982	Installed	Yes
2CA294	Velan	142007-2	N/A	N/A	2014	Installed	Yes

7. Description of Work Add New Component/Part/Appurtenance/Weld

Additional Description Added piping, bolting material at 2" blind flange, and valve 2CA294 per EC111274.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operation Pressure ☑ Exempt ☐ Other ☐ Pressure 1450 PSI Test Temp. 70 °F

Description (Optional): Test performed per procedure MP/0/A/7650/076.

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

As Required by the Provisions of the ASME Code Section XI

9. Remarks (Should Include the Following Information, as Applicable):

Component Line Size: 1/2, 1, 2, & 3 in. (nominal) System Class: ASME Class 3

Weld Isometric Drawing No(s).: MCFI-2CA57

Flow Diagram No(s).: MCFD-2592-01.01

Support/Restraint Sketch/Drawing No(s).: N/A

Other Applicable Information (e.g., W.O. No., EC No.) if not included elsewhere on NIS-2 Form:

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed FL Grass, Quality Assurance Technical Specialist FL Grass Date May 8, 20 14

Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of North Carolina and employed by The Hartford Steam Boiler Inspection and Insurance Company of Connecticut have inspected the components described in this Owner's Report during the period 3-17-14 to 5-12-14, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

JF Swan Jerome F. Swan Commissions NB11473-NC1524, N-I

Inspector's Signature National Board, State, Province, and Endorsements

Date 5-12-, 20 14

FORM NPV-1 (Back - Pg. 2 of 2)

Certificate Holder's Serial No. 142067-1 Thru -2

8. Design conditions 2100 psig (pressure) 180 °F (temperature) or valve pressure class 900 Class

9. Cold working pressure 2160 psig

10. Hydrostatic test Shell - 3250 psig. Disk differential test pressure N/A psig

11. Remarks AS BUILT VALVE DRAWING.
(*1) Material conforms to ASME code section II part 'A' 2007 Edition, None Addenda.

CERTIFICATION OF DESIGN

Design Specification certified by	R.E. Miller	P.E. State	NC	Reg. no.	4880
Design Report certified by	M. Murphy	P.E. State	QUEBEC	Reg. no.	112521

CERTIFICATION 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-2797-2 Expires 04 May 2016

Date 04 March 2014 Name VELAN INC. (N Certificate Holder) Signed (authorized representative)

CERTIFICATION OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by RÉGIE DU BÂTIMENT DU QUÉBEC

of Québec have inspected the pump, or valve, described in this Data Report on Valve(s) / Valve part(s), 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 2014-03-04 Signed (Authorized Nuclear Inspector) Commission [illegible] QC # 14324 (National Board Number and Endorsement) RÉGIE DU BÂTIMENT DU QUÉBEC

(07/11)

2031411/2

142007-1 THRU-2

FORM NPV-1 CERTIFICATE HOLDER'S 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., 550 MC ARTHUR STREET, MONTREAL, QUEBEC, H4T 1X8, CANADA.
(name and address of N Certificate holder)

2. Manufactured for Duke Energy Carolinas, LLC, Dept ID: DPNMNS, P.O. Box 37925, Charlotte, NC., 28237-7925, United States.
(name and address of Purchaser)

3. Location of installation McGuire Nuclear Station / Duke Energy Carolinas, LLC 13225 Hagers Ferry Road, Hwy 73, Huntersville, NC, 28078-8985, United States.
(name and address)

4. Model No., Series No., or Type W08-7084B-02MSN-W Drawing P012-870123-N01 Rev. D CRN N/A

5. ASME Code, Section III, Division 1 1971 (edition) Summer 1973 (Addenda (if applicable) (date)) 3 (class) N/A (Code Case no.)

6. Pump or valve 900 Cl. Bolted Bonnet Gate Valve Nominal inlet size 2.00" Outlet size 2.00"

7. Material

(a) valve Body ✓ ASME SA 105 (*1) Bonnet ✓ ASME SA 105 (*1) Disk WEDGE ✓ ASME SA 105 (*1) Bolting ASME SA 193, Gr.B7 (*1) ASME SA 194, Gr.2H (*1)

(b) pump Casing Cover Bolting

(a) Certificate Holder's Serial No.	(b) National Board No.	✓ (c) Body/Casing Serial No.	✓ (d) Bonnet/Cover Serial No.	✓ (e) Disk / WEDGE Serial No.
142007-1 ✓	N/A	4007 ✓	19495 ✓	7703 ✓
142007-2 ✓	N/A	4010 ✓	19496 ✓	7701 ✓

RA JF AN 5-12

*Supplemental information in the form of lists, sketches, or drawings may be used provided: (1) size is 8½ x 11; (2) information in items 1 through 4 on this Data Report is included on each sheet; and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

(07/10)

2031411/2

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Duke Energy Carolinas, LLC — Date 5/8/2014

526 South Church Street, Charlotte, NC, 28201 (Address) — Sheet 1 of 2

2. Plant McGuire Nuclear Station (Name) — Unit 2

12700 Hagers Ferry Road, Huntersville, NC 28078 (Address)

2124935-16 (Work Order # (or Repair/Replacement Organization P.O. No., Job No., etc.))

3. Work Performed by Duke Energy Carolinas, LLC (Name)

526 South Church Street, Charlotte, NC 28201-1006 (Address)

Type Code Symbol Stamp: N/A

Authorization No.: N/A

Expiration Date: N/A

4. Identification of System CA - Auxiliary Feedwater

5. (a) Applicable Construction Code ASME III 19 71 Edition, Summer and Winter Addenda, N/A Code Case

(b) Applicable Edition of Section XI used for Repair/Replacement Activity 1998 Edition with the 1999 and 2000 Addenda

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

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
CA Piping	Duke Energy	N/A	73	N/A	1982	Installed	Yes
2CA297	Velan	142006-2	N/A	N/A	2014	Installed	Yes

7. Description of Work Add New Component/Part/Appurtenance/Weld

Additional Description Added piping and valve 2CA297 per EC111274.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operation Pressure ☑ Exempt ☐ Other ☐ Pressure 1353 PSI Test Temp. 75 °F

Description (Optional): Test performed per procedure MP/0/A/7650/076.

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

As Required by the Provisions of the ASME Code Section XI

9. Remarks (Should Include the Following Information, as Applicable): Sheet 2 of 2

Component Line Size: 1, 3, & 4 in. (nominal) System Class: ASME Class 3

Weld Isometric Drawing No(s).: MCFI-2CA58 & 2CA63

Flow Diagram No(s).: MCFD-2592-01.01

Support/Restraint Sketch/Drawing No(s).: N/A

Other Applicable Information (e.g., W.O. No., EC No.) if not included elsewhere on NIS-2 Form:

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed FL Grass, Quality Assurance Technical Specialist Date May 8, 2014

Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of North Carolina and employed by The Hartford Steam Boiler Inspection and Insurance Company of Connecticut have inspected the components described in this Owner's Report during the period 3-13-14 to 5-12-14, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

JF Swan Jerome F. Swan Commissions NB11473-NC1524, N-I

Inspector's Signature National Board, State, Province, and Endorsements

Date 5-12, 2014

142006-1 THRU-2

FORM NPV-1 CERTIFICATE HOLDER'S 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., 550 MC ARTHUR STREET, MONTREAL, QUEBEC, H4T 1X8, CANADA.
(name and address of N Certificate holder)

2. Manufactured for Duke Energy Carolinas, LLC, Dept ID: DPNMNS, P.O. Box 37925, Charlotte, NC., 28237-7925, United States.
(name and address of Purchaser)

3. Location of installation McGuire Nuclear Station / Duke Energy Carolinas, LLC 13225 Hagers Ferry Road, Hwy 73, Huntersville, NC, 28078-8985, United States.
(name and address)

4. Model No., Series No., or Type B10-7054B-02TS Drawing P2-82186-N01 Rev. F CRN N/A

5. ASME Code, Section III, Division 1 | 1971 (edition) | Summer 1973 (Addenda (if applicable) (date)) | 3 (class) | N/A (Code Case no.)

6. Pump or valve 900 Cl. Bolted Bonnet Gate Valve Nominal inlet size 3.00" Outlet size 3.00"

7. Material

(a) valve	Body	ASME SA 105 (*1)	Bonnet	ASME SA 105 (*1)	Disk	WEDGE ✓	ASME SA 105 (*1)	Bolting	ASME SA 193, Gr.B7 (*1) ASME SA 194, Gr.2H (*1)
(b) pump	Casing		Cover		Bolting				

(a) Certificate Holder's Serial No.	(b) National Board No.	✓ (c) Body/Casing Serial No.	✓ (d) Bonnet/Cover Serial No.	(e) Disk / WEDGE ✓ Serial No.
142006-1 ✓	N/A	8546 ✓	19512 ✓	7699 ✓
142006-2 ✓	N/A	4091 ✓	19511 ✓	7700 ✓

*Supplemental information in the form of lists, sketches, or drawings may be used provided: (1) size is 8½ x 11; (2) information in items 1 through 4 on this Data Report is included on each sheet; and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

2031395 & 6

(07/10)

5-12-1

FORM NPV-1 (Back - Pg. 2 of 2)

Certificate Holder's Serial No. 142006-1 Thru -2

8. Design conditions 2160 psig (pressure) 100 °F (temperature) or valve pressure class 900 Class

9. Cold working pressure 2160 psig

10. Hydrostatic test Shell - 3250 psig . Disk differential test pressure N/A psig

11. Remarks AS BUILT VALVE DRAWING.
(*1) Material conforms to ASME code section II part 'A' 2004 Edition, None Addenda.

CERTIFICATION OF DESIGN

Design Specification certified by R.E. Miller P.E. State NC Reg. no. 4860

Design Report certified by N/A P.E. State N/A Reg. no. N/A

CERTIFICATION 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-2797-2 Expires 04 May 2016

Date 04 March 2014 Name VELAN INC. (N Certificate Holder) Signed (authorized representative)

CERTIFICATION OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by RÉGIE DU BÂTIMENT DU QUÉBEC

of Québec have inspected the pump, or valve, described in this Data Report on Valve(s) / Valve part(s) , 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 2014-03-04 Signed (Authorized Nuclear Inspector) Commission 12460AN J. CHUPRUN QC # 14324 (S) (National Board Number and Endorsement)

RÉGIE DU BÂTIMENT DU QUÉBEC

(07/11)

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Duke Energy Carolinas, LLC — Date 4/6/2014

526 South Church Street, Charlotte, NC, 28201 (Address) — Sheet 1 of 2

2. Plant McGuire Nuclear Station (Name) — Unit 2

12700 Hagers Ferry Road, Huntersville, NC 28078 (Address)

2139324-02 (Work Order # (or Repair/Replacement Organization P.O. No., Job No., etc.))

3. Work Performed by Duke Energy Carolinas, LLC (Name)

526 South Church Street, Charlotte, NC 28201-1006 (Address)

Type Code Symbol Stamp: N/A

Authorization No.: N/A

Expiration Date: N/A

4. Identification of System SM - Main Steam

5. (a) Applicable Construction Code ASME III 19 71 Edition, Summer and Winter Addenda, N/A Code Case

(b) Applicable Edition of Section XI used for Repair/Replacement Activity 1998 Edition with the 1999 and 2000 Addenda

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

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
2MCA-SM-11	Duke Energy	00123	N/A	N/A	N/A	Removed	Yes
2MCA-SM-11	Duke Energy	21930	N/A	N/A	N/A	Installed	Yes

7. Description of Work Replaced Component/Part/Appurtenance

Additional Description Replaced snubber on hanger 2MCA-SM-11

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operation Pressure ☐ Exempt ☑ Other ☐ Pressure ____ PSI Test Temp. ____ °F

Description (Optional):

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

As Required by the Provisions of the ASME Code Section XI

9. Remarks (Should Include the Following Information, as Applicable): Sheet 2 of 2

Component Line Size: 42 in. (nominal) System Class: ASME Class 2

Weld Isometric Drawing No(s).: N/A

Flow Diagram No(s).: MCFD-2593-01.00

Support/Restraint Sketch/Drawing No(s).: 2MCA-SM-11

Other Applicable Information (e.g., W.O. No., EC No.) if not included elsewhere on NIS-2 Form:

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed FL Grass, Quality Assurance Technical Specialist Date April 6, 2014

Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of North Carolina and employed by The Hartford Steam Boiler Inspection and Insurance Company of Connecticut have inspected the components described in this Owner's Report during the period 3-24-14 to 4-9-14, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

JF Swan Jerome F. Swan Commissions NB11473-NC1524, N-I

Inspector's Signature National Board, State, Province, and Endorsements

Date 4-9, 2014

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Duke Energy Carolinas, LLC — Date 4/9/2014

526 South Church Street, Charlotte, NC, 28201 (Address) — Sheet 1 of 2

2. Plant McGuire Nuclear Station (Name) — Unit 2

12700 Hagers Ferry Road, Huntersville, NC 28078 (Address)

2144518-02 (Work Order # (or Repair/Replacement Organization P.O. No., Job No., etc.))

3. Work Performed by Duke Energy Carolinas, LLC (Name)

526 South Church Street, Charlotte, NC 28201-1006 (Address)

Type Code Symbol Stamp: N/A

Authorization No.: N/A

Expiration Date: N/A

4. Identification of System NS - Containment Spray

5. (a) Applicable Construction Code ASME III 19 71 Edition, Summer and Winter Addenda, N/A Code Case

(b) Applicable Edition of Section XI used for Repair/Replacement Activity 1998 Edition with the 1999 and 2000 Addenda

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

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
NS Heat Exchanger	Joseph Oat & Sons Inc.	2514	5765	N/A	1990	Corrected	Yes

7. Description of Work Replaced Component/Part/Appurtenance

Additional Description Replaced bolting material in man way of Containment spray heat exchanger

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operation Pressure ☑ Exempt ☐ Other ☐ Pressure ____ PSI Test Temp. ____ °F

Description (Optional): test performed per procedure MP/0/A/7700/045,

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

As Required by the Provisions of the ASME Code Section XI

9. Remarks (Should Include the Following Information, as Applicable): Sheet 2 of 2

Component Line Size: N/A in. (nominal) System Class: ASME Class 2

Weld Isometric Drawing No(s).: N/A

Flow Diagram No(s).: MCFD-2563-01.00

Support/Restraint Sketch/Drawing No(s).: N/A

Other Applicable Information (e.g., W.O. No., EC No.) if not included elsewhere on NIS-2 Form:

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed FL Grass, Quality Assurance Technical Specialist Date April 9, 20 14

Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of North Carolina and employed by The Hartford Steam Boiler Inspection and Insurance Company of Connecticut have inspected the components described in this Owner's Report during the period 3-31-14 to 4-10-14, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

JF Swan Jerome F. Swan Commissions NB11473-NC1524, N-I

Inspector's Signature National Board, State, Province, and Endorsements

Date 4-10, 20 14

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Duke Energy Carolinas, LLC — Date 4/30/2014

526 South Church Street, Charlotte, NC, 28201 (Address) — Sheet 1 of 2

2. Plant McGuire Nuclear Station (Name) — Unit 2

12700 Hagers Ferry Road, Huntersville, NC 28078 (Address)

2145700-10 (Work Order # (or Repair/Replacement Organization P.O. No., Job No., etc.))

3. Work Performed by Duke Energy Carolinas, LLC (Name)

526 South Church Street, Charlotte, NC 28201-1006 (Address)

Type Code Symbol Stamp: N/A

Authorization No.: N/A

Expiration Date: N/A

4. Identification of System CF - Feedwater

5. (a) Applicable Construction Code ASME III 19 71 Edition, Summer and Winter Addenda, N/A Code Case

(b) Applicable Edition of Section XI used for Repair/Replacement Activity 1998 Edition with the 1999 and 2000 Addenda

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

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
2CF121	Pacific	0237-6	72	N/A	1977	Corrected	Yes

7. Description of Work Replaced Component/Part/Appurtenance

Additional Description Replaced body to bonnet bolting material on valve 2CF121

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operation Pressure ☑ Exempt ☐ Other ☐ Pressure ____ PSI Test Temp. ____ °F

Description (Optional): Test performed per procedure MP/0/A/7700/045.

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

As Required by the Provisions of the ASME Code Section XI

9. Remarks (Should Include the Following Information, as Applicable): Sheet 2 of 2

Component Line Size: 16 in. (nominal) System Class: ASME Class 2

Weld Isometric Drawing No(s).: MCFI-2CF14 / 2CF17

Flow Diagram No(s).: MCFD-2591-01.01

Support/Restraint Sketch/Drawing No(s).: N/A

Other Applicable Information (e.g., W.O. No., EC No.) if not included elsewhere on NIS-2 Form:

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed FL Grass, Quality Assurance Technical Specialist Date April 30, 2014

Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of North Carolina and employed by The Hartford Steam Boiler Inspection and Insurance Company of Connecticut have inspected the components described in this Owner's Report during the period 4-16-14 to 4-30-14, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

JF Swan Jerome F. Swan Commissions NB11473-NC1524, N-I

Inspector's Signature National Board, State, Province, and Endorsements

Date 4-30, 2014

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Duke Energy Carolinas, LLC — Date 4/6/2014

526 South Church Street, Charlotte, NC, 28201 (Address) — Sheet 1 of 2

2. Plant McGuire Nuclear Station (Name) — Unit 2

12700 Hagers Ferry Road, Huntersville, NC 28078 (Address)

2146084-01 (Work Order # (or Repair/Replacement Organization P.O. No., Job No., etc.))

3. Work Performed by Duke Energy Carolinas, LLC (Name)

526 South Church Street, Charlotte, NC 28201-1006 (Address)

Type Code Symbol Stamp: N/A

Authorization No.: N/A

Expiration Date: N/A

4. Identification of System RN - Nuclear Service Water

5. (a) Applicable Construction Code ASME III 19 71 Edition, Summer and Winter Addenda, N/A Code Case

(b) Applicable Edition of Section XI used for Repair/Replacement Activity 1998 Edition with the 1999 and 2000 Addenda

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

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
2MCA-RN-3130	Duke Energy	3380	N/A	N/A	N/A	Removed	Yes
2MCA-RN-3130	Duke Energy	3607	N/A	N/A	N/A	Installed	Yes

7. Description of Work Replaced Component/Part/Appurtenance

Additional Description Replaced snubber on hanger 2MCA-RN-3130

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operation Pressure ☐ Exempt ☑ Other ☐ Pressure ____ PSI Test Temp. ____ °F

Description (Optional):

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

As Required by the Provisions of the ASME Code Section XI

9. Remarks (Should Include the Following Information, as Applicable): Sheet 2 of 2

Component Line Size: 20 in. (nominal) System Class: ASME Class 3

Weld Isometric Drawing No(s).: N/A

Flow Diagram No(s).: MCFD-2574-03.00

Support/Restraint Sketch/Drawing No(s).: 2MCA-RN-3130

Other Applicable Information (e.g., W.O. No., EC No.) if not included elsewhere on NIS-2 Form:

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed FL Grass, Quality Assurance Technical Specialist Date April 6, 2014

Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of North Carolina and employed by The Hartford Steam Boiler Inspection and Insurance Company of Connecticut have inspected the components described in this Owner's Report during the period 3-29-14 to 4-8-14, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

JF Swan Jerome F. Swan Commissions NB11473-NC1524, N-I

Inspector's Signature National Board, State, Province, and Endorsements

Date 4-8, 2014

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Duke Energy Carolinas, LLC — Date 4/6/2014

526 South Church Street, Charlotte, NC, 28201 (Address) — Sheet 1 of 2

2. Plant McGuire Nuclear Station (Name) — Unit 2

12700 Hagers Ferry Road, Huntersville, NC 28078 (Address)

2146133-01 (Work Order # (or Repair/Replacement Organization P.O. No., Job No., etc.))

3. Work Performed by Duke Energy Carolinas, LLC (Name)

526 South Church Street, Charlotte, NC 28201-1006 (Address)

Type Code Symbol Stamp: N/A

Authorization No.: N/A

Expiration Date: N/A

4. Identification of System

5. (a) Applicable Construction Code ASME III 1971 Edition, Summer and Winter Addenda, N/A Code Case

(b) Applicable Edition of Section XI used for Repair/Replacement Activity 1998 Edition with the 1999 and 2000 Addenda

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

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
2MCA-S-RN-530-1-H	Duke Energy	3754	N/A	N/A	N/A	Removed	Yes
2MCA-S-RN-530-1-H	Duke Energy	37044	N/A	N/A	N/A	Installed	Yes

7. Description of Work Replaced Component/Part/Appurtenance

Additional Description Replaced snubber on hanger 2MCA-S-RN-530-01-H

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operation Pressure ☐ Exempt ☑ Other ☐ Pressure ____ PSI Test Temp. ____ °F

Description (Optional):

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

As Required by the Provisions of the ASME Code Section XI

9. Remarks (Should Include the Following Information, as Applicable): Sheet 2 of 2

Component Line Size: 3 in. (nominal) System Class: ASME Class 3

Weld Isometric Drawing No(s).: N/A

Flow Diagram No(s).: MCFD-2574-03-00

Support/Restraint Sketch/Drawing No(s).: 2MCA-S-RN-530-01-H

Other Applicable Information (e.g., W.O. No., EC No.) if not included elsewhere on NIS-2 Form:

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed FL Grass, Quality Assurance Technical Specialist Date April 6, 2014

Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of North Carolina and employed by The Hartford Steam Boiler Inspection and Insurance Company of Connecticut have inspected the components described in this Owner's Report during the period 3-30-14 to 4-7-14, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

JF Swan Jerome F. Swan Commissions NB11473-NC1524, N-I

Inspector's Signature National Board, State, Province, and Endorsements

Date 4-7-, 2014

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Duke Energy Carolinas, LLC — Date 4/6/2014

526 South Church Street, Charlotte, NC, 28201 (Address) — Sheet 1 of 2

2. Plant McGuire Nuclear Station (Name) — Unit 2

12700 Hagers Ferry Road, Huntersville, NC 28078 (Address)

2146430-01 (Work Order # (or Repair/Replacement Organization P.O. No., Job No., etc.))

3. Work Performed by Duke Energy Carolinas, LLC (Name)

526 South Church Street, Charlotte, NC 28201-1006 (Address)

Type Code Symbol Stamp: N/A

Authorization No.: N/A

Expiration Date: N/A

4. Identification of System KC - Component Cooling

5. (a) Applicable Construction Code ASME III 19 71 Edition, Summer and Winter Addenda, N/A Code Case

(b) Applicable Edition of Section XI used for Repair/Replacement Activity 1998 Edition with the 1999 and 2000 Addenda

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

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
2MCA-KC-3041	Duke Energy	3719	N/A	N/A	N/A	Removed	Yes
2MCA-KC-3041	Duke Energy	31200602/005	N/A	N/A	N/A	Installed	Yes

7. Description of Work Replaced Component/Part/Appurtenance

Additional Description Replaced snubber on hanger 2MCA-KC-3041, snubber was removed on w/o 2099364.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operation Pressure ☐ Exempt ☑ Other ☐ Pressure ____ PSI Test Temp. ____ °F

Description (Optional):

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

As Required by the Provisions of the ASME Code Section XI

9. Remarks (Should Include the Following Information, as Applicable): Sheet 2 of 2

Component Line Size: 14 in. (nominal) System Class: ASME Class 3

Weld Isometric Drawing No(s).: N/A

Flow Diagram No(s).: MCFD-2573-02.00

Support/Restraint Sketch/Drawing No(s).: 2MCA-KC-3041

Other Applicable Information (e.g., W.O. No., EC No.) if not included elsewhere on NIS-2 Form:

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed FL Grass, Quality Assurance Technical Specialist Date April 6, 20 14

Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of North Carolina and employed by The Hartford Steam Boiler Inspection and Insurance Company of Connecticut have inspected the components described in this Owner's Report during the period 4-1-14 to 4-8-14, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

JF Swan Jerome F. Swan Commissions NB11473-NC1524, N-I

Inspector's Signature National Board, State, Province, and Endorsements

Date 4-8- , 20 14

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Duke Energy Carolinas, LLC — Date 4/6/2014

526 South Church Street, Charlotte, NC, 28201 (Address) — Sheet 1 of 2

2. Plant McGuire Nuclear Station (Name) — Unit 2

12700 Hagers Ferry Road, Huntersville, NC 28078 (Address)

2146542-01 (Work Order # (or Repair/Replacement Organization P.O. No., Job No., etc.))

3. Work Performed by Duke Energy Carolinas, LLC (Name)

526 South Church Street, Charlotte, NC 28201-1006 (Address)

Type Code Symbol Stamp: N/A

Authorization No.: N/A

Expiration Date: N/A

4. Identification of System RN - Nuclear Service Water

5. (a) Applicable Construction Code ASME III 19 71 Edition, Summer and Winter Addenda, N/A Code Case

(b) Applicable Edition of Section XI used for Repair/Replacement Activity 1998 Edition with the 1999 and 2000 Addenda

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

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
see section 9	Duke Energy	7648	N/A	N/A	N/A	Removed	Yes
see section 9	Duke Energy	39004	N/A	N/A	N/A	Installed	Yes

7. Description of Work Replaced Component/Part/Appurtenance

Additional Description Replaced snubber on hanger 2MCA-S-RN-532-1-PP

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operation Pressure ☐ Exempt ☑ Other ☐ Pressure ____ PSI Test Temp. ____ °F

Description (Optional):

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

As Required by the Provisions of the ASME Code Section XI

9. Remarks (Should Include the Following Information, as Applicable): Sheet 2 of 2

Component Line Size: 1 1/2 in. (nominal) System Class: ASME Class 3

Weld Isometric Drawing No(s).: N/A

Flow Diagram No(s).: MCFD-2574-03.00

Support/Restraint Sketch/Drawing No(s).: 2MCA-RN-532-01-PP

Other Applicable Information (e.g., W.O. No., EC No.) if not included elsewhere on NIS-2 Form:

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed FL Grass, Quality Assurance Technical Specialist Date April 6, 2014

Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of North Carolina and employed by The Hartford Steam Boiler Inspection and Insurance Company of Connecticut have inspected the components described in this Owner's Report during the period 3-31-14 to 4-7-14, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

JF Swan Jerome F. Swan Commissions NB11473-NC1524, N-I

Inspector's Signature National Board, State, Province, and Endorsements

Date 4-7-, 2014

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Duke Energy Carolinas, LLC — Date 5/6/2014

526 South Church Street, Charlotte, NC, 28201 (Address) — Sheet 1 of 2

2. Plant McGuire Nuclear Station (Name) — Unit 2

12700 Hagers Ferry Road, Huntersville, NC 28078 (Address)

2147122-20 (Work Order # (or Repair/Replacement Organization P.O. No., Job No., etc.))

3. Work Performed by Duke Energy Carolinas, LLC (Name)

526 South Church Street, Charlotte, NC 28201-1006 (Address)

Type Code Symbol Stamp: N/A

Authorization No.: N/A

Expiration Date: N/A

4. Identification of System NC - Reactor Coolant

5. (a) Applicable Construction Code ASME III 19 71 Edition, Summer and Winter Addenda, N/A Code Case

(b) Applicable Edition of Section XI used for Repair/Replacement Activity 1998 Edition with the 1999 and 2000 Addenda

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

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
NC Piping	Duke Energy	N/A	82	N/A	1982	Corrected	Yes

7. Description of Work Replaced Component/Part/Appurtenance

Additional Description Replaced 1 1/2" bent piping at "D" Loop cold leg

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operation Pressure ☑ Exempt ☐ Other ☐ Pressure ____ PSI Test Temp. ____ °F

Description (Optional):

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

As Required by the Provisions of the ASME Code Section XI

9. Remarks (Should Include the Following Information, as Applicable): Sheet 2 of 2

Component Line Size: 1 1/2 in. (nominal) System Class: ASME Class 1

Weld Isometric Drawing No(s).: MCFI-2NC45

Flow Diagram No(s).: MCFD-2553-01.00

Support/Restraint Sketch/Drawing No(s).: N/A

Other Applicable Information (e.g., W.O. No., EC No.) if not included elsewhere on NIS-2 Form:

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed FL Grass, Quality Assurance Technical Specialist Date May 6, 2014

Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of North Carolina and employed by The Hartford Steam Boiler Inspection and Insurance Company of Connecticut have inspected the components described in this Owner's Report during the period 4-4-14 to 5-13-14, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

JF Swan Jerome F. Swan Commissions NB11473-NC1524, N-I

Inspector's Signature National Board, State, Province, and Endorsements

Date 5-13-, 2014

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Duke Energy Carolinas, LLC — Date 4/8/2014

526 South Church Street, Charlotte, NC, 28201 (Address) — Sheet 1 of 2

2. Plant McGuire Nuclear Station (Name) — Unit 2

12700 Hagers Ferry Road, Huntersville, NC 28078 (Address)

2147306-01 (Work Order # (or Repair/Replacement Organization P.O. No., Job No., etc.))

3. Work Performed by Duke Energy Carolinas, LLC (Name)

526 South Church Street, Charlotte, NC 28201-1006 (Address)

Type Code Symbol Stamp: N/A

Authorization No.: N/A

Expiration Date: N/A

4. Identification of System NV - Chemical and Volume Control

5. (a) Applicable Construction Code ASME III 19 71 Edition, Summer and Winter Addenda, N/A Code Case

(b) Applicable Edition of Section XI used for Repair/Replacement Activity 1998 Edition with the 1999 and 2000 Addenda

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

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
2MCA-S-NV-504-1-II	Duke Energy	865	N/A	N/A	N/A	Removed	Yes
2MCA-S-NV-504-1-II	Duke Energy	38842	N/A	N/A	N/A	Installed	Yes

7. Description of Work Replaced Component/Part/Appurtenance

Additional Description Replaced snubber on hanger 2MCA-S-NV-504-1-II

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operation Pressure ☐ Exempt ☑ Other ☐ Pressure ____ PSI Test Temp. ____ °F

Description (Optional):

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

As Required by the Provisions of the ASME Code Section XI

9. Remarks (Should Include the Following Information, as Applicable): Sheet 2 of 2

Component Line Size: 2 in. (nominal) System Class: ASME Class 2

Weld Isometric Drawing No(s).: N/A

Flow Diagram No(s).: MCFD-2554-03.01

Support/Restraint Sketch/Drawing No(s).: 2MCA-S-NV-504-1-II

Other Applicable Information (e.g., W.O. No., EC No.) if not included elsewhere on NIS-2 Form:

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed FL Grass, Quality Assurance Technical Specialist Date April 8, 20 14

Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of North Carolina and employed by The Hartford Steam Boiler Inspection and Insurance Company of Connecticut have inspected the components described in this Owner's Report during the period 4-6-14 to 4-9-14, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

JF Swan Jerome F. Swan Commissions NB11473-NC1524, N-I

Inspector's Signature National Board, State, Province, and Endorsements

Date 4-9, 20 14

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Duke Energy Carolinas, LLC — Date 4/19/2014

526 South Church Street, Charlotte, NC, 28201 (Address) — Sheet 1 of 2

2. Plant McGuire Nuclear Station (Name) — Unit 2

12700 Hagers Ferry Road, Huntersville, NC 28078 (Address)

2148547-01 (Work Order # (or Repair/Replacement Organization P.O. No., Job No., etc.))

3. Work Performed by Duke Energy Carolinas, LLC (Name)

526 South Church Street, Charlotte, NC 28201-1006 (Address)

Type Code Symbol Stamp: N/A

Authorization No.: N/A

Expiration Date: N/A

4. Identification of System NI - Safety Injection

5. (a) Applicable Construction Code ASME III 1971 Edition, Summer and Winter Addenda, N/A Code Case

(b) Applicable Edition of Section XI used for Repair/Replacement Activity 1998 Edition with the 1999 and 2000 Addenda

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

6. Identification of Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Corrected, Removed, or Installed	ASME Code Stamped (Yes or No)
2MCR-NI-4570	Duke Energy	5143	N/A	N/A	N/A	Removed	Yes
2MCR-NI-4570	Duke Energy	37641	N/A	N/A	N/A	Installed	Yes
2MCR-NI-4570	Duke Energy	5522	N/A	N/A	N/A	Removed	Yes
2MCR-NI-4570	Duke Energy	37638	N/A	N/A	N/A	Installed	Yes

7. Description of Work Replaced Component/Part/Appurtenance

Additional Description Replaced two snubbers on hanger 2MCR-NI-4570

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operation Pressure ☐ Exempt ☑ Other ☐ Pressure ____ PSI Test Temp. ____ °F

Description (Optional):

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

As Required by the Provisions of the ASME Code Section XI

9. Remarks (Should Include the Following Information, as Applicable): Sheet 2 of 2

Component Line Size: 10 in. (nominal) System Class: ASME Class 1

Weld Isometric Drawing No(s).: N/A

Flow Diagram No(s).: MCFD-2562-02.01

Support/Restraint Sketch/Drawing No(s).: 2MCR-NI-4570

Other Applicable Information (e.g., W.O. No., EC No.) if not included elsewhere on NIS-2 Form:

Applicable Manufacturer's Data Reports to be attached

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed FL Grass, Quality Assurance Technical Specialist Date April 19, 2014

Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of North Carolina and employed by The Hartford Steam Boiler Inspection and Insurance Company of Connecticut have inspected the components described in this Owner's Report during the period 4-14-14 to 4-20-14, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

JF Swan Jerome F. Swan Commissions NB11473-NC1524, N-I

Inspector's Signature National Board, State, Province, and Endorsements

Date 4-20, 2014

SECTION 6

6.0 ***Pressure Testing***

Third Period – Third 10 Year Interval

This section contains a pressure test completion status for the examinations required during refueling outage 2EOC22 and the examinations required during the third period of the third ten-year interval. There was no through-wall leakage observed during any of these pressure tests.

Table 6-1 shows a completion status of pressure test zones conducted during the third period of the third ten-year interval. There are two Class 2 Zones that were completed after the close of breaker shown on NIS-1 Form but completed prior to the end of the interval which was July 15, 2014.

Table 6-1				
Examination Category	***Test Requirement***	***Total Examinations Required For This Period***	***Total Examinations Credited For This Period***	***Total Examinations Remaining***
B-P	System Leakage Test (IWB-5220)	2	2	0
C-H	System Leakage Test (IWC-5220)	35	35	0

There is (1) Class 1 (Category B-P) pressure test zone that requires pressure testing each refueling outage. Table 6-2 shows a completion status of the Class 1 (Category B-P) pressure test zone conducted during refueling outage EOC 22. There was no through-wall leakage observed during this pressure test.

Table 6-2 Detailed Class 1 Listing				
Zone Number	**Boundary Dwg**	**EOC22 Completion Status**	**EOC22 VT-2 Examination Date**	**Code Cases Used**
2NC-001L-A	MC-ISIL-2553-01.00 MC-ISIL-2553-02.00 MC-ISIL-2553-02.01 MC-ISIL-2554-01.00 MC-ISIL-2554-01.01 MC-ISIL-2554-01.02 MC-ISIL-2561-01.00 MC-ISIL-2562-01.00 MC-ISIL-2562-02.00 MC-ISIL-2562-02.01 MC-ISIL-2562-03.00 MC-ISIL-2562-03.01	Complete	4/23/2014	N-566-2

There are (66) Risk Informed Segments (Category R-A) that are required to receive a pressure test each refueling outage. Table 6-3 shows a completion status of the (66) Risk Informed Segments pressure tested during refueling outage EOC 22. There was no through-wall leakage observed during these pressure tests.

Table 6-3 Detailed Risk Informed Pressure Test Listing

	Zone Number	Boundary Dwg	Segment Number	EOC22 Completion Status	EOC22 VT-2 Examination Date
1	2NC-001L-A	MC-ISIL-2553-01.00	NC-18	All Complete	4/23/2014
2		MC-ISIL-2553-02.00	NC-19		
3		MC-ISIL-2554-01.00	NC-20		
4		MC-ISIL-2554-01.01	NC-21		
5		MC-ISIL-2562-01.00	NC-23		
6			NC-086		
7			NC-89		
8			NC-90		
9			NC-054		
10			NC-055		
11			NC-056		
12			NV-033A		
13			NV-033B		
14			NV-034A		
15			NV-034B		
16			NV-037		
17			NV-038		
18			NV-041A		
19			NV-041B		
20			NV-042A		
21			NV-042B		
22			NV-030A		
23			NV-030B		
24			NV-032A		
25			NV-032B		
26			NV-035		
27			NV-036		
28			NV-039A		
29			NV-039B		
30			NV-040A		
31			NV-040B		
32			NI-068		
33			NI-069		
34			NI-070		
35			NI-071		
36	2RI-001L-B	MC-ISIL-2554-01.00	NI-063B	All Complete	3/28/2014
37		MC-ISIL-2554-01.01	ND-008C		

Table 6-3 Detailed Class 2 Listing continued					
	Zone Number	Boundary Dwg	Segment Number	EOC22 Completion Status	EOC22 VT-2 Examination Date
38		MC-ISIL-2554-01.02	ND-009C		
39		MC-ISIL-2554-01.03	NV-002AB		
40		MC-ISIL-2554-03.00	NV-002C		
41		MC-ISIL-2554-03.01	NV-002D		
42		MC-ISIL-2561-01.00	NV-011A		
43		MC-ISIL-2562-01.00	NV-019B		
44		MC-ISIL-2562-03.00	NV-019C		
45			NV-019D		
46			NV-019E		
47			NV-019AA		
48			NV-019AB		
49			NV-019AD		
50			NV-020AA		
51			NV-020AB		
52			NV-020AD		
53			NV-020AE		
54			NV-021A		
55			NV-021B		
56			NV026		
57			NV027		
58			NV-028		
59			NV-029		
60			NV-080A		
61			NV-080B		
62			NV-084A		
63			NV-084B		
64			NV-084C		
65			NV-108A		
66			NV-109		

There are (35) Class 2 (Category C-H) pressure test zones that require pressure testing once each Inspection Period. Table 6-4 shows a completion status of the (35) Class 2 (Category C-H) pressure tests zones that require pressure testing for the Third Period of the Third Ten Year Interval. There was no through-wall leakage observed during these pressure tests.

Table 6-4 Detailed Class 2 Third Period Listing

	Zone Number	Boundary Dwg	Completion Status	VT-2 Examination Date	Code Cases Used
1	2BB-040L-B	MC-ISIL-2580-01.00	Complete	4/23/2014	None
2	2BB-074L-B	MC-ISIL-2572-03.00 MC-ISIL-2580-01.00 MC-ISIL-2584-01.00	Complete	4/23/2014	None
3	2CA-040L-B	MC-ISIL-2592-01.00	Complete	4/23/2014	None
4	2CA-043L-B	MC-ISIL-2584-01.00 MC-ISIL-2591-01.01 MC-ISIL-2592-01.00 MC-ISIL-2617-01.00	Complete	4/23/2014	None
5	2FW-007L-B	MC-ISIL-2554-03.00 MC-ISIL-2554-03.01 MC-ISIL-2561-01.00 MC-ISIL-2562-03.00 MC-ISIL-2563-01.00 MC-ISIL-2571-01.00	Complete	10/26/2012	None
6	2NC-001L-A	MC-ISIL-2553-01.00 MC-ISIL-2553-02.00 MC-ISIL-2554-01.00 MC-ISIL-2554-01.01	Complete	4/23/2014	N-566-2
7	2ND-009L-B	MC-ISIL-2554-01.02 MC-ISIL-2561-01.00 MC-ISIL-2562-03.00 MC-ISIL-2562-03.01 MC-ISIL-2563-01.00 MC-ISIL-2571-01.00 MC-ISIL-2572-01.00	Complete	10/26/2012	N-566-2
8	2ND-010L-B	MC-ISIL-2561-01.00 MC-ISIL-2562-03.01 MC-ISIL-2563-01.00	Complete	10/26/2012	N-566-2
9	2NI-012L-B	MC-ISIL-2562-02.00 MC-ISIL-2572-01.01	Complete	10/25/2012	None
10	2NI-013L-B	MC-ISIL-2562-02.01 MC-ISIL-2572-01.01	Complete	10/25/2012	N-566-2
11	2NI-014L-B	MC-ISIL-2562-02.01 MC-ISIL-2562-03.00	Complete	10/22/2012	None
12	2NI-015L-B	MC-ISIL-2562-03.00	Complete	3/25/2014	None

Table 6-4 Detailed Class 2 Third Period Listing (continued)					
	Zone Number	Boundary Dwg	Completion Status	VT-2 Examination Date	Code Cases Used
13	2NI-016L-B	MC-ISIL-2562-03.00	Complete	6/25/2014	None
14	2NI-017L-B	MC-ISIL-2562-03.00 MC-ISIL-2562-03.01	Complete	5/24/2012	None
15	2NI-018L-B	MC-ISIL-2562-03.01	Complete	3/25/2014	None
16	2NI-060L-B	MC-ISIL-2562-03.00	Complete	3/25/2014	None
17	2NI-061L-B	MC-ISIL-2562-01.00	Complete	3/28/2014	None
18	2NI-062L-B	MC-ISIL-2562-01.00	Complete	3/28/2014	None
19	2NM-026L-B	MC-ISIL-2572-01.01	Complete	4/23/2014	None
20	2NM-027L-B	MC-ISIL-2572-03.00	Complete	4/23/2014	None
21	2NS-019L-B	MC-ISIL-2563-01.00	Complete	8/23/2012	None
22	2NS-020L-B	MC-ISIL-2563-01.00	Complete	7/12/2012	N-566-2
23	2NV-003L-B	MC-ISIL-2554-01.00 MC-ISIL-2554-01.01 MC-ISIL-2554-01.02 MC-ISIL-2554-01.03	Complete	5/21/2014	None
24	2NV-004L-B	MC-ISIL-1554-05.00 MC-ISIL-2554-01.00 MC-ISIL-2554-01.01 MC-ISIL-2554-01.02 MC-ISIL-2554-02.00 MC-ISIL-2554-02.01 MC-ISIL-2554-03.00 MC-ISIL-2554-03.01 MC-ISIL-2561-01.00 MC-ISIL-2562-01.00 MC-ISIL-2562-03.00	Complete	4/24/2014	None
25	2NV-005L-B	MC-ISIL-2554-01.02	Complete	4/23/2014	N-566-2
26	2NV-006L-B	MC-ISIL-2554-03.00	Complete	11/23/2012	None
27	2NV-008L-B	MC-ISIL-2554-01.02	Complete	4/19/2014	None
28	2NV-011L-B	MC-ISIL-2554-03.01	Complete	6/19/2013	None
29	2RN-044L-B	MC-ISIL-2574-04.00	Complete	4/18/2014	None
30	2RV-048L-B	MC-ISIL-2604-03.00	Complete	6/05/2013	None
31	2SA-047L-B	MC-ISIL-2593-01.02	Complete	10/17/2013	None
32	2SM-040L-B	MC-ISIL-2591-01.01 MC-ISIL-2593-01.00 MC-ISIL-2593-01.03	Complete	4/23/2014	None
33	2SM-045L-B	MC-ISIL-2593-01.00 MC-ISIL-2593-01.02 MC-ISIL-2593-01.03	Complete	5/07/2012	None
34	2SM-046L-B	MC-ISIL-2593-01.00 MC-ISIL-2593-01.03	Complete	5/07/2012	None
35	2YA-063L-B	MC-ISIL-2617-01.00	Complete	8/28/2013	None