THIRD TEN-YEAR INTERVAL INSERVICE INSPECTION PLAN

MCGUIRE NUCLEAR STATION

Duke Energy SM

THIRD INTERVAL INSERVICE INSPECTION PLAN

MCGUIRE NUCLEAR STATION

UNIT 1

GENERAL REQUIREMENTS

REVISION 0

Duke Power SM

A Duke Energy Company

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MCGUIRE NUCLEAR STATION

GENERAL INFORMATION

McGuire Nuclear Station's Inservice Inspection Plan is comprised of two separate volumes, the first is identified as General Requirements; the second is identified as Unit 1, Volume 1.

Location: 12700 Hagers Ferry Road, Huntersville, North Carolina 28078-9340

Commercial Service Date: December 1, 1981

Third Interval Start Date: December 1, 2001

Owner: Duke Power Company
526 South Church St.
Mail Code EC07J
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1.0 Applicable Codes and Standards for Inservice Inspection

"In accordance with the requirements of Paragraph 50.55a(g) of 10CFR Part 50, the inservice inspection of Unit 1 of the McGuire Nuclear Station will be performed in accordance with the 1995 Edition of ASME Section XI, through the 1996 Addenda, hereafter referred to as Section XI, with the exception of Paragraph IWB-1220, which will be performed in accordance with 1989 Edition of ASME Section XI as required per Paragraph 50.55a(b)(2)(xi) of 10CFR Part 50. The inservice inspection examinations will be performed in accordance with Inspection Program B of Section XI. The Ultrasonic Examination of ferritic vessels with thickness > 2", similar metal piping welds, and bolting will be performed in accordance with Appendix VIII of the 1995 Edition of ASME Section XI, with the 1996 Addenda. All examinations will be performed to the extent practicable within the limitations of design, geometry and materials of construction of the component."

1.1 Additional Codes and Standards Used

Inspections performed in addition to those required by Section XI are listed below:

1.1.1 Steam generator tubing will be inspected as required by ASME Section XI and the Technical Specifications for McGuire Nuclear Station. The Steam Generator Maintenance and Engineering Support Section of the Nuclear Services Division has overall responsibility for this inspection.

1.1.2 The manual UT examination of the reactor vessel Shell-to-Flange and Head-to-Flange welds will be inspected in accordance with USNRC Regulatory Guide 1.150, Revision 1.

1.1.3 Augmented examinations on certain systems or components will be performed in accordance with the governing commitment. (Reference Section 7)

1.2 Code Cases Applicable to the ASME Boiler and Pressure Vessel Code Section XI

The following code cases will be used for the Third Interval Inservice Inspection Program at McGuire Unit 1

1.2.1 Code Case N-307-1: "Revised Ultrasonic Examination Volume For Class 1 Bolting, Table IWB-2500-1, Examination Category B-G-1, When The Examinations Are Conducted From The Center-Drilled Hole." (This code case is approved for use under Regulatory Guide 1.147, Revision 12.)

1.2.2 Code Case N-457: "Qualification Specimen Notch Location For Ultrasonic Examination of Bolts and Studs". (This code case is approved for use under Regulatory Guide 1.147, Revision 12.)

1.2.3	Code Case N-460:	"Alternative Examination Coverage For Class 1 and Class 2 Welds". (This code case is approved for use under Regulatory Guide 1.147, Revision 12.)
1.2.4	Code Case N-463-1:	"Evaluation Procedures and Acceptance Criteria for Flaws In Class 1 Ferritic Piping That Exceed The Acceptance Standards of IWB-3514.2". (This code case is approved for use under Regulatory Guide 1.147, Revision 12.)

1.3 Applicable Duke Power Administrative Procedures

The following Duke Power Company procedures will be used to control preservice and inservice inspection activities and inservice inspection plans and reports:

PROCEDURE NUMBER	TITLE
NSD-300	"ASME Section XI Program"
NSD-701	"Records Management"
NSD-702	"Document Management"
NSD-800	"Software and Data Quality Assurance (SDQA) Program"
QA-502	"Digitization and Optical Storage of Records"
QA-513	"Preparation and Implementation of ASME Section XI Inservice Inspection Plans Including Requirements for Augmented and Elective Examinations"
QA-516	"Evaluation of ISI Indications"
QA-520	"Preparation and Distribution of Inservice Inspection Reports"
QAL-5	"Control Of Preservice and Inservice Examination Activities"

2.0 System Boundaries Subject to Inspection

The boundaries for Class 1, 2 and 3 non-exempt systems are shown on the NDE Boundary Drawings listed in Section 2 of the unit specific volume. Unless otherwise noted, systems designated as Class A are equivalent to Class 1, Class B are equivalent to Class 2, and Class C are equivalent to Class 3.

2.1 Class 1 Components Exempted From Volumetric and Surface Examinations

2.1.1 Components that are connected to the reactor coolant system and part of the reactor coolant pressure boundary, and that are of such a size and shape so that upon postulated rupture the resulting flow of coolant from the reactor coolant system under normal plant operating conditions is within the capacity of makeup systems which are operable from on-site emergency power. Reference Section XI, Paragraph IWB-1220(a), 1989 Edition (see Section 1.0 above).

2.1.2 Piping of NPS 1" and smaller, except for steam generator tubing. Reference Section XI, Paragraph IWB-1220(b)(1), 1989 Edition (see Section 1.0 above).

2.1.3 Components and their connections in piping of NPS 1" and smaller. Reference Section XI, Paragraph IWB-1220(b)(2), 1989 Edition (see Section 1.0 above).

2.1.4 Reactor vessel head connections and associated piping, NPS 2" and smaller, made inaccessible by control rod drive penetrations. Reference Section XI, Paragraph IWB-1220(c), 1989 Edition (see Section 1.0 above).

2.2 Class 2 Components Within RHR, ECC, and CHR Exempted From Volumetric and Surface Examinations

2.2.1 Vessels, piping, pumps, valves, and their connections in piping NPS 4" and smaller in all systems except high pressure safety injection systems. Reference Section XI, Paragraphs IWC-1221(a) (1) and (2).

2.2.2 Vessels, piping, pumps, valves, and their connections in piping NPS $1^1/_2$" and smaller in high pressure safety injection systems. Reference Section XI, Paragraphs IWC-1221(b) (1) and (2).

2.2.3 Vessels, piping, pumps, valves, other components, and component connections of any size in statically pressurized, passive (i.e., no pumps) safety injection systems. Reference Section XI, Paragraph IWC-1221(c).

2.2.4 Piping and other components of any size beyond the last shutoff valve in open ended portions of systems that do not contain water during normal plant operating conditions. Reference Section XI, Paragraph IWC-1221(d).

2.3 Class 2 Components Within Systems Other Than RHR, ECC, And CHR Exempted From Volumetric and Surface Examinations

2.3.1 Vessels, piping, pumps, valves, and their connections in piping NPS 4" and smaller. Reference Section XI, Paragraphs IWC-1222(a) and (b).

2.3.2 Vessels, piping, pumps, valves, other components, and component connections of any size in systems or portions of systems that operate (when the system function is required) at a pressure equal to or less than 275 psig and at a temperature equal to or less than 200 ° F. Reference Section XI, Paragraph IWC-1222(c).

2.3.3 Piping and other components of any size beyond the last shutoff valve in open ended portions of systems that do not contain water during normal plant operating conditions. Reference Section XI, Paragraph IWC-1222(d).

2.4 Inaccessible Welds

2.4.1 Welds or portions of welds that are inaccessible due to being encased in concrete, buried underground, located inside a penetration, or encapsulated by guard pipe. Reference Section XI, Paragraph IWC-1223.

2.5 Class 3 Items Exempted From Examination

2.5.1 For systems, except Auxiliary Feedwater Systems: Vessels, piping, pumps, valves, and their connections in piping NPS 4" and smaller. Reference Section XI, Paragraphs IWD-1220(a) (1) and (2).

2.5.2 For Auxiliary Feedwater Systems: Vessels, piping, pumps, valves, and their connections in piping NPS 1" and smaller. Reference Section XI, Paragraphs IWD-1220(b) (1) and (2).

2.5.3 Components that operate at a pressure of 275 psig or less and at temperature of 200^{0}F or less in systems (or portions of systems) whose function is not required in support of Residual Heat Removal (RHR), Containment Heat Removal (CHR), and Emergency Core Cooling Systems (ECCS). Reference Section XI, Paragraph IWD-1220(c).

2.5.4 Welds or portions of welds that are inaccessible due to being encased in concrete, buried underground, located inside a penetration, or encapsulated by guard pipe. Reference Section XI, Paragraph IWD-1220(d).

2.6 Examination Boundaries

Section 2 of the Unit specific volume contains a listing of NDE Boundary Drawings that are color-coded to identify that NDE examination is required on each portion of a system. The color- code used for NDE examinations is described below:

Red	Class 1 system, non-exempt
Yellow	Class 2 system, non-exempt
Green	Class 3 system, non-exempt
Blue	System (or portions of systems) exempt from examination

Revisions to the plant system flow diagrams are reviewed for additions/changes to the ISI boundaries. These additions/changes are incorporated into the NDE Boundary Drawings and the ISI Plan as necessary. Controlled copies will be issued as required by Document Management.

2.7 Inspection Interval and Inspection Periods

Reference Section 8.0 for a report nomenclature list.

Third Inspection Interval

Start Date 12/01/2001 – 12/01/2004	12/01/2004 – 12/01/2008	12/01/2008 – End Date 12/01/2011
1st Period	2nd Period	3rd Period
Refueling Outage 1 (EOC 15)	Refueling Outage 3 (EOC 17)	Refueling Outage 6 (EOC 20)
Refueling Outage 2 (EOC 16)	Refueling Outage 4 (EOC 18)	Refueling Outage 7 (EOC 21)
	Refueling Outage 5 (EOC 19)	

3.0 Inspection Methods and Procedures to Be Used for Inservice Inspection

Inservice inspection of McGuire Unit 1 will be performed using procedures which comply with the requirements of the applicable codes referenced in Section 1 of this plan. Volumetric, surface, and visual methods of inspection will be used as required. Each inspection will be performed under the QA Program of the organization performing the inspection.

A specific examination procedure is referenced for each inspection method listed in Volume 1 of this Plan. All procedures beginning with "NDE" are found in the Duke Power Company Procedure Manuals. All other procedures are found in applicable Vendor Procedure Manuals for McGuire Nuclear Station.

3.1 Volumetric Inspection

Volumetric inspection will be performed by manual and/or automated ultrasonic methods, except in some cases where ultrasonic methods are not practical. Radiographic examinations will be used in these cases in lieu of ultrasonic examinations. Inspection of reactor vessel welds will be performed using an automated ultrasonic inspection device.

Steam generator tubing will be examined using eddy current inspection methods as outlined in the McGuire Technical Specifications. The Steam Generator Maintenance and Engineering Support Section of the Nuclear Services Division has overall responsibility for implementing and reporting inspections pertaining to steam generator tubing.

3.2 Surface Inspection

Surface inspection will be performed using either liquid penetrant or magnetic particle methods. The liquid penetrant method will be used for all surface inspections on austenitic steels and may also be used on ferritic steel. The magnetic particle method will only be used on ferritic steel.

3.3 Visual Inspection

Inservice visual inspections will be performed using direct methods where practical. Remote visual examinations may be used in some cases.

3.4 Pump and Valve Testing

Inservice testing of pumps (IWP-3000) and valves (IWV-3000) will be addressed under the McGuire Nuclear Station Pump and Valve Inservice Testing Program. The McGuire System Engineering Group will be responsible for all testing and reporting under this program.

3.5 Snubber Testing

Inservice testing and inspection of snubbers (IWF-5000) will be performed per Selective Licensing Commitment 16.9.15. The McGuire Mechanical Services Group will be responsible for all testing, inspecting, and reporting under this program.

3.6 Pressure Testing

Inservice inspection pressure testing activities will be performed in accordance with the Third Interval Pressure Test Plan. The Inservice Inspection Plan Manager/Pressure Testing will be responsible for all testing, inspecting, and reporting under this program.

3.7 Containment Vessel Inspection

Inservice inspection requirements for the Steel Containment Vessel are specified in the McGuire Nuclear Station Containment ISI Plan (Document number MC-1042-CISI-001). The Civil Engineering Section of the Nuclear Engineering Division has overall responsibility for this program.

3.8 Inspection Procedures

The following procedures will be used for the inservice inspection of McGuire Unit 1:

PROCEDURE NUMBER	TITLE
54-ISI-106	Procedure for the Remote Ultrasonic Examination of Reactor Vessel and Associated Piping Welds using Remote Manipulators and the ACCUSONEX Acquisition and Analysis System
54-ISI-364	Remote Underwater In-Vessel Visual Inspection of Reactor Pressure Vessels, Vessel Internals, and Components in Pressurized Water Reactors
54-ISI-800	Remote Ultrasonic Examination of Reactor Vessel Welds in accordance with ASME Section XI, Appendix VIII, Supplements 4 and 6
NDE-12	General Radiography Procedure for Preservice and Inservice Inspection
NDE-25	Magnetic Particle Examination
NDE-35	Liquid Penetrant Examination
NDE-600	Ultrasonic Examination of Similar Metal Welds in Ferritic and Austenitic Piping

PROCEDURE NUMBER	TITLE
NDE-620	Ultrasonic Examination of Welds In Ferritic Pressure Vessels Greater Than 2 Inches in Thickness
NDE-670	Ultrasonic Sizing of Flaws in Wrought Piping
NDE-910	Ultrasonic Examination of Small Diameter, Thin Wall Piping Welds and Base Material
NDE-946	Ultrasonic Thickness Measurement for Erosion/Corrosion Examinations
NDE-949	Ultrasonic Examination of Reactor Coolant Pump Flywheels at McGuire and Catawba Nuclear Station
NDE-1003	Ultrasonic Sizing of Surface Connected Flaws Using The Time of Flight Technique
NDE-2010	Ultrasonic Examination of Dissimiliar Metal and Cast Austenitic Welds Using Refracted Longitudinal and Shear Waves
NDE-2030	Ultrasonic Examination of Similar Metal Welds in Wrought Ferritic and Austenitic Pressure Vessels and Valve Bodies
NDE-2040	Ultrasonic Examination Using Longitudinal Wave and Shear Wave Straight Beam Techniques
NDE-2047	Ultrasonic Examination of Steam Generator Manway Studs at McGuire Units 1 and 2 and Catawba Unit 1
NDE-2050	Ultrasonic Examination of Reactor Pressure Vessel Flange-to-Shell Welds
NDE-2052	Ultrasonic Examination of Pressurizer Support Skirt Welds
NDE-2060	Ultrasonic Examination of Reactor Pressure Vessel Head to Flange Welds
NDE-2080	Ultasonic Examination of Nozzle Inner Radii Sections in Ferritic Pressure Vessels
NDE-2090	Ultasonic Examination of Small Diameter Piping for Thermal Fatigue

PROCEDURE NUMBER	TITLE
NDE-2930	Ultrasonic Examination of Steam Generator Primary Inlet and Outlet Nozzle-to-Safe End Welds at McGuire and Catawba Nuclear Stations
PDI-UT-5	Generic Procedure for the Ultrasonic Examination of Bolts and Studs
PDI-UT-6	PDI Generic Procedure for the Manual Ultrasonic Examination of Reactor Pressure Vessel Welds
PDI-UT-7	Generic Procedure for the Manual Ultrasonic Through Wall and Length Sizing of Ultrasonic Indications in Reactor Pressure Vessel Welds
QAL-13	ISI Visual Examination, VT-1 and VT-1C
QAL-14	ISI Visual Examination, VT-3 and VT-3C

The latest revision of each procedure that has been approved by Duke Power Company for McGuire Nuclear Station Unit 1 will be used. Duke Power approval of Vendor procedures will be indicated by the signature of the Manager NDE on the title page of the Vendors' Inservice Inspection Manual for McGuire Nuclear Station.

4.0 Description of Inservice Inspection Plan for ASME Class 1 Items

The inservice inspection of ASME Class 1 Items shall be performed in accordance with the requirements of Article IWB-2000 of Section XI. Specific examinations are described in Section 8 of this Plan. A detailed listing and schedule of each examination is shown in Volume 1 of this Plan.

4.1 Examination Categories and Requirements

The examination categories to be used are those listed in Table IWB-2500-1 of Section XI. Specific examinations will be identified by an Item Number similar to those listed in Table IWB-2500-1 of Section XI, plus an additional number to uniquely identify that examination. (Example: B01.011.001)

Class 1 Items to be inspected:

Category B-A **Pressure Retaining Welds In Reactor Vessel**

IWB-2500-1 Item	Component To Be Examined	Comments
B1.10	**Shell Welds**	
B1.11	Circumferential	
B1.12	Longitudinal	
B1.20	**Head Welds**	
B1.21	Circumferential	
B1.22	Meridional	
B1.30	Shell-to-Flange Weld	
B1.40	Head-to-Flange Weld	
B1.50	**Repair Welds**	
B1.51	Beltline region	N/A for McGuire 1

IWB-2500-1 Item	Component To Be Examined	Comments
	Pressurizer	
B2.10	**Shell-to-Head Welds**	
B2.11	Circumferential	
B2.12	Longitudinal	
B2.20	**Head Welds**	
B2.21	Circumferential	N/A for McGuire 1
B2.22	Meridional	N/A for McGuire 1
	Steam Generators (Primary Side)	
B2.30	**Head Welds**	
B2.31	Circumferential	N/A for McGuire 1
B2.32	Meridional	N/A for McGuire 1
B2.40	Tubesheet-to-Head Weld	
	Heat Exchangers (Primary Side) - Head	
B2.50	**Head Welds**	
B2.51	Circumferential	N/A for McGuire 1
B2.52	Meridional	N/A for McGuire 1
	Heat Exchangers (Primary Side) - Shell	
B2.60	Tubesheet-to-Head Welds	N/A for McGuire 1
B2.70	Longitudinal Welds	N/A for McGuire 1
B2.80	Tubesheet-to-Shell Welds	N/A for McGuire 1

Category B-D **Full Penetration Welded Nozzles In Vessels - Inspection Program B**

IWB-2500-1 Item	Component To Be Examined	Comments
	Reactor Vessel	
B3.90	Nozzle-to-Vessel Welds	
B3.100	Nozzle Inside Radius Section	
	Pressurizer	
B3.110	Nozzle-to-Vessel Welds	
B3.120	Nozzle Inside Radius Section	
	Steam Generators (Primary Side)	
B3.130	Nozzle-to-Vessel Welds	N/A for McGuire 1
B3.140	Nozzle Inside Radius Section	
	Heat Exchangers (Primary Side)	
B3.150	Nozzle-to-Vessel Welds	N/A for McGuire 1
B3.160	Nozzle Inside Radius Section	N/A for McGuire 1

Category B-F **Pressure Retaining Dissimilar Metal Welds in Vessel Nozzles**

IWB-2500-1 Item	Component To Be Examined	Comments
	Reactor Vessel	
B5.10	Nominal Pipe Size 4 in. or Larger Nozzle-to-Safe End Butt Welds	See RFR 01-005
B5.20	Nominal Pipe Size Less Than 4 in. Nozzle-to-Safe End Butt Welds	N/A for McGuire 1
B5.30	Nozzle-to-Safe End Socket Welds	N/A for McGuire 1
	Pressurizer	
B5.40	Nominal Pipe Size 4 in. or Larger Nozzle-to-Safe End Butt Welds	See RFR 01-005
B5.50	Nominal Pipe Size Less Than 4 in. Nozzle-to-Safe End Butt Welds	N/A for McGuire 1
B5.60	Nozzle-to-Safe End Socket Welds	N/A for McGuire 1
	Steam Generator	
B5.70	Nominal Pipe Size 4 in. or Larger Nozzle-to-Safe End Butt Welds	See RFR 01-005
B5.80	Nominal Pipe Size Less Than 4 in. Nozzle-to-Safe End Butt Welds	N/A for McGuire 1
B5.90	Nozzle-to-Safe End Socket Welds	N/A for McGuire 1
	Heat Exchangers	
B5.100	Nominal Pipe Size 4 in. or Larger Nozzle-to-Safe End Butt Welds	N/A for McGuire 1
B5.110	Nominal Pipe Size Less Than 4 in. Nozzle-to-Safe End Butt Welds	N/A for McGuire 1
B5.120	Nozzle-to-Safe End Socket Welds	N/A for McGuire 1

Category B-G-1 Pressure Retaining Bolting, Greater Than 2 in. In Diameter

IWB-2500-1 Item	Component To Be Examined	Comments
	Reactor Vessel	
B6.10	Closure Head Nuts	
B6.20	Closure Studs, In Place	Closure studs are examined when removed, see B6.30
B6.30	Closure Studs, When Removed	
B6.40	Threads In Flange	
B6.50	Closure Washers, Bushings	
	Pressurizer	
B6.60	Bolts and Studs	N/A for McGuire 1
B6.70	Flange Surface, When Connection Disassembled	N/A for McGuire 1
B6.80	Nuts, Bushings, and Washers	N/A for McGuire 1
	Steam Generators	
B6.90	Bolts and Studs	
B6.100	Flange Surface, When Connection Disassembled	
B6.110	Nuts, Bushings, and Washers	
	Heat Exchangers	
B6.120	Bolts and Studs	N/A for McGuire 1
B6.130	Flange Surface, When Connection Disassembled	N/A for McGuire 1
B6.140	Nuts, Bushings, and Washers	N/A for McGuire 1

Category B-G-1 (continued)

	Piping	
B6.150	Bolts and Studs	N/A for McGuire 1
B6.160	Flange Surface, When Connection Disassembled	N/A for McGuire 1
B6.170	Nuts, Bushings, and Washers	N/A for McGuire 1
	Pumps	
B6.180	Bolts and Studs	
B6.190	Flange Surface, When Connection Disassembled	
B6.200	Nuts, Bushings, and Washers	
	Valves	
B6.210	Bolts and Studs	N/A for McGuire 1
B6.220	Flange Surface, When Connection Disassembled	N/A for McGuire 1
B6.230	Nuts, Bushings, and Washers	N/A for McGuire 1

Category B-G-2 Pressure Retaining Bolting, 2 in. And Less In Diameter

IWB-2500-1 Item	Component To Be Examined	Comments
	Reactor Vessel	
B7.10	Bolts, Studs, and Nuts	N/A for McGuire 1
	Pressurizer	
B7.20	Bolts, Studs, and Nuts	
	Steam Generators	
B7.30	Bolts, Studs, and Nuts	N/A for McGuire 1
	Heat Exchangers	
B7.40	Bolts, Studs, and Nuts	N/A for McGuire 1
	Piping	
B7.50	Bolts, Studs, and Nuts	
	Pumps	
B7.60	Bolts, Studs, and Nuts	
	Valves	
B7.70	Bolts, Studs, and Nuts	

Category B-J	Pressure Retaining Welds In Piping	
IWB-2500-1 Item	**Component To Be Examined**	**Comments**
B9.10	**Nominal Pipe Size 4 in. or Larger**	
B9.11	Circumferential Welds	See RFR 01-005
B9.20	**Nominal Pipe Size Less Than 4 in.**	
B9.21	Circumferential Welds	See RFR 01-005
B9.30	**Branch Pipe Connection Welds**	
B9.31	Nominal Pipe Size 4 in. or Larger	See RFR 01-005
B9.32	Nominal Pipe Size Less Than 4 in.	See RFR 01-005
B9.40	Socket Welds	See RFR 01-005

Category B-K	Welded Attachments For Vessels, Piping, Pumps, And Valves	
IWB-2500-1 Item	**Component To Be Examined**	**Comments**
	Pressure Vessels	
B10.10	Welded Attachments	
	Piping	
B10.20	Welded Attachments	
	Pumps	
B10.30	Welded Attachments	N/A for McGuire 1
	Valves	
B10.40	Welded Attachments	N/A for McGuire 1

Category	**B-L-1**	**Pressure Retaining Welds In Pump Casings**
	B-M-1	**Pressure Retaining Welds In Valve Bodies**
	B-L-2	**Pump Casings**
	B-M-2	**Valve Bodies**

IWB-2500-1 Item	**Component To Be Examined**	**Comments**
	Pumps	
B12.10	Pump Casing Welds (B-L-1)	N/A for McGuire 1
B12.20	Pump Casing (B-L-2)	
	Valves	
B12.30	Valves, Less Than NPS 4 Valve Body Welds (B-M-1)	N/A for McGuire 1
B12.40	Valves, NPS 4 or Larger Valve Body Welds (B-M-1)	N/A for McGuire 1
B12.50	Valve Body, Exceeding NPS 4 (B-M-2)	

Category	**B-N-1**	**Interior Of Reactor Vessel**
	B-N-2	**Welded Core Support Structures And Interior Attachments To Reactor Vessels**
	B-N-3	**Removable Core Support Structures**

IWB-2500-1 Item	**Component To Be Examined**	**Comments**
	Reactor Vessel	
B13.10	Vessel Interior (B-N-1)	Each Inspection Period
	Reactor Vessel (PWR)	
B13.50	Interior Attachments Within Beltline Region (B-N-2)	N/A for McGuire 1
B13.60	Interior Attachments Beyond Beltline Region (B-N-2)	

B13.70	Core Support Structure (B-N-3)

Category B-O **Pressure Retaining Welds In Control Rod Housings**

IWB-2500-1 Item	Component To Be Examined	Comments
	Reactor Vessel	
B14.10	Welds in CRD Housing	

Category B-P **All Pressure Retaining Components**

IWB-2500-1 Item	Component To Be Examined	Comments
	Reactor Vessel	
B15.10	Pressure Retaining Boundary	Reference Duke Power Company Inservice Inspection Pressure Test Plan
	Pressurizer	
B15.20	Pressure Retaining Boundary	Reference Duke Power Company Inservice Inspection Pressure Test Plan
	Steam Generators	
B15.30	Pressure Retaining Boundary	Reference Duke Power Company Inservice Inspection Pressure Test Plan
	Heat Exchangers	
B15.40	Pressure Retaining Boundary	Reference Duke Power Company Inservice Inspection Pressure Test Plan
	Piping	
B15.50	Pressure Retaining Boundary	Reference Duke Power Company Inservice Inspection Pressure Test Plan
	Pumps	

B15.60	Pressure Retaining Boundary	Reference Duke Power Company Inservice Inspection Pressure Test Plan

Category B-P **(continued)**

Valves

B15.70	Pressure Retaining Boundary	Reference Duke Power Company Inservice Inspection Pressure Test Plan

Category B-Q **Steam Generator Tubing**

IWB-2500-1 Item	Component To Be Examined	Comments
B16.10	Steam Generator Tubing in Straight Design	N/A for McGuire 1
B16.20	Steam Generator Tubing in U-Tube Design	Steam Generator Tubing is examined and documented by the Steam Generator Maintenance and Engineering Support Section/Nuclear Services Division as required by the Station Technical Specifications.

Category F-A **Supports**

IWF-2500-1 Item	Component To Be Examined	Comments
F1.10	Class 1 Piping Supports	25% of totals

IWF-2500-1 Item	Component to be Examined	Comments
F1.40	Class 1, 2 & 3 Supports Other than Piping	

5.0 Description of Inservice Inspection Plan for ASME Class 2 Items

The inservice inspection of ASME Class 2 Items shall be performed in accordance with the requirements of Article IWC-2000 of Section XI. Specific examinations are described in Section 8 of this Plan. A detailed listing and schedule of each examination is shown in Volume 1 of this Plan.

5.1 Examination Categories and Requirements

The examination categories to be used are those listed in Table IWC-2500-1 of Section XI. Specific examinations will be identified by an Item Number, similar to those listed in Table IWC-2500-1 of Section XI, plus an additional number to uniquely identify that examination. (Example C01.010.001)

Class 2 Items to be inspected:

Category C-A **Pressure Retaining Welds In Pressure Vessels**

IWC-2500-1 Item	Component To Be Examined	Comments
C1.10	Shell Circumferential Welds	
C1.20	Head Circumferential Welds	
C1.30	Tubesheet-to-Shell Weld	

Category C-B **Pressure Retaining Nozzle Welds In Vessels**

IWC-2500-1 Item	Component To Be Examined	Comments
C2.10	**Nozzles in Vessels ≤ 1/2 in. Nominal Thickness**	
C2.11	Nozzle-to-Shell (or Head) Weld	
C2.20	**Nozzles Without Reinforcing Plate in Vessels > 1/2 in. Nominal Thickness**	
C2.21	Nozzle-to-Shell (or Head) Weld	
C2.22	Nozzle Inside Radius Section	

Category C-B (Continued)

IWC-2500-1 Item	Component To Be Examined	Comments
C2.30	**Nozzles With Reinforcing Plate In Vessels > $^1/_2$ in. Nominal Thickness**	
C2.31	Reinforcing Plate Welds to Nozzle and Vessel	
C2.32	Nozzle-to-Shell (or Head) Welds When Inside of Vessel is Accessible	N/A for McGuire 1
C2.33	Nozzle-to-Shell (or Head) Welds When Inside of Vessel is Inaccessible	For scheduling and examination results see Duke Power Company Insevice Inspection Pressure Test Plan

Category C-C Welded Attachments For Vessels, Piping, Pumps, And Valves

IWC-2500-1 Item	Component To Be Examined	Comments
	Pressure Vessels	
C3.10	Welded Attachments	
	Piping	
C3.20	Welded Attachments	
	Pumps	
C3.30	Welded Attachments	
	Valves	
C3.40	Welded Attachments	N/A for McGuire 1

Category C-D **Pressure Retaining Bolting Greater Than 2 in. In Diameter**

IWC-2500-1 Item	Component To Be Examined	Comments
	Pressure Vessels	
C4.10	Bolts and Studs	N/A for McGuire 1
	Piping	
C4.20	Bolts and Studs	N/A for McGuire 1
	Pumps	
C4.30	Bolts and Studs	N/A for McGuire 1
	Valves	
C4.40	Bolts and Studs	N/A for McGuire 1

Category C-F-1 **Pressure Retaining Welds In Austenitic Stainless Steel Or High Alloy Piping**

IWC-2500-1 Item	Component To Be Examined	Comments
C5.10	**Piping Welds $\geq$ 3/8 in. Nominal Wall Thickness for Piping > NPS 4**	
C5.11	Circumferential Weld	See RFR 01-005
C5.20	**Piping Welds > 1/5 in. Nominal Wall Thickness for Piping $\geq$ NPS 2 and $\leq$ NPS 4**	
C5.21	Circumferential Weld	See RFR 01-005
C5.30	Socket Welds	See RFR 01-005

Category C-F-1 (Continued)

IWC-2500-1 Item	Component To Be Examined	Comments
C5.40	**Pipe Branch Connections of Branch Piping ≥ NPS 2**	
C5.41	Circumferential Weld	See RFR 01-005

Category C-F-2 Pressure Retaining Welds In Carbon Or Low Alloy Steel Piping

IWC-2500-1 Item	Component To Be Examined	Comments
C5.50	**Piping Welds ≥ 3/8 in. Nominal Wall Thickness for Piping > NPS 4**	
C5.51	Circumferential Weld	See RFR 01-005
C5.60	**Piping Welds > 1/5 in. Nominal Wall Thickness for Piping ≥ NPS 2 and ≤ NPS 4**	
C5.61	Circumferential Weld	See RFR 01-005
C5.70	Socket Welds	See RFR 01-005
C5.80	**Pipe Branch Connections of Branch Piping ≥ NPS 2**	
C5.81	Circumferential Weld	See RFR 01-005

Category C-G Pressure Retaining Welds In Pumps And Valves

IWC-2500-1 Item	Component To Be Examined	Comments
	Pumps	
C6.10	Pump Casing Welds	N/A for McGuire 1
	Valves	
C6.20	Valve Body Welds	

Category C-H	All Pressure Retaining Components	
IWC-2500-1 Item	**Component To Be Examined**	**Comments**
	Pressure Vessels	
C7.10	Pressure retaining components	Reference Duke Power Company Inservice Inspection Pressure Test Plan
	Piping	
C7.30	Pressure retaining components	Reference Duke Power Company Inservice Inspection Pressure Test Plan
	Pumps	
C7.50	Pressure retaining components	Reference Duke Power Company Inservice Inspection Pressure Test Plan
	Valves	
C7.70	Pressure retaining components	Reference Duke Power Company Inservice Inspection Pressure Test Plan

Category F-A	Supports	
IWF-2500-1 Item	**Component To Be Examined**	**Comments**
F1.20	Class 2 Piping Supports	15% of totals
IWF-2500-1 Item	**Component To Be Examined**	**Comments**
F1.40	Class 1, 2 & 3 Supports Other than Piping	

6.0 Description of Inservice Inspection Plan for ASME Class 3 Items

The inservice inspection of ASME Class 3 Items shall be performed in accordance with the requirements of Article IWD-2000 of Section XI. Specific examinations are described in Section 8 of this Plan. A detailed listing and schedule of each examination is shown in Volume 1 of this Plan.

6.1 Examination Categories and Requirements

The examination categories to be used are those listed in Table IWD-2500-1 of Section XI. Specific examinations will be identified by an Item Number, similar to those listed in Table IWD-2500-1 of Section XI, plus an additional number to uniquely identify that examination: (Example: D01.010.001).

Class 3 Items to be inspected:

Category D-A **Welded Attachments for Vessels, Piping, Pumps, and Valves**

IWD-2500-1 Item	Component to be Examined	Comments
	Pressure Vessels	
D1.10	Welded Attachments	
	Piping	
D1.20	Welded Attachments	
	Pumps	
D1.30	Welded Attachments	NA for McGuire Unit 1
	Valves	
D1.40	Welded Attachments	NA for McGuire Unit 1

Category D-B **All Pressure Retaining Components**

IWD-2500-1 Item	Component To Be Examined	Comments
	Pressure Vessels	
D2.10	Pressure retaining components	Reference Duke Power Company Inservice Inspection Pressure Test Plan
D2.20	Pressure retaining components	Reference Duke Power Company Inservice Inspection Pressure Test Plan

Category D-B (Continued)

IWD-2500-1 Item	Component To Be Examined	Comments
	Piping	
D2.30	Pressure retaining components	Reference Duke Power Company Inservice Inspection Pressure Test Plan
D2.40	Pressure retaining components	Reference Duke Power Company Inservice Inspection Pressure Test Plan
	Pumps	
D2.50	Pressure retaining components	Reference Duke Power Company Inservice Inspection Pressure Test Plan
D2.60	Pressure retaining components	Reference Duke Power Company Inservice Inspection Pressure Test Plan
	Valves	
D2.70	Pressure retaining components	Reference Duke Power Company Inservice Inspection Pressure Test Plan
D2.80	Pressure retaining components	Reference Duke Power Company Inservice Inspection Pressure Test Plan

Category F-A **Supports**

IWF-2500-1 Item	Component to be Examined	Comments
F1.30	Class 3 Piping Supports	10% of Totals

IWF-2500-1 Item	Component to be Examined	Comments
F1.40	Class 1, 2 & 3 Supports Other than Piping	

7.0 Description of Augmented Inservice Inspection Plan

Augmented inservice inspection shall be performed as required in Section 1.1 of this Plan. Specific examinations are described in Section 8 of this Plan. A detailed listing and schedule of each examination is shown in Volume 1 of this Plan.

7.1 Examination Categories and Requirements

Items requiring augmented inservice inspection are described in the following paragraphs. Each inspection will be assigned a unique Item Number.

7.1.1 Reactor Coolant Pump Flywheel (Item Number Series G01.001)

The following inspection techniques will be used in accordance with the McGuire Units 1 and 2 Technical Specification 5.5.7, Amendment Nos. 190 and 171.

" A qualified in-place UT examination over the volume from the inner bore of the flywheel to the circle one-half of the outer radius or a surface examination (MT and/or PT) of exposed surfaces of the removed flywheels may be conducted at approximately 10 year intervals coinciding with the Inservice Inspection schedule as required by ASME Section XI."

Duke Power Company will schedule all four Reactor Coolant Pumps for a UT examination. Only one exam per pump is required. They will be scheduled based on the last UT performed in second interval

7.1.2 Augmented Inservice Inspection on Accumulator Injection Piping Welds at the Reactor Coolant System Nozzles for Pipe Rupture Protection (Item Number Series G03.001)

Pipe Rupture Protection shall comply with Augmented Inservice Inspection for Pipe Rupture Protection SRG-78-01, Revision 2 (Distribution Code MADM-257) for McGuire Nuclear Station.

8.0 Description of Examination Listings

All ASME Class 1, 2, and 3 systems and components have been reviewed to determine the inservice examination requirements for McGuire Unit 1. Examinations referenced by this section were written in accordance with the criteria found in Sections 3, 4, 5, 6 and 7 of this Plan.

For administrative purposes, the printouts identifying NDE examinations to be performed during each refueling outage that accompany this Inservice Inspection Plan will reflect the refueling outages as shown below.

Outage No.	1	2	3	4	5	6	7
End of Refueling Cycle No.	15	16	17	18	19	20	21

8.1 Examination Information

The following information is listed for each examination where applicable:

8.1.1 Item Number

The Item Number for each examination is composed of three sections. The first two sections of the item number for ASME Class 1, Class 2 and Class 3 items are similar to item numbers assigned in Table IWB-2500-1, IWC-2500-1 and IWD-2500-1 of Section XI.

The scheme for assigning item numbers for Class 1, 2 and 3 piping supports (IWF-2500-1) is identified as follows:

<u>Class 1</u>

F01.010.000A	= Category A	(rods in one direction only)
F01.010.000B	= Category B	(multi-directional hangers)
F01.010.000C	= Category C	(thermal movement, i.e. springs, snubbers and constant supports)

Class 2

F01.020.000A	= Category A	(rods in one direction only)
F01.020.000B	= Category B	(multi-directional hangers)
F01.020.000C	= Category C	(thermal movement, i.e. springs, snubbers and constant supports)

Class 3

F01.030.000A	= Category A	(rods in one direction only)
F01.030.000B	= Category B	(multi-directional hangers)
F01.030.000C	= Category C	(thermal movement, i.e. springs, snubbers and constant supports)

The last section of the Item Number is composed of a three or four character sequence to uniquely identify that inspection. (Example F01.020.001A or F01.010.150C)

8.1.2 ID Number

The ID Number is selected so that, by using the specified reference drawing(s) and any applicable comments, the area to be examined can be accurately identified. Several different weld identification systems were used by various equipment vendors. A consistent system of weld or component identification has been developed and is described below:

8.1.2.1 The first character of each ID Number indicates the Unit to which the examination applies.

8.1.2.2 The Unit Number is followed by a series of letters to indicate the component or system to be examined.

Some of the abbreviations used are:

CRDM	Control Rod Drive Mechanisms
CAP	Auxiliary Feedwater Pump
CCP	Centrifugal Charging Pump
CSHX	Containment Spray Heat Exchanger
DG	Diesel Generator

KCHX	Component Cooling Heat Exchanger
KCP	Component Cooling Pump
KDC	Lube Oil Cooler
KDHX	Diesel Generator Cooling Water Heat Exchanger
KDP	Jacket Water Pump
KFHX	Feul Pool Cooling Heat Exchanger
LDST	Lube Oil Strainer
RNP	Nuclear Service Water Pump
RNST	Nuclear Service Water Strainer
RCHP	Reciprocating Charging Pump
PZR	Pressurizer
RCP	Reactor Coolant Pump
RCPA	Reciprocating Charging Pump Accumulator
RCPSS	Reciprocating Charging Pump Suction Stabilizer
REGHX	Regenerative Heat Exchanger
RHR	Residual Heat Removal
RPV	Reactor Pressure Vessel
SGA	Steam Generator A
SGB	Steam Generator B
SGC	Steam Generator C
SGD	Steam Generator D
SIP	Safety Injection Pump
SWHX	Seal Water Heat Exchanger
SWINJF	Seal Water Injection Filter
CA	Auxiliary Feedwater System

CF	Main Feedwater System
FW	Refueling Water System
KC	Component Cooling System
NC	Reactor Coolant System
ND	Residual Heat Removal System
NF	Ice Condenser Refrigeration
NI	Safety Injection System
NS	Containment Spray System
NV	Chemical and Volume Control System
RN	Nuclear Service Water
RV	Containment Ventilation Cooling Water System
SA	Auxiliary Steam System
SM	Main Steam System
SV	Main Steam Vent to Atmosphere
VP	Containment Purge Ventilation
VQ	Containment Air Release and Addition System
WL	Liquid Waste Recycle System

8.1.2.3 The remainder of the ID Number will indicate the exact weld or component to be examined, as shown on the reference drawings. Additional information will be included in the comments space when necessary to positively identify the area to be examined.

Safe-End Welds - ID Number ends with "SE";

Westinghouse Butt Weld - ID Number containing "W";

Westinghouse Branch Pipe Weld - ID Number containing "WN".

8.1.3 Drawing Numbers

Drawings beginning with "MC-ISIN-" are electronic color-coded NDE Boundary Drawings that were used as the basis for all exams listed in Volume 1. These drawings are maintained by the ISI Plan Management Group of the Nuclear Services Division and a controlled copy of these drawings can be obtained from Document Management located in the Duke Power Company General Office.

At least one Duke Power drawing number is listed for each examination, if available. Drawing numbers beginning with "MCM" are vendor component drawings. Drawing numbers beginning with "MC" or "MCFD", followed by a four digit number are system flow diagrams. Those beginning with "MCFI -", followed by a one-digit number and a two-letter designation (see par. 8.1.2.2) are system weld isometrics. Drawings beginning with "MCSRD" are support math model drawings. These drawings can be obtained from Document Management located at McGuire Nuclear Station.

8.1.4 Location (Optional)

Location of Item: building, degree, elevation, axis, etc.

8.1.5 Inspection Required / Configuration (Pipe to Elbow, Valve to Pipe, Flange to Tee, etc.)

The following abbreviations are used to describe the type of inspection required for each item:

PT	Liquid Penetrant Inspection
MT	Magnetic Particle Inspection
RT	Radiographic Inspection
UT	Ultrasonic Inspection
ET	Eddy Current Inspection
VT-1	ISI Visual Examination
VT-3	ISI Visual Examination

8.1.6 Procedure

The inspection procedure is listed for each item to be inspected. The procedures are chosen from those in Section 3 of this Plan.

8.1.7 Material Type/Grade

The following abbreviations are used to indicate the type of material to be examined:

CS Carbon Steel

SS Stainless Steel

IN Inconel

8.1.8 Diameter

The actual outside diameter of the weld is listed for pressure vessel welds less than 100 inches in diameter. No entry is made in this category if the weld diameter is 100 inches or larger.

The nominal pipe size (NPS) is listed for all valves and piping welds up to 24" NPS. The nominal inside diameter is listed for all vendor supplied piping larger than 24" NPS. The actual outside diameter is listed for all other piping welds.

The nominal outside diameter is listed for examinations of bolts and studs.

For integrally welded supports or cladding, the smaller weld or area dimension is listed in this category.

8.1.9 Thickness

The dimension listed for component or piping welds is the nominal thickness at the weld.

The overall length of bolts or studs is listed in this category when applicable.

The larger dimension of support attachment welds or cladding areas is listed in this category.

8.1.10 Calibration Block

The calibration block(s) to be used for the UT examinations were selected by the NDE Level III, from the calibration block listing shown in Section 10 of this plan.
The designation "TBD" is used to indicate cases where the calibration block is still being designed and/or fabricated.

An asterisk (*) is used to identify ultrasonic examinations which do not require a basic calibration block number to be listed. Duke Power Company ultrasonic procedures NDE-600 and NDE-670 are written and qualified to Appendix VIII of the 1995 Edition of ASME XI through the 1996 Addenda.

8.1.11 Comments

Additional information about the specified examination will be included here when needed.

8.2 Examination Listings

The detailed examination listing and schedule can be found in Volume 1 of this plan.

9.0 Requests for Relief from ASME Code Requirements

Each request for relief from a requirement of the ASME Section XI Code specified in Section 1 of the General Requirements will be submitted by the Nuclear Generation Department to the Nuclear Regulatory Commission for approval.

The following is a listing of the Requests for Relief submitted for use:

Serial Number	Units Affected	Date RFR Submitted	Date SER Approved	Comments
01-004	1	6/1/01		Alternative Inspection for Snubbers
01-005	1	Pending		WCAP-14572, Revision 1-NP-A. "Westinghouse Owners Group Application of Risk-Informed Methods to Piping Inservice Inspection Topical Report."

10.0 Calibration Standards

10.1 Ultrasonic Calibration Standards

10.1.1 Calibration standards are prepared for each UT inspection listed in the detailed inspection listings (Volume 1) of this plan. Calibration standards where applicable, are designed in accordance with the requirements of ASME Section XI.

10.1.2 Calibration standards for UT inspection shall be selected per the Calibration Block Listing. The number of the calibration standard used shall be recorded on the inspection data.

10.1.3 When using Procedure NDE-600, the use of basic calibration blocks on piping welds including those examined per Relief for Request 01-005 is not required.

10.2 Eddy Current Calibration Standards

Eddy Current calibration standards are maintained by the Steam Generator Maintenance and Engineering Support Group/Nuclear Generation Division. Eddy Current Examinations are scheduled and performed per McGuire Technical Specifications.

10.3 Calibration Standard Description

The McGuire Calibration Block Listing found in this section contains information concerning each calibration standard to be used for the inservice inspection of McGuire Unit 1.

Code Year 1995

Report order: Block no.
Plant(s): MN1

DUKE ENERGY CORPORATION
QUALITY ASSURANCE TECHNICAL SERVICES
Inservice Inspection Database Management System
Calibration Block Listing

BLOCK NO.	TYPE	DESCRIPTION	CODE REQ	MATERIAL TYPE/GRADE	DIAM SIZE	THICKNESS (LENGTH)	COMMENTS
40387	PLATE	6" x 7" x 28" SA508 CL.2	95/96A	CS	0.000	7.000	Heat # 158025C-1 SS Clad
40397	PLATE	3" x 6" x 12" SA240 T316	95/96A	CS	0.000	3.000	Heat # 28316
50211	PIPE	6" Sch. 160 SA376 T304	95/96A	SS	6.650	0.719	Heat # C7948
50236A	PLATE	15" x 4" x 6" SA508	95/96A	CS	0.000	6.125	Heat # 123L418
50237	FORGING	25" x 20" x 9" SA508 Forging	95/96A	CS	0.000	9.000	Heat # CZS123L418
50237B	FORGING	5" x 6" x 12" SA508 CL.2	95/96A	CS	0.000	5.000	Heat # CZS123L418
50304	PLATE	9" x 36.65" x 37" SA508 CL.2	95/96A	CS	0.000	36.670	Heat # CCR801 SS Clad Heat # L3541
50313	PIPE	12" Sch. 40 SA312 T304	95/96A	SS	12.750	0.375	Heat # F60096 Reciprocating CP Suction
50319	PIPE	6" Sch. 80 SA312 SS304	95/96A	SS	6.625	0.432	Heat # F81032
50337	PLATE	4.2" x 6" x 15" SA533 GR.A CL.	95/96A	CS	0.000	4.200	Heat # B7401-1 SS Clad
50338	PLATE	3" x 6" x 15" SA533 GR.A CL.	95/96A	CS	0.000	3.000	Heat # B7401-1 CS With SS Clad
50339	PIPE	14" x 1.64" SA182 F316L	95/96A	SS	14.000	1.640	Heat # D-42
50374	PIPE	6.25" x .625" Inconel SB-167	95/96A	Inconel	6.250	0.625	Heat # 2155-2-3495

DUKE ENERGY CORPORATION
QUALITY ASSURANCE TECHNICAL SERVICES
Inservice Inspection Database Management System
Calibration Block Listing

BLOCK NO.	TYPE	DESCRIPTION	CODE REQ	MATERIAL TYPE/GRADE	DIAM SIZE	THICKNESS (LENGTH)	COMMENTS
50376	PLATE	6" x 7" x 28" SA533 GR.B CL.	95/96A	CS	0.000	7.000	Heat # C0569-2 Code # B8604-3 SS Clad (Curved)
50422	PLATE	6" x 12" x .625" SA516-70	95/96A	CS	0.000	0.625	1/16" 304 Cladding Containment Spray Heat Exhanger
50424	PIPE	4" Sch. 120 SA312 T304	95/96A	SS	4.500	0.438	Seal Water Injection Filter 1A
50428	CURVED CCS	10.92" x 1.075" SA351 CF8	95/96A	SS	10.920	1.075	Thickness = 01.070 Thru 01.075 Regenerative Heat Exchanger
50465	RCP STUD	42.0" x 4.320" SA540 GR.B-2	95/96A	CS	4.320	0.000	Heat # B9476 Pro. No. 36506-OR Serial # 12189 "D" RCP Studs
50467	NOZZLE FORGING	6" x .875" SA508 CL.2	95/96A	CS	6.000	0.875	.120" SS Cladding
50468	NOZZLE FORGING	15" x 1.250" SA508 CL.2	95/96A	CS	15.000	1.250	.190" SS Cladding
50501	REACTOR VESSEL STUD	64.594" x 6.697" SA540 GR.B-2	95/96A	CS	6.690	0.000	Heat # 61880
50502	RCP STUD	30.6" x 4.375" SA540 GR.B-24	95/96A	CS	4.375	0.000	Heat # 99137 RCP Stud (Hex-Head Bolt)
5131617	FORGING	SA508 Class 3	95/96A	CS	0.000	6.400	Steam Generator Primary Head to Tubesheet Carbon Steel with Stainless Steel Clad
5135230	FORGING	SA508 Class 3	95/96A	CS	0.000	3.250	Steam Generator Secondary Shell to Tubesheet
5139385	FORGING	SA508 Class 3	95/96A	CS	0.000	4.125	Steam Generator Secondary Side
5149697	PLATE	SA336 Class F 316N	95/96A	SS	0.000	3.750	Heat # IN 151 Lot # 27777ACSS Steam Generator Primary Inlet and Outlet Nozzle to SE

DUKE ENERGY CORPORATION
QUALITY ASSURANCE TECHNICAL SERVICES
Inservice Inspection Database Management System
Calibration Block Listing

BLOCK NO.	TYPE	DESCRIPTION	CODE REQ	MATERIAL TYPE/GRADE	DIAM SIZE	THICKNESS (LENGTH)	COMMENTS
5158172	PLATE	SA336 Class F 316N	95/96A	SS	0.000	4.400	Steam Generator Primary Inlet and Outlet Nozzle to SE
7C015	SG STUD	2.500" x 26.625" SA540 GR.B	95/96A	CS	2.500	26.625	Steam Generator Manway Stud
8304-601	FORGING	SA508 Class 1	95/96A	CS	20.000	4.300	Heat # 24-2094 Main Feedwater Nozzle Inside Radius
95001	FORGING	11.88" x 6" x 36.06" SA508 CL.	95/96A	CS	6.000	11.880	Carbon Steel With SS Clad, Heat # 123-Y-317 Framatome Block FTI-RPV-95001

THIRD TEN-YEAR INTERVAL INSERVICE INSPECTION PLAN

MCGUIRE NUCLEAR STATION UNIT 1

Duke Energy SM

THIRD INTERVAL INSERVICE INSPECTION PLAN

MCGUIRE NUCLEAR STATION

UNIT 1

Volume 1

REVISION 0

Duke Power SM

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McGuire Unit 1

Inservice Inspection Examination Listing and Schedule

Section 1

Revision 0

The detailed inspection plans for Inservice Inspection of McGuire Unit 1 are maintained in this volume. Section 1 contains the examination listing and schedule. Section 2 contains a list of reference drawings.

Duke Power Company

ISI Plan Management

Inservice Inspection Plan For:

McGuire Unit 1

Interval 3

ISI Outage 1

Refueling Outage **EOC 15**

ISI Inspection Listing

Revision 0

CATEGORY B-A, Pressure Retaining Welds in Reactor Vessel

Shell-to-Flange Weld

DUKE ENERGY CORPORATION
QUALITY ASSURANCE TECHNICAL SERVICES
Inservice Inspection Database Management System

McGuire 1

Inservice Inspection Plan for Interval 3 Outage 1

ITEM NUMBER	ID NUMBER	SYS ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
B01.030.001 Class A	1RPV 7-442 Circumferential	MCM 1201.01-146 MCM 1201.01-223	NDE-2050	UT	CS	0.000 10.700	50304	NOZZLE BELT TO FLANGE PC. 454-01 TO PC. 442-06 UT FROM FLANGE SURFACE

Total B01.030 Items: 1

CATEGORY B-A, Pressure Retaining Welds in Reactor Vessel

Head-to-Flange Weld

DUKE ENERGY CORPORATION
QUALITY ASSURANCE TECHNICAL SERVICES
Inservice Inspection Database Management System

McGuire 1

Inservice Inspection Plan for Interval 3 Outage 1

ITEM NUMBER	ID NUMBER	SYS ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
B01.040.001	1RPV 6-446A	MCM 1201.01-204	NDE-2060	UT	CS	0.000	50376	CLOSURE HEAD TO FLANGE
	Circumferential	MCM 1201.01-225				7.300		PC. 446-02 TO PC. 446-03
Class A								
B01.040.001A	1RPV 6-446A	MCM 1201.01-204	NDE-25	MT	CS	0.000		CLOSURE HEAD TO FLANGE
	Circumferential	MCM 1201.01-225				7.300		PC. 446-02 TO PC. 446-03
Class A								

Total B01.040 Items: 2

Total B01 Items: 3

CATEGORY B-G-1, Pressure Retaining Bolting, Greater than 2" In Diameter

Reactor Vessel

DUKE ENERGY CORPORATION
QUALITY ASSURANCE TECHNICAL SERVICES
Inservice Inspection Database Management System

McGuire 1

Inservice Inspection Plan for Interval 3 Outage 1

ITEM NUMBER	ID NUMBER	SYS ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
****** Closure Head Nuts ******								
B06.010.001	1RPV-449-02-01	MCM 1201.01-204 MCM 1201.01-206	QAL-13	VT-1	CS	10.540 1.770	-----	CLOSURE HEAD NUT
B06.010.002	1RPV-449-02-02	MCM 1201.01-204 MCM 1201.01-206	QAL-13	VT-1	CS	10.540 1.770	-----	CLOSURE HEAD NUT
B06.010.003	1RPV-449-02-03	MCM 1201.01-204 MCM 1201.01-206	QAL-13	VT-1	CS	10.540 1.770	-----	CLOSURE HEAD NUT
B06.010.004	1RPV-449-02-04	MCM 1201.01-204 MCM 1201.01-206	QAL-13	VT-1	CS	10.540 1.770	-----	CLOSURE HEAD NUT
B06.010.005	1RPV-449-02-05	MCM 1201.01-204 MCM 1201.01-206	QAL-13	VT-1	CS	10.540 1.770	-----	CLOSURE HEAD NUT
B06.010.006	1RPV-449-02-06	MCM 1201.01-204 MCM 1201.01-206	QAL-13	VT-1	CS	10.540 1.770	-----	CLOSURE HEAD NUT
B06.010.007	1RPV-449-02-07	MCM 1201.01-204 MCM 1201.01-206	QAL-13	VT-1	CS	10.540 1.770	-----	CLOSURE HEAD NUT
B06.010.008	1RPV-449-02-08	MCM 1201.01-204 MCM 1201.01-206	QAL-13	VT-1	CS	10.540 1.770	-----	CLOSURE HEAD NUT

CATEGORY B-G-1, Pressure Retaining Bolting, Greater than 2" In Diameter

Reactor Vessel

DUKE ENERGY CORPORATION
QUALITY ASSURANCE TECHNICAL SERVICES
Inservice Inspection Database Management System

McGuire 1

Inservice Inspection Plan for Interval 3 Outage 1

ITEM NUMBER	ID NUMBER	SYS ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
B06.010.009	1RPV-449-02-09	MCM 1201.01-204 MCM 1201.01-206	QAL-13	VT-1	CS	10.540 1.770	-----	CLOSURE HEAD NUT
B06.010.010	1RPV-449-02-10	MCM 1201.01-204 MCM 1201.01-206	QAL-13	VT-1	CS	10.540 1.770	-----	CLOSURE HEAD NUT
B06.010.011	1RPV-449-02-11	MCM 1201.01-204 MCM 1201.01-206	QAL-13	VT-1	CS	10.540 1.770	-----	CLOSURE HEAD NUT

Total B06.010 Items: 11

CATEGORY B-G-1, Pressure Retaining Bolting, Greater than 2" In Diameter

Reactor Vessel

DUKE ENERGY CORPORATION
QUALITY ASSURANCE TECHNICAL SERVICES
Inservice Inspection Database Management System

McGuire 1

Inservice Inspection Plan for Interval 3 Outage 1

ITEM NUMBER	ID NUMBER	SYS ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
****** Closure Studs, when removed ******								
B06.030.001	1RPV-449-01-01	MCM 1201.01-204 MCM 1201.01-206	PDI-UT-5	UT	CS	7.000 57.688	50501	CLOSURE STUD
Class A								
B06.030.001A	1RPV-449-01-01	MCM 1201.01-204 MCM 1201.01-206	NDE-25	MT	CS	7.000 57.688		CLOSURE STUD
Class A								
B06.030.002	1RPV-449-01-02	MCM 1201.01-204 MCM 1201.01-206	PDI-UT-5	UT	CS	7.000 57.688	50501	CLOSURE STUD
Class A								
B06.030.002A	1RPV-449-01-02	MCM 1201.01-204 MCM 1201.01-206	NDE-25	MT	CS	7.000 57.688		CLOSURE STUD
Class A								
B06.030.003	1RPV-449-01-03	MCM 1201.01-204 MCM 1201.01-206	PDI-UT-5	UT	CS	7.000 57.688	50501	CLOSURE STUD
Class A								
B06.030.003A	1RPV-449-01-03	MCM 1201.01-204 MCM 1201.01-206	NDE-25	MT	CS	7.000 57.688		CLOSURE STUD
Class A								
B06.030.004	1RPV-449-01-04	MCM 1201.01-204 MCM 1201.01-206	PDI-UT-5	UT	CS	7.000 57.688	50501	CLOSURE STUD
Class A								
B06.030.004A	1RPV-449-01-04	MCM 1201.01-204 MCM 1201.01-206	NDE-25	MT	CS	7.000 57.688		CLOSURE STUD
Class A								

CATEGORY B-G-1, Pressure Retaining Bolting, Greater than 2" In Diameter

Reactor Vessel

DUKE ENERGY CORPORATION
QUALITY ASSURANCE TECHNICAL SERVICES
Inservice Inspection Database Management System

McGuire 1

Inservice Inspection Plan for Interval 3 Outage 1

ITEM NUMBER	ID NUMBER	SYS ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
B06.030.005	1RPV-449-01-05	MCM 1201.01-204 MCM 1201.01-206	PDI-UT-5	UT	CS	7.000 57.688	50501	CLOSURE STUD
Class A								
B06.030.005A	1RPV-449-01-05	MCM 1201.01-204 MCM 1201.01-206	NDE-25	MT	CS	7.000 57.688		CLOSURE STUD
Class A								
B06.030.006	1RPV-449-01-06	MCM 1201.01-204 MCM 1201.01-206	PDI-UT-5	UT	CS	7.000 57.688	50501	CLOSURE STUD
Class A								
B06.030.006A	1RPV-449-01-06	MCM 1201.01-204 MCM 1201.01-206	NDE-25	MT	CS	7.000 57.688		CLOSURE STUD
Class A								
B06.030.007	1RPV-449-01-07	MCM 1201.01-204 MCM 1201.01-206	PDI-UT-5	UT	CS	7.000 57.688	50501	CLOSURE STUD
Class A								
B06.030.007A	1RPV-449-01-07	MCM 1201.01-204 MCM 1201.01-206	NDE-25	MT	CS	7.000 57.688		CLOSURE STUD
Class A								
B06.030.008	1RPV-449-01-08	MCM 1201.01-204 MCM 1201.01-206	PDI-UT-5	UT	CS	7.000 57.688	50501	CLOSURE STUD
Class A								
B06.030.008A	1RPV-449-01-08	MCM 1201.01-204 MCM 1201.01-206	NDE-25	MT	CS	7.000 57.688		CLOSURE STUD
Class A								
B06.030.009	1RPV-449-01-09	MCM 1201.01-204 MCM 1201.01-206	PDI-UT-5	UT	CS	7.000 57.688	50501	CLOSURE STUD
Class A								

CATEGORY B-G-1, Pressure Retaining Bolting, Greater than 2" In Diameter

Reactor Vessel

DUKE ENERGY CORPORATION
QUALITY ASSURANCE TECHNICAL SERVICES
Inservice Inspection Database Management System

McGuire 1

Inservice Inspection Plan for Interval 3 Outage 1

ITEM NUMBER	ID NUMBER	SYS ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
B06.030.009A	1RPV-449-01-09	MCM 1201.01-204 MCM 1201.01-206	NDE-25	MT	CS	7.000 57.688		CLOSURE STUD
Class A								
B06.030.010	1RPV-449-01-10	MCM 1201.01-204 MCM 1201.01-206	PDI-UT-5	UT	CS	7.000 57.688	50501	CLOSURE STUD
Class A								
B06.030.010A	1RPV-449-01-10	MCM 1201.01-204 MCM 1201.01-206	NDE-25	MT	CS	7.000 57.688		CLOSURE STUD
Class A								
B06.030.011	1RPV-449-01-11	MCM 1201.01-204 MCM 1201.01-206	PDI-UT-5	UT	CS	7.000 57.688	50501	CLOSURE STUD
Class A								
B06.030.011A	1RPV-449-01-11	MCM 1201.01-204 MCM 1201.01-206	NDE-25	MT	CS	7.000 57.688		CLOSURE STUD
Class A								

Total B06.030 Items: 22

CATEGORY B-G-1, Pressure Retaining Bolting, Greater than 2" In Diameter

Reactor Vessel

ITEM NUMBER	ID NUMBER	SYS ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
****** Threads in Flange ******								
B06.040.001	1RPV-THREAD-01	MCM 1201.01-147 MCM 1201.01-206	NDE-640	UT	CS	7.000 12.000	40387	THREADS IN RPV FLANGE
Class A								
B06.040.002	1RPV-THREAD-02	MCM 1201.01-147 MCM 1201.01-206	NDE-640	UT	CS	7.000 12.000	40387	THREADS IN RPV FLANGE
Class A								
B06.040.003	1RPV-THREAD-03	MCM 1201.01-147 MCM 1201.01-206	NDE-640	UT	CS	7.000 12.000	40387	THREADS IN RPV FLANGE
Class A								
B06.040.004	1RPV-THREAD-04	MCM 1201.01-147 MCM 1201.01-206	NDE-640	UT	CS	7.000 12.000	40387	THREADS IN RPV FLANGE
Class A								
B06.040.005	1RPV-THREAD-05	MCM 1201.01-147 MCM 1201.01-206	NDE-640	UT	CS	7.000 12.000	40387	THREADS IN RPV FLANGE
Class A								
B06.040.006	1RPV-THREAD-06	MCM 1201.01-147 MCM 1201.01-206	NDE-640	UT	CS	7.000 12.000	40387	THREADS IN RPV FLANGE
Class A								
B06.040.007	1RPV-THREAD-07	MCM 1201.01-147 MCM 1201.01-206	NDE-640	UT	CS	7.000 12.000	40387	THREADS IN RPV FLANGE
Class A								
B06.040.008	1RPV-THREAD-08	MCM 1201.01-147 MCM 1201.01-206	NDE-640	UT	CS	7.000 12.000	40387	THREADS IN RPV FLANGE
Class A								

CATEGORY B-G-1, Pressure Retaining Bolting, Greater than 2" In Diameter

Reactor Vessel

DUKE ENERGY CORPORATION
QUALITY ASSURANCE TECHNICAL SERVICES
Inservice Inspection Database Management System

McGuire 1

Inservice Inspection Plan for Interval 3 Outage 1

ITEM NUMBER	ID NUMBER	SYS ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
B06.040.009	1RPV-THREAD-09	MCM 1201.01-147 MCM 1201.01-206	NDE-640	UT	CS	7.000 12.000	40387	THREADS IN RPV FLANGE
Class A								
B06.040.010	1RPV-THREAD-10	MCM 1201.01-147 MCM 1201.01-206	NDE-640	UT	CS	7.000 12.000	40387	THREADS IN RPV FLANGE
Class A								
B06.040.011	1RPV-THREAD-11	MCM 1201.01-147 MCM 1201.01-206	NDE-640	UT	CS	7.000 12.000	40387	THREADS IN RPV FLANGE
Class A								
B06.040.012	1RPV-THREAD-12	MCM 1201.01-147 MCM 1201.01-206	NDE-640	UT	CS	7.000 12.000	40387	THREADS IN RPV FLANGE
Class A								
B06.040.013	1RPV-THREAD-13	MCM 1201.01-147 MCM 1201.01-206	NDE-640	UT	CS	7.000 12.000	40387	THREADS IN RPV FLANGE
Class A								
B06.040.014	1RPV-THREAD-14	MCM 1201.01-147 MCM 1201.01-206	NDE-640	UT	CS	7.000 12.000	40387	THREADS IN RPV FLANGE
Class A								
B06.040.015	1RPV-THREAD-15	MCM 1201.01-147 MCM 1201.01-206	NDE-640	UT	CS	7.000 12.000	40387	THREADS IN RPV FLANGE
Class A								
B06.040.016	1RPV-THREAD-16	MCM 1201.01-147 MCM 1201.01-206	NDE-640	UT	CS	7.000 12.000	40387	THREADS IN RPV FLANGE
Class A								
B06.040.017	1RPV-THREAD-17	MCM 1201.01-147 MCM 1201.01-206	NDE-640	UT	CS	7.000 12.000	40387	THREADS IN RPV FLANGE
Class A								

CATEGORY B-G-1, Pressure Retaining Bolting, Greater than 2" In Diameter

Reactor Vessel

DUKE ENERGY CORPORATION
QUALITY ASSURANCE TECHNICAL SERVICES
Inservice Inspection Database Management System

McGuire 1

Inservice Inspection Plan for Interval 3 Outage 1

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
B06.040.018	1RPV-THREAD-18		MCM 1201.01-147 MCM 1201.01-206	NDE-640	UT	CS	7.000 12.000	40387	THREADS IN RPV FLANGE
Class A									
B06.040.019	1RPV-THREAD-19		MCM 1201.01-147 MCM 1201.01-206	NDE-640	UT	CS	7.000 12.000	40387	THREADS IN RPV FLANGE
Class A									
B06.040.020	1RPV-THREAD-20		MCM 1201.01-147 MCM 1201.01-206	NDE-640	UT	CS	7.000 12.000	40387	THREADS IN RPV FLANGE
Class A									
B06.040.021	1RPV-THREAD-21		MCM 1201.01-147 MCM 1201.01-206	NDE-640	UT	CS	7.000 12.000	40387	THREADS IN RPV FLANGE
Class A									
B06.040.022	1RPV-THREAD-22		MCM 1201.01-147 MCM 1201.01-206	NDE-640	UT	CS	7.000 12.000	40387	THREADS IN RPV FLANGE
Class A									
B06.040.023	1RPV-THREAD-23		MCM 1201.01-147 MCM 1201.01-206	NDE-640	UT	CS	7.000 12.000	40387	THREADS IN RPV FLANGE
Class A									
B06.040.024	1RPV-THREAD-24		MCM 1201.01-147 MCM 1201.01-206	NDE-640	UT	CS	7.000 12.000	40387	THREADS IN RPV FLANGE
Class A									
B06.040.025	1RPV-THREAD-25		MCM 1201.01-147 MCM 1201.01-206	NDE-640	UT	CS	7.000 12.000	40387	THREADS IN RPV FLANGE
Class A									
B06.040.026	1RPV-THREAD-26		MCM 1201.01-147 MCM 1201.01-206	NDE-640	UT	CS	7.000 12.000	40387	THREADS IN RPV FLANGE
Class A									

CATEGORY B-G-1, Pressure Retaining Bolting, Greater than 2" In Diameter

Reactor Vessel

DUKE ENERGY CORPORATION
QUALITY ASSURANCE TECHNICAL SERVICES
Inservice Inspection Database Management System

McGuire 1

Inservice Inspection Plan for Interval 3 Outage 1

ITEM NUMBER	ID NUMBER	SYS ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
B06.040.027	1RPV-THREAD-27	MCM 1201.01-147 MCM 1201.01-206	NDE-640	UT	CS	7.000 12.000	40387	THREADS IN RPV FLANGE
Class A								
B06.040.028	1RPV-THREAD-28	MCM 1201.01-147 MCM 1201.01-206	NDE-640	UT	CS	7.000 12.000	40387	THREADS IN RPV FLANGE
Class A								
B06.040.029	1RPV-THREAD-29	MCM 1201.01-147 MCM 1201.01-206	NDE-640	UT	CS	7.000 12.000	40387	THREADS IN RPV FLANGE
Class A								
B06.040.030	1RPV-THREAD-30	MCM 1201.01-147 MCM 1201.01-206	NDE-640	UT	CS	7.000 12.000	40387	THREADS IN RPV FLANGE
Class A								
B06.040.031	1RPV-THREAD-31	MCM 1201.01-147 MCM 1201.01-206	NDE-640	UT	CS	7.000 12.000	40387	THREADS IN RPV FLANGE
Class A								
B06.040.032	1RPV-THREAD-32	MCM 1201.01-147 MCM 1201.01-206	NDE-640	UT	CS	7.000 12.000	40387	THREADS IN RPV FLANGE
Class A								
B06.040.033	1RPV-THREAD-33	MCM 1201.01-147 MCM 1201.01-206	NDE-640	UT	CS	7.000 12.000	40387	THREADS IN RPV FLANGE
Class A								
B06.040.034	1RPV-THREAD-34	MCM 1201.01-147 MCM 1201.01-206	NDE-640	UT	CS	7.000 12.000	40387	THREADS IN RPV FLANGE
Class A								
B06.040.035	1RPV-THREAD-35	MCM 1201.01-147 MCM 1201.01-206	NDE-640	UT	CS	7.000 12.000	40387	THREADS IN RPV FLANGE
Class A								

CATEGORY B-G-1, Pressure Retaining Bolting, Greater than 2" In Diameter

Reactor Vessel

DUKE ENERGY CORPORATION
QUALITY ASSURANCE TECHNICAL SERVICES
Inservice Inspection Database Management System

McGuire 1

Inservice Inspection Plan for Interval 3 Outage 1

ITEM NUMBER	ID NUMBER	SYS ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
B06.040.036	1RPV-THREAD-36	MCM 1201.01-147 MCM 1201.01-206	NDE-640	UT	CS	7.000 12.000	40387	THREADS IN RPV FLANGE
Class A								
B06.040.037	1RPV-THREAD-37	MCM 1201.01-147 MCM 1201.01-206	NDE-640	UT	CS	7.000 12.000	40387	THREADS IN RPV FLANGE
Class A								
B06.040.038	1RPV-THREAD-38	MCM 1201.01-147 MCM 1201.01-206	NDE-640	UT	CS	7.000 12.000	40387	THREADS IN RPV FLANGE
Class A								
B06.040.039	1RPV-THREAD-39	MCM 1201.01-147 MCM 1201.01-206	NDE-640	UT	CS	7.000 12.000	40387	THREADS IN RPV FLANGE
Class A								
B06.040.040	1RPV-THREAD-40	MCM 1201.01-147 MCM 1201.01-206	NDE-640	UT	CS	7.000 12.000	40387	THREADS IN RPV FLANGE
Class A								
B06.040.041	1RPV-THREAD-41	MCM 1201.01-147 MCM 1201.01-206	NDE-640	UT	CS	7.000 12.000	40387	THREADS IN RPV FLANGE
Class A								
B06.040.042	1RPV-THREAD-42	MCM 1201.01-147 MCM 1201.01-206	NDE-640	UT	CS	7.000 12.000	40387	THREADS IN RPV FLANGE
Class A								
B06.040.043	1RPV-THREAD-43	MCM 1201.01-147 MCM 1201.01-206	NDE-640	UT	CS	7.000 12.000	40387	THREADS IN RPV FLANGE
Class A								
B06.040.044	1RPV-THREAD-44	MCM 1201.01-147 MCM 1201.01-206	NDE-640	UT	CS	7.000 12.000	40387	THREADS IN RPV FLANGE
Class A								

CATEGORY B-G-1, Pressure Retaining Bolting, Greater than 2" In Diameter

Reactor Vessel

DUKE ENERGY CORPORATION
QUALITY ASSURANCE TECHNICAL SERVICES
Inservice Inspection Database Management System

McGuire 1

Inservice Inspection Plan for Interval 3 Outage 1

ITEM NUMBER	ID NUMBER	SYS ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
B06.040.045	1RPV-THREAD-45	MCM 1201.01-147 MCM 1201.01-206	NDE-640	UT	CS	7.000 12.000	40387	THREADS IN RPV FLANGE
Class A								
B06.040.046	1RPV-THREAD-46	MCM 1201.01-147 MCM 1201.01-206	NDE-640	UT	CS	7.000 12.000	40387	THREADS IN RPV FLANGE
Class A								
B06.040.047	1RPV-THREAD-47	MCM 1201.01-147 MCM 1201.01-206	NDE-640	UT	CS	7.000 12.000	40387	THREADS IN RPV FLANGE
Class A								
B06.040.048	1RPV-THREAD-48	MCM 1201.01-147 MCM 1201.01-206	NDE-640	UT	CS	7.000 12.000	40387	THREADS IN RPV FLANGE
Class A								
B06.040.049	1RPV-THREAD-49	MCM 1201.01-147 MCM 1201.01-206	NDE-640	UT	CS	7.000 12.000	40387	THREADS IN RPV FLANGE
Class A								
B06.040.050	1RPV-THREAD-50	MCM 1201.01-147 MCM 1201.01-206	NDE-640	UT	CS	7.000 12.000	40387	THREADS IN RPV FLANGE
Class A								
B06.040.051	1RPV-THREAD-51	MCM 1201.01-147 MCM 1201.01-206	NDE-640	UT	CS	7.000 12.000	40387	THREADS IN RPV FLANGE
Class A								
B06.040.052	1RPV-THREAD-52	MCM 1201.01-147 MCM 1201.01-206	NDE-640	UT	CS	7.000 12.000	40387	THREADS IN RPV FLANGE
Class A								
B06.040.053	1RPV-THREAD-53	MCM 1201.01-147 MCM 1201.01-206	NDE-640	UT	CS	7.000 12.000	40387	THREADS IN RPV FLANGE
Class A								

CATEGORY B-G-1, Pressure Retaining Bolting, Greater than 2" In Diameter

Reactor Vessel

ITEM NUMBER	ID NUMBER	SYS ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
B06.040.054	1RPV-THREAD-54	MCM 1201.01-147	NDE-640	UT	CS	7.000	40387	THREADS IN RPV FLANGE
		MCM 1201.01-206				12.000		
Class A								

Total B06.040 Items: 54

CATEGORY B-G-1, Pressure Retaining Bolting, Greater than 2" In Diameter

Reactor Vessel

DUKE ENERGY CORPORATION
QUALITY ASSURANCE TECHNICAL SERVICES
Inservice Inspection Database Management System

McGuire 1

Inservice Inspection Plan for Interval 3 Outage 1

ITEM NUMBER	ID NUMBER	SYS ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
****** Closure Washers, Bushings ******								
B06.050.001	1RPV-449-03-01	MCM 1201.01-204	QAL-13	VT-1	CS	10.560	-----	CLOSURE WASHER
		MCM 1201.01-206				1.719		
Class A								
B06.050.002	1RPV-449-03-02	MCM 1201.01-204	QAL-13	VT-1	CS	10.560	-----	CLOSURE WASHER
		MCM 1201.01-206				1.719		
Class A								
B06.050.003	1RPV-449-03-03	MCM 1201.01-204	QAL-13	VT-1	CS	10.560	-----	CLOSURE WASHER
		MCM 1201.01-206				1.719		
Class A								
B06.050.004	1RPV-449-03-04	MCM 1201.01-204	QAL-13	VT-1	CS	10.560	-----	CLOSURE WASHER
		MCM 1201.01-206				1.719		
Class A								
B06.050.005	1RPV-449-03-05	MCM 1201.01-204	QAL-13	VT-1	CS	10.560	-----	CLOSURE WASHER
		MCM 1201.01-206				1.719		
Class A								
B06.050.006	1RPV-449-03-06	MCM 1201.01-204	QAL-13	VT-1	CS	10.560	-----	CLOSURE WASHER
		MCM 1201.01-206				1.719		
Class A								
B06.050.007	1RPV-449-03-07	MCM 1201.01-204	QAL-13	VT-1	CS	10.560	-----	CLOSURE WASHER
		MCM 1201.01-206				1.719		
Class A								
B06.050.008	1RPV-449-03-08	MCM 1201.01-204	QAL-13	VT-1	CS	10.560	-----	CLOSURE WASHER
		MCM 1201.01-206				1.719		
Class A								

CATEGORY B-G-1, Pressure Retaining Bolting, Greater than 2" In Diameter

Reactor Vessel

DUKE ENERGY CORPORATION
QUALITY ASSURANCE TECHNICAL SERVICES
Inservice Inspection Database Management System

McGuire 1

Inservice Inspection Plan for Interval 3 Outage 1

ITEM NUMBER	ID NUMBER	SYS ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
B06.050.009	1RPV-449-03-09	MCM 1201.01-204	QAL-13	VT-1	CS	10.560	-----	CLOSURE WASHER
		MCM 1201.01-206				1.719		
Class A								
B06.050.010	1RPV-449-03-10	MCM 1201.01-204	QAL-13	VT-1	CS	10.560	-----	CLOSURE WASHER
		MCM 1201.01-206				1.719		
Class A								
B06.050.011	1RPV-449-03-11	MCM 1201.01-204	QAL-13	VT-1	CS	10.560	-----	CLOSURE WASHER
		MCM 1201.01-206				1.719		
Class A								

Total B06.050 Items: 11

CATEGORY B-G-1, Pressure Retaining Bolting, Greater than 2" In Diameter

Pumps

DUKE ENERGY CORPORATION
QUALITY ASSURANCE TECHNICAL SERVICES
Inservice Inspection Database Management System

McGuire 1

Inservice Inspection Plan for Interval 3 Outage 1

ITEM NUMBER	ID NUMBER	SYS ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
****** Bolts and Studs ******								
B06.180.001	1RCP-1A-F	MCM 1201.01-120	PDI-UT-5	UT	CS	4.500 29.500	50502	24 RCP MAIN FLANGE BOLTS
Class A								

Total B06.180 Items: 1

CATEGORY B-G-1, Pressure Retaining Bolting, Greater than 2" In Diameter

Pumps

ITEM NUMBER	ID NUMBER	SYS ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
****** Flange Surface, when connection dissassembled ******								
B06.190.001 Class A	1RCP-1A-FLANGE	MCM 1201.01-7	QAL-13	VT-1	SS	77.000 10.370	-----	RCP1A MAIN FLANGE INSPECT ONLY IF DISASSEMBLED MCM 1201.01-193 PUMP MANUAL
B06.190.002 Class A	1RCP-1B-FLANGE	MCM 1201.01-7	QAL-13	VT-1	SS	77.000 10.370	-----	RCP1B MAIN FLANGE INSPECT ONLY IF DISASSEMBLED MCM 1201.01-193 PUMP MANUAL
B06.190.003 Class A	1RCP-1C-FLANGE	MCM 1201.01-7	QAL-13	VT-1	SS	77.000 10.370	-----	RCP1C MAIN FLANGE INSPECT ONLY IF DISASSEMBLED MCM 1201.01-193 PUMP MANUAL
B06.190.004 Class A	1RCP-1D-FLANGE	MCM 1201.01-7	QAL-13	VT-1	SS	77.000 10.370	-----	RCP1D MAIN FLANGE INSPECT ONLY IF DISASSEMBLED MCM 1201.01-193 PUMP MANUAL

Total B06.190 Items: 4

Total B06 Items: 103

CATEGORY B-L-2, Pump Casings

DUKE ENERGY CORPORATION
QUALITY ASSURANCE TECHNICAL SERVICES
Inservice Inspection Database Management System

Pumps

McGuire 1

Inservice Inspection Plan for Interval 3 Outage 1

ITEM NUMBER	ID NUMBER	SYS ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
****** Pump Casing ******								
B12.020.001 Class A	1RCP-1A	MCM 1201.01-7	QAL-14	VT-3	SS	77.000 4.500		PUMP CASING INTERNAL SURFACES INSPECT ONE REACTOR COOLANT PUMP PER INTERVAL. INSPECT ONLY IF DISASSEMBLED.
B12.020.002 Class A	1RCP-1B	MCM 1201.01-7	QAL-14	VT-3	SS	77.000 4.500		PUMP CASING INTERNAL SURFACES INSPECT ONE REACTOR COOLANT PUMP PER INTERVAL. INSPECT ONLY IF DISASSEMBLED.
B12.020.003 Class A	1RCP-1C	MCM 1201.01-7	QAL-14	VT-3	SS	77.000 4.500		PUMP CASING INTERNAL SURFACES INSPECT ONE REACTOR COOLANT PUMP PER INTERVAL. INSPECT ONLY IF DISASSEMBLED.
B12.020.004 Class A	1RCP-1D	MCM 1201.01-7	QAL-14	VT-3	SS	77.000 4.500		PUMP CASING INTERNAL SURFACES INSPECT ONE REACTOR COOLANT PUMP PER INTERVAL. INSPECT ONLY IF DISASSEMBLED.

Total B12.020 Items: 4

CATEGORY B-M-2, Valve Bodies

DUKE ENERGY CORPORATION
QUALITY ASSURANCE TECHNICAL SERVICES
Inservice Inspection Database Management System

Valves

McGuire 1

Inservice Inspection Plan for Interval 3 Outage 1

ITEM NUMBER	ID NUMBER	SYS ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
****** Valve Body, Exceeding NPS 4 ******								
B12.050.001A Class A	1NC-1	MCM 1205.09-0001 MCFD-1553-02.00	QAL-14	VT-3	SS	6.000 0.000		MCFI-1NC5 CROSBY RELIEF VALVE INSPECT ONE VALVE IN THIS GROUP (1A-1C) PER INTERVAL.INSPECT ONLY IF DISASSEMBLED. ITEM # 1NC-0001
B12.050.001B Class A	1NC-2	MCM 1205.09-0001 MCFD-1553-02.00	QAL-14	VT-3	SS	6.000 0.000		MCFI-1NC5 CROSBY RELIEF VALVE INSPECT ONE VALVE IN THIS GROUP (1A-1C) PER INTERVAL.INSPECT ONLY IF DISASSEMBLED. ITEM # 1NC-0002
B12.050.001C Class A	1NC-3	MCM 1205.09-0001 MCFD-1553-02.00	QAL-14	VT-3	SS	6.000 0.000		MCFI-1NC5 CROSBY RELIEF VALVE INSPECT ONE VALVE IN THIS GROUP (1A-1C) PER INTERVAL.INSPECT ONLY IF DISASSEMBLED. ITEM # 1NC-0003
B12.050.002A Class A	1ND-1B	MCM-1205.00-0010 MCFD-1561-01.00	QAL-14	VT-3	SS	14.000 0.000		MCFI-1ND38 WALWORTH GATE VALVE INSPECT ONE VALVE IN THIS GROUP (2A-2B) PER INTERVAL.INSPECT ONLY IF DISASSEMBLED. ITEM # 4J-001
B12.050.002B Class A	1ND-2A	MCM-1205.00-0010 MCFD-1561-01.00	QAL-14	VT-3	SS	14.000 0.000		MCFI-1ND38 WALWORTH GATE VALVE INSPECT ONE VALVE IN THIS GROUP (2A-2B) PER INTERVAL.INSPECT ONLY IF DISASSEMBLED. ITEM # 4J-001
B12.050.003A Class A	1NI-54A	MCM-1205.00-0012 MCFD-1562-02.00	QAL-14	VT-3	SS	10.000 0.000		MCFI-1NI79 CRANE-ALOYCO GATE VALVE INSPECT ONE VALVE IN THIS GROUP (3A-3D) PER INTERVAL.INSPECT ONLY IF DISASSEMBLED. ITEM # 4J-005

CATEGORY B-M-2, Valve Bodies

DUKE ENERGY CORPORATION
QUALITY ASSURANCE TECHNICAL SERVICES
Inservice Inspection Database Management System

Valves

McGuire 1

Inservice Inspection Plan for Interval 3 Outage 1

ITEM NUMBER	ID NUMBER	SYS ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
B12.050.003B Class A	1NI-65B	MCM1205.00-0012 MCFD-1562-02.00	QAL-14	VT-3	SS	10.000 0.000		MCFI-1NI80 CRANE-ALOYCO GATE VALVE INSPECT ONE VALVE IN THIS GROUP (3A-3D) PER INTERVAL.INSPECT ONLY IF DISASSEMBLED. ITEM # 4J-043
B12.050.003C Class A	1NI-76A	MCM-1205.00-0012 MCFD-1562-02.00	QAL-14	VT-3	SS	10.000 0.000		MCFI-1NI87 CRANE-ALOYCO GATE VALVE INSPECT ONE VALVE IN THIS GROUP (3A-3D) PER INTERVAL.INSPECT ONLY IF DISASSEMBLED. ITEM # 4J-043
B12.050.003D Class A	1NI-88B	MCM-1205.00-0012 MCFD-1562-02.00	QAL-14	VT-3	SS	10.000 0.000		MCFI-1NI86 CRANE-ALOYCO GATE VALVE INSPECT ONE VALVE IN THIS GROUP (3A-3D) PER INTERVAL.INSPECT ONLY IF DISASSEMBLED. ITEM # 4J-043
B12.050.004A Class A	1NI-59	MCM 1205.36-0011 MCFD-1562-02.00	QAL-14	VT-3	SS	10.000 0.000		MCFI-1NI79 ATWOOD-MORRILL CHECK VALVE INSPECT ONE VALVE IN THIS GROUP (4A-4H) PER INTERVAL.INSPECT ONLY IF DISASSEMBLED. ITEM # 4J-055
B12.050.004B Class A	1NI-60	MCM 1205.36-0010 MCFD-1562-02.00	QAL-14	VT-3	SS	10.000 0.000		MCFI-1NI79 ATWOOD-MORRILL CHECK VALVE INSPECT ONE VALVE IN THIS GROUP (4A-4H) PER INTERVAL.INSPECT ONLY IF DISASSEMBLED. ITEM # 4J-054
B12.050.004C Class A	1NI-70	MC 1205.36-0011 MCFD-1562-02.00	QAL-14	VT-3	SS	10.000 0.000		MCFI-1NI80 ATWOOD-MORRILL CHECK VALVE INSPECT ONE VALVE IN THIS GROUP (4A-4H) PER INTERVAL.INSPECT ONLY IF DISASSEMBLED. ITEM # 4J-055
B12.050.004D Class A	1NI-71	MCM 1205.36-0010 MCFD-1562-02.00	QAL-14	VT-3	SS	10.000 0.000		MCFI-1NI62 ATWOOD-MORRILL CHECK VALVE INSPECT ONE VALVE IN THIS GROUP (4A-4H) PER INTERVAL.INSPECT ONLY IF DISASSEMBLED. ITEM # 4J-054

CATEGORY B-M-2, Valve Bodies

DUKE ENERGY CORPORATION
QUALITY ASSURANCE TECHNICAL SERVICES
Inservice Inspection Database Management System

Valves

McGuire 1

Inservice Inspection Plan for Interval 3 Outage 1

ITEM NUMBER	ID NUMBER	SYS ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
B12.050.004E	1NI-81	MCM 1205.36-0011 MCFD-1562-02.01	QAL-14	VT-3	SS	10.000 0.000		MCFI-1NI87 ATWOOD-MORRILL CHECK VALVE INSPECT ONE VALVE IN THIS GROUP (4A-4H) PER INTERVAL.INSPECT ONLY IF DISASSEMBLED. ITEM # 4J-055
Class A								
B12.050.004F	1NI-82	MCM 1205.36-0010 MCFD-1562-02.01	QAL-14	VT-3	SS	10.000 0.000		MCFI-1NI87 ATWOOD-MORRILL CHECK VALVE INSPECT ONE VALVE IN THIS GROUP (4A-4H) PER INTERVAL.INSPECT ONLY IF DISASSEMBLED. ITEM # 4J-054
Class A								
B12.050.004G	1NI-93	MCM 1205.36-0011 MCFD-1562-02.01	QAL-14	VT-3	SS	10.000 0.000		MCFI-1NI86 ATWOOD-MORRILL CHECK VALVE INSPECT ONE VALVE IN THIS GROUP (4A-4H) PER INTERVAL.INSPECT ONLY IF DISASSEMBLED. ITEM # 4J-055
Class A								
B12.050.004H	1NI-94	MCM 1205.36-0010 MCFD-1562-02.01	QAL-14	VT-3	SS	10.000 0.000		MCFI-1NI86 ATWOOD-MORRILL CHECK VALVE INSPECT ONE VALVE IN THIS GROUP (4A-4H) PER INTERVAL.INSPECT ONLY IF DISASSEMBLED. ITEM # 4J-054
Class A								
B12.050.005A	1NI-125	MCM 1205.00-0006 MCFD-1562-03.00	QAL-14	VT-3	SS	8.000 0.000		MCFI-1NI53 ALOYCO CHECK VALVE INSPECT ONE VALVE IN THIS GROUP (5A-5B) PER INTERVAL.INSPECT ONLY IF DISASSEMBLED. ITEM # 4J-010
Class A								
B12.050.005B	1NI-129	MCM 1205.00-0006 MCFD 1562-03.00	QAL-14	VT-3	SS	8.000 0.000		MCFI-1NI53 ALOYCO CHECK VALVE INSPECT ONE VALVE IN THIS GROUP (5A-5B) PER INTERVAL.INSPECT ONLY IF DISASSEMBLED. ITEM # 4J-010
Class A								
B12.050.006A	1NI-126	MCM 1205.00-0005 MCFD-1562-03.00	QAL-14	VT-3	SS	6.000 0.000		MCFI-1NI53 CRANE-ALOYCO CHECK VALVE INSPECT ONE VALVE IN THIS GROUP (6A-6F) PER INTERVAL. INSPECT ONLY IF DISASSEMBLED. ITEM # 4J-008
Class A								

CATEGORY B-M-2, Valve Bodies

DUKE ENERGY CORPORATION
QUALITY ASSURANCE TECHNICAL SERVICES
Inservice Inspection Database Management System

Valves

McGuire 1

Inservice Inspection Plan for Interval 3 Outage 1

ITEM NUMBER	ID NUMBER	SYS ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
B12.050.006B Class A	1NI-134	MCM 1205.00-0005 MCFD-1562-03.00	QAL-14	VT-3	SS	6.000 0.000		MCFI-1NI53 CRANE-ALOYCO CHECK VALVE INSPECT ONE VALVE IN THIS GROUP (6A-6F) PER INTERVAL. INSPECT ONLY IF DISASSEMBLED. ITEM # 4J-008
B12.050.006C Class A	1NI-157	MCM 1205.00-0005 MCFD-1562-03.00	QAL-14	VT-3	SS	6.000 0.000		MCFI-1NI53 CRANE-ALOYCO CHECK VALVE INSPECT ONE VALVE IN THIS GROUP (6A-6F) PER INTERVAL. INSPECT ONLY IF DISASSEMBLED. ITEM # 4J-008
B12.050.006D Class A	1NI-175	MCM 1205.00-0005 MCFD-1562-03.01	QAL-14	VT-3	SS	6.000 0.000		MCFI-1NI53 CRANE-ALOYCO CHECK VALVE INSPECT ONE VALVE IN THIS GROUP (6A-6F) PER INTERVAL. INSPECT ONLY IF DISASSEMBLED. ITEM # 4J-008
B12.050.006E Class A	1NI-180	MCM 1205.00-0005 MCFD-1562-03.01	QAL-14	VT-3	SS	6.000 0.000		MCFI-1NI53 CRANE-ALOYCO CHECK VALVE INSPECT ONE VALVE IN THIS GROUP (6A-6F) PER INTERVAL. INSPECT ONLY IF DISASSEMBLED. ITEM # 4J-008
B12.050.006F Class A	1NI-181	MCM 1205.00-0005 MCFD-1562-03.01	QAL-14	VT-3	SS	6.000 0.000		MCFI-1NI53 CRANE-ALOYCO CHECK VALVE INSPECT ONE VALVE IN THIS GROUP (6A-6F) PER INTERVAL. INSPECT ONLY IF DISASSEMBLED. ITEM # 4J-008
B12.050.007A Class A	1NI-160	MCM 1205.36-0028 MCFD-1562-03.00	QAL-14	VT-3	SS	6.000 0.000		MCFI-1NI35 WESTINGHOUSE CHECK VALVE INSPECT ONE VALVE IN THIS GROUP (7A-7B) PER INTERVAL.INSPECT ONLY IF DISASSEMBLED. ITEM # 5J-001

CATEGORY B-M-2, Valve Bodies

Valves

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
B12.050.007B	1NI-176		MCM 1205.36-0028	QAL-14	VT-3	SS	6.000		MCFI-1NI78
			MCFD-1562-03.01				0.000		WESTINGHOUSE CHECK VALVE
Class A									INSPECT ONE VALVE IN THIS GROUP (7A-7B) PER INTERVAL.INSPECT ONLY IF DISASSEMBLED. ITEM # 5J-001

Total B12.050 Items:	**27**
Total B12 Items:	**31**

CATEGORY B-O, Pressure Retaining Welds In Control Rod Housings

Reactor Vessel

ITEM NUMBER	ID NUMBER	SYS ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
****** Welds in CRD Housing ******								
B14.010.011	1RVP-CRDM-65	MCM 1201.01-224	NDE-35	PT	SS-Inconel	4.000 0.642		CRD HOUSING WELD (PERIPHERAL)
Class A								

Total B14.010 Items: 1

Total B14 Items: 1

CATEGORY C-A, Pressure Retaining Welds In Pressure Vessels

Head Circumferential Welds

DUKE ENERGY CORPORATION
QUALITY ASSURANCE TECHNICAL SERVICES
Inservice Inspection Database Management System

McGuire 1

Inservice Inspection Plan for Interval 3 Outage 1

ITEM NUMBER	ID NUMBER	SYS ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
C01.020.001	1SGD-W144	MCM 1201.01-0782	NDE-620	UT	CS	0.000	5139385	STEAM GENERATOR 1D
	Circumferential		See Com			4.125	50236A	"DEPENDING UPON THE EXAMINER'S
Class B				Steam drum to				QUALIFICATIONS, PROCEDURE PDI-UT-6 MAY
				Steam drum head				BE USED IN LIEU OF PROCEDURE
								NDE-620"

Total C01.020 Items: 1

CATEGORY C-A, Pressure Retaining Welds In Pressure Vessels

Tubesheet-to-Shell Weld

ITEM NUMBER	ID NUMBER	SYS ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
C01.030.001 Class B	1SGA-W65 Circumferential	MCM 1201.01-0782	NDE-620 See Com	UT Tubesheet to Shell	CS	0.000 3.687	5135230 50236A	STEAM GENERATOR 1A "DEPENDING UPON THE EXAMINER'S QUALIFICATIONS, PROCEDURE PDI-UT-6 MAY BE USED IN LIEU OF PROCEDURE NDE-620"

Total C01.030 Items: 1

Total C01 Items: 2

CATEGORY C-B, Pressure Retaining Nozzle Welds In Vessels

Nozzles Without Reinforcing Plate In Vessels > 1/2 in. Nom. Thickness

DUKE ENERGY CORPORATION
QUALITY ASSURANCE TECHNICAL SERVICES
Inservice Inspection Database Management System

McGuire 1

Inservice Inspection Plan for Interval 3 Outage 1

ITEM NUMBER	ID NUMBER	SYS ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
****** Nozzle-to-Shell (or Head) Weld ******								
C02.021.001	1SGA-W258	MCM 1201.01-0782	NDE-620	UT	CS	16.000	5139385	STEAM GENERATOR 1A FEEDWATER NOZZLE
	Circumferential		See Com			4.125	50236A	"DEPENDING UPON THE EXAMINER'S
Class B				Nozzle to Steam drum				QUALIFICATIONS, PROCEDURE PDI-UT-6 MAY BE USED IN LIEU OF PROCEDURE NDE-620"
C02.021.001A	1SGA-W258	MCM 1201.01-0782	NDE-25	MT	CS	16.000		STEAM GENERATOR 1A FEEDWATER NOZZLE
	Circumferential					4.125		
Class B				Nozzle to Steam drum				
Total C02.021 Items:	**2**							
****** Nozzle Inside Radius Section ******								
C02.022.001	1SGA-W258	MCM 1201.01-0782	NDE-2080	UT	CS	16.000	8304-601	STEAM GENERATOR 1A FEEDWATER NOZZLE
	Circumferential					4.125		INSIDE RADIUS
Class B				Nozzle to Steam drum				
Total C02.022 Items:	**1**							
Total C02 Items:	**3**							

CATEGORY C-C, Welded Attachments For Vessels, Piping, Pumps, And Valves

Pressure Vessels

DUKE ENERGY CORPORATION
QUALITY ASSURANCE TECHNICAL SERVICES
Inservice Inspection Database Management System

McGuire 1

Inservice Inspection Plan for Interval 3 Outage 1

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
****** Welded Attachments ******									
C03.010.002	1NSHX-1A-SUPP	NS	MCM 1201.06-25	NDE-35	PT	CS	0.000 0.000		CONTAINMENT SPRAY HEAT EXCHANGER 1A SUPPORT WELDED ATTACHMENT
Class B									

Total C03.010 Items: 1

CATEGORY C-C, Welded Attachments For Vessels, Piping, Pumps, And Valves

Piping

DUKE ENERGY CORPORATION
QUALITY ASSURANCE TECHNICAL SERVICES
Inservice Inspection Database Management System

McGuire 1

Inservice Inspection Plan for Interval 3 Outage 1

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
****** Welded Attachments ******									
C03.020.021	1-MCA-ND-H15	ND	MCSRD-NDA/sht. 5	NDE-35	PT	SS	8.000		WELDED ATTACHMENT
	Rigid Support						0.237		
Class B									
C03.020.026	1-MCA-ND-H69	ND	MCSRD-NDA/sht. 4	NDE-35	PT	SS	12.000		WELDED ATTACHMENT
	Rigid Support						0.125		
Class B									
C03.020.031	1-MCA-NI-H6	NI	MCSRD-NIA/sht. 1	NDE-35	PT	SS	8.000		WELDED ATTACHMENT
	Spring Hgr						0.203		
Class B									
C03.020.051	1-MCA-NV-H12	NV	MCSRD-NVD/sht. 1	NDE-35	PT	SS	8.000		WELDED ATTACHMENT
	Rigid Support						0.125		
Class B									
C03.020.052	1-MCA-NV-H13	NV	MCSRD-NVD/sht. 1	NDE-35	PT	SS	6.000		WELDED ATTACHMENT
	Rigid Support						0.250		
Class B									

Total C03.020 Items: 5

CATEGORY C-C, Welded Attachments For Vessels, Piping, Pumps, And Valves

Pumps

ITEM NUMBER	ID NUMBER	SYS ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
****** Welded Attachments ******								
C03.030.001	1CCPUMP-1A-LEG	MCM 1201.05-228	NDE-35	PT	SS	0.000 0.000		CENTRIFUGAL CHARGING PUMP 1A 4 SUPPORT LEGS WELDED ATTACHMENT
Class B								

Total C03.030 Items: 1

Total C03 Items: 7

CATEGORY C-G, Pressure Retaining Welds In Pumps And Valves

DUKE ENERGY CORPORATION
QUALITY ASSURANCE TECHNICAL SERVICES
Inservice Inspection Database Management System

McGuire 1

Inservice Inspection Plan for Interval 3 Outage 1

Valves

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
****** Valve Body Welds ******									
C06.020.001A	1CF-26-1	CF	MCM 1205.23-0004	NDE-25	MT	CS	12.000 1.360		ITEM # FWI-002 INSPECT ONE VALVE IN THIS GROUP (1A-1D) PER INTERVAL.
Class B					Valve Body to Bonnet				

Total C06.020 Items: 1

Total C06 Items: 1

CATEGORY D-A, Welded Attachments For Vessels, Piping, Pumps, and Valves

Piping

DUKE ENERGY CORPORATION
QUALITY ASSURANCE TECHNICAL SERVICES
Inservice Inspection Database Management System

McGuire 1

Inservice Inspection Plan for Interval 3 Outage 1

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
****** Welded Attachments ******									
D01.020.003	1-MCA-CA-H68	CA	MCSRD-CAD/sht.1	QAL-13	VT-1	NA	4.000		WELDED ATTACHMENT
	Rigid Support						0.125		
Class C									
D01.020.006	1-MCA-CA-H63	CA	MCSRD-CAC/sht.2	QAL-13	VT-1	NA	4.000		WELDED ATTACHMENT
	Rigid Restraint						0.125		
Class C									

Total D01.020 Items: 2

Total D01 Items: 2

CATEGORY F-A, Supports

DUKE ENERGY CORPORATION
QUALITY ASSURANCE TECHNICAL SERVICES
Inservice Inspection Database Management System

McGuire 1

Inservice Inspection Plan for Interval 3 Outage 1

Class 1 Piping Supports

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
F01.010.001C	1-MCR-NC-500	NC	MCSRD-NC-01/sht. 1	QAL-14	VT-3	NA	14.000		
	Spring Hgr						0.000		
Class A									
F01.010.002A	1-MCR-NC-501	NC	MCSRD-NC-01/sht. 1	QAL-14	VT-3	NA	14.000		
	Rigid Support						0.000		
Class A									
F01.010.003C	1-MCR-NC-506	NC	MCSRD-NC-03/sht. 2	QAL-14	VT-3	NA	6.000		
	Spring Hgr						0.000		
Class A									
F01.010.004A	1-MCR-NC-507	NC	MCSRD-NC-03/sht. 2	QAL-14	VT-3	NA	6.000		
	Rigid Support						0.000		
Class A									
F01.010.051A	1-MCR-ND-500	ND	MCSRD-ND-01/sht. 1	QAL-14	VT-3	NA	14.000		
	Rigid Support						0.000		
Class A									
F01.010.101C	1-MCR-NI-515	NI	MCSRD-NI-01/sht. 1	QAL-14	VT-3	NA	6.000		
	Hyd Snubber						0.000		
Class A									
F01.010.102A	1-MCR-NI-521	NI	MCSRD-NI-01/sht. 4	QAL-14	VT-3	NA	10.000		
	Rigid Support						0.000		
Class A									
F01.010.104C	1-MCR-NI-528	NI	MCSRD-NI-01/sht. 3	QAL-14	VT-3	NA	6.000		
	Hyd Snubber						0.000		
Class A									

CATEGORY F-A, Supports

DUKE ENERGY CORPORATION
QUALITY ASSURANCE TECHNICAL SERVICES
Inservice Inspection Database Management System

Class 1 Piping Supports

McGuire 1

Inservice Inspection Plan for Interval 3 Outage 1

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
F01.010.162C	1-MCR-NV-1234	NV	MCSRD-NV-02/sht. 3	QAL-14	VT-3	NA	3.000		
	Mech Snubber						0.000		
Class A									
F01.010.163C	1-MCR-NV-1291	NV	MCSRD-NV-09/sht. 1	QAL-14	VT-3	NA	2.000		
	Mech Snubber						0.000		
Class A									
F01.010.164C	1-MCR-NV-1292	NV	MCSRD-NV-09/sht. 1	QAL-14	VT-3	NA	2.000		
	Spring Hgr						0.000		
Class A									

Total F01.010 Items: 11

CATEGORY F-A, Supports

Class 2 Piping Supports

DUKE ENERGY CORPORATION
QUALITY ASSURANCE TECHNICAL SERVICES
Inservice Inspection Database Management System

McGuire 1

Inservice Inspection Plan for Interval 3 Outage 1

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
F01.020.006A	1-MCR-CA-H400	CA	MCSRD-CAN/sht. 1	QAL-14	VT-3	NA	6.000		
	Rigid Support						0.000		
Class B									
F01.020.008C	1-MCA-CA-H415	CA	MCSRD-CAN/sht. 2	QAL-14	VT-3	NA	6.000		
	Mech Snubber						0.000		
Class B									
F01.020.010A	1-MCA-CA-H426	CA	MCSRD-CAO/sht. 2	QAL-14	VT-3	NA	6.000		
	Rigid Support						0.000		
Class B									
F01.020.054C	1-MCA-CF-H208	CF	MCSRD-CFC/sht. 12	QAL-14	VT-3	NA	26.000		
	Hyd Snubber						0.000		
Class B									
F01.020.058C	1-MCR-CF-H404	CF	MCSRD-CFC/sht. 12	QAL-14	VT-3	NA	16.000		
	Hyd Snubber						0.000		
Class B									
F01.020.153B	1-MCA-ND-H17	ND	MCSRD-NDA/sht. 2	QAL-14	VT-3	NA	8.000		
	Rigid Restraint						0.000		
Class B									
F01.020.155C	1-MCA-ND-H23	ND	MCSRD-NDA/sht. 2	QAL-14	VT-3	NA	8.000		
	Spring Hgr						0.000		
Class B									
F01.020.157B	1-MCA-ND-H59	ND	MCSRD-NDA/sht. 6	QAL-14	VT-3	NA	8.000		
	Rigid Restraint						0.000		
Class B									

CATEGORY F-A, Supports

DUKE ENERGY CORPORATION
QUALITY ASSURANCE TECHNICAL SERVICES
Inservice Inspection Database Management System

Class 2 Piping Supports

McGuire 1

Inservice Inspection Plan for Interval 3 Outage 1

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
F01.020.160A	1-MCA-ND-H76	ND	MCSRD-NDA/sht. 8	QAL-14	VT-3	NA	8.000		
	Rigid Support						0.000		
Class B									
F01.020.163A	1-MCA-ND-H84	ND	MCSRD-NDA/sht. 3	QAL-14	VT-3	NA	8.000		
	Rigid Support						0.000		
Class B									
F01.020.179A	1-MCA-ND-H69	ND	MCSRD-NDA/sht. 4	QAL-14	VT-3	NA	12.000		
	Rigid Support						0.125		
Class B									
F01.020.180A	1-MCA-ND-H15	ND	MCSRD-NDA/sht. 5	QAL-14	VT-3	SS	8.000		
	Rigid Support						0.237		
Class B									
F01.020.202A	1-MCA-NI-H5	NI	MCSRD-NIA/sht. 1	QAL-14	VT-3	NA	6.000		
	Rigid Support						0.000		
Class B									
F01.020.203C	1-MCA-NI-H6	NI	MCSRD-NIA/sht. 1	QAL-14	VT-3	NA	8.000		
	Spring Hgr						0.203		
Class B									
F01.020.209B	1-MCR-NI-555	NI	MCSRD-NI-03/sht. 3	QAL-14	VT-3	NA	6.000		
	Rigid Restraint						0.000		
Class B									
F01.020.211C	1-MCR-NI-676	NI	MCSRD-NI-11/sht. 1	QAL-14	VT-3	NA	4.000		
	Hyd Snubber						0.000		
Class B									
F01.020.212B	1-MCR-NI-685	NI	MCSRD-NI-11/sht.2	QAL-14	VT-3	NA	2.000		
	Rigid Restraint						0.000		
Class B									

CATEGORY F-A, Supports

DUKE ENERGY CORPORATION
QUALITY ASSURANCE TECHNICAL SERVICES
Inservice Inspection Database Management System

Class 2 Piping Supports

McGuire 1

Inservice Inspection Plan for Interval 3 Outage 1

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
F01.020.251A	1-MCA-NS-H2	NS	MCSRD-NSC/sht. 1	QAL-14	VT-3	NA	10.000		
	Rigid Support						0.000		
Class B									
F01.020.252A	1-MCA-NS-H3	NS	MCSRD-NSC/sht. 1	QAL-14	VT-3	NA	10.000		
	Rigid Support						0.000		
Class B									
F01.020.253C	1-MCA-NS-H7	NS	MCSRD-NSB/sht. 1	QAL-14	VT-3	NA	10.000		
	Spring Hgr						0.000		
Class B									
F01.020.254B	1-MCR-NS-655	NS	MCSRD-NS-04/sht. 2	QAL-14	VT-3	NA	8.000		
	Rigid Restraint						0.000		
Class B									
F01.020.301B	1-MCA-NV-H461	NV	MCSRD-NVD/sht. 1	QAL-14	VT-3	NA	6.000		
	Rigid Restraint						0.000		
Class B									
F01.020.302B	1-MCA-NV-H800	NV	MCSRD-NVE/sht. 3	QAL-14	VT-3	NA	4.000		
	Rigid Restraint						0.000		
Class B									
F01.020.303A	1-MCA-NV-H6	NV	MCSRD-NVD/sht. 1	QAL-14	VT-3	NA	6.000		
	Rigid Support						0.000		
Class B									
F01.020.304A	1-MCA-NV-H8	NV	MCSRD-NVD/sht. 1	QAL-14	VT-3	NA	8.000		
	Rigid Support						0.000		
Class B									
F01.020.305A	1-MCA-NV-H11	NV	MCSRD-NVD/sht. 1	QAL-14	VT-3	NA	8.000		
	Rigid Support						0.000		
Class B									

CATEGORY F-A, Supports

DUKE ENERGY CORPORATION
QUALITY ASSURANCE TECHNICAL SERVICES
Inservice Inspection Database Management System

Class 2 Piping Supports

McGuire 1

Inservice Inspection Plan for Interval 3 Outage 1

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
F01.020.306A	1-MCA-NV-H12	NV	MCSRD-NVD/sht. 1	QAL-14	VT-3	NA	8.000		
	Rigid Support						0.125		
Class B									
F01.020.307A	1-MCA-NV-H13	NV	MCSRD-NVD/sht. 1	QAL-14	VT-3	NA	6.000		
	Rigid Support						0.250		
Class B									
F01.020.308C	1-MCA-NV-H14	NV	MCSRD-NVD/sht. 1	QAL-14	VT-3	NA	6.000		
	Spring Hgr						0.000		
Class B									
F01.020.451A	1-MCR-RN-537	RN	MCSRD-RN-03/sht. 2	QAL-14	VT-3	NA	0.000		
	Rigid Support		MCFD 1574-04.00				0.000		
Class B									
F01.020.501C	1-MCA-SA-H19	SA	MCSRD-SAA/sht. 1	QAL-14	VT-3	NA	6.000		
	Spring Hgr						0.000		
Class B									
F01.020.551C	1-MCA-SM-H12	SM	MCSRD-SMA/sht. 2	QAL-14	VT-3	NA	42.000		
	Hyd Snubber						0.000		
Class B									
F01.020.553C	1-MCA-SM-H20	SM	MCSRD-SMA/sht. 2	QAL-14	VT-3	NA	42.000		
	Hyd Snubber						0.000		
Class B									
F01.020.602C	1-MCA-SV-H17	SV	MCSRD-SVA/sht. 2	QAL-14	VT-3	NA	6.000		
	Hyd Snubber						0.000		
Class B									
F01.020.651C	1-MCA-VQ-H10	VQ	MCSRD-VQA/sht. 1	QAL-14	VT-3	NA	6.000		
	Hyd Snubber						0.000		
Class B									

CATEGORY F-A, Supports

Class 2 Piping Supports

ITEM NUMBER	ID NUMBER	SYS ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS

Total F01.020 Items: 35

CATEGORY F-A, Supports

DUKE ENERGY CORPORATION
QUALITY ASSURANCE TECHNICAL SERVICES
Inservice Inspection Database Management System

Class 3 Piping Supports

McGuire 1

Inservice Inspection Plan for Interval 3 Outage 1

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
F01.030.001A	1-MCA-CA-H86		MCSRD-CAA/sht.1	QAL-14	VT-3	NA	6.000		
	Rigid Support						0.000		
Class C									
F01.030.011A	1-MCA-CA-H63	CA	MCSRD-CAC/sht.2	QAL-14	VT-3	NA	4.000		
	Rigid Support						0.125		
Class C									
F01.030.013A	1-MCA-CA-H68	CA	MCSRD-CAD/sht.1	QAL-14	VT-3	NA	4.000		
	Rigid Support						0.125		
Class C									
F01.030.023A	1-MCA-CA-H100	CA	MCSRD-CAK/sht.1	QAL-14	VT-3	NA	6.000		
	Rigid Support						0.000		
Class C									
F01.030.024A	1-MCA-CA-H103	CA	MCSRD-CAK/sht.1	QAL-14	VT-3	NA	8.000		
	Rigid Support						0.000		
Class C									
F01.030.026A	1-MCA-CA-H346	CA	MCSRD-CAK/sht.1	QAL-14	VT-3	NA	8.000		
	Rigid Support						0.000		
Class C									
F01.030.027C	1-MCA-CA-H347	CA	MCSRD-CAK/sht.1	QAL-14	VT-3	NA	8.000		
	Mech Snubber						0.000		
Class C									
F01.030.102A	1-MCA-KC-1042	KC	MCSRD-KC-313/sht.3	QAL-14	VT-3	NA	6.000		
	Rigid Support		MCFD 1573-02.02				0.000		
Class C									

CATEGORY F-A, Supports

DUKE ENERGY CORPORATION
QUALITY ASSURANCE TECHNICAL SERVICES
Inservice Inspection Database Management System

Class 3 Piping Supports

McGuire 1

Inservice Inspection Plan for Interval 3 Outage 1

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
F01.030.103A	1-MCA-KC-1304	KC	MCSRD-KC-315/sht.5	QAL-14	VT-3	NA	14.000		
	Rigid Support		MCFD 1573-02-00				0.000		
Class C									
F01.030.104C	1-MCA-KC-2137	KC	MCSRD-KC-304/sht.1	QAL-14	VT-3	NA	16.000		
	Hyd Snubber		MCFD 1573-01.01				0.000		
Class C									
F01.030.105B	1-MCR-KC-556	KC	MCSRD-KC-01/sht.1	QAL-14	VT-3	NA	6.000		
	Rigid Restraint		MCFD 1573-03-00				0.000		
Class C									
F01.030.106B	1-MCR-KC-561	KC	MCSRD-KC-01/sht.1	QAL-14	VT-3	NA	6.000		
	Rigid Restraint		MCFD 1573-03-00				0.000		
Class C									
F01.030.111A	1-MCA-KC-1091	KC	MCSRD-KC-303/sht.1	QAL-14	VT-3	NA	6.000		
	Rigid Support		MCFD 1573-01.01				0.000		
Class C									
F01.030.121B	1-MCR-KC-557	KC	MCSRD-KC-01/sht.1	QAL-14	VT-3	NA	6.000		
	Rigid Restraint		MCFD 1573-03-00				0.000		
Class C									
F01.030.123B	1-MCA-KC-1090	KC	MCSRD-KC-303/sht.1	QAL-14	VT-3	NA	6.000		
	Rigid Restraint		MCFD 1573-01.01				0.000		
Class C									
F01.030.124B	1-MCA-KC-2190	KC	MCSRD-KC-303/sht.1	QAL-14	VT-3	NA	6.000		
	Rigid Restraint		MCFD 1573-01.01				0.000		
Class C									
F01.030.140B	1-MCA-KC-2169	KC	MCSRD-KC-315/sht.3	QAL-14	VT-3	NA	10.000		
	Rigid Restraint		MCFD 1573-03-01				0.000		
Class C									

CATEGORY F-A, Supports

Class 3 Piping Supports

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
F01.030.141B	1-MCA-KC-2232	KC	MCSRD-KC-315/sht.3	QAL-14	VT-3	NA	14.000		
	Rigid Restraint		MCFD 1573-03-01				0.000		
Class C									
F01.030.155A	1-MCA-KD-121	KD	MCSRD-KD-10/sht.2	QAL-14	VT-3	NA	6.000		
	Rigid Support		MCFD 1609-01.01				0.000		
Class C									
F01.030.161C	1-MCA-LD-65	LD	MCSRD-LD-301/sht.2	QAL-14	VT-3	NA	6.000		
	Spring Hgr		MCFD 1609-02.00				0.000		
Class C									
F01.030.162A	1-MCA-LD-171	LD	MCSRD-LD-301/sht.1	QAL-14	VT-3	NA	6.000		
	Rigid Support		MCFD 1609-02.00				0.000		
Class C									
F01.030.208B	1-MCA-RN-H979	RN	MCSRD-RN-301/sht.2	QAL-14	VT-3	NA	20.000		
	Rigid Restraint		MCFD 1574-01.01				0.000		
Class C									
F01.030.209B	1-MCA-RN-2024	RN	MCSRD-RN-301/sht.3	QAL-14	VT-3	NA	18.000		
	Rigid Restraint		MCFD 1574-03.00				0.000		
Class C									
F01.030.210B	1-MCA-RN-2330	RN	MCSRD-RN-301/sht.4	QAL-14	VT-3	NA	20.000		
	Rigid Restraint		MCFD 1574-03.00				0.000		
Class C									
F01.030.212C	1-MCA-RN-H937	RN	MCSRD-RN-301/sht.2	QAL-14	VT-3	NA	18.000		
	Mech Snubber		MCFD 1574-01.01				0.000		
Class C									
F01.030.213A	1-MCA-RN-2240	RN	MCSRD-RN-301/sht.2	QAL-14	VT-3	NA	30.000		
	Rigid Support		MCFD 1574-01.01				0.000		
Class C									

CATEGORY F-A, Supports

Class 3 Piping Supports

McGuire 1

Inservice Inspection Plan for Interval 3 Outage 1

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
F01.030.214A	1-MCA-RN-1260	RN	MCSRD-RN-316	QAL-14	VT-3	NA	8.000		
	Rigid Support		MCFD 1574-03.00				0.000		
Class C									

Total F01.030 Items: 27

CATEGORY F-A, Supports

DUKE ENERGY CORPORATION
QUALITY ASSURANCE TECHNICAL SERVICES
Inservice Inspection Database Management System

Supports other than Piping Supports (Class 1, 2, 3)

McGuire 1

Inservice Inspection Plan for Interval 3 Outage 1

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
F01.040.007	1RHRHX-SUPPORT-1	ND	MCM 1201.06-0022 MCM 1201.06-48	QAL-14	VT-3	NA	0.000 0.000		1A RESIDUAL HEAT REMOVAL HEAT EXCHANGER SUPPORT
Class B									
F01.040.008	1CSHX-SUPPORT-1A	NS	MCM 1201.06-0025	QAL-14	VT-3	NA	0.000 0.000		1A CONTAINMENT SPRAY HEAT EXCHANGER SUPPORT
Class B									
F01.040.009	1REGHX-SUPPORT	NV	MCM 1201.06-15 MCM 1201.06-61 MCM 1201.06-0069	QAL-14	VT-3	NA	0.000 0.000		REGENERATIVE HEAT EXCHANGER SUPPORT
Class B									
F01.040.037	1CRAC-SUPPORT-1	YC	MCM 1211.00-0136	QAL-14	VT-3	NA	0.000 0.000		CONTROL AIR CHILLER 1 SUPPORT
Class C									
F01.040.038	1CRAP-SUPPORT-1	YC	MCM 1201.05-298	QAL-14	VT-3	NA	0.000 0.000		CONTROLLED AREA CHILLED WATER PUMP 1 SUPPORT
Class C									
F01.040.041	1CRAAHU-SUPPORT	YC	MCM 1211.00-211	QAL-14	VT-3	NA	0.000 0.000		CONTROL ROOM AREA AIR HANDLING UNIT 1 SUPPORT
Class C									

Total F01.040 Items: 6

Total F01 Items: 79

CATEGORY R-A, Risk Informed Piping Examinations

Elements Subject to Thermal Fatigue

DUKE ENERGY CORPORATION
QUALITY ASSURANCE TECHNICAL SERVICES
Inservice Inspection Database Management System

McGuire 1

Inservice Inspection Plan for Interval 3 Outage 1

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
**** ****									
R01.011.013 Class A	1NC1FW19-1 Circumferential	NC	MCFI-1NC-19 MC-ISIN-1553-01.00	NDE-600	UT Pipe to Pipe Cap		2.000 0.344	*	SEGMENT NC-017, *SEE SECTION 8 FOR CALIBRATION BLOCK REQUIREMENTS
R01.011.014 Class A	1NC1F2592 Circumferential	NC	MCFI-1NC33 MC-ISIN-1553-01.00	NDE-600	UT Pipe to Pipe		3.000 0.438	*	SEGMENT NC-022 IS NOT HSS. THIS WELD ADDED AS A RESULT OF DELTA RISK EVALUATION, *SEE SECTION 8 FOR CALIBRATION BLOCK REQUIREMENTS
R01.011.019 Class A	1NC154-1 Circumferential	NC	MCFI-1NC-54 MC-ISIN-1553-01.00	NDE-600	UT Pipe to Elbow	SS	6.000 0.719	*	SEGMENT NC-032, *SEE SECTION 8 FOR CALIBRATION BLOCK REQUIREMENTS
R01.011.020 Class A	1NC91-2 Circumferential	NC	MCFI-1NC54 MC-ISIN-1553-01.00	NDE-600	UT Pipe to Elbow	SS	6.000 0.719	*	SEGMENT NC-033, *SEE SECTION 8 FOR CALIBRATION BLOCK REQUIREMENTS
R01.011.021 Class A	1NC92-2 Circumferential	NC	MCFI-1NC52 MC-ISIN-1553-01.00	NDE-600	UT Pipe to Elbow	SS	14.000 1.250	*	SEGMENT NC-034, *SEE SECTION 8 FOR CALIBRATION BLOCK REQUIREMENTS
R01.011.022 Class A	1NC138-1 Circumferential	NC	MCFI-1NC54 MC-ISIN-1553-01.00	NDE-600	UT Pipe to Elbow	SS	6.000 0.719	*	SEGMENT NC-035, *SEE SECTION 8 FOR CALIBRATION BLOCK REQUIREMENTS
R01.011.027 Class A	1NC1F1664 Circumferential	NC	MCFI-1NC11 MC-ISIN-1553-02.01	NDE-600	UT Pipe to Reducer	SS	4.000 0.531	*	SEGMENT NC-092, *SEE SECTION 8 FOR CALIBRATION BLOCK REQUIREMENTS
R01.011.142 Class B	1NV1FW172-28 Circumferential	NV	MCFI-1NV172 MC-ISIN-1554-03.00	NDE-600	Pipe to Pipe	SS	2.000 0.344	*	SEGMENT NV-019AB, *SEE SECTION 8 FOR CALIBRATION BLOCK REQUIREMENTS

CATEGORY R-A, Risk Informed Piping Examinations

Elements Subject to Thermal Fatigue

DUKE ENERGY CORPORATION
QUALITY ASSURANCE TECHNICAL SERVICES
Inservice Inspection Database Management System

McGuire 1

Inservice Inspection Plan for Interval 3 Outage 1

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
R01.011.144 Class B	1NV1FW175-34 Circumferential	NV	MCFI-1NV175 MC-ISIN-1554-03.00	NDE-600	UT Pipe to Reducer	SS	2.000 0.344	*	SEGMENT NV-019AC, *SEE SECTION 8 FOR CALIBRATION BLOCK REQUIREMENTS
R01.011.145 Class B	1NV1FW173-29 Circumferential	NV	MCFI-1NV173 MC-ISIN-1554-03.00	NDE-600	UT Pipe to Pipe		2.000 0.344	*	SEGMENT NV-019AC, *SEE SECTION 8 FOR CALIBRATION BLOCK REQUIREMENTS
R01.011.147 Class B	1NV1FW181-25 Circumferential	NV	MCFI-1NV181 MC-ISIN-1554-03.00	NDE-600	UT Pipe to Elbow	SS	2.000 0.344	*	SEGMENT NV-020AA,
R01.011.148 Class B	1NV1FW181-24 Circumferential	NV	MCFI-1NV181 MC-ISIN-1554-03.00	NDE-600	UT Pipe to Pipe	SS	2.000 0.344	*	SEGMENT NV-020AA, *SEE SECTION 8 FOR CALIBRATION BLOCK REQUIREMENTS
R01.011.170 Class B	1NV1F4823 Circumferential	NV	MCFI-1NV3 MC-ISIN-1554-03.00	NDE-600	UT Reducer to Pipe		2.000 0.344	*	SEGMENT NV-110B, *SEE SECTION 8 FOR CALIBRATION BLOCK REQUIREMENTS
R01.011.201 Class B	1RV1F104 Circumferential	RV	MCFI-1RV31 MC-ISIN-1604.03-00	NDE-600	UT Elbow to Pipe	CS	12.000 0.375	*	SEGMENT RV-001, *SEE SECTION 8 FOR CALIBRATION BLOCK REQUIREMENTS
R01.011.221 Class B	1WL1F7651 Circumferential	WL	MCFI-1WL127 MC-ISIN-1565-01.00	NDE-600	UT Pipe to Pipe	SS	4.000 0.375	*	SEGMENT WL-002A, *SEE SECTION 8 FOR CALIBRATION BLOCK REQUIREMENTS
R01.011.222 Class B	1WLP679-1 Circumferential	WL	MCFI-1WL127 MC-ISIN-1565-01.00	NDE-600	UT Elbow to Pipe	SS	4.000 0.375	*	SEGMENT WL-002A, *SEE SECTION 8 FOR CALIBRATION BLOCK REQUIREMENTS

Total R01.011 Items: 16

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CATEGORY R-A, Risk Informed Piping Examinations

Elements Subject to Corrosive, Erosive, or Cavitation Wastage

DUKE ENERGY CORPORATION
QUALITY ASSURANCE TECHNICAL SERVICES
Inservice Inspection Database Management System

McGuire 1

Inservice Inspection Plan for Interval 3 Outage 1

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
R01.013.001	1RV1F104	RV	MCFI-1RV31	NDE-946	UT	CS	12.000	STEP	SEGMENT RV-001
	Circumferential		MC-ISIN-1604.03-00				0.375	WEDGE	EXAMINE A 1 FT. LENGTH OF PIPE AT WELD TO DETERMINE WALL THKS.
Class B					Elbow to Pipe				

Total R01.013 Items: 1

Total R01 Items: 17