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Niagara Mohawk Power Corp Syracuse, N.Y. 13202 Mr. P.D. Raymond	11-18-74	11-22-74	X			

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ENCLOSURES:
Proposed changes to the tech specs.... consist of a change to the tech specs with respect to the inservice inspection program for systems inportant to safety...

ACKNOWLEDGED

(40 cys encl rec'd)

PLANT NAME: Nine Mile Point #1

FOR ACTION/INFORMATION 11-25-74 JB

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BEFORE THE UNITED STATES

ATOMIC ENERGY COMMISSION

In the Matter of	)	
	)	
NIAGARA MOHAWK POWER CORPORATION	)	Docket No. 50-220
(Nine Mile Point Unit 1)	)	

APPLICATION FOR AMENDMENT

TO

PROVISIONAL OPERATING LICENSE

Niagara Mohawk Power Corporation, Licensee in the above-captioned docket, hereby files an Application for Amendment to its Provisional Operating License DPR-17.

This Amendment would change the Technical Specifications with respect to the inservice inspection program for systems important to safety.

With this Application for Amendment, Licensee hereby transmits a document entitled "Proposed Change to Technical Specifications" describing the change and the reasons therefore. The proposed change has been reviewed and approved by the Safety Review and Audit Board and the Site Operations Review Committee.

WHEREFORE, Licensee prays as in its original Application for Licenses.

Respectfully submitted,

NIAGARA MOHAWK POWER CORPORATION

By Philip D. Raymond

Philip D. Raymond
Vice President-Engineering

Subscribed and sworn to before me
this 18th day of November, 1974.

Hazel J. Carrick

HAZEL J. CARRICK
Notary Public in the State of New York
Qualified in Onon. Co. No. 4524460
My Commission Expires March 30, 1976

Proposed Changes to the Technical Specifications

Proposed changes to the Technical Specifications would increase the assurance of system integrity comparable to the recommended programs in Regulatory Guide 1.51 and Section XI of the ASME Boiler and Pressure Vessel Code, within the limits of accessibility designed into Nine Mile Point Unit 1.

This change is being made in response to the request contained in the Atomic Energy Commission's letter of September 28, 1973. With the addition of the attached changes, the inservice inspection program will include inspection of those systems which would be included as ASME Code Class 2 and 3 components if being presently designed.

LIMITING CONDITION FOR OPERATION	SURVEILLANCE REQUIREMENT

4.2.6 INSERVICE INSPECTION PROGRAM

Applicability:

Applies to the in-service inspection program.

Objective:

To assure structural integrity and leak tightness of systems important to safety.

Specification:

Nondestructive examinations shall be made on the components as specified in Tables 4.2.6a, b and c. Any indications of a defect shall be evaluated. The examination process to be used shall be one of those listed or a more suitable process if it is so determined at the time of examination.

The areas to be inspected include high service areas and random selection areas. It is desirable to examine high service factor areas such as primary recirculating system nozzles due to the higher thermal and mechanical stresses involved. Random selection areas including reactor vessel studs, flanges, head welds, and piping welds will be examined in order to assess the overall condition of the system components. Since the high stress concentration areas are the most probable locations of defects, the inspections will not only test weld integrity but also the condition of the base metal.

Prior to operation the reactor coolant system will be free of gross defects and the facility has been designed such that gross defects should not occur throughout life; however, to determine the status of the coolant system to ensure that gross defects are not developing, the five year surveillance program was developed. A new ten year inspection program is reflected by this specification. This inspection will reveal problem areas should they occur before a leak develops. In addition, extensive visual inspection for leaks will be made on critical systems during maintenance outages. The inspection interval is based on Section XI of the ASME Boiler and Pressure Vessel Code. This program has been developed in response to an AEC letter dated September 29, 1974 from D. L. Ziemann to Mr. P. D. Raymond and is designed to be implemented over the lifetime of the facility. This program will be applied to those areas of Class I, II or III systems whose physical location and low radiation levels allow access. In addition, areas which are covered by non-replaceable insulation or coatings will be considered non-accessible.

Tables 4.2.6.a, b and c apply to Class I, II and III systems and components as given in Section XI of the ASME Boiler and Pressure Vessel Code. The following definitions result from the above.

Class I components or systems are those which circulate reactor coolant connected to the reactor coolant pressure boundary inside of the drywell up to and including the isolation valve and the reactor vessel.

Class II components or systems are those from and including the outermost isolation valve which circulate reactor coolant or perform a safety function.

Class III components or systems are those associated with reactor coolant handling systems and core and containment cooling systems. Also systems whose failure would cause release of activity.

Visual, Volumetric and Surface examination techniques as defined by Section XI will be used as required by the Code. Volumetric examinations include radiography, ultrasonic or other proven methods. Surface examinations include magnetic particle, liquid penetrant or other proven methods.

The following portions of the Section XI requirements have been deleted from our program due to the non-existence of these items:

1. B-F, Pump Pressure Boundary Nozzles to Safe-End Welds
2. B-G-1, Piping Pressure Boundary Pressure Retaining Bolting
3. B-G-2, Pump Pressure Boundary Bolting
4. B-I-2, Interior Clad Surface of Vessels Other than Reactor Vessels
5. B-L-1, Pressure Containing Welds in Pump Casings
6. B-N-3, Removable Core Support Structures

Table 4.2.6a

INSERVICE INSPECTION PROGRAM

CLASS I

Title	Components and Parts To Be Examined	Extent of Examination	Examination Method	System(s)
B-A				
Pressure Containing Welds in Reactor Vessel Belt-Line Region	Reactor Vessel	Not Accessible	Volumetric	Reactor Vessel
B-B				
Pressure Containing Welds in Reactor Vessel	Closure Head Circumferential and Meridional Welds (Vessel Welds not Accessible)	10% of Meridional, 5% of Circumferential in 10 years	Volumetric	Reactor Vessel
B-C				
Pressure Containing Welds Vessel to Flange, and Head to Flange	Vessel to Flange Circumferential Weld	100% in 10 years	Volumetric	Reactor Vessel
	Head to Flange Circumferential Weld	100% in 10 years	Volumetric	

Table 4.2.6a (cont'd)

INSERVICE INSPECTION PROGRAM

CLASS I

Title	Components and Parts To Be Examined	Extent of Examination	Examination Method	System(s)
B-D				
Full Penetration Welds of Nozzles in Reactor Vessel	Nozzle to Vessel Attachment Welds:	100% of Accessible Areas in 10 Years	Volumetric	Reactor Vessel Nozzles
	Steam Nozzle-to-Vessel Feedwater Nozzle-to-Vessel Core Spray Nozzle-to-Vessel Recirculation Inlet Nozzle-to-Vessel Recirculation Outlet Nozzle-to-Vessel Control Rod Drive Water Return Nozzle-to-Vessel			
	Nozzle-to-Closure Head Attachment Welds	100% of Accessible Areas in 10 Years	Volumetric	
	Inner Radius Sections of the Nozzles Listed Above	100% of Accessible Areas in 10 Years	Volumetric	
	Inner Radius Section of the Closure Head Nozzles	100% of Accessible Areas in 10 Years	Volumetric	

Table 4.2.6a (cont'd)

INSERVICE INSPECTION PROGRAM

CLASS I

Title	Components and Parts To Be Examined	Extent of Examination	Examination Method	System(s)
B-E				
Pressure Containing Welds in Vessel Penetrations	Welds in Vessel for Leakage at Control Rod Drive Penetrating and In Core Monitor Housings (Stub Tube-to-Housing and Vessel)	25% in 10 Years	Visual	Reactor Vessel Penetrations
B-F				
Pressure Containing Dis-similar Metal Welds	Primary Nozzles to Safe-End Welds: Recirculation Inlet Recirculation Outlet Core Spray	100% in 10 Years	Volumetric & Surface	Reactor Vessel Recirculation Core Spray
	Piping Pressure Boundary Safe-Ends in Branch Piping Welds	100% in 10 Years	Volumetric & Surface	
	Valve Pressure Boundary Valve to Safe-End Welds	100% in 10 Years	Volumetric & Surface	

Table 4.2.6a (cont'd)

INSERVICE INSPECTION PROGRAM

CLASS I

Title	Components and Parts To Be Examined	Extent of Examination	Examination Method	System(s)
B-G-1				
Pressure Retaining Bolting 2" & Larger	Reactor Vessel Closure Studs & Nuts	100% in 10 Years	Volumetric	Reactor Vessel
	Reactor Vessel Ligaments Between Threaded Stud Holes	100% in 10 Years	Volumetric	
	Reactor Vessel Closure Washers and Bushings	100% in 10 Years	Visual	
	Pump Pressure Boundary Pressure-Retaining Bolting	100% in 10 Years	Volumetric	Piping Inside Drywell
	Valve Pressure Boundary Pressure-Retaining Bolting	100% in 10 Years	Volumetric	
B-G-2				
Pressure Retaining Bolting Smaller Than 2 Inches in Diameter	Piping Pressure Boundary Pressure-Retaining Boundary	100% in 10 Years	Visual	Piping Inside Drywell
	Valve Pressure Boundary Bolting	100% in 10 Years	Visual	

Table 4.2.6a (cont'd)

INSERVICE INSPECTION PROGRAM

CLASS I

Title	Components and Parts To Be Examined	Extent of Examination	Examination Method	System(s)
B-H				
Vessel Supports	Skirt-to-Vessel Weld	100% of Accessible Areas in 10 Years	Volumetric	Reactor Vessel Skirt
B-I-1				
Interior Clad Surface of Reactor Vessels	Closure Head Cladding-6 Patches each 36 in.^{2} in Area	100% in 10 Years of Patch Areas	Visual & Surface Volumetric	Reactor Vessel
	Vessel Cladding - 6 Patches, each 36 in.^{2} in Area	100% in 10 Years of Patch Areas	Visual	

Table 4.2.6a (cont'd)

INSERVICE INSPECTION PROGRAM

CLASS I

Title	Components and Parts To Be Examined	Extent of Examination	Examination Method	System(s)
B-J				
Pressure Containing Welds in Piping	Longitudinal & Circumferential Welds in Piping	25% of all circumferential joints including adjacent 1 ft. longitudinal weld joint in 10 Years	Volumetric For Longitudinal & Circumferential Welds & Branch Pipe Connection greater than 6" Diameter. Surface for Socket Welds & Branch Pipe Connections greater than 1" but less than 6" Diameter	Main Steam Feedwater Emergency Condenser Core Spray Recirculation Shutdown Cooling Control Rod Drive Reactor Head Spray Cleanup

Table 4.2.6a (cont'd)

INSERVICE INSPECTION PROGRAM

CLASS I

Title	Components and Parts To Be Examined	Extent of Examination	Examination Method	System(s)
B-K-1				
Support Members and Structures.	Piping Pressure Boundary Integrally Welded External Support Attachments	25% in 10 Years or to Extent Accessible	Volumetric	Main Steam Feedwater Emergency Condenser Core Spray Reactor Recirculation Shutdown Cooling Control Rod Drive Reactor Head Spray Cleanup
	Pump Integrally Welded Support Attachments	25% in 10 Years or to Extent Accessible	Volumetric	
	Valve Integrally Welded Support Attachments	25% in 10 Years or to Extent Accessible	Volumetric	

Table 4.2.6a (cont'd)

INSERVICE INSPECTION PROGRAM

CLASS I

Title	Components and Parts To Be Examined	Extent of Examination	Examination Method	System(s)
B-K-2				
Support Components	Piping Pressure Boundary Hangers, Snubbers, Absorbers & Other Support Whose Structural Integrity is Relied Upon to Withstand Design Loads and Seismic Induced Displacements.	100% in 10 Years or of Those Accessible	Visual	Main Steam Feedwater Emergency Condenser Core Spray Reactor Recirculation Shutdown Cooling
	Pump Hangers, Snubbers, Absorbers, Type Supports Whose Structural Integrity is Relied Upon to Withstand Design Loads & Seismic Induced Displacements.	100% in 10 Years or of Those Accessible	Visual	Control Rod Drive Reactor Head Spray Cleanup
	Valve Hangers, Snubbers, Absorbers, Type Supports Whose Structural Integrity is Relied Upon to Withstand Design Loads & Seismic Induced Displacements.	100% in 10 Years or of Those Accessible	Visual	

Table 4.2.6a (cont'd)

INSERVICE INSPECTION PROGRAM

CLASS I

Title	Components and Parts To Be Examined	Extent of Examination	Examination Method	System(s)
B-L-2				
Pump Casings	Internal Pressure Boundary Surfaces of Recirculation Pumps	One Pump in 10 Years	Visual	Recirculation Pumps
B-M-1				
Pressure Containing Welds in Valve Bodies	Welds in Valve Bodies Larger than One Inch in Diameter	One Valve in Each Group of Same Design-100% of Those Accessible in 10 Years	Volumetric	Main Steam Feedwater Emergency Condenser Core Spray Reactor Recirculation Shutdown Cooling Control Rod Drive Reactor Head Spray Cleanup

Table 4.2.6a (cont'd)

INSERVICE INSPECTION PROGRAM

CLASS I

Title	Components and Parts To Be Examined	Extent of Examination	Examination Method	System(s)
B-M-2				
Surfaces of Valve Bodies	Internal Pressure Boundary Surfaces of Valves 4 Inches and Larger	One Valve in Each Group of Same Design - 100% of Those Accessible in 10 Years	Visual	Valves Inside Drywell On: Main Steam Feedwater Core Spray Emergency Cooling Shutdown Cooling Recirculation Cleanup
B-N-1 & 2				
Interior Surfaces and Internal Components of Reactor Vessel	The Interior Surfaces of the Reactor Vessel, the Internal Components, Internal Supports Welded to the Vessel Wall, and the Space Below the Core But Above the Bottom Head	Interior Surfaces - At 3 Year Intervals (Refuel Outage) Internal Supports - 100% in 10 Years	Visual	Reactor Vessel

Table 4.2.6a (cont'd)

INSERVICE INSPECTION PROGRAM

CLASS I

Title	Components and Parts To Be Examined	Extent of Examination	Examination Method	System(s)
B-O				
Pressure Retaining Welds in Control Rod Drive Housings	Weld Metal and Base Metal for One Wall Thickness Beyond the Edge of the Weld	100% of the Welds in 10% of the Peripheral Control Rod Drive Housings in 10 Years	Volumetric	Control Rod Drive

Table 4.2.6b

INSERVICE INSPECTION PROGRAM

CLASS II

Title	Components and Parts To Be Examined	Extent of Examination	Examination Method	System(s)
C-A				
Pressure Retaining Welds in Pressure Vessels	Shell and Head Circumferential Welds Which Are Gross Structural Discontinuities	20% of Each Accessible Weld in 10 Years	Volumetric	Containment Spray Heat Exchanger Emergency Condenser Shutdown Cooling Heat Exchanger Liquid Poison Tank Feedwater Heat Exchanger Cleanup Heat Exchanger

Table 4.2.6b (cont'd)

INSERVICE INSPECTION PROGRAM

CLASS II

Title	Components and Parts To Be Examined	Extent of Examination	Examination Method	System(s)
C-B				
Pressure Retaining Nozzle Welds in Vessel	Nozzle to Vessel Attachment Welds	100% of Each Accessible Weld in 10 Years	Volumetric	Containment Spray Heat Exchanger Emergency Condenser Shutdown Cooling Heat Exchanger Liquid Poison Tank Feedwater Heat Exchanger Cleanup Heat Exchanger

Table 4.2.6b (cont'd)

INSERVICE INSPECTION PROGRAM

CLASS II

Title	Components and Parts To Be Examined	Extent of Examination	Examination Method	System(s)
C-C				
Integrally Welded Support Attachments to Vessels	Welds of External Support, Attachment, Brackets, Lugs, Etc.	100% of Each Accessible Weld in 10 Years	Surface	Containment Spray Heat Exchanger Emergency Condenser Shutdown Cooling Heat Exchanger Liquid Poison Tank Feedwater Heat Exchanger Cleanup Heat Exchanger

Table 4.2.6b (cont'd)

INSERVICE INSPECTION PROGRAM

CLASS II

Title	Components and Parts To Be Examined	Extent of Examination	Examination Method	System(s)
C-D				
Pressure Retaining Bolting Larger Than One Inch in Diameter	Bolts, Studs, Nuts, Bushings, Washers and Threads in Base Metal And Flange Ligaments Between Threaded Stud Holes	100% of Accessible Bolts, Studs, Nuts, Bushings and Threads 10% of Accessible Bolting in Each Joint, But Not Less Than 2 per Joint Bushings, threads and ligaments in base material of flanges are required to be examined only when connection is disassembled. Bolting may be examined in place under tension, when connection is disassembled or when bolting is removed.	Visual & Surface or Volumetric	Containment Spray Heat Exchanger Emergency Condenser Shutdown Cooling Heat Exchanger Liquid Poison Tank Feedwater Heat Exchanger Cleanup Heat Exchanger

Table 4.2.6b (cont'd)

INSERVICE INSPECTION PROGRAM

CLASS II

Title	Components and Parts To Be Examined	Extent of Examination	Examination Method	System(s)
C-E-1				
Support Members for Piping, Valves (larger than 4 inches) and Pumps	External Support Attachments Welds to Pressure Retaining Boundary and the Base Metal	100% of Accessible Major Load Bearing Elements in 10 Years	Surface	Main Steam to TSV & Bypass Valve Feedwater - Discharge #2 Feedwater Heater to IV Emergency Condenser Shutdown Cooling-Reactor Side (All) Core Spray - All Containment Spray - All Cleanup - All

Table 4.2.6b (cont'd)

INSERVICE INSPECTION PROGRAM

CLASS II

Title	Components and Parts To Be Examined	Extent of Examination	Examination Method	System(s)
C-E-2 Support Components for Piping, Valves & Pumps	Support Components Which Extend From Piping, Valves & Pump Attachments	All Accessible Support Components in 10 Years	Visual	Main Steam to TSV & Bypass Valve Feedwater - Discharge #2 Feedwater Heater to IV Emergency Condensers Shutdown Cooling-Reactor Side (All) Core Spray - All Containment Spray - All Cleanup - All

Table 4.2.6b (cont'd)

INSERVICE INSPECTION PROGRAM

CLASS II

Title	Components and Parts To Be Examined	Extent of Examination	Examination Method	System(s)
C-F Pressure Retaining Welds in Piping, Valves & Pumps in Systems that Circulate Reactor Coolant	Accessible Areas of the Following: a. circumferential butt welds at structural discontinuities b. circumferential butt welds in piping within 3 pipe diameters of the centerline of rigid pipe anchors, or anchors at the penetration of the primary reactor containment, or at rigidly anchored components. c. longitudinal weld joints in pipe fittings (i.e., in tees,elbows, reducers). d. branch connection weld joints e. pump casing and valve body weld joints.	100% of the Weld in 10 Years This includes the weld metal and base metal for one-wall thickness beyond the edge of the weld.	Volumetric	Feedwater Main Steam Shutdown Cooling Emergency Condenser Clean-up

Table 4.2.6b (cont'd)

INSERVICE INSPECTION PROGRAM

CLASS II

Title	Components and Parts To Be Examined	Extent of Examination	Examination Method	System(s)
C-G				
Pressure Retaining Welds in Piping, Pumps And Valves Which Circulate Other Than Reactor Coolant	The areas shall include 50% of the total number of the following welds: a. circumferential butt welds at structural discontinuities. b. circumferential butt welds in piping within 3 pipe diameters of the centerline of rigid pipe anchors, or anchors at the penetration of the primary reactor containment, or at rigidly anchored components. c. longitudinal weld joints in pipe fittings (i.e.,in tees, elbows, reducers)	100% of the Weld in 10 Years This includes the weld metal and base metal for one wall thickness beyond the edge of weld.	Volumetric	Core Spray Containment Spray

Table 4.2.6b (cont'd)

INSERVICE INSPECTION PROGRAM

CLASS II

Title	Components and Parts To Be Examined	Extent of Examination	Examination Method	System(s)
C-G (cont'd)				
Pressure Retaining Welds in Piping, Pumps And Valves Which Circulate Other Than Reactor Coolant	d. branch connection weld joints. e. pump casing and valve body weld joints. The welds selected shall provide a representative sampling among the total number of welds covered by (a) to (e) above.	100% of the Weld in 10 Years This includes the weld metal and base metal for one wall thickness beyond the edge of the weld.	Volumetric	Core Spray Containment Spray

Table 4.2.6c

INSERVICE INSPECTION PROGRAM

CLASS III

Title	Components and Parts To Be Examined	Extent of Examination	Examination Method	System(s)
Pressure Retaining Components and Supports	Vessels, piping, valves, pumps and supports	The examination shall cover all accessible areas including supports and hangers. This test will be performed when the system is undergoing an in-service test, component functional test or a system pressure test. Each system will be inspected during the 10 year inspection interval.	Visual	Reactor and Waste building closed loop cooling Service water Radioactive waste disposal Diesel generator fuel oil, starting air and cooling water Instrument and breathing air Drywell vent and purge Drywell and torus vacuum relief Drywell instrumentation and leak monitoring