Vogtle Electric Generating Plant - Unit 1 (VEGP-1)
Inservice Inspection (ISI) Program
First 10-Year Interval
(ISI-P-006)

Revision 4 Summary of Changes

Affected ISI Program Document Pages	Change
2-23, 3-12, 4-2, 4-3, and 4-4	Any reference to Relief Requests RR-45, 47, 48, and 54, which were withdrawn by Georgia Power Company letter MSV-00169 dated March 27, 1990 to the NRC, have been deleted.
6-3, 6-4, 6-85 6-87, 6-88, 6-89, and 6-96	Adds notation as appropriate that Relief Requests RR-45, 47, 48, and 54 were withdrawn.
6-18	Reference to Relief Request RR-13 is deleted from the discussion "Requirement from which relief is requested" in Relief Request RR-12. Relief Request RR-13 was previously withdrawn in Revision 1 of the ISI program document, ISI-P-006. A statement has been added in the aforementioned discussion section indicating the specific reason why relief is being requested.
6-4, 6-97, and 6-98	Relief Request RR-55 and RR-56 are being added to the ISI program document although the subject relief requests are intentionally being left blank. This is being done for administrative purposes in order that the relief request numbering sequence and relief request content will be similar for the two Vogtle units; e.g., Relief Request RR-11 pertains to visual examination of reactor vessel supports for both Vogtle units in their respective ISI program documents.

6-58, 6-58a, and 6-59	Relief Request RR-32 has been revised to include the surface examination of the reinforcing plate-to-vessel welds in the Residual Heat Removal System heat exchangers and to elaborate upon the relief requested. In addition, the figure accompanying the relief request has been revised to better depict the configuration at VEGP-1. The revised relief request is similar in content to RR-32 for VEGP-2.

B-P, CONTINUED

Item No.	Parts Examined	Test Requirements	Examination Method[4]	Extent and Frequency of Examination: 1st Interval	Extent and Frequency of Examination: 2nd, 3rd, 4th Intervals	Relief Request	Comments
	Piping						
B15.50	Pressure Retaining Boundary	System leakage test[1,7] (IWB-5221)	VT-2	Each refueling outage[5]	Each refueling outage[5]		
B15.51	Pressure Retaining Boundary	System hydro test[2] (IWB-5222)	VT-2	One test[6]	One test per interval[6]		
	Pumps						
B15.60	Pressure Retaining Boundary	System leakage test[1,7] (IWB-5221)	VT-2	Each refueling outage[5]	Each refueling outage[5]		
B15.61	Pressure Retaining Boundary	System hydro test[2] (IWB-5222)	VT-2	One test[6]	One test per interval[6]		
	Valves						
B15.70	Pressure Retaining Boundary	System leakage test[1,7] (IWB-5221)	VT-2	Each refueling outage[5]	Each refueling outage[5]		
B15.71	Pressure Retaining Boundary	System hydro test[2] (IWB-5222)	VT-2	One test[6]	One test per interval[6]		

NOTES:

(1) The pressure retaining boundary during the system leakage test shall correspond to the reactor coolant system boundary, with all valves in the normal position, which is required for normal reactor operation startup. The VT-2 examination shall, however, extend to and include the second closed valve at the boundary extremity.

(2) The pressure retaining boundary during the system hydrostatic test shall include all Class 1 components within the system boundary.

(3) System pressure tests of the reactor coolant system shall be conducted in accordance with IWA-5000. System pressure tests for repaired, replaced, or altered components shall be governed by IWA-5214(c).

(4) Visual examination of IWA-5240.

(5) The system leakage test (IWB-5221) shall be conducted prior to plant startup following each reactor refueling outage.

(6) The system hydrostatic test (IWB-5222) shall be conducted at or near the end of each inspection interval.

(7) A system hydrostatic test (IWB-5222) and the accompanying VT-2 examination are acceptable in lieu of the system leakage test (IWB-5221) and VT-2 examination.

C-H, ALL PRESSURE RETAINING COMPONENTS

Item No.	Parts Examined[1]	Test[2] Required	Examination[3] Method	Extent and Frequency of Examination: Each Period[4]	Extent and Frequency of Examination: Each Interval[4]	Relief Request	Comments
	Pressure Vessels						
C7.10	Pressure Retaining Components	IWC-5221 test[8]	VT-2	Pressure retaining boundary[7]		RR-46	
C7.20	Pressure Retaining Components	IWC-5222 test	VT-2		Pressure retaining boundary[7]		
	Piping						
C7.30	Pressure Retaining Components	IWC-5221 test[8]	VT-2	Pressure retaining boundary[7]		RR-46	
C7.40	Pressure Retaining Components	IWC-5222 test	VT-2		Pressure retaining boundary[7]	RR-44	
	Pumps						
C7.50	Pressure Retaining Components	IWC-5221 test[8]	VT-2	Pressure retaining boundary[7]		RR-46	
C7.60	Pressure Retaining Components	IWC-5222 test	VT-2		Pressure retaining boundary[7]		
	Valves						
C7.70	Pressure Retaining Components	IWC-5221 test[8]	VT-2	Pressure retaining boundary[7]		RR-46	
C7.80	Pressure Retaining Components	IWC-5222 test	VT-2		Pressure retaining boundary[7]	RR-44	

D-A, SYSTEMS IN SUPPORT OF REACTOR SHUTDOWN FUNCTION

Item No.	Parts Examined	Test And Examination Requirements	Examination Method	Extent and Frequency of Examination: Each Period	Extent and Frequency of Examination: Each Interval	Relief Request	Comments
D1.10	Pressure Retaining Components[1]	IWA-5000/ IWD-5221[5]	VT-2	Pressure retaining boundary[2]		RR-49,50	
		IWA-5000/ IWD-5223[5]	VT-2		Pressure retaining boundary[2,4]	RR-49	
D1.20	Integral Attachment-Component Supports and Restraints[3]	Figure IWD-2500-1	VT-3		Integral attachments		
D1.30	Integral Attachment-Mechanical and Hydraulic Snubbers[3]	Figure IWD-2500-1	VT-3		Integral attachments		
D1.40	Integral Attachment-Spring Type Supports[3]	Figure IWD-2500-1	VT-3		Integral attachments		
D1.50	Integral Attachment-Constant Load Type Supports[3]	Figure IWD-2500-1	VT-3		Integral attachment		
D1.60	Integral Attachment-Shock Absorbers[3]	Figure IWD-2500-1	VT-3		Integral attachment		

NOTES:

(1) The system boundary extends up to and including the first normally closed valve or valve capable of automatic closure as required to perform the safety-related system function.
(2) The system hydrostatic test shall be conducted at or near the end of each inspection interval or during the same inspection period of each inspection interval for Inspection Program B.
(3) In the case of multiple components within a system of similar design, function, and service, the intergral attachment of only one of the multiple components shall be examined. The integral attachments selected for examination shall correspond to those component supports selected by IWF-2510(b).
(4) There are no exemptions or exclusions from these requirements except as specified in IWA-5214(c).
(5) A system hydrostatic test (IWD-5223) and accompanying VT-2 examination are acceptable in lieu of the system pressure test (IWD-5221) and VT-2 examination.

B-B, SYSTEMS IN SUPPORT OF EMERGENCY CORE COOLING, CONTAINMENT HEAT REMOVAL, ATMOSPHERE CLEANUP, AND REACTOR RESIDUAL HEAT REMOVAL

Item No.	Parts Examined	Test And Examination Requirements	Examination Method	Extent and Frequency of Examination: Each Period	Extent and Frequency of Examination: Each Interval	Relief Request	Comments
D2.10	Pressure Retaining Components[1]	IWA-5000/ IWD-5222[5]	VT-2	Pressure retaining boundary[2]		RR-50,51	
		IWA-5000/ IWD-5223[5]	VT-2		Pressure retaining boundary[2]		
D2.20	Integral Attachment-Component Supports and Restraints[3]	Figure IWD-2500-1	VT-3		Integral attachment		
D2.30	Integral Attachment-Mechanical and Hydraulic Snubbers[3]	Figure IWD-2500-1	VT-3		Integral attachment		
D2.40	Integral Attachment-Spring Type Supports[3]	Figure IWD-2500-1	VT-3		Integral attachment		
D2.50	Integral Attachment-Constant Load Type Supports[3]	Figure IWD-2500-1	VT-3		Integral attachment		
D2.60	Integral Attachment-Shock Absorbers[3]	Figure IWD-2500-1	VT-3		Integral attachment		

NOTES:

(1) The system boundary extends up to and including the first normally closed valve or valve capable of automatic closure as required to perform the safety-related system function.
(2) The system hydrostatic test shall be conducted at or near the end of each inspection interval or during the same inspection period of each inspection interval for Inspection Program B.
(3) In the case of multiple components within a system of similar design, function, and service, the integral attachment of only one of the multiple components shall be examined. The integral attachments selected for examination shall correspond to those component supports selected by IWF-2510(b).
(4) There are no exemptions or exclusions from these requirements except as specified in IWA-5214(c).
(5) A system hydrostatic test (IWD-5223) and accompanying VT-2 examination are acceptable in lieu of the system pressure test (IWD-5222) and VT-2 examination.

D-C, SYSTEMS IN SUPPORT OF RESIDUAL HEAT REMOVAL FROM SPENT FUEL STORAGE POOL

Item No.	Parts Examined	Test And Examination Requirements	Examination Method	Extent and Frequency of Examination: Each Period	Extent and Frequency of Examination: Each Interval	Relief Request	Comments
D3.10	Pressure Retraining Components[1]	IWA-5000/ IWD-5221[5]	VT-2	Pressure retaining boundary[2]		RR-50,53	
		IWA-5000/ IWD-5223[5]	VT-2		Pressure retaining boundary[2]	RR-53	
D3.20	Integral Attachment Component Supports and Restraints[3]	Figure IWD-2500-1	VT-3		Integral attachment		
D3.30	Integral Attachment-Mechanical and Hydraulic Snubbers[3]	Figure IWD-2500-1	VT-3		Integral attachment		
D3.40	Integral Attachment-Spring Type Supports[3]	Figure IWD-2500-1	VT-3		Integral attachment		
D3.50	Integral Attachment-Constant Load Type Supports[3]	Figure IWD-2500-1	VT-3		Integral attachment		
D3.60	Integral Attachment-Shock Absorbers[3]	Figure IWD-2500-1	VT-3		Integral attachment		

NOTES:

(1) The system boundary extends up to and including the first normally closed valve or valve capable of automatic closure as required to perform the safety-related system function.
(2) The system hydrostatic test shall be conducted at or near the end of each inspection interval or during the same inspection period of each inspection interval for Inspection Program B.
(3) In the case of multiple components within a system of similar design, function, and service, the integral attachment of only one of the multiple components shall be examined. The integral attachments selected for examination shall correspond to those component supports selected by IWF-2510(b).
(4) There are no exemptions or exclusions from these requirements except as specified in IWA-5214(c).
(5) A system hydrostatic test (IWD-5223) and accompanying VT-2 examination are acceptable in lieu of the system pressure test (IWD-5221) and VT-2 examination.

Relief Request No.	Examination Area
RR-32	Volumetric exam of RHR heat exchanger nozzle inner radius
RR-33	Relief request withdrawn
RR-34	Volumetric exam of Class 2 piping welds
RR-35	Technique for volumetric exam of thin-wall piping
RR-36	Volumetric exam of Class 2 thin-wall piping
RR-37	Volumetric exam of small-diameter Class 2 piping
RR-38	Subsection IWE
RR-39	Mechanized volumetric examination of pressure-retaining shell and head welds in the reactor vessel outside the beltline region
RR-40	Notch length in basic ultrasonic calibration blocks for examination of vessel welds
RR-41	Calibration blocks for reactor vessel nozzle-to-safe-end welds
RR-42	Volumetric examination of nozzle inner radius section for steam generator inlet and outlet nozzles
RR-43	VT-4 visual examination of snubbers
RR-44	Class 2 piping hydrostatically tested to Class 1 requirements
RR-45	Relief request withdrawn
RR-46	System pressure test on Class 2 components
RR-47	Relief request withdrawn
RR-48	Relief request withdrawn

Relief Request No.	Examination Area
RR-49	System pressure test on Class 3 vertical pit type pumps
RR-50	System pressure test on Class 3 components
RR-51	Class 3 system functional test on systems subjected to Examination Category D-B requirements
RR-52	Reactor Vessel integrally welded attachments
RR-53	Class 3 hydrostatic test on Spent Fuel Cooling and Purification
RR-54	Relief request withdrawn conditionally
RR-55	Intentionally blank
RR-56	Intentionally blank

VEGP-1

RR-12

Component or Relief Area

Volumetric examination of pressure-retaining welds in pressurizer (Class 1).

Requirement from which Relief is Requested

Item No. B2.11, Category B-B, requires a volumetric examination of the weld volume shown in Fig. IWB-2500-1. Item No. B3.110, Category B-D, requires a volumetric examination of the weld volume shown in Fig. IWB- 2500-7(b). Item No. B5.40, Category B-F, requires a volumetric and surface examination of the volume and area shown in Fig. IWB-2500-8. Each examination requires 100% of weld length be covered. Relief is requested from performing a 100% ultrasonic examination of the weld length due to physical limitations which prevent complete examination coverage of the welds.

Basis for Relief

Geometric configuration presents physical limitations which prevent complete coverage of welds by ultrasonic examination. The welds on which a complete Code examination cannot be accomplished are listed in Attachment 1.

Alternate Examination

The required Code surface examination will be performed on the nozzle to safe-end welds. An ultrasonic examination will be performed on the affected welds to the extent shown in Attachment 1. In addition, a surface examination will be performed on the head-to-nozzle welds to supplement the ultrasonic examinations.

VEGP-1

RR-32

Component or Relief Area

Examination of (1) the nozzle inner radii and (2) the reinforcing plate-to-vessel welds of the Residual Heat Removal (RHR) heat exchangers, 11205-E6-001 and 002 (Class 2).

Examination Area Identification Numbers include IR01, IR02, W09, W10, W011, and W012 for each of the subject heat exchangers.

Requirement From Which Relief Is Requested

(1) Item No. C2.22, Category C-B, Table IWC-2500-1 of ASME Section XI requires a volumetric examination of the inner radius section of pressure retaining nozzles (greater than 12-inch nominal pipe size) in vessels with nominal wall thickness greater than 1/2-inch.

(2) Item No. C2.31, Category C-B, Table IWC-2500-1 requires a surface examination of the reinforcing plate-to-vessel welds in vessels greater than 1/2 inch nominal wall thickness.

Relief is requested from the above examination requirements.

Basis for Relief

(1) Figure No. IWC-2500-4(c) of ASME Section XI which constitutes the examination requirement for Examination Area Identification Numbers IR01 and IR02 does not illustrate the nozzle design of the VEGP-1 RHR Heat Exchangers. The configuration of the nozzles at VEGP-1 differs from the configuration depicted in the Code figure. Attachment 1 depicts the configuration at VEGP-1. Although the reinforcing plate welded to the vessel has a rounded configuration in the flow path, it is not a true "nozzle inner radius" when compared with the configuration in Figure No. IWC-2500-4(c). It is not practical to perform an inner radius ultrasonic examination since the interface between the reinforcing plate and the RHR Heat Exchanger vessel wall precludes an adequate volumetric examination.

Basis for Relief (Cont'd)

(2) Figure No. IWC-2500-4(c) of ASME Section XI which constitutes the examination requirement for Examination Area Identification Numbers W09, W10, W011, and W012 does not illustrate the reinforcing plate-to-vessel design of the VEGP-1 RHR Heat Exchangers. Refer to Attachment 1 for the VEGP-1 configuration. The reinforcing plate at VEGP-1 is welded to the inside diameter of the heat exchanger wall with no nozzle-to-reinforcing plate contact (welds). The reinforcing plate-to-vessel welds are inaccessible. Therefore, it is impractical to perform a surface examination on the reinforcing plate-to-vessel welds W09, W10, W011, and W012 due to their inaccessibility.

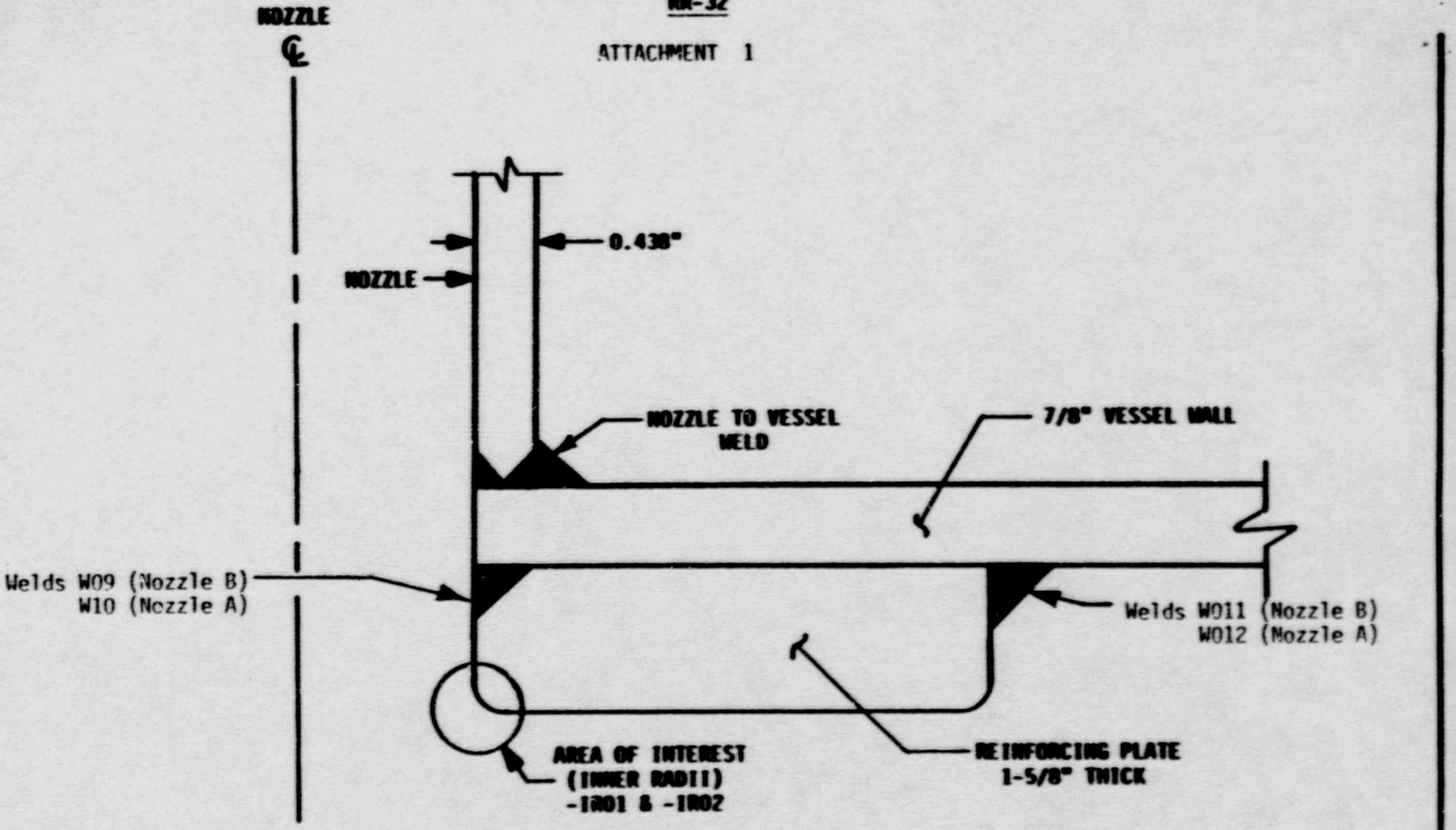
For the reasons discussed above, GPC has determined that implementation of the Code requirements is impractical. Accordingly, relief from the Code requirements is sought from the NRC as allowed by 10 CFR 50.55a (g) (5) (iii).

Alternate Examination in Lieu of ASME Section XI Requirements

(1) As discussed above, due to the lack of true nozzle inner radii, an adequate ultrasonic examination cannot be performed for Examination Area Identification Numbers IR01 and IR02 for the VEGP-1 RHR Heat Exchangers due to the interface between the reinforcing plate and the RHR heat exchanger vessel wall. Those examination areas are to be deleted from the inservice inspection plan document since true nozzle inner radii do not exist.

(2) Due to their inaccessibility, no surface examination of the reinforcing plate-to-vessel welds W09, W10, W011, and W012 can be performed. No alternate examination, e.g., volumetric examination, can be performed or is proposed due to the configuration involved. The interface between the reinforcing plate and the RHR heat exchanger vessel wall precludes an adequate volumetric examination from being performed for the aforementioned welds. No compensating increase in the level of quality and safety would be realized should an alternate examination, e.g., volumetric examination, be performed.

ATTACHMENT 1



RESIDUAL HEAT REMOVAL HEAT EXCHANGER
NOZZLE TO VESSEL WELDS
(NOT TO SCALE)

VEGP-1

RR-45

Relief Request Withdrawn

VEGP-1

RR-47

Relief Request Withdrawn

VEGP-1

RR-48

Relief Request Withdrawn

VEGP-1

RR-48

Attachment 1

Relief Request Withdrawn

VEGP-1

RR-54

Relief Request Withdrawn Conditionally

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