Progress Energy

JUN 10 2008

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

Subject: Brunswick Steam Electric Plant, Unit Nos. 1 and 2
Docket Nos. 50-325 and 50-324/License Nos. DPR-71 and DPR-62
Response to Request for Additional Information Regarding Relief Request ISI-02 for the Fourth 10-Year Inservice Inspection Interval (NRC TAC Nos. MD7557 and MD7558)

Reference: Letter from Randy C. Ivey (CP&L), Request for Approval of Risk-Informed Inservice Inspection Program for the Fourth 10-Year Interval, dated December 19, 2007, ADAMS Accession Number ML073620362

Ladies and Gentlemen:

By letter dated December 19, 2007, Carolina Power & Light Company (CP&L), now doing business as Progress Energy Carolinas, Inc., submitted a relief request extending the previously approved Risk-Informed Inservice Inspection (RI-ISI) Program for the Brunswick Steam Electric Plant (BSEP), Unit Nos. 1 and 2, to the fourth 10-year inservice inspection interval. On March 26, 2008, via electronic mail, the NRC requested additional information regarding relief request ISI-02. Responses to those NRC questions are enclosed.

No regulatory commitments are contained in this letter. Please refer any questions regarding this submittal to Mr. Gene Atkinson, Supervisor - Licensing/Regulatory Programs (Acting), at (910) 457-2056.

Sincerely,

Randy C Ivey

Randy C. Ivey
Manager - Support Services
Brunswick Steam Electric Plant

Progress Energy Carolinas, Inc.
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A047
NRR

WRM/wrm

Enclosures:

1. Response to NRC Request for Additional Information Regarding Relief Request ISI-02
2. Relief Request ISI-02 (Revised)

cc (with enclosures):

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Response to NRC Request for Additional Information Regarding Relief Request ISI-02

By letter dated December 19, 2007, Carolina Power & Light Company (CP&L), now doing business as Progress Energy Carolinas, Inc., submitted a relief request extending the previously approved Risk-Informed Inservice Inspection (RI-ISI) Program for the Brunswick Steam Electric Plant (BSEP), Unit Nos. 1 and 2, to the fourth 10-year inservice inspection interval. On March 26, 2008, via electronic mail, the NRC requested additional information regarding relief request ISI-02. Responses to those NRC questions are provided below.

NRC Request 1:

On page 1 of the proposed relief request, the licensee stated that the fourth interval ISI program will be based on the ASME Code, 2001 Edition through the 2003 Addenda. However, Title 10, Code of Federal Regulation (10 CFR) part 50.55a(b)(2)(xxiv) prohibits the use of Appendix VIII, the supplements to Appendix VIII, and Article I-3000 of Section XI of the ASME Code, 2002 Addenda through the latest edition and addenda. This condition and limitation are applicable to ultrasonic examinations using the Performance Demonstration Initiative (PDI) program. Therefore, clarify whether Appendix VIII of the ASME Code, Section XI, will be used in any of the examinations performed under this relief request. If so, discuss whether the code of record for the ultrasonic examination needs to be revised specifically for the ultrasonic examinations of the welds in the RI-ISI program.

CP&L Response:

The reference to ASME Code, Section XI, 2001 Edition through the 2003 Addenda in this request was only to identify the Code of Record of the Inservice Inspection Program. CP&L understood that 10 CFR 50.55a(b)(2)(xxiv) prohibited the use of Appendix VIII, the supplements to Appendix VIII, and Article I-3000 of Section XI of the ASME Code, 2002 Addenda through the latest edition and addenda.

During the fourth inspection interval, CP&L will perform examination of risk-informed components in accordance with the Performance Demonstration Initiative (PDI) Program requirements and the applicable 10 CFR 50.55a modifications and limitations pertaining to the use of Appendix VIII. Relief Request ISI-02 has been revised to clarify the requirements for examining weldments within the scope of this request, a copy of which is provided in Enclosure 2.

NRC Request 2:

On page 3, Section 5.0, Proposed Alternative and Basis for Use, the licensee stated that all ASME Section XI piping components, regardless of risk classification, will continue to receive

Code required pressure testing as part of the current ASME Section XI program. Discuss the specific sub-article of the Code to which pressure testing will be conducted.

CP&L Response:

Since this relief request only applies to Class 1 components, system pressure tests will be performed in accordance with requirements specified in Examination Category B-P. For repair/replacement activities involving these components, the applicable requirements of Subarticle IWA-4500 will be met. In both cases, the pressure tests and visual (i.e., VT-2) examinations will be meet the applicable requirements specified in Articles IWA-5000 and IWB-5000.

NRC Request 3:

On page 3 of the proposed relief request, the licensee stated that the RI-ISI continues to meet Regulatory Guide 1.174. Discuss whether the RI-ISI meets Regulatory Guide 1.178, "An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis," and Standard Review Plan 3.9.8, "Standard Review Plan for Trial Use for the Review of Risk-Informed Inservice Inspection of Piping."

CP&L Response:

Regulatory Guide 1.178 is structured to follow the general four-element process, and is consistent for risk-informed applications and approaches identified in Regulatory Guide 1.174. Additionally, Regulatory Guide 1.178 focuses on the use of probabilistic risk assessment in support of a RI-ISI program consistent with Regulatory Guide 1.174. NUREG-0800, Chapter 3.9.8, is consistent with the approach for using probabilistic risk assessment in risk-informed decisions on plant-specific changes to the licensing basis described in Regulatory Guide 1.174 and provides acceptable methods for implementing a RI-ISI program described in Regulatory Guide 1.178.

Since the program at BSEP meets the applicable requirements of Regulatory Guide 1.174, and was developed in accordance with the NRC approved methodology (i.e., Electric Power Research Institute Report TR-112657, "Revised Risk-Informed Inservice Inspection Evaluation Procedure"), the proposed risk-informed program discussed in this request meets the applicable requirements of Regulatory Guide 1.178 and Standard Review Plan 3.9.8.

NRC Request 4:

For the proposed RI-ISI program applicable to the fourth ISI interval, confirm that no new welds have been added to or removed from the RI-ISI program that was approved by the NRC for the third ISI interval as shown in Tables 1 and 2 of the relief request. If welds have been added to

the third ISI interval RI-ISI program, provide technical basis for the addition and identify the welds.

CP&L Response:

No new welds were added to or removed from the program since approval was obtained for the third inspection interval.

NRC Request 5:

[a.] Discuss whether all welds in Tables 1 and 2 of the relief request have been completed or inspected during the third ISI interval. [b.] Discuss inspection results. [c.] Discuss any problems encountered when implementing the RI-ISI program or when performing the examinations.

CP&L Response:

The RI-ISI Program was implemented at BSEP at the beginning of the second period of the third inspection interval. For this reason, it was stated in the NRC's Safety Evaluation dated November 28, 2001, that BSEP would complete 72.3 percent of Unit 1 and 91 percent of Unit 2 risk-informed examinations during the second and third inspection periods.

For the Unit 1, the required risk-informed examinations have been completed. The results of the examinations were found to be satisfactory. No problems were encountered implementing the risk-informed program on Unit 1. To support the examination of some of the welds, conditioning was required to obtain better examination coverage. In addition, some welds were considered limited examinations due to the configuration of the weld.

For Unit 2, not all of the required risk-informed examinations have been completed. As allowed by paragraph IWA-2430(d) and IWB-2412(b), the third inspection interval and period has been extended for one year. This extension will allow the examination of the remaining seven weldments during the B219R1 refueling outage which is currently scheduled for spring 2009.

The remaining required risk-informed examinations have been completed, and their results were found to be acceptable. No problems were encountered during the implementation of this program. To support the examination of some of the welds, conditioning was required to obtain better examination coverage. In addition, some welds were considered limited examinations due to the configuration of the weld.

Relief Request ISI-02 (Revised)

10 CFR 50.55a Request Number ISI-02

Proposed Alternative In Accordance with 10 CFR 50.55a(a)(3)(i)

- Acceptable Level of Quality and Safety -

1. ASME Code Component(s) Affected

Code Class:	Class 1
Category:	B-J and B-F
System:	See Notes (pages 8 and 13)
Affected Components:	Pressure Retaining Piping

2. Applicable Code Edition and Addenda

The Code of Record for the fourth 10-year inservice inspection interval at the Brunswick Steam Electric Plant (BSEP), Unit Nos. 1 and 2, is the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, Section XI, 2001 Edition with 2003 Addenda.

The fourth 10-year inservice inspection interval began on May 11, 2008, and will conclude on May 10, 2018.

3. Applicable Code Requirement

The following Code requirements are paraphrased from the 2001 Edition through the 2003 Addenda of the ASME Code, Section XI:

Table IWB-2500-1, Examination Category B-F, requires volumetric and surface examinations on all welds for Items B5.10.

Table IWB-2500-1, Examination Category B-J, requires volumetric and/or surface examinations on a sample of welds for items B9.11, B9.21, B9.31, B9.32, and B9.40. The weld population selected for inspection includes the following:

1. All terminal ends in each pipe or branch run connected to vessels.

2. All terminal ends and joints in each pipe or branch run connected to other components where the stress levels exceed either of the following limits under loads associated with specific seismic events and operational conditions:

   a. primary plus secondary stress intensity range of $2.4S_m$ for ferritic steel and austenitic steel.

   b. cumulative usage factor U of 0.4.

3. All dissimilar metal welds not covered under Category B-F.

4. Additional piping welds so that the total number of circumferential butt welds, branch connections, or socket welds selected for examination equals 25 percent of the circumferential butt welds, branch connections, or socket welds in the reactor coolant piping system. This total does not include welds exempted by IWB-1220 or welds in Item No. B9.22.

4. Reason for Request

ASME Code, Section XI, Examination Categories B-F and B-J currently contain the requirements for the nondestructive examination of Class 1 pressure retaining welds. The previously approved Risk-Informed Inservice Inspection (RI-ISI) program (i.e., Reference 1) was substituted for Class 1 piping (Examination Categories B-F and B-J) in accordance with 10 CFR 50.55a(a)(3)(i) by alternatively providing an acceptable level of quality and safety. The purpose of this request is for the continued application of the RI-ISI methodology on Class 1 pressure retaining welds during the fourth inspection interval. Other non-related portions of the ASME Code, Section XI, will be unaffected. For example, existing pressure testing requirements remain unchanged.

In accordance with 10 CFR 50.55a(a)(3)(i), relief is requested on the basis that the proposed alternative using Electric Power Research Institute (EPRI) Topical Report TR-112657, "Risk-Informed Inservice Inspection Evaluation Procedure," (i.e., Reference 1) will provide an acceptable level of quality and safety.

5. Proposed Alternative and Basis for Use

In accordance with 10 CFR 50.55a(a)(3)(i), Carolina Power & Light Company (CP&L), now doing business as Progress Energy Carolinas, Inc., requests NRC approval of the BSEP RI-ISI Program as an alternative to the ASME Code, Section XI, 2001 Edition with 2003 Addenda inspection requirements for Class 1 Examination Category B-J and B-F pressure retaining welds. Examination of these welds will be in accordance with the applicable

requirements of the Performance Demonstration Initiative (PDI) Program and the applicable modifications and limitations specified in 10 CFR50.55a.

The current BSEP RI-ISI Program was developed in accordance with the EPRI methodology contained in EPRI Topical Report TR-112657, "Revised Risk-Informed Inservice Inspection Evaluation Procedure," (i.e., Reference 1). The current BSEP RI-ISI Program was approved by NRC letter dated November 28, 2001, (i.e., Reference 2) for use during the second and third periods of the third 10-year inspection interval.

The fourth interval RI-ISI Program will be a continuation of the current application and has been updated consistent with the intent of NEI 04-05, "Living Program Guidance to Maintain Risk-Informed Inservice Inspection Programs for Nuclear Plant Piping Systems," (i.e., Reference 3) and continues to meet EPRI TR-112657 and Regulatory Guide 1.174 (i.e., Reference 4) risk acceptance criteria.

In addition to the risk-informed evaluation, selection, and examination procedure, all ASME Code, Section XI components, regardless of risk classification, will continue to receive Code-required pressure testing as part of the current ASME Code, Section XI program. Visual examinations (i.e., VT-2) are implemented in accordance with the BSEP pressure testing program, which remains unaffected by the RI-ISI Program.

6. Duration of Proposed Alternative

Use of the alternative is proposed for the fourth 10-year inservice inspection interval, which began on May 11, 2008, and will conclude on May 10, 2018.

7. Precedents

The NRC previously approved the BSEP RI-ISI Program, by Reference 2, for use during the third 10-year inservice inspection interval.

8. References

1. Electric Power Research Institute Topical Report TR-112657, Revision B-A, "Revised Risk-Informed Inservice Inspection Evaluation Procedure," Palo Alto, CA: 1999.

2. NRC letter dated November 28, 2001, "Brunswick Steam Electric Plant, Unit Nos. 1 and 2– Safety Evaluation for the Risk-Informed Inservice Inspection (RI-ISI) Program, TAC Nos. MB1760 and MB1761."

3. NEI 04-05, "Living Program Guidance to Maintain Risk-Informed Inservice Inspection Programs for Nuclear Plant Piping Systems," dated April 2004.

4. NRC Regulatory Guide 1.174, "An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis."

5. CP&L Letter dated April 20, 2001, "Brunswick Steam Electric Plant, Unit Nos. 1 and 2, Third Ten Year Inservice Inspection Interval – Request for Approval of Risk-Informed Inservice Inspection Program."

6. Electric Power Research Institute, Risk-Informed Inservice Inspection (RI-ISI) Report for the Brunswick Steam Electric Plant, December 2007.

Table 1

Unit 1 Inspection Location Selection Comparison Between Existing and New RI-ISI Interval by Risk Category

System[1]	Risk		Consequence Rank	Failure Potential		Code Category	Weld Count	1st Approved RI-ISI Interval		New RI-ISI Interval	
	Category	Rank		DMs	Rank			RI-ISI	Other[2]	RI-ISI	Other[2]
RPV	4 (2)	Medium (High)	High	None (IGSCC)	Low (Medium)	B-F	2	1[3]		1[3]	
RPV	4	Medium	High	None	Low	B-F	3	1		1	
RPV	5	Medium	Medium	TASCS	Medium	B-F	2	1		1	
RPV	6	Low	Medium	None	Low	B-F	2	0		0	
						B-J	4	0		0	
RCR	2	High	High	CC	Medium	B-F	10	3		3	
RCR	4(2)	Medium (High)	High	None (IGSCC)	Low (Medium)	B-F	2	0		0	
						B-J	64	7[4]		7[4]	
RCR	4	Medium	High	None	Low	B-J	35	4		4	
RWCU	4(1)	Medium (High)	High	None (IGSCC, FAC)	Low (High)	B-F	1	1[5]		1[5]	
RWCU	4 (1)	Medium (High)	High	None (FAC)	Low (High)	B-J	3	1		1	
RWCU	4(2)	Medium (High)	High	None (IGSCC)	Low (Medium)	B-J	1	1[6]		1[6]	
RWCU	4	Medium	High	None	Low	B-J	13	2		2	
RWCU	6	Low	Medium	None	Low	B-J	6	0		0	
RCIC	4 (1)	Medium (High)	High	None (FAC)	Low (High)	B-J	11	1		1	
RCIC	4	Medium	High	None	Low	B-J	3	1		1	
RCIC	6 (3)	Low (High)	Medium	None (FAC)	Low (High)	B-J	1	0		0	
RCIC	6	Low	Medium	None	Low	B-J	22	0		0	

Table 1

Unit 1 Inspection Location Selection Comparison Between Existing and New RI-ISI Interval by Risk Category

System[1]	Risk		Consequence Rank	Failure Potential		Code Category	Weld Count	1st Approved RI-ISI Interval		New RI-ISI Interval	
	Category	Rank		DMs	Rank			RI-ISI	Other[2]	RI-ISI	Other[2]
RHR	4 (2)	Medium (High)	High	None (IGSCC)	Low (Medium)	B-F	3	0		0	
						B-J	2	1[7]		1[7]	
RHR	4	Medium	High	None	Low	B-J	11	2		2	
RHR	7	Low	Low	None	Low	B-J	23	0		0	
CS	2	High	High	CC	Medium	B-F	2	1		1	
CS	4	Medium	High	None	Low	B-F	2	0		0	
						B-J	39	5		5	
CS	7	Low	Low	None	Low	B-J	6	0		0	
HPCI	4	Medium	High	None	Low	B-J	28	3		3	
HPCI	6	Low	Medium	None	Low	B-J	7	0		0	
MS	4	Medium	High	None	Low	B-J	109	11		11	
MS	6	Low	Medium	None	Low	B-J	4	0		0	
FW	2 (1)	High (High)	High	TASCS, CC (IGSCC, FAC)	Medium (High)	B-F	2	0		0	
FW	2 (1)	High (High)	High	TASCS (IGSCC, FAC)	Medium (High)	B-F	2	1[8]		1[8]	
FW	2 (1)	High (High)	High	CC (IGSCC, FAC)	Medium (High)	B-F	2	1[9]		1[9]	
FW	2 (1)	High (High)	High	TASCS, CC (FAC)	Medium (High)	B-J	4	2		2	

Table 1

Unit 1 Inspection Location Selection Comparison Between Existing and New RI-ISI Interval by Risk Category

System[1]	Risk		Consequence Rank	Failure Potential		Code Category	Weld Count	1st Approved RI-ISI Interval		New RI-ISI Interval	
	Category	Rank		DMs	Rank			RI-ISI	Other[2]	RI-ISI	Other[2]
FW	2 (1)	High (High)	High	TASCS (FAC)	Medium (High)	B-J	6	2		2	
FW	2 (1)	High (High)	High	CC (FAC)	Medium (High)	B-J	4	0		0	
FW	2 (2)	High (High)	High	TASCS (IGSCC)	Medium (Medium)	B-J	2	1[10]		1[10]	
FW	4 (1)	Medium (High)	High	None (IGSCC, FAC)	Low (High)	B-F	2	1[11]		1[11]	
FW	4 (1)	Medium (High)	High	None (FAC)	Low (High)	B-J	63	7		7	
FW	4 (2)	Medium (High)	High	None (IGSCC)	Low (Medium)	B-J	2	1[12]		1[12]	
FW	5 (3)	Medium (High)	Medium	TASCS (FAC)	Medium (High)	B-J	1	1		1	
FW	6 (3)	Low (High)	Medium	None (FAC)	Low (High)	B-J	1	0		0	
CRD	4	Medium	High	None	Low	B-F	1	1		1	
JPI	4 (2)	Medium (High)	High	None (IGSCC)	Low (Medium)	B-J	2	1[13]		1[13]	

Table 1 Notes

1. System designations are as follows:
   CRD – Control Rod Drive
   CS – Core Spray
   HPCI – High Pressure Coolant Injection
   FW - Feedwater
   JPI – Jet Pump Instrumentation
   MS – Main Steam (i.e., Nuclear Boiler)
   RCIC – Reactor Core Isolation Cooling
   RCR – Reactor Coolant Recirculation
   RHR – Residual Heat Removal
   RPV – Reactor Pressure Vessel
   RWCU – Reactor Water Clean-up
2. The column labeled "Other" is generally used to identify augmented inspection program locations credited per Section 3.6.5 of EPRI TR-112657. The EPRI methodology allows augmented inspection program locations to be credited if the inspection locations selected strictly for RI-ISI purposes produce less than a 10% sampling of the overall Class 1 weld population. As stated in Section 3.5 of Reference 4, BSEP achieved greater than a 10% sampling without relying on augmented inspection program locations beyond those selected by the RI-ISI process. The "Other" column has been retained in this table solely for uniformity purposes with the other RI-ISI application template submittals.
3. This one weld was selected for examination by both the Intergranular Stress Corrosion Cracking (IGSCC) Program and the RI-ISI Program. Since IGSCC was the only potential damage mechanism for this weld, the IGSCC examination will be credited towards both programs.
4. These seven welds were selected for examination by both the IGSCC Program and the RI-ISI Program. Since IGSCC was the only damage mechanism identified for these welds, the IGSCC examinations will be credited toward both programs.
5. This one weld was selected for examination by both the IGSCC Program and the RI-ISI Program. Since IGSCC was the only potential damage mechanism for this weld, the IGSCC examination will be credited towards both programs.
6. This one weld was selected for examination by both the IGSCC Program and the RI-ISI Program. Since IGSCC was the only potential damage mechanism for this weld, the IGSCC examination will be credited towards both programs
7. This one weld was selected for examination by both the IGSCC Program and the RI-ISI Program. Since IGSCC was the only potential damage mechanism for this weld, the IGSCC examination will be credited towards both programs.

8. This one weld was selected for examination by both the IGSCC Program and the RI-ISI Program. Since thermal stratification, cycling and striping (TASCS) was identified along with IGSCC as a potential damage mechanism for this weld, the examination will include the requirements identified in EPRI TR-112657 for TASCS examinations in order to be credited towards both the IGSCC and RI-ISI programs.
9. This one weld was selected for examination by both the IGSCC Program and the RI-ISI Program. Since crevice corrosion was identified along with IGSCC as a potential damage mechanism for this weld, the examination will include the requirements identified in EPRI TR-112657 for crevice corrosion examinations in order to be credited towards both the IGSCC and RI-ISI programs.
10. This one weld was selected for examination by both the IGSCC Program and the RI-ISI Program. Since TASCS was identified along with IGSCC as a potential damage mechanism for this weld, the examination will include the requirements identified in EPRI TR-112657 for TASCS examinations in order to be credited towards both the IGSCC and RI-ISI programs.
11. This one weld was selected for examination by both the IGSCC Program and the RI-ISI Program. Since IGSCC was the only potential damage mechanism for this weld, the IGSCC examination will be credited towards both programs.
12. This one weld was selected for examination by both the IGSCC Program and the RI-ISI Program. Since IGSCC was the only potential damage mechanism for this weld, the IGSCC examination will be credited towards both programs.
13. This one weld was selected for examination by both the IGSCC Program and the RI-ISI Program. Since IGSCC was the only potential damage mechanism for this weld, the IGSCC examination will be credited towards both programs.

Table 2

Unit 2 Inspection Location Selection Comparison Between Existing and New RI-ISI Interval by Risk Category

System[1]	Risk		Consequence Rank	Failure Potential		Code Category	Weld Count	1st Approved RI-ISI Interval		New RI-ISI Interval	
	Category	Rank		DMs	Rank			RI-ISI	Other[2]	RI-ISI	Other[2]
RPV	4 (2)	Medium (High)	High	None (IGSCC)	Low (Medium)	B-F	2	1[3]		1[3]	
RPV	4	Medium	High	None	Low	B-F	3	1		1	
RPV	5	Medium	Medium	TASCS	Medium	B-F	2	1		1	
RPV	6	Low	Medium	None	Low	B-F	2	0		0	
						B-J	4	0		0	
RCR	2	High	High	CC	Medium	B-F	10	3		3	
RCR	4(2)	Medium (High)	High	None (IGSCC)	Low (Medium)	B-F	2	2[4]		2[4]	
						B-J	64	5[5]		5[5]	
RCR	4	Medium	High	None	Low	B-J	42	5		5	
RWCU	4(1)	Medium (High)	High	None (FAC)	Low (High)	B-J	4	1		1	
RWCU	4 (2)	Medium (High)	High	None (IGSCC)	Low (Medium)	B-J	1	1[6]		1[6]	
RWCU	4	Medium	High	None	Low	B-J	12	2		2	
RWCU	6 (5)	Low (Medium)	Medium	None (IGSCC)	Low (Medium)	B-F	1	0		0	
RWCU	6	Low	Medium	None	Low	B-J	6	0		0	
RCIC	4 (1)	Medium (High)	High	None (FAC)	Low (High)	B-J	12	2		2	
RCIC	4	Medium	High	None	Low	B-J	3	1		1	
RCIC	6 (3)	Low (High)	Medium	None (FAC)	Low (High)	B-J	1	0		0	

Table 2

Unit 2 Inspection Location Selection Comparison Between Existing and New RI-ISI Interval by Risk Category

System[1]	Risk		Consequence Rank	Failure Potential		Code Category	Weld Count	1st Approved RI-ISI Interval		New RI-ISI Interval	
	Category	Rank		DMs	Rank			RI-ISI	Other[2]	RI-ISI	Other[2]
RCIC	6	Low	Medium	None	Low	B-J	22	0		0	
RHR	4 (2)	Medium (High)	High	None (IGSCC)	Low (Medium)	B-F	3	0		0	
						B-J	2	1[7]		1[7]	
RHR	4	Medium	High	None	Low	B-J	11	2		2	
RHR	7	Low	Low	None	Low	B-J	22	0		0	
CS	2 (2)	High (High)	High	CC (IGSCC)	Medium (Medium)	B-F	2	1[8]		1[8]	
CS	4 (2)	Medium (High)	High	None (IGSCC)	Low (Medium)	B-F	2	1[9]		1[9]	
CS	4	Medium	High	None	Low	B-J	39	4		4	
CS	7	Low	Low	None	Low	B-J	6	0		0	
HPCI	4	Medium	High	None	Low	B-J	26	3		3	
HPCI	6	Low	Medium	None	Low	B-J	8	0		0	
MS	4	Medium	High	None	Low	B-J	112	12		12	
MS	6	Low	Medium	None	Low	B-J	4	0		0	
FW	2 (1)	High (High)	High	TASCS, CC (FAC)	Medium (High)	B-J	2	1		1	
FW	2 (1)	High (High)	High	TASCS (FAC)	Medium (High)	B-J	8	2		2	
FW	2 (1)	High (High)	High	CC (FAC)	Medium (High)	B-J	2	0		0	
FW	4 (1)	Medium (High)	High	None (FAC)	Low (High)	B-J	56	6		6	
FW	5 (3)	Medium (High)	Medium	TASCS (FAC)	Medium (High)	B-J	1	1		1	

Table 2

Unit 2 Inspection Location Selection Comparison Between Existing and New RI-ISI Interval by Risk Category

System[1]	Risk		Consequence Rank	Failure Potential		Code Category	Weld Count	1st Approved RI-ISI Interval		New RI-ISI Interval	
	Category	Rank		DMs	Rank			RI-ISI	Other[2]	RI-ISI	Other[2]
FW	6 (3)	Low (High)	Medium	None (FAC)	Low (High)	B-J	1	0		0	
CRD	4	Medium	High	None	Low	B-F	1	1		1	
JPI	4 (2)	Medium (High)	High	None (IGSCC)	Low (Medium)	B-J	2	1[10]		1[10]	

Table 2 Notes

1. System designations are as follows:
   CRD – Control Rod Drive
   CS – Core Spray
   HPCI – High Pressure Coolant Injection
   FW - Feedwater
   JPI – Jet Pump Instrumentation
   MS – Main Steam (i.e., Nuclear Boiler)
   RCIC – Reactor Core Isolation Cooling
   RCR – Reactor Coolant Recirculation
   RHR – Residual Heat Removal
   RPV – Reactor Pressure Vessel
   RWCU – Reactor Water Clean-up
2. The column labeled "Other" is generally used to identify augmented inspection program locations credited per Section 3.6.5 of EPRI TR-112657. The EPRI methodology allows augmented inspection program locations to be credited if the inspection locations selected strictly for RI-ISI purposes produce less than a 10% sampling of the overall Class 1 weld population. As stated in Section 3.5 of Reference 4, BSEP achieved greater than a 10% sampling without relying on augmented inspection program locations beyond those selected by the RI-ISI process. The "Other" column has been retained in this table solely for uniformity purposes with the other RI-ISI application template submittals.
3. This one weld was selected for examination by both the IGSCC Program and the RI-ISI Program. Since IGSCC was the only potential damage mechanism for this weld, the IGSCC examination will be credited towards both programs.
4. These two welds were selected for examination by both the IGSCC Program and the RI-ISI Program. Since IGSCC was the only damage mechanism identified for these welds, the IGSCC examinations will be credited toward both programs.
5. These five welds were selected for examination by both the IGSCC Program and the RI-ISI Program. Since IGSCC was the only potential damage mechanism for this weld, the IGSCC examinations will be credited towards both programs.
6. This one weld was selected for examination by both the IGSCC Program and the RI-ISI Program. Since IGSCC was the only potential damage mechanism for this weld, the IGSCC examination will be credited towards both programs
7. This one weld was selected for examination by both the IGSCC Program and the RI-ISI Program. Since IGSCC was the only potential damage mechanism for this weld, the IGSCC examination will be credited towards both programs.

8. This one weld was selected for examination by both the IGSCC Program and the RI-ISI Program. Since crevice corrosion was identified along with IGSCC as a potential damage mechanism for this weld, the examination will include the requirements identified in EPRI TR-112657 for crevice corrosion examinations in order to be credited towards both the IGSCC and RI-ISI programs.
9. This one weld was selected for examination by both the IGSCC Program and the RI-ISI Program. Since IGSCC was the only potential damage mechanism for this weld, the IGSCC examination will be credited towards both programs.
10. This one weld was selected for examination by both the IGSCC Program and the RI-ISI Program. Since IGSCC was the only potential damage mechanism for this weld, the IGSCC examination will be credited towards both programs.