CATEGORY 1

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SUBJECT: Requests approval of revised relief request 14.Purpose of rev is to clarify discrepancies among original FPL request, sussequent NRC RAIs & FPL RAI responses.

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Florida Power & Light Company, 6351 S. Ocean Drive, Jensen Beach, FL 34957

November 19, 1998

L-98-229
10 CFR 50.4
10 CFR 50.55a

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D. C. 20555

RE: St. Lucie Unit 2
Docket No. 50-389
In-Service Inspection Plan
Second Ten-Year Interval
Revised Relief Request 14

Pursuant to 10 CFR 50.55a (a)(3), Florida Power and Light Company (FPL) requests approval of revised Relief Request 14. FPL has determined pursuant to 10 CFR 50.55a (a)(3) that the proposed alternatives would provide an acceptable level of quality and safety or that compliance with the specified requirements would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety. Relief Request 14 requested relief from repeating the sequence of component examinations established during the first ten-year interval. The exchange of correspondence between the NRC and FPL on Relief Request 14 has been in progress since 1993. The relief request was originally submitted with the second ten-year interval in-service inspection (ISI) program by letter L-93-191 dated August 3, 1993. On May 4, 1995, NRC issued a safety evaluation report (SER) approving the St. Lucie Unit 2 second interval ISI plan. However, the SER stated that Relief Request 14 required additional information and would be handled under separate correspondence. In response to requests for additional information (RAI) faxed to FPL on August 25, 1995, and February 21, 1996, FPL supplemented Relief Request 14 by FPL letters L-95-310A dated November 20, 1995, and L-97-65 dated March 3, 1997. On August 13, 1997, NRC approved Relief Request 14 for St. Lucie Unit 2.

The purpose of this revision is to clarify discrepancies among the original FPL request, subsequent NRC RAIs and the FPL RAI responses. In addition, a typographical error in the cover letter resulted in an inconsistency between the Steam Generator A and the Steam Generator B inspection schedules which required several changes in the relief request.

Attachment 1 is a summary of the discrepancies and the proposed corrections. The summary is a compilation of the original relief request, the NRC directives in the RAIs, and the resolution of the typographical error. Because of the discrepancies described above, the NRC SER can not be

integrated as written into the St. Lucie Unit 2 ISI program. In order to correct the discrepancies and clarify the relief request, a revised request for relief is provided as Attachment 2. Please contact us if there are any questions regarding this submittal.

Very truly yours,

J. A. Stall
Vice President
St. Lucie Plant

JAS/GRM

cc: Regional Administrator, Region II, USNRC
Senior Resident Inspector, USNRC, St. Lucie Plant

Item 1

Steam Generator "B" was substituted for "A" in the subject relief request authorized for use August 13, 1997. If implemented as worded, 14-17 years will elapse between examinations. *FPL proposes to perform Steam Generator "A" examinations in the second period and Steam Generator "B" examinations in the third period.*

Item 2

Discrepancies and proposed corrections are below for categories B-F, C-A, and C-B between the table that is included on page 3 of the Technical Letter Attachment (TLA) to the SER and what FPL proposed within the relief request or completed in the first exam period. Explanations of each follows;

Category B-F Discrepancy

	Examination Category	1st. Period 16% - 34%	2nd Period 50% – 67%	3rd Period 100% - 100%
Technical Letter	B-F (31) total	10 = 32%	+11 = 67%	+10 = 100%
FPL Proposed	B-F (31) total	14 = 45%	+ 7 = 68%	+10 = 100%

Examinations that had originally been proposed to be performed in a later period were done in the same period as the first interval with the exception of four pressurizer welds. The four pressurizer examinations were performed in the first period as authorized on page 2 of the TLR attachment. The remaining non-pressurizer examinations were performed in the same period as the first interval. The performance of the pressurizer examinations in the first period, as authorized, results in a program B percentage variation. The following table shows the schedule of examinations.

EXAMINATION CATEGORY B-F
Table 14-4(modified)

Item Identification	Code Category	Code Item Number	1st. Interval Schedule	2nd. Interval Schedule
RC-115-1501-771-A Elbow-Safe End	B-F	B5.130	1st (period)	1st (period)
RC-121-1501-771-B Elbow-Safe End	B-F	B5.130	1st	1st
RC-121-901-771 Safe End-Pipe	B-F	B5.130	1st	1st
RC-112-1501-771-C Elbow-Safe End	B-F	B5.130	1st	1st
RC-301-771 Nozzle-Safe End	B-F	B5.130	2nd	2nd
RC-501-771 Nozzle-Safe End	B-F	B5.130	1st	1st
503-671-B Safety Noz-Flange	B-F	B5.40	3rd	1st
503-671-C Safety Noz-Flange	B-F	B5.40	2nd	1st
RC-514-671 Safe End-Nozzle	B-F	B5.40	2nd	1st
RC-506-671 Nozzle-Safe End	B-F	B5.40	3rd	1st

Category B-F (continued)

Note: 4 items will be examined during an earlier period.
0 items will be examined during a later period.
27 items will be examined during the same period as first interval.

Examination Schedule:

	# of Items	# Items Req'd	1st. Period Items % 16% - 34%	2nd. Period Items % 50% - 67%	3rd. Period Items % 100% - 100%
PRZ	4	4	4 = 100%	+ 0 = 100%	+ 0 = 100%
OTHER	27	27	10 = 37%	+ 7 = 62%	+10 = 100%
Total	31	31	14 = 45%	+ 7 = 67%	+10 = 100%

Category C-A Discrepancy

	Examination Category	1st Period 16% - 34%	2nd Period 50% – 67%	3rd Period 100% - 100%
Technical Letter	C-A (15) total	2 = 13%	+ 6 = 53%	+ 7 = 100%
FPL Proposed	C-A (9) total	2 = 22%	+ 7 = 100%*	+ 0 = 100%

* Table 14-8 included within the relief request proposed the seven steam generator welds ***(it also included an addition error, listing the total welds to be examined in the second period as six)***

FPL proposed to perform all seven steam generator C-A examinations in the second period thus avoiding scaffolding twice in the interval. A recalculation shows that examination of the seven steam generator welds in the second period results in a program B percentage variation. ***Discrepancy # 1 affects this category also- if FPL performs all S/G exams in the third period as stated in the SER there will be a change to this table.***

EXAMINATION CATEGORY C-A
Table 14-8

Item Identification	Code Category	Code Item Number	1st. Interval Schedule	2nd. Interval Schedule
SG-2A-203-246 Ext. Ring-Tubesheet	C-A	C1.30	1st	2nd
SG-2A-101-241 Ext. Ring-Lower Shell	C-A	C1.10	1st	2nd
SG-2A-101-221 Cone-Upper Shell	C-A	C1.10	3rd	2nd
SG-2A-201-271 Top Head-Upper Shell	C-A	C1.20	3rd	2nd
SG-2A-106-201 Dome-Torus	C-A	C1.10	3rd	2nd
SG-2A-204-246 Stay-Tubesheet	C-A	C1.30	3rd	2nd
1-2701 Flange-Body	C-A	C1.10	3rd	1st
1-2701 Body-Tubesheet	C-A	C1.30	3rd	1st

Note: **Steam Generators** - Examination Category C-A, no examinations were conducted on the secondary side of steam generator 2B during the first inspection interval. All examinations were performed on steam generator 2A, and were distributed evenly between the three inspection periods. Section XI allows performance of all examinations on one vessel among a group of vessels. Where substitutions could be made (shutdown cooling water heat exchanger, etc.), examination areas were adjusted to minimize the variation to the percentage requirements of Inspection Program B.

Category C-A (continued)

Shutdown Cooling Water Heat Exchanger - Two items in the shutdown cooling heat exchanger were moved to the first inspection period (as proposed in L-97-65), in order to minimize the variation in the percentages required by Inspection Program B.

Result:

6 Items will be examined during an earlier period.
2 Items will be examined during a later period.
1 Item will be examined during the same period as first interval.

Examination Schedule:

	# of Items	# Items Req'd	1st. Period Items % 16% - 34%	2nd. Period Items % 50% - 67%	3rd. Period Items % 100% - 100%
SG	14	7	0 = 0%	+ 7 = 100%	+ 0 = 100%
SCHx	4	2	2 = 100%	+ 0 = 100%	+ 0 = 100%
TOTAL	18	9	2 = 22%	+ 7* = 100%	+ 0 = 100%

- Table 14-8 had addition error (previously listed as six)

Category C-B Discrepancy

	Examination Category	1st Period 16% - 34%	2nd Period 50% – 67%	3rd Period 100% - 100%
Technical Letter	C-B (8) total	0 = 0%	+ 4 = 50%	+ 4 = 100%
FPL Proposed	C-B (8) total	4 = 50%	+ 4 = 100%*	+ 0 = 100%

Originally, FPL had proposed to perform examinations of the four reinforcement plate welds in the third period. The RAI received by FPL in 1995 (FPL response L-95-310A- Attachment 2 page 3, dated November 20, 1995) states in NRC Request 6 that "because these areas have not been examined previously, the INEL staff believes it prudent that exams be performed on these examinations areas early in the second interval." The examinations were performed during the next refueling (SL2-9, Fall 1995) in conjunction with the proposed C-A shutdown cooling heat exchanger exams. Each was found to be acceptable.

St. Lucie Unit 2
Docket No. 50-389
L-98-229 Attachment 2

Attachment 2

St. Lucie Unit 2

Revised Relief Request 14

COMPONENT IDENTIFICATION:

Class:	Component Identification:
1	Reactor Pressure Vessel and Closure Head Steam Generator - Primary Side Pressurizer
2	Steam Generator - Secondary Side Shutdown Cooling Water Heat Exchanger

B. EXAMINATION REQUIREMENTS:

1. Quality Group A, ASME Code Class 1

Exam Category:	Exam Item No:	Exam Description:
B-A	B1.40	RPV Head-Flange Weld
B-D	B3.90*	RPV Nozzle - Vessel Weld
	B3.100	RPV Nozzle Inside Radius
	B3.110	Pressurizer Nozzle-Vessel Weld
	B3.120	Pressurizer Nozzle Inside Radius
	B3.130	Steam Generator Nozzle - Vessel Weld
	B3.140	Steam Generator Nozzle Inside Radius
B-B	B2.11	Pressurizer Shell - Head Welds
	B2.12	Pressurizer Long Welds
	B2.31	Steam Generator Circ Head Welds
	B2.32	Steam Generator Meridional Welds
	B2.40	Steam Generator Tubesheet - Head Welds
B-F	B5.40	Pressurizer Nozzle - Safe End
	B5.130	Piping – Dissimilar Metal Butt Welds
B-G-2	B7.20	Pressurizer Bolts, Studs, Nuts
	B7.30	Steam Generator Bolts, Studs, Nuts
	B7.50	Piping- Bolts, Studs, Nuts
	B7.60	Pump- Bolts, Studs, Nuts
	B7.70	Valve- Bolts, Studs, Nuts
B-K*	B10.10	Pressurizer Integral Attachments
	B10.10	Steam Generator Integral Attachments

*Implementation of Code Case N-509 changes Category B-H Item #s B8.20 & B8.30 to Category B-K Item # 10.10

B-J	B9.11	Circumferential Pipe Welds
	B9.12	Longitudinal Pipe Welds
	B9.21	Circumferential Pipe Welds

2. Quality Group B, ASME Code Class 2

Exam Category:	Exam Item No:	Exam Description:
C-A	C1.10	Shell Circumferential Welds
	C1.20	Head Circumferential Welds
	C1.30	Tubesheet to Shell Welds
C-B	C2.21	Nozzle to Shell (or Head) Welds
	C2.22	Nozzle Inner Radius Section
	C2.31	Nozzle Reinforcing Plate Welds
	C2.33	Nozzle to Shell Weld (when inaccessible)
C-C	C3.10	Vessel Welded Attachments
	C3.20	Piping Welded Attachments
	C3.30	Pump Welded Attachments

3. Table IWB-2412-1 and IWC-2412-1

With the exception of the examinations that may be deferred until the end of an inspection interval as specified in Table IWB-2500-1, the required examinations in each examination category shall be completed during successive inspection interval in accordance with Table IWB-2412-1 and IWC-2412-1.

Inspection Interval	Inspection Period, Calendar Years of Plant Service	Minimum Examinations Completed, %	Maximum Examinations Credited, % [Note (1)]
2nd.	13 - 1996	16	34
	17 - 2000	50	67
	20 - 2003	100	100
Note: (1) Except as noted in Table IWB-2500-1, B1.30			

4. Successive Inspections

IWB-2420(a) and IWC-2420(a) - The sequence of component examinations established during the first inspection interval shall be repeated during each successive inspection interval, to the extent practical.

C. RELIEF REQUESTED:

Florida Power and Light Company (FPL) requests relief from repeating the sequence of component examinations established during the first in-service inspection interval, allow an alternative to the requirements contained within Tables IWB-2412-1, IWC-2412-1, and to substitute like examinations on the same or similar lines when radiation dose rates can be lowered significantly. Substitutions to the extent practical will be in accordance with normal scheduling criteria.

D. BASIS FOR RELIEF:

Since FPL began performing in-service examinations, the guidance for radiation exposure (ALARA) and personnel safety, as they relate to the selection and scheduling of in-service examinations, have increased significantly. Examinations in the first in-service inspection interval on Class 1 and 2 components and systems were performed in accordance with the 1980 Edition through the Winter 1980 Addenda of Section XI prorated for the interval.

Vessels, unlike piping systems, are unique in that examination areas include several Examination Categories, Examination Item Numbers, and, in the case of steam generators cover two Code Classes (Class 1 and Class 2, respectively). Equal distribution of examinations over three inspection periods on individual vessels (steam generators, pressurizer, etc.), are complicated due to their unique size, reduction in required examination items, and multiple Examination Categories. Equal distribution imposes an undue hardship in the areas of radiation exposure, personnel access, multiple job interference, and adds additional cost without providing a significant increase in the quality and safety of the plant.

Previous Examination Results

The St. Lucie previous nondestructive (NDE) examination results performed on these same components during the first inspection interval have not identified any flaws that exceeded the acceptance criteria of Section XI or identied results that would warrant consideration of not adjusting the sequence of the examinations, therefore modifying the ISI schedule would have no effect on the safe operation of the plant.

Radiation

10 CFR 20.1101(b) mandates FPL to reduce radiation exposure to as low as reasonably achievable (ALARA). In order to satisfy this requirement and other new regulations, FPL must re-evaluate every aspect of every job. Adjusting the sequence of examinations will allow FPL to minimize the amount of work being conducted in radiation areas, meet safety requirements, ALARA requirements, and still meet the intent of Section XI.

Adjusting the sequence of examinations reduces the need for personnel to prepare and examine components in essentially the same areas several times. The radiation exposure, time, and manpower required to perform these tasks can be significantly reduced by changing the sequence of examinations and the areas to be examined. St. Lucie has gone through one outage with this altered scheduling criteria.

Insulation

Vessel insulation is of a size and shape that the removal process of examination area insulation usually requires a substantial amount of additional insulation to be removed. Adhering to the sequence of examinations established during the first interval would require FPL to remove and reinstall the same insulation and scaffolding on two or more occasions. Removal, storage, and reinstallation of the insulation greatly increases the chances of insulation damage and includes additional man-rem and costs associated with the need for personnel to prepare and examine components in essentially the same area several times. The radiation exposure, time, and manpower required to perform these tasks can be significantly reduced by changing the sequence of examinations and changing the areas to be examined.

Cost Reduction - The cost associated with preparing vessels for selected examinations on the same component, within each inspection period in order to specifically satisfy the percentage requirements of Section XI, is an economic hardship without a substantial compensating increase in the quality or safety of the unit.

Examination Schedules - While it is desirable to have examination schedules move forward in the interval (less than 10 years between successive examinations), the wording of Inspection Program B

makes this difficult. A review of Inspection Program B requirements show that it is weighted toward moving examinations to the end of the interval (opposite from USNRC desires). The maximum examinations allowed for credit during the first period is 34%. If the minimum examinations were performed during the first period (16%) and the maximum examined during the second period (67%), then 51% of the interval exams could be performed during the second period. This same thought process can be applied to the third period. When a sample size in a category is small, Inspection Program B requires examinations to be scheduled later in the interval. Since St. Lucie ISI examinations were originally scheduled one-third each period, it is not possible to move examination schedules forward without scheduling others later in the interval.

Inspection Program B allows up to 50% of the 10 year examinations to be performed during the second or third periods. Allowing this same latitude during the first period would enable FPL to perform examinations with a more efficient schedule, reduce radiation exposure and costs, and meet USNRC desires to have the time frame between successive examinations not exceed 10 year intervals.

Substitutions - Examination items scheduled may be substituted for items not previously scheduled in order to reduce the radiation levels. All substitutions will meet the selection criteria of the applicable Examination Category, (i.e. terminal ends, high stress welds, etc.), and shall meet the percentage requirements of Inspection Program B. Such changes will be noted in the summary report submittal.

Tables 14-1 through 14-10 provide listings of items selected for adjustment by Examination Category and provides specific percentages to be achieved during the inspection interval and within each inspection period.

Table 14-11 provides a Category summary for all Code Categories.

E. ALTERNATIVE EXAMINATIONS OR TESTS:

FPL proposes to adjust the sequence of examinations established within the first inspection interval on the reactor pressure vessel, steam generator and pressurizer, such that all major examinations are performed at one time within a specified inspection period. Where practical, FPL has adjusted the sequence of examinations, (additional items) within the same examination category, (shutdown cooling water heat exchanger, etc.) in order to minimize the variation in the percentage requirements of Inspection Program B.

FPL proposes the following alternatives:

Reactor Pressure Vessel - All required examinations will be performed in the second inspection period, in conjunction with the automated examination activity, with the exception of the shell to flange weld from the seal side and the threads in base material which will be conducted in the first period.

Reactor Pressure Vessel Closure Head - All required examinations will be performed in the first inspection period, which will minimize the percentage requirements over the inspection interval.

Steam Generator (primary and secondary sides) - All required examinations will be performed in the second inspection period, except the Examination Category B-D nozzle-to-vessel welds for Steam Generator B which will be examined during the third period.

Pressurizer - All required examinations will be performed in the first inspection period.

Shutdown Cooling Water Heat Exchanger - All required examinations will be performed in the first inspection period.

The readjusted schedule proposed and the system pressure test will provide continued assurance of an acceptable level of quality and safety.

In lieu of the percentage requirements of IWB-2412-1 and IWC-2412-1, FPL proposes the following variations. The minor variations between Inspection Program B and the percentages defined below will not significantly affect the health and safety of the general public.

Examination Category	1st. Period 16% - 34%	2nd. Period 50% - 67%	3rd. Period 100% -100%
B-A * (26) total	6 = 23%	+ 20 = 100%	+ 0 = 100%
B-B (9) total	4 = 44%	+ 5 = 100%	+ 0 = 100%
B-D (36) total	12 = 33%	+ 18 = 83%	+ 6 = 100%
B-F (31) total	14 = 45%	+ 7 = 68%	+ 10 = 100%
B-J ** (179) total	60 = 34%	+ 62 = 68%	+ 57 = 100%
B-K *** (2) total	1 = 50%	+ 1 = 100%	+ 0 = 100%
B-G-2 (22) total	8 = 36%	+ 5 = 59%	+ 5 = 100%
C-A (9) total	2 = 22%	+ 7 = 100%	+ 0 = 100%
C-B (8) total	4 = 50%	+ 4 = 100%	+ 0 = 100%
C-C (9) total	3 = 33%	+ 3 = 67%	+ 3 = 100%

Note: Shaded blocks identifies variations to the percentage requirements of Section XI.

* Deferral of inspection to the end of interval permissible by IWB-2500-1

** The number identified above reflect circumferential weld examinations only, see Table 14-5 for additional longitudinal weld numbers and overall B-J Category percentages.

*** Later editions of Section XI allow less than three items in a category to be examined in any two periods. Implementation of Code Case N-509 changes Category B-H Item numbers B8.20 & B8.30 to Category B-K Item numbers 10.10.

F. IMPLEMENTATION SCHEDULE*

The second in-service inspection interval August 8, 1993 to August 8, 2003

*Request for Relief clarified in USNRC request for additional information in letters dated November 20, 1995, and March 13, 1997.

G. ATTACHMENTS TO THE RELIEF:

14-1	Examination Category B-A
14-2	Examination Category B-B
14-3	Examination Category B-D
14-4	Examination Category B-F
14-5	Examination Category B-J
14-6	Examination Category B-K
14-7	Examination Category B-G-2
14-8	Examination Category C-A
14-9	Examination Category C-B
14-10	Examination Category C-C
14-11	Category Summaries

EXAMINATION CATEGORY B-A Table 14-1				
Item Identification	Code Category	Code Item Number	1st. Interval Schedule	2nd. Interval Schedule
101-101 Flange-Torus	B-A	B1.40	3rd(period)	1st(period)
101-171 Lower Shell-Interm. Shell	B-A	B1.11	2nd	2nd
106-121 Interm Shell-Upper Shell	B-A	B1.11	2nd	2nd
101-142-A Lower Shell Long Weld	B-A	B1.12	2nd	2nd
101-142-B Lower Shell Long Weld	B-A	B1.12	2nd	2nd
101-142-C Lower Shell Long Weld	B-A	B1.12	2nd	2nd
101-124-A Interm Shell Long Weld	B-A	B1.12	2nd	2nd
101-124-B Interm Shell Long Weld	B-A	B1.12	2nd	2nd
101-124-C Interm Shell Long Weld	B-A	B1.12	2nd	2nd
101-122-A Upper Shell Long Weld	B-A	B1.12	2nd	2nd
101-122-B Upper Shell Long Weld	B-A	B1.12	2nd	2nd
101-122-C Upper Shell Long Weld	B-A	B1.12	2nd	2nd
101-151 Dome-Peel Seg	B-A	B1.22	2nd	2nd
201-141 Bottom Head-Lower Shell	B-A	B1.21	2nd	2nd
101-154-A Peel Seg-Peel Seg	B-A	B1.22	2nd	2nd
101-154-B Peel Seg-Peel Seg	B-A	B1.22	2nd	2nd
101-154-C Peel Seg-Peel Seg	B-A	B1.22	2nd	2nd
101-154-D Peel Seg-Peel Seg	B-A	B1.22	2nd	2nd
101-154-E Peel Seg-Peel Seg	B-A	B1.22	2nd	2nd
101-154-F Peel Seg-Peel Seg	B-A	B1.22	2nd	2nd
101-121 Shell-Flange	B-A	B1.30	1st and 2nd	1st and 2nd

NOTES: Examinations performed in this Category will be in accordance with Section XI, Table IWB-2500-1, the St. Lucie ISI Program, and applicable USNRC approved Requests for Relief. All required examinations will be performed in the second inspection period, in conjunction with the automated examination activity, with the exception of the shell to flange weld from the seal side and the threads in base material and welds associated with the closure head which will be conducted in

Category B-A (continued)

1 item will be examined during an earlier period.
0 items will be examined during a later period.
25 items will be examined during the same period as first interval.

Examination Schedule:

	# of Items	# Items Req'd	1st. Period Items % 16% - 34%	2nd. Period Items % 50% - 67%	3rd. Period Items % 100% - 100%
RPV	26	26	6 = 23%	+ 20 = 100%	+ 0 = 100%

EXAMINATION CATEGORY B-B Table 14-2				
Item Identification	Code Category	Code Item Number	1st. Interval Schedule	2nd. Interval Schedule
SG-2A-101-254-D Meridional Weld	B-B	B2.32	1st (period)	2nd (period)
SG-2A-101-251 Staybase-Primary Head	B-B	B2.31	1st	2nd
SG-2A-202-271 Primary Ext. Ring-Head	B-B	B2.31	1st	2nd
SG-2A-201-246 Primary Ext. Ring-Tubesheet	B-B	B2.40	1st	2nd
SG-2A-101-244-D Ext. Ring Meridional Weld	B-B	B2.32	1st	2nd
501-671 Top Head-Upper Shell	B-B	B2.11	2nd	1st
101-622-A Upper Shell Long Weld	B-B	B2.12	2nd	1st
101-642-A Lower Shell Long Weld	B-B	B2.12	2nd	1st
304-671 Lower Shell-Lower Head	B-B	B2.11	2nd	1st

Notes: **Steam Generators** - Examination Category B-B inspections performed on the primary side were performed on both steam generators during the first inspection interval and were distributed between all three inspection periods. Section XI allows performance of all examinations on one vessel among a group of vessels.

Pressurizer - Examination Category B-B inspections performed on the pressurizer during the first inspection interval were distributed between the second and third inspection periods. The pressurizer is contained within the pressurizer cubical with limited access around the vessel.

Result:

4 items will be examined during an earlier period.
5 items will be examined during a later period.
0 items will be examined during the same period as first interval.

Examination Schedule:

	# of Items	# Items Req'd	1st. Period Items % 16% - 34%	2nd. Period Items % 50% - 67%	3rd. Period Items % 100% - 100%
SG	30	5	0 = 0%	+ 5 = 100%	+ 0 = 100%
Prz	6	4	4 = 100%	+ 0 = 100%	+ 0 = 100%
Totals	36	9	4 = 44%	+ 5 = 100%	+ 0 = 100%

EXAMINATION CATEGORY B-D Table 14-3				
Item Identification	Code Category	Code Item Number	1st. Interval Schedule	2nd. Interval Schedule
105-121-A Outlet Nozzle-Shell	B-D	B3.90	1st and 2nd	2nd
103-121-A Inlet Nozzle-Shell	B-D	B3.90	2nd	2nd
103-121-B Inlet Nozzle-Shell	B-D	B3.90	2nd	2nd
105-121-B Outlet Nozzle-Shell	B-D	B3.90	1st and 2nd	2nd
103-121-C Inlet Nozzle-Shell	B-D	B3.90	2nd	2nd
103-121-D Inlet Nozzle-Shell	B-D	B3.90	2nd	2nd
ON-IR-A Inner Radius	B-D	B3.100	1st and 2nd	2nd
IN-IR-A Inner Radius	B-D	B3.100	2nd	2nd
IN-IR-B Inner Radius	B-D	B3.100	2nd	2nd
ON-IR-B Inner Radius	B-D	B3.100	1st and 2nd	2nd
IN-IR-C Inner Radius	B-D	B3.100	2nd	2nd
IN-IR-D Inner Radius	B-D	B3.100	2nd	2nd
SG-2A-104-251 Inlet Noz-Head	B-D	B3.130	1st	2nd
SG-2A-102-251-A Outlet Noz-Head	B-D	B3.130	1st	2nd
SG-2A-102-251-B Outlet Noz-Head	B-D	B3.130	1st	2nd
SG-2B-104-251 Inlet Nozzle-Head	B-D	B3.130	3rd	3rd
SG-2B-102-251-A Outlet Nozzle-Head	B-D	B3.130	3rd	3rd
SG-2B-102-251-B Outlet Nozzle-Head	B-D	B3.130	3rd	3rd
SG-2A-IN-IR Noz Inner Radius	B-D	B3.140	1st	2nd
SG-2A-ON-IR-A Outlet Nozzle	B-D	B3.140	1st	2nd
SG-2A-ON-IR-B Outlet Nozzle	B-D	B3.140	1st	2nd
SG-2B-IN-IR Inlet Nozzle IRS	B-D	B3.140	3rd	3rd
SG-2B-ON-IR-A Outlet Nozzle IRS	B-D	B3.140	3rd	3rd
SG-2B-ON-IR-B Outlet Nozzle IRS	B-D	B3.140	3rd	3rd
108-601-A Safety Nozzle-Vessel	B-D	B3.110	2nd	1st
108-601-B Relief Nozzle-Vessel	B-D	B3.110	2nd	1st
108-601-C Safety Noz-Vessel	B-D	B3.110	2nd	1st
108-601-D Safety Noz-Vessel	B-D	B3.110	2nd	1st

EXAMINATION CATEGORY B-D Table 14-3				
Item Identification	Code Category	Code Item Number	1st. Interval Schedule	2nd. Interval Schedule
105-651 Surge Noz-Vessel	B-D	B3.110	2nd	1st
SVN-IR-A Safety Nozzle IRS	B-D	B3.120	2nd	1st
RVN-IR Relief Nozzle IRS	B-D	B3.120	2nd	1st
SVN-IR-B Safety Nozzle IRS	B-D	B3.120	2nd	1st
SVN-IR-C Safety Nozzle IRS	B-D	B3.120	2nd	1st
SRGN-IR Surge Nozzle IRS	B-D	B3.120	2nd	1st

Notes:

Reactor Pressure Vessel - Examination Category B-D nozzles and inner radius examinations are addressed in USNRC approved Request for Relief 17.

Steam Generators - Examination Category B-D examinations on the primary side were performed on both steam generators during the first inspection interval and were distributed between all three inspection periods.

Pressurizer - Examination Category B-D examinations on the pressurizer during the first inspection interval were distributed between the first, second and third inspection periods. The pressurizer is contained within the pressurizer cubical with limited access on both the top and bottom heads. The pressurizer includes such items as lifting lugs, manways, safety, relief and spray nozzles (top head) and the surge and heater nozzles (bottom head) which are in close proximity of each other that makes distributing them equally over the interval impractical. Code required coverage and limitations associated with the nozzle examinations are included within the USNRC approved Request for Relief 3.

10 items will be examined during an earlier period.
6 items will be examined during a later period.
20 items will be examined during the same period as first interval.

Category B-D (continued)

Examination Schedule:

	# of Items	# Items Req'd	1st. Period Items % 16% - 34%	2nd. Period Items % 50% - 67%	3rd. Period Items % 100% - 100%
RPV	12	12	0 = 0%	+ 12 = 100%	+ 0 = 100%
PRZ	12	12	12 = 100%	+ 0 = 100%	+ 0 = 100%
SG	12	12	0 = 0%	+ 6 = 100%	+ 6 = 100%
Totals	36	36	12 = 33%	+ 18 = 83%	+ 6 = 100%

EXAMINATION CATEGORY B-F Table 14-4				
Item Identification	Code Category	Code Item Number	1st. Interval Schedule	2nd. Interval Schedule
RC-115-1501-771-A Elbow-Safe End	B-F	B5.130	1st	1st
RC-121-1501-771-B Elbow-Safe End	B-F	B5.130	1st	1st
RC-121-901-771 Safe End-Pipe	B-F	B5.130	1st	1st
RC-112-1501-771-C Elbow-Safe End	B-F	B5.130	1st	1st
RC-301-771 Nozzle-Safe End	B-F	B5.130	2nd	2nd
RC-501-771 Nozzle-Safe End	B-F	B5.130	1st	1st
503-671-B Safety Noz-Flange	B-F	B5.40	3rd	1st
503-671-C Safety Noz-Flange	B-F	B5.40	2nd	1st
RC-514-671 Safe End-Nozzle	B-F	B5.40	2nd	1st
RC-506-671 Nozzle-Safe End	B-F	B5.40	3rd	1st

Note: 4 items will be examined during an earlier period.
0 items will be examined during a later period.
27 items will be examined during the same period as first interval.

Examination Schedule:

	# of Items	# Items Req'd	1st. Period Items % 16% - 34%	2nd. Period Items % 50% - 67%	3rd. Period Items % 100% - 100%
PRZ	6	6	6 = 100%	+ 0 = 100%	+ 0 = 100%
OTHER	25	25	8 = 32%	+ 7 = 62%	+ 10 = 100%
Totals	31	31	14 = 45%	+ 7 = 68%	+ 10 = 100%

EXAMINATION CATEGORY B-J Table 14-5				
Item Identification	Code Category	Code Item Number	1st. Interval Schedule	2nd. Interval Schedule
401-128-A Outlet Nozzle-Ext.	B-J	B9.11a	1st	2nd
401-128-B Outlet Nozzle-Ext.	B-J	B9.11a	1st	2nd
RC-114-201-258 Nozzle Ext.	B-J	B9.11a	1st	3rd
RC-115-401-258-B Nozzle-Nozzle Ext.	B-J	B9.11a	2nd	3rd
RC-115-1 Nozzle Ext-Elbow	B-J	B9.11b	2nd	3rd
RC-115-103-742-LS-A Long Seam	B-J	B9.12	2nd	3rd
RC-115-103-742-LS-B Long Seam	B-J	B9.12	2nd	3rd
RC-112-401-258-A SG Nozzle-Nozzle Ext.	B-J	B9.11a	1st	3rd
RC-114-1 Outlet Nozzle Ext.-Pipe	B-J	B9.11d	1st	2nd
RC-114-101-722-LS-A Pipe Long Seam	B-J	B9.12	1st	2nd
RC-114-101-722-LS-B Pipe Long Seam	B-J	B9.12	1st	2nd
RC-123-1 Nozzle Ext.-Pipe	B-J	B9.11d	1st	2nd
RC-101-FW-1 Safe end-Pipe	B-J	B9.11d	3rd	1st
RC-101-1-SW-13 Pipe-Tee	B-J	B9.11d	3rd	1st
RC-122-FW-1 Safe end-Pipe	B-J	B9.21b	3rd	1st
CH-147-SW-45 Pipe-Valve	B-J	B9.21a	2nd	3rd
RC-148-SW-2 Valve-Pipe	B-J	B9.21b	2nd	3rd
RC-148-FW-1 Pipe-Safe end	B-J	B9.21c	2nd	3rd

Note: There are 531 circumferential welds and 64 longitudinal welds within this examination category for a total of 595 items. Minimum circumferential examinations required (531 x .25 = 132.75) or 133 circumferential weld items required to be examined during this inspection interval. There are 179 circumferential weld items scheduled for examination.

3 items will be examined during an earlier period.
15 items will be examined during a later period.
197 items will be examined during the same period as first interval.

Category B-J (continued)

Examination Schedule:

	# of Items	# Items Req'd	1st. Period Items % 16% - 34%	2nd. Period Items % 50% - 67%	3rd. Period Items % 100% - 100%
Circ Welds	531	179	60 = 34%	+ 62 = 68%	+ 57 = 100%
Long Welds	64	36	10 = 27%	+ 18 = 77%	+ 8 = 100%
Totals	595	215	70 = 33%	+ 80 = 70%	+ 65 = 100%

EXAMINATION CATEGORY B-K* Table 14-6				
Item Identification	Code Category	Code Item Number	1st. Interval Schedule	2nd. Interval Schedule
103-651 Support Skirt	B-K	B10.10	2nd	1st
SG-2A-109-251 Support Skirt-Stay Base	B-K	B10.10	Not Examined	2nd
SG-2B-109-251 Support Skirt-Stay Base	B-K	B10.10	3rd	Not Required

Notes:

(1) Four welded pads were added to the steam space nozzle outside surfaces during the last outage. In accordance with IWB-2420(b) these welded pads will be re-examined for the next three inspection periods, starting with the second inspection period. Pads are not included within the count, as normally these nozzles would be excluded from the volumetric and surface examination requirements of Table IWB-2500-1.

(2) Steam Generator 2A's welded attachment will be substituted for Steam Generator 2B's welded attachment. Steam Generator 2A was not examined during the first inspection interval. The Steam Generator 2B welded attachment was examined in the third period of the first inspection interval. In the case of multiply vessels, the examination is limited to the attachment weld of one vessel.

(3) Later Code Editions allows Categories with less than three items to be examined in any two inspection periods in lieu of the percentage requirements of Table IWB-2412-1.

*Implementation of Code Case N-509 changes Category B-H item numbers B8.20 & B8.30 to Category B-K Item number 10.10

1 item will be examined during an earlier period.
0 items will be examined during a later period.
0 Items will be examined during the same period as first interval.
1 Item - Steam Generator 2A will be substituted for Steam Generator 2B.

Examination Schedule:

	# of Items	# Items Req'd	1st. Period Items % 16% - 34%	2nd. Period Items % 50% - 67%	3rd. Period Items % 100% - 100%
PRZ (1)	1	1	1 = 100%	+ 0 = 100%	+ 0 = 100%
SG A&B (2)	2	1	0 = 0%	+ 1 = 100%	+ 0 = 100%
Totals	3	2	1 = 50%	+ 1 = 100%	+ 0 = 100%

EXAMINATION CATEGORY B-G-2 Table 14-7				
Item Identification	Code Category	Code Item Number	1st. Interval Schedule	2nd. Interval Schedule
SG-2A-PMS-A Manway Studs	B-G-2	B7.30	1st	3rd
SG-2A-PMN-A Manway Nuts	B-G-2	B7.30	1st	3rd
SG-2A-PMS-B Manway Studs	B-G-2	B7.30	1st	3rd
SG-2A-PMN-B Manway Nuts	B-G-2	B7.30	1st	3rd
SV-1200 Safety Valve-Flange	B-G-2	B7.50	3rd	1st
SV-1201 Safety Valve-Flange	B-G-2	B7.50	3rd	1st
SV-1202 Safety Valve-Flange	B-G-2	B7.50	3rd	1st
MS-01 Manway Studs & Nuts	B-G-2	B7.20	3rd	1st
V-3258 Bolting	B-G-2	B7.70	3rd	1st
V-3217 Bolting	B-G-2	B7.70	2nd	1st

Note: There are four groups of valves for which bolting is limited to components selected for examination under Category B-M-2 and only when disassembled or at the end of inspection interval, whichever comes first. These are not to be added to the count.

The number of valves associated with each group are as follows:

Group 1 4 valves1 required
Group 2 4 valves1 required
Group 3 5 valves1 required
Group 4 4 valves1 required

4 items will be examined during an earlier period.
4 items will be examined during a later period.
6 items will be examined during the same period as first interval.
4 items will be added when selected within the valve groups identified above.
4 items added to B7.50 category which were not examined in the first interval.

Category B-G-2 (continued)

Examination Schedule:

	# of Items	# Items Req'd	1st. Period Items % 16% - 34%	2nd. Period Items % 50% - 67%	3rd. Period Items % 100% - 100%
PRZ	1	1	1 = 100%	+ 0 = 100%	+ 0 = 100%
SG	8	4	0 = 0%	+ 0 = 100%	+ 4 = 100%
PIPING	13	13	7 = 45%	+ 5 = 81%	+ 1 = 100%
VALVES	17	4	To be added when selected under B-M-2 or end of interval		
Totals	39	22	8 = 36%	+ 5 = 59%	+ 5 = 100%

EXAMINATION CATEGORY C-A Table 14-8				
Item Identification	Code Category	Code Item Number	1st. Interval Schedule	2nd. Interval Schedule
SG-2A-203-246 Ext. Ring-Tubesheet	C-A	C1.30	1st	2nd
SG-2A-101-241 Ext. Ring-Lower Shell	C-A	C1.10	1st	2nd
SG-2A-101-221 Cone-Upper Shell	C-A	C1.10	3rd	2nd
SG-2A-201-271 Top Head-Upper Shell	C-A	C1.20	3rd	2nd
SG-2A-106-201 Dome-Torus	C-A	C1.10	3rd	2nd
SG-2A-204-246 Stay-Tubesheet	C-A	C1.30	3rd	2nd
1-2701 Flange-Body	C-A	C1.10	3rd	1st
1-2701 Body-Tubesheet	C-A	C1.30	3rd	1st

Note: **Steam Generators** - Examination Category C-A, no examinations were conducted on the secondary side of steam generator 2B during the first inspection interval. All examinations were performed on steam generator 2A, and were distributed evenly between the three inspection periods. Section XI allows performance of all examinations on one vessel among a group of vessels. Where substitutions could be made (shutdown cooling water heat exchanger, etc.), examination areas were adjusted to minimize the variation to the percentage requirements of Inspection Program B.

Shutdown Cooling Water Heat Exchanger - Two items in the shutdown cooling heat exchanger were moved to the first inspection period in order to minimize the variation in the percentages required by Inspection Program B.

6 items will be examined during an earlier period.
2 items will be examined during a later period.
1 item will be examined during the same period as first interval.

Examination Schedule:

	# of Items	# Items Req'd	1st. Period Items % 16% - 34%	2nd. Period Items % 50% - 67%	3rd. Period Items % 100% - 100%
SG	14	7	0 = 0%	+ 7 = 100%	+ 0 = 100%
SCHx	4	2	2 = 100%	+ 0 = 100%	+ 0 = 100%
Totals	20	9	2 = 22%	+ 7 = 100%	+ 0 = 100%

EXAMINATION CATEGORY C-B Table 14-9				
Item Identification	Code Category	Code Item Number	1st. Interval Schedule	2nd. Interval Schedule
SG-2A-105-201 Steam Nozzle-Head	C-B	C2.21	3rd	2nd
SG-2A-105-201-IR Steam Nozzle Inner Radius	C-B	C2.22	3rd	2nd
1-2741-1 Nozzle-Vessel	C-B	C2.33	3rd	Each Period *
1-2742-1 Nozzle-Vessel	C-B	C2.33	3rd	Each Period *
1-2742-2 Pad-Vessel	C-B	C2.31	3rd	1st
1-2742-3 Pad-Vessel	C-B	C2.31	3rd	1st
1-2741-3 Pad-Vessel	C-B	C2.31	3rd	1st
1-2741-2 Pad-Vessel	C-B	C2.31	3rd	1st

Note: 6 items will be examined during an earlier period.
0 items will be examined during a later period.
2 items will be examined during the same period as first interval.

* 2 items require a VT-2 examination every period, these items are not included within the count.

Examination Schedule:

	# of Items	# Items Req'd	1st. Period Items % 16% - 34%	2nd. Period Items % 50% - 67%	3rd. Period Items% 100% - 100%
SG	8	4	0 = 0%	+ 4 = 100%	+ 0 = 100%
SCHx	12	4	4 = 0%	+ 0 = 0%	+ 0 = 100%
Totals	20	8	4 = 50%	+ 4 = 100%	+ 0 = 100%

EXAMINATION CATEGORY C-C Table 14-10				
Item Identification	Code Category	Code Item Number	1st. Interval Schedule	2nd. Interval Schedule
BF-4007-6081 Welded Attachment	C-C	C3.20	2nd	1st
BF-4006-6076 Welded Attachment	C-C	C3.20	3rd	1st
SI-2413-352 Shear Lugs	C-C	C3.20	Not Examined	1st

Note: Code Case N-509 applies

Note: 3 items will be examined during an earlier period.
0 items will be examined during a later period.
5 items will be examined during the same period as first interval.
1 item was added new during this interval.

Examination Schedule:

	# of Items	# Items Req'd	1st. Period Items % 16% - 34%	2nd. Period Items % 50% - 67%	3rd. Period Items % 100% - 100%
SG	16	1	0 = 0%	+ 1 = 100%	+ 0 = 100%
PIPING	54	5	3 = 60%	+ 2 = 100%	+ 0 = 100%
CSP/LPSI	12	3	0 = 0%	+ 0 = 0%	+ 3 = 100%
Totals	45	9	3 = 33%	+ 3 = 67%	+ 3 = 100%

CATEGORY SUMMARIES FOR ST. LUCIE UNIT 2
Table 14-11

Examination Category	Number of Components Being Examined Early	Number of Components Scheduled the Same as the First Interval	Number of Components Being Examined Late
B-A	1	25	0
B-B	4	0	5
B-D	10	18	8
B-E	Examinations performed in this Category will be in accordance with Section XI, the St. Lucie ISI Program, and applicable relief requests.		
B-F	4	27	0
B-G-1	Examinations performed in this Category will be in accordance with Section XI, the St. Lucie ISI Program, and applicable relief requests.		
B-G-2	4	6	4
B-H	1	0	0
B-J	3	197	15
B-K-1	Examinations performed in this Category will be in accordance with Section XI, the St. Lucie ISI Program, and applicable relief requests.		
B-L-1 B-L-2 B-M-1 B-M-2 B-N-1 B-N-2 B-N-3 B-O B-P B-Q	Examinations performed in this Category will be in accordance with Section XI, the St. Lucie ISI Program, and applicable relief requests.		

CATEGORY SUMMARIES FOR ST. LUCIE UNIT 2
Table 14-11 Continued

Examination Category	Number of Components Being Examined Early	Number of Components Scheduled the Same as the First Interval	Number of Components Being Examined Late
C-A	6	1	2
C-B	6	2	0
C-C	3	5	0
C-D	There are no components in this Category at St. Lucie.		
C-F-1 C-F-2	Examinations performed in this Category will be in accordance with Section XI, the St. Lucie ISI Program, and applicable relief requests.		
C-G	There are no components in this Category at St. Lucie.		
C-H	Examinations performed in this Category will be in accordance with Section XI, the St. Lucie ISI Program, and applicable relief requests.		
D-A D-B D-C	Examinations performed in this Category will be in accordance with Section XI, the St. Lucie ISI Program, and applicable relief requests.		
F-A F-B F-C	Examinations performed in this Category will be in accordance with Section XI, the St. Lucie ISI Program, and applicable relief requests.		