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the southern electric system

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January 11, 1996

Docket Nos.: 50-348
50-364

10 CFR 50.55a

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

Joseph M. Farley Nuclear Plant
Inservice Inspection and Inservice Testing Program
ASME Code Update Deferral Request

Ladies and Gentlemen:

Southern Nuclear Operating Company (SNC) is hereby requesting a 40-month deferral of the 10-year updates of the FNP Unit 1 and Unit 2 Inservice Inspection (ISI) and Inservice Testing (IST) Programs.

The Code of Federal Regulations (CFR), 10CFR50.55a(f)(4)(ii) and 10CFR50.55a(g)(4)(ii) require that ISI and IST programs during 120-month intervals, beyond the initial interval, comply with the requirements of the latest edition and addenda of the ASME Code incorporated by reference in paragraph (b) of section 50.55a twelve months prior to the start of the 120-month interval. Based on a commercial operation date of December 1, 1977, the ISI and IST programs for Unit 1 were updated December 1, 1987. The programs for Unit 2 (commercial date July 30, 1981) were updated at the same time as Unit 1 to utilize the same edition of the ASME Code (1983 with Summer 1983 Addenda). The next ten-year update for both units is due December 1, 1997.

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The CFR, in regulation 10CFR50.55a(a)(3), allows licensees to propose alternatives to the requirements of 10CFR50.55a (f) and (g). Licensees are required to demonstrate that the proposed alternatives would provide an acceptable level of quality and safety, or that compliance would result in hardship without a compensating increase in the level of quality or safety. In accordance with 10CFR50.55a(a)(3), SNC proposes an alternative to the rules contained in 10CFR50.55a(f)(4)(ii) and 10CFR50.55a(g)(4)(ii) in order to allow FNP to continue to use the 1983 ASME Code with Summer 1983 Addenda for an additional 40-month period. Under the proposed alternative rules, both units would be updated on April 1, 2001.

SNC is requesting this deferral in order to provide for more efficient use of SNC manpower. Current large scale projects including FNP Unit 1 & 2 Power Uprate and preparation of FNP Improved Technical Specifications are expected to consume considerable licensing, engineering and plant manpower as well as NRC resources. The competition for limited resources is expected to be high during the time the ISI and IST Plan implementation phase of the 10-year update would occur. The 10-year updates require considerable plant review and modification of implementing procedures. Also, the SNC engineering support manpower resources involved in the FNP 10-year update are shared with the Vogtle and Hatch projects. Deferring the ASME Code update should greatly reduce the resource and scheduling problems associated with implementing these projects. An additional benefit would be to allow industry risk-based ISI and IST pilot work to continue such that implementation of these strategies into the FNP ISI and IST programs may be feasible by the end of the deferral period.

SNC has concluded that compliance with the rules stated above would result in hardship and unnecessary costs without a compensating increase in the level of quality or safety. This conclusion is based on a comparison between the 1983 Code and the 1989 Code for ISI and the 1990 OM Code for IST. Therefore, SNC proposes the following alternative rules which will provide an acceptable level of quality and safety for FNP Units 1 and 2 during the deferral period.

- SNC proposes an alternative to the rules contained in 10CFR50.55a(f)(4)(ii) and 10CFR50.55a(g)(4)(ii) in order to allow FNP to continue to use the 1983 ASME Code with Summer 1983 Addenda for an additional 40-month period. SNC will continue the existing examination schedule for each unit during the 40-month deferral period. For Unit 1, where the deferral period coincides with the 1st period of the 3rd interval, the examination plan for the 1st period of the 2nd interval will be repeated. For Unit 2, where the deferral period generally coincides with the 3rd period of the 2nd interval, SNC will complete all currently scheduled 2nd interval inspections and tests.

In addition, SNC commits to the following actions during the deferral period:

- SNC commits to comply with the 1989 Code scoping requirements for ISI examination of Class 2 piping welds during the deferral period.

- SNC commits to comply with the 1989 Code scoping requirements for IST testing of safety/relief valves during the deferral period.

The following supplemental information is being provided to the NRC in order to facilitate the review process:

Attachment 1 - ISI Program Comparison of ASME Codes
Attachment 2 - ISI Program Relief Requests Applicable During the Deferral Period
Attachment 3 - ISI Program Code Cases Applicable During the Deferral Period
Attachment 4 - IST Program Comparison of ASME Codes
Attachment 5 - IST Program Relief Requests Applicable During the Deferral Period
Attachment 6 - IST Program Code Cases Applicable During the Deferral Period

SNC is requesting a response to this proposal for deferral of the ISI and IST Program updates by April 30, 1996. This date is significant in order for SNC to prepare partial updates of the programs as described herein or to evaluate its position if the NRC does not grant this deferral.

If there are any questions or if additional information is needed, please advise.

Respectfully submitted,

SOUTHERN NUCLEAR OPERATING COMPANY

Dave Morey

EFB:clt:update.doc

Attachments (6)
See list above.

cc: Mr. S. D. Ebneter, Region II Administrator
Mr. B. L. Siegel, NRR Senior Project Manager
Mr. T. M. Ross, Plant Resident Inspector

ATTACHMENT 1

ISI Program Comparison of ASME Codes

Attachment 1

ISI Program Comparison of ASME Codes

The following is a comparison of significant Class 1 and Class 3 requirements in effect for the deferral period (1983 Code) versus those that would be in effect if the ISI Program was updated as scheduled (assumed 1989 Code). Class 2 is not included (except for pressure tests and component supports) because the scope and examination method of ISI examination for Class 2 components will be revised to comply with the 1989 Code.

RPV Shell Welds (Category B-A)

The 1983 Code requires that one beltline circumferential weld and one beltline longitudinal weld be examined while the 1989 Code requires that all shell welds be examined. The 1983 Code and the 1989 Code both require 100% of the vessel to flange weld be examined. These new requirements have already been incorporated into FNP plans as required by regulation 10CFR50.55a(g)(6)(ii)(A).

There are no FNP-1 circumferential or longitudinal shell weld examinations scheduled during the deferral period. All Item B1.10 FNP-1 shell welds are currently scheduled to be examined at the end of Interval 2 as part of the augmented requirements of 10CFR50.55a(g)(6)(ii)(A).

All Item B1.10 FNP-2 shell welds are currently scheduled to be examined during the deferral period (at the end of Interval 2) as part of the augmented requirements of 10CFR50.55a(g)(6)(ii)(A).

RPV Head Welds (Category B-A)

The 1983 Code requires that the accessible length of one circumferential and one meridional head weld be examined while the 1989 Code requires that the accessible length of all circumferential and meridional welds be examined. The 1983 and the 1989 Codes both require 100% of the head to flange weld be examined.

For FNP-1, there are no circumferential or meridional head weld examinations scheduled during the deferral period. All 1989 Code required examinations on these welds will be performed at or near the end of the third interval, as allowed by the Code.

For FNP-2, there is only one circumferential weld on the bottom head and none on the top head. Additionally, there are no meridional welds on either FNP-2 head. The accessible length of the one circumferential weld will be examined during the deferral period which satisfies the 1983 and 1989 Code requirements.

RPV Nozzle Welds (Category B-D)

The 1983 and 1989 Codes both require that full penetration welds of nozzles in vessels and their inner radii be examined volumetrically. There is no effect on FNP.

Attachment 1
ISI Program Comparison of ASME Codes

RPV Invessel Examinations (Category B-N-2, Category B-N-2, Category B-N-3)

There are no appreciable differences between the 1983 and the 1989 Code for these examinations; therefore, there is no effect on FNP.

RPV CRD Housing Welds (Category B-O)

There are no appreciable differences between the 1983 and the 1989 Code for CRD housing welds; therefore, there is no effect on FNP.

Other Class 1 Vessel Welds (Category B-B, Category B-D)

There are no appreciable differences between the 1983 and the 1989 Code for pressure retaining welds on the steam generators or pressurizer; therefore, there is no effect on FNP.

Class 1 Pump and Valve Welds (Category B-L-1, Category B-M-1)

(N/A to FNP)

Class 1 Piping Welds (Category B-J, Category B-F)

Category B-J components were selected for examination during Interval 2 per the requirements of Table IWB-2500 and Table IWB-2600 in the 1974 Edition of Section XI with Addenda through Summer 1975. As allowed by 10CFR50.55a(b)(2)(ii), SNC intends to continue this practice during Interval 3. Therefore, the edition of the code has no effect on the selection of B-J welds. There are no appreciable differences between the 1983 and the 1989 Code for Category B-F dissimilar metal welds; therefore, there is no effect on FNP.

Class 1 Welded Attachments (Category B-K-1, Category B-H)

There are no appreciable differences between the 1983 and the 1989 Code for Category B-K-1 or Category B-H welded attachments; therefore, there is no effect on FNP.

Class 1 Bolting (Category B-G-1, Category B-G-2)

The only significant difference between the 1983 and the 1989 Code for Category B-G-1 bolting (> 2" diameter) is that per the 1983 Code, valve and pump bolting examinations would be performed on those components selected per B-L-1 and B-M-1, while per the 1989 Code, valve and pump bolting examinations would be performed on those components selected per B-L-2 and B-M-2. There is no effect for FNP since there is no B-G-1 bolting on pumps and valves at FNP.

The only significant difference between the 1983 Code and the 1989 Code for B-G-2 bolting ($\leq$ 2" diameter) is that the 1989 Code reduces the scope of bolting examination by limiting the examination of bolting to components selected for examination per B-B, B-J, B-L-2, and B-M-2, while the 1983 Code has no limitations listed. FNP will continue to apply the more conservative 1983 Code requirements during the deferral period.

Attachment 1
ISI Program Comparison of ASME Codes

Class 1 Valve and Pump Internal Surfaces (Category B-L-2, Category B-M-2)

The only significant difference between the 1983 and the 1989 Code is that the 1989 Code limits the examination of the internal surface to those components disassembled for maintenance, while the 1983 Code does not. With FNP implementation of Relief Requests RR-15 and RR-16, there is no substantive difference between the 1983 and 1989 Codes.

Class 1, 2, and 3 Pressure Tests (Category B-P, Category C-H, Categories D-A, D-B, D-C)

There are no appreciable differences between the 1983 and the 1989 Code for pressure tests; therefore, there is no effect on FNP. (Note: For hydrostatic tests, FNP has received permission from the NRC to use Code Case N-498-1.)

Class 3 Welded Attachments (Categories D-A, D-B, D-C)

There are no appreciable differences between the 1983 and the 1989 Code for Class 3 welded attachments; therefore, there is no effect on FNP.

Repair/Replacement

The 1989 Code has attempted to make the repair/replacement sections of the Code more definitive by expanding paragraphs to show intent, better defining requirements, etc. This has resulted in significant editorial changes, with no appreciable difference in the technical requirements.

Appendix VII

Appendix VII was added to the Code in the 1988 addenda. This new appendix specifies the requirements for training and qualification of NDE personnel. While the adoption of Appendix VII is not a technical change, it does add a defined programmatic approach to the certification process.

SNC plans are to train and qualify ultrasonic NDE personnel to the requirements of Appendix VII prior to the start of the deferral period. In addition, SNC has reviewed the primary ISI vendor plans which indicate that their personnel will also meet the certification requirements of Appendix VII by the first outage of the deferral period.

ATTACHMENT 2

ISI Program Relief Requests Applicable During the Deferral Period

Attachment 2

ISI Program Relief Requests Applicable During the Deferral Period

SNC currently uses a relief request granted by the NRC that allows the use of Code Case N-498-1 in lieu of the hydrostatic test requirements of the Code. It is anticipated that this Code Case will be listed for use in Regulatory Guide 1.147 prior to the start of the deferral period. If not, continued approval will be necessary. Additionally, the following relief requests are applicable to Farley Nuclear Plant Unit 1 and 2 during the deferral period.

Relief Request No.	Examination Area
RR-1	Material requirements for calibration blocks used for ultrasonic examination of heavy wall vessels.
RR-2	Notch location requirements for calibration blocks used for ultrasonic examination of heavy wall vessels.
RR-3	Hole location requirements for calibration blocks used for ultrasonic examination of heavy wall vessels.
RR-5	Curvature differences between the calibration blocks used for examination of piping systems and thin wall vessels and the components to be examined.
RR-7	Dimensional requirements for calibration notches placed on calibration blocks used for ultrasonic examination of piping systems and thin wall vessels.
RR-9	Volumetric examination of nozzle-to-vessel welds in the pressurizer.
RR-10	Volumetric examination of nozzle-to-safe-end welds in steam generators.
RR-11	Volumetric examination of nozzle inner radius section for steam generators.

Attachment 2
ISI Program Relief Requests Applicable During the Deferral Period

Relief Request No.	Examination Area
RR-12	Delete VT-4 visual examination method and redefine VT-3 visual examination requirements in accordance with paragraph IWA-2213 of ASME Section XI, 1986 Edition.
RR-13	Volumetric examination of pressure retaining branch connection welds in Class 1 piping.
RR-14	Volumetric examination of the reactor vessel flange ligaments.
RR-15	Visual examination of the reactor coolant pump internal pressure boundary surfaces.
RR-16	Visual examination of the internal pressure boundary surfaces of Class 1 valves.
RR-17	Reference system for all welds and areas subject to volumetric and surface examination.
RR-18	Volumetric examination of pressure retaining welds in the regenerative heat exchanger.
RR-20	Surface examination of integrally welded attachments to Class 2 charging pumps.
RR-21	Hydrostatic testing of Class 2 containment pressure sensing lines (capillaries).
RR-22	Hydrostatic testing of portions of Class 2 components at reduced pressure.
RR-23	Hydrostatic testing of portions of Class 2 piping to the connecting Class 1 requirement.

Attachment 2
ISI Program Relief Requests Applicable During the Deferral Period

Relief Request No.	Examination Area
RR-25	Hydrostatic test for the Class 2 reactor vessel flange seal leakoff line (line No. CCB-36).
RR-26	Hydrostatic testing of portions of Class 2 piping systems isolated from the test boundary by closed check valves.
RR-27	Hydrostatic test for Class 2 waste gas drain filter line to volume control tank (line No. HCB-92).
RR-28	Volumetric examination of the nozzle inside radius section of the steam outlet nozzle on steam generators.
RR-29	Hydrostatic testing of boron injection recirculation discharge piping (line No. CCB-62).
RR-30	Hydrostatic testing of Class 2 portion of the steam generator (4-hour hold time).
RR-31	Visual (VT-2) examination for leakage of Class 3 service water pumps.
RR-32	Visual (VT-2) examination for leakage in encased piping in spent fuel pool cooling system.
RR-33	Hydrostatic testing of portions of Class 3 piping and components which operate continuously during all modes of plant operation.
RR-34	Hydrostatic testing of Class 3 spray additive lines in containment spray system.

Attachment 2
ISI Program Relief Requests Applicable During the Deferral Period

Relief Request No.	Examination Area
RR-35	Hydrostatic testing of Class 3 buried piping in the service water system.
RR-36	Visual (VT-2) examination of the tubes in the Class 3 component cooling water heat exchangers.
RR-37	Visual (VT-2) examination of condenser coils (tubes) in Class 3 coolers.
RR-38	Hydrostatic testing of Class 3 portions of auxiliary steam piping.
RR-39	Hydrostatic testing of Class 3 auxiliary feedwater pump minimum flow piping.
RR-40	Hydrostatic testing of all Class 2 branch pipe lines from VCT to first valve.
RR-41	Break away drag test for hydraulic snubbers.
RR-42	Additional sample testing requirements for snubbers.
RR-43	Hydrostatic testing of Class 2 portions of the RCS head vent lines.
RR-44	Operational monitoring of the Class 3 spent fuel pool cooling heat exchangers.
RR-46	Schedule adjustment for three (3) system hydrostatic tests.

ATTACHMENT 3

ISI Program Code Cases Applicable During the Deferral Period

Attachment 3

ISI Program Code Cases Applicable During the Deferral Period

The following defines the requirements for Code Cases to be applied by SNC during the deferral period.

For Code Cases presently approved by the NRC and listed in Regulatory Guide 1.147, Rev. 11, SNC will use these Code Cases during the deferral period on an "as-needed" basis. SNC will use the revision of the Code Case currently specified by Revision 11 of the Regulatory Guide, or later.

For Code Cases currently used by SNC during the second interval and shown as annulled in Regulatory Guide 1.147, Rev. 11, SNC requests approval to continue use of these Code Cases. Specifically these Code Cases are as follows:

- Code Case N-424, "Qualification of Visual Examination Personnel"
- Code Case N-445, "Use of Later Editions of SNT-TC-1A for Qualification of NDE Personnel"
- Code Case N-446, "Recertification of Visual Examination Personnel"

For new Code Cases that may be adopted in later revisions of Regulatory Guide 1.147, SNC intends to use such Code Cases during the deferral period on an "as-needed" basis.

ATTACHMENT 4

IST Program Comparison of ASME Codes

Attachment 4
IST Program Comparison of ASME Codes

FNP will continue to implement the inservice testing (IST) requirements of the ASME Section XI Code, 1983 Edition with Addenda through the Summer 1983, subsections IWP and IWV, except as modified by existing IST program relief requests. If FNP were updating the IST Program, the ASME OM Code 1990 would be the Code choice in lieu of the OMa-1988 Standard as referenced in the latest version of 10 CFR 50.55a. Provided below is a summary of the basic differences in the IST requirements between the existing Code of record and the ASME OM Code, 1990 Edition.

ASME Section XI Subsection	OM Code Subsection
IWA	ISTA
IWP	ISTB
IWV	ISTC & Appendix I
IWF	ISTD

OM ISTA Versus ASME XI IWA

Subsection IWA of the ASME Section XI Code includes all ISI and IST general requirements. The OM Code defines all general requirements for IST in subsection ISTA. Therefore, ASME Section XI, subsection IWA is not applicable for IST when using the OM Code. There are virtually no differences in the requirements of ISTA and IWA as applicable to IST for pumps and valves.

OM ISTB Versus ASME XI IWP

The scope of ISTB is greater than that of IWP; however, 10CFR50.55a(f)(4) limits the scope of IST to ASME Class 1, 2 and 3 pumps and valves; and therefore the scope of IST as applicable to FNP is unchanged from that as required by IWP.

ISTB provides some additional clarification relative to instrument requirements and addresses the use of digital instruments. This additional information only clarifies testing issues and the requirements are virtually the same as those of IWP.

ISTB only requires a run time of 2 minutes after stable flow conditions have been established prior to monitoring of the appropriate parameters. IWP requires a 5 minute run time.

The number and location of vibration measurements required by ISTB is greater than required by IWP.

On centrifugal pumps, two measurements are required in a plane perpendicular to the rotating shaft approximately 90° apart on each accessible pump bearing housing. A measurement is also required in the axial direction on each accessible thrust bearing housing.

On vertical line shaft pumps, measurements are required on the upper motor-bearing housing in three orthogonal directions one of which is in the axial direction.

On reciprocating pumps, measurement is required on the crankshaft, approximately perpendicular to both the crankshaft and the line of plunger travel.

The only significant difference in the vibration monitoring as required by the OM Code is the requirement for axial measurements. While performing measurements in the axial direction would provide additional information for certain type of pumps, FNP does not consider this additional monitoring to provide any significant safety improvement over the existing vibration requirements.

ISTB requires that if portable vibration sensors are used, the measurement points shall be permanently identified on the pump to permit duplication. Vibration monitoring points are presently duplicated from test to test at FNP by identification or procedural control. Therefore, this change has minimal impact.

ISTB requires the frequency response range of vibration instruments to be from one-third (IWP required one-half) minimum pump rotational speed to at least 1000 Hz. The only impact of this change is in application to slow speed pumps. FNP does not have any slow speed pumps in the IST Program, thus the existing calibration practices should be adequate to detect mechanical degradation.

ISTB does not require bearing temperature measurements and the NRC has indicted in NUREG-1482 that the deletion of bearing temperature measurements is acceptable. This is a relaxation of requirements.

ISTB requires that for variable speed pumps, the pump be tested with the speed adjusted to the reference speed, ±1%. IWP does not provide for any variance from the reference pump speed. FNP presently adjusts the speed of variable speed pumps to a set speed for testing which is an acceptable practice under either code.

ISTB Acceptance Criteria Versus IWP Acceptance Criteria

The following are changes in pump acceptance criteria:

The hydraulic acceptance criteria (as applicable) for positive displacement and vertical line shaft pumps are approximately equal to the IWP criteria on the lower end but the ISTB criteria are greater on the high end (110% versus 102%).

The hydraulic acceptance criteria for centrifugal pumps is broader than that of IWP. ISTB allows an acceptable range of 90% -110% of the reference value whereas IWP allows only 93/94% - 102%.

The vibration acceptance criteria of the OM Code is somewhat less stringent than the IWP acceptance criteria except that the ISTB acceptance criteria is stated in both displacement and velocity and the allowable range is stated as a multiple of the reference value and a set maximum value for centrifugal and vertical line shaft pumps. The measured values must satisfy both criteria.

The ISTB vibration limit for positive displacement pumps is less stringent than the IWP acceptance criteria and is stated only as a multiple of the reference value.

ISTB implicitly breaks the vibration measurement parameter by pump speed (i.e., displacement for speeds < 600 rpm and velocity for speeds > 600 rpm), but still allows either displacement or velocity measurement.

IWP vibration acceptance criterion is based on multiples of change from the initially established reference value (2.5 x reference = Alert Range, 6 x reference = Required Action Range). ISTB also uses these multiples, but also sets absolute levels for the Alert (>0.325 in/sec (10 mils)) and Action Ranges (0.7 in/sec (22 mils)). The vibration measurements must meet both the absolute and the multiple of the reference value to be acceptable.

These pump acceptance criteria changes are not significant enough to warrant a change to FNP procedures. Present IWP acceptance criteria is adequate for the deferral period.

The remainder of the requirements for ISTB and IWP (evaluation of results, corrective action, records, etc.) are virtually the same. ISTB has clarified some requirements, but there are no real changes in the intent.

OM ISTC Versus ASME XI IWV

The scope of ISTC is greater than that of IWV; however, 10CFR50.55a(f)(4) limits the scope of IST to ASME Class 1, 2 and 3 pumps and valves. Therefore, the scope of IST as applicable to FNP is unchanged from that as required by IWV.

ISTC allows deferral of testing, if justified, until refueling outages. Deferral of valve testing to refueling outages is presently accomplished only by relief request.

IWV did not require any testing for passive valves except those that perform a containment or pressure isolation function were required to be leakrate tested. ISTC requires passive valves with remote position indicators to be position verified at least once every two years. The position of the vast majority of these valves is controlled by administrative procedures and FNP does not consider this Code change to be of significant safety benefit.

ISTC requires stroke timing of all power-operated valves to the nearest second no matter what their reference stroke time is. IWV allowed timing to the nearest 10% for valves with stroke times greater than 10 seconds.

For stroke time testing of power-operated valves, IWV required comparison testing from test to test. ISTC requires comparison to a reference value for the stroke time.

These changes to stroke time testing do not represent significant changes in terms of quality or safety.

IWV acceptance criteria for comparison time testing power-operated valves allowed a change from test to test of 50% for valves with stroke times < 10 seconds and 25% for valves with stroke times > 10 seconds. ISTC has broken this acceptance criteria down by two types of power-operated valve.

Electric power-operated valves (AC & DC MOVs) with reference stroke times < 10 seconds shall exhibit not more than a 25% change nor 1 second from the reference stroke time. IWV allowed a maximum 50% change from test to test.

Electric power-operated valves with reference stroke times > 10 seconds shall exhibit not more than a 15% change from the reference stroke time. IWV allowed a maximum 25% change from test to test.

Other power-operated valves with reference stroke times < 10 seconds shall exhibit not more than a 50% change from the reference stroke time.

Other power-operated valves with reference stroke times > 10 seconds shall exhibit not more than a 25% change from the reference stroke time.

Power-operated valves with a designated maximum allowable stroke time of 2 seconds may be exempted from the comparison time testing requirements.

These changes to valve acceptance criteria do not represent significant changes in terms of quality or safety.

ISTC includes the ability to analyze test data that does not meet the initial acceptance criteria and make an operability determination based upon the analysis. IWV did not specifically include such ability.

The ISTC requirements for testing check valves is virtually the same as that already identified in NRC Generic Letter 89-04. FNP is presently following GL 89-04 or has relief to allow the testing being implemented. ISTC does include some additional requirements for check valves that are manually exercised (without disassembly) and includes the criteria for the sample disassembly and inspection of check valves. The application of non-intrusive check valve testing is not incorporated directly into ISTC, but is included as an example of an acceptable observation method.

ISTC has clarified the testing requirements for Category D valves (explosively actuated valves), but the testing requirements are unchanged.

IWV required that rupture disks be tested per the manufacturers' recommendations. ISTC requires testing in accordance with that of Appendix I for non-reclosing pressure relief devices. Appendix I requires that Class 1, 2 and 3 non-reclosing pressure relief devices be replaced every 5 years unless historical data indicates a requirement for more frequent replacement. Following the manufacturer's recommendations is adequate for the deferral period.

The requirements for testing safety and relief valves are now included in OM Code, Appendix I (old OM-1 standard). Appendix I is more detailed than the sections of IWV, including details on test methods and equipment. IWV requirements for relief valve bench testing are generic in nature and provide minimal guidance. The existing relief valve bench testing practices at FNP, when coupled with the 1989 scoping requirements, will ensure adequate assurance that the subject valves are capable of performing their safety function.

FNP's overall evaluation of the 1983 ASME XI Code and the ASME OM Code - 1990 results in the conclusion that there are no significant technical differences that would warrant further changes to FNP IST procedures during the deferral period. Therefore, no significant safety benefit would be obtained by updating the IST program to satisfy the OM Code requirements.

OM ISTD Versus ASME XI IWF

FNP performs snubber visual inspection in accordance with ASME Section XI, the plant Technical Specifications, or a combination of the two. Snubber functional testing is performed in accordance with plant Technical Specification as documented in relief requests included in the plant's ISI Program. Since FNP's snubber program was developed to satisfy Technical Specification requirements, a summary of the IWF versus ISTD differences is not provided nor warranted because a Code update would not result in any changes.

ATTACHMENT 5

IST Program Relief Requests Applicable During the Deferral Period

Attachment 5
IST Program Relief Requests Applicable During the Deferral Period

Relief Request No.	Subject Area
PR-1	Deletion of pump bearing temperature measurement.
PR-2	Expanded full-scale range for inlet pressure gauges.
PR-3 (Unit 1 only)	Deferral of flow measurement to refueling outage.
PR-4	Deferral of flow measurement to refueling outage using variable resistance flow reference values.
PR-5	Expanded full-scale range for inlet pressure gauges.
PR-8	Deferral of flow measurement to cold shutdown using variable resistance flow reference values.
PR-9	Expanded full-scale range for inlet pressure gauges.
PR-10	Combined pump testing quarterly and single pump testing each refueling and at cold shutdown (of sufficient duration).
PR-12	Vibration measurement on pump motor housing.
PR-13	Use of installed instruments for flow measurement.
PR-14 (Unit 1 only)	Expanded full-scale range for discharge pressure gages.
PR-15	Use of variable resistance flow and pressure reference values.
PR-19	Use of variable resistance flow and pressure reference values.
B13-RV-2	Verify reverse flow closure by Appendix J, Type C testing at refueling.
E11-RV-1	Remote position indicator verification by pressure decay following leak rate testing at refueling.
E11-RV-2	Verify forward flow operability by partial stroke at cold shutdown and full stroke each refueling.
E11-RV-3	One valve of group of three disassembled and full stroked at refueling on a staggered sample basis, to verify forward flow operability.

Attachment 5
IST Program Relief Requests Applicable During the Deferral Period

E11-RV-4	One valve of group of three disassembled and full stroked at refueling on a staggered sample basis, to verify forward-flow operability.
E13-RV-1 (Unit 1)	Verify forward flow operability by full flow testing at refueling.
E13-RV-1 (Unit 2)	One valve of group of two disassembled and manually stroked at refueling on a staggered sample basis, to verify forward flow operability.
E13-RV-2	Remote position indication verification by pressure decay following leak rate testing at refueling.
E13-RV-3	Partial flow testing quarterly and one valve of two disassembled and manually stroked at refueling on a staggered sample basis, to verify forward flow operability.
E13-RV-4 (Unit 2 only)	Valve disassembled and full stroked every third refueling outage to verify forward-flow operability.
E14-RV-1	Verify reverse flow closure by Appendix J, Type C testing at refueling.
E21-RV-1	Verify forward flow operability by partial stroke at cold shutdown and full stroke each refueling.
E21-RV-2	One valve of group of three disassembled and full stroked at refueling on a staggered sample basis, to verify forward flow operability.
E21-RV-3	Verify reverse flow closure by Appendix J, Type C testing at refueling.
E21-RV-4	Verify forward flow operability by full stroke each refueling.
E21-RV-5	Stroke and time during cold shutdown or refueling when RCS is at mid-plane and relevant pumps are secured or properly aligned.
E21-RV-7	Verify forward flow operability by partial stroke quarterly and full stroke each refueling.

E21-RV-8	Stroke and time during cold shutdown or refueling when RCS is vented or open.
E21-RV-9	Stroke and time during cold shutdown or refueling when RCS is vented or open.
E21-RV-13	One valve of group of three disassembled and full stroked at refueling on a staggered sample basis, to verify forward flow operability.
E21-RV-14	One valve of group of three disassembled and full stroked at refueling on a staggered sample basis, to verify forward flow operability.
E21-RV-15	Verify reverse flow closure by pressure decay or leak test at each refueling
G21-RV-1	Verify reverse flow closure by Appendix J, Type C testing at refueling.
N12-RV-1	One valve of group of two disassembled and full stroked at at refueling on a staggered sample basis, to verify reverse flow closure.
N23-RV-1	Verify reverse flow closure by pressure decay at cold shutdown and refueling.
N23-RV-2	Stroke and time at refueling when system can be thoroughly flushed.
P11-RV-1	Verify reverse flow closure by Appendix J, Type C testing at refueling.
P16-RV-1	Stroke and time at cold shutdown or refueling.
P16-RV-2	Verify reverse flow closure by Appendix J, Type C testing at refueling.
P16-RV-3	One valve of group of two disassembled and full stroked at refueling on a staggered sample basis, to verify forward flow operability.

P16-RV-4	One valve of each group of two disassembled and full stroked at refueling, to verify forward flow operability or reverse flow closure, respectively.
P16-RV-5	Verify reverse flow closure quarterly for valves of idle pumps, with a minimum of once each refueling for any valve in group.
P17-RV-1	Stroke, time, and fail (as appropriate) at cold shutdown or refueling when relevant pumps are secured.
P17-RV-2	Verify reverse flow closure by Appendix J, Type C testing at refueling.
P17-RV-3	Verify reverse flow closure at refueling.
P17-RV-4	Stroke, time, and fail at cold shutdown or refueling when relevant pumps are secured.
P19-RV-1	Verify reverse flow closure by Appendix J, Type C testing at refueling.

ATTACHMENT 6

IST Program Code Cases Applicable During the Deferral Period

Attachment 6

IST Program Code Cases Applicable During the Deferral Period

Code Case Number	Title	Approved by US NRC Reg. Guide 1.147
N-472	Use of Digital Readout and Digital Measurement Devices for Performing Pump Vibration Testing Section XI, Division 1	Yes