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Serving The Best Location in the Nation
PERRY NUCLEAR POWER PLANT

November 17, 1989
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U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, D. C 20555

Perry Nuclear Power Plant
Docket No. 50-440
In-Service Inspection
Relief Requests

Gentlemen:

The Cleveland Electric Illuminating Company, pursuant to 10CFR50.55a(g)(5), hereby submits eleven relief requests (identified IR-016 through IR-023 and PT-001 through PT-003) for the PNPP Unit 1 Inservice Inspection (ISI) Program generated upon completion of the PNPP's first refueling outage.

If you have any questions, please feel free to call.

Very truly yours,

Al Kaplan
Vice President
Nuclear Group

AK:njc

Attachment

cc: T. Colburn
P. Hiland
USNRC Region III
J. Harris (State of Ohio)
W. Zimmerman (ANI)

A047
1/1

Attached are eleven ISI relief requests generated following PNPP's first refueling outage.

RR Number	System/Code
IR-016	1B13 / B-D, B3.90 & B3.100
IR-017	1B13 / 1B33 / Augmented, X0.1
IR-018	1E12 / B-K-1, B10.10
IR-019	1C11, 1E12, 1E22 / C-C, C3.20
IR-020	1E51 / C-F-2, C5.51
IR-021	1B21, 1P42, 1P45, 2P42 / D-B, D2.20
IR-022	1 '1, 1E12, 1P42, 1P45, 2P42 / F-A, F3.10
IR-023	ALL / SNUBBERS
PT- 01	Class 2 / IWA-5000 (Pressure Testing)
PT-002	Class 2 / IWA-5000 (Hydrostatic Testing)
PT-003	Class 2 & 3 / IWA-5000 (No Detectable Leakage)

NJC/CODED/2772

Perry Nuclear Power Plant Unit 1
RELIEF REQUEST IR-016

I. Identification of Components

System: Reactor Pressure Vessel, Class I

A. Category B-D, Full Penetration Welds of Nozzles in Vessels. Component Description: (See Attached Table for Component Identification Numbers.

1. Nozzle-to-Vessel Welds (Item B3.90)
2. Nozzle Inside Radius Section (Item B3.100)

II. ASME B&PV Section XI Requirements

ASME code requires 100% volumetric examination of welds.

III. Relief Requested

Relief requested from 100% volumetric examination (See attached table for percent completion of required exam) at the first and subsequent examinations as scheduled in Section 13 of the ISI Plan.

IV. Basis for Relief

The structural integrity of the reactor pressure vessel welds was demonstrated during construction by meeting the requirements of the ASME Code Section III. All welds were examined in accordance with the appropriate Code requirements, weld techniques and welders were qualified in accordance with Code requirements, and materials were purchased and traced in accordance with the appropriate Code and NRC requirements and guidelines. The Perry Unit 1 reactor vessel had no reportable indications from preservice inspection results.

The pressure boundary passed the required hydrostatic test; following startup testing the plant has operated for a total of about 340 equivalent full power days between November 1987 and February 1989, without detectable pressure boundary leakage.

Complete examinations meeting the requirements of the ASME Code Section XI will continue to be performed on welds of similar configurations utilizing similar weld techniques, procedures and materials. The inspected welds are subject to the same operating and environmental conditions as the partially examined welds.

It is, therefore, reasonable to apply the results from examined welds to the partially examined welds in the attached table.

In addition, catastrophic reactor vessel failure is precluded by avoiding nil ductile temperatures at significant stress levels according to the design, surveillance and operating provisions described in the Perry USAR Sections 5.3.1 and 5.3.2 and the Technical Specifications 3/4.4.6.

In summary, because of initial vessel condition free of reportable indications, successful code hydrotest and operating experience without leakage indications, the capability to examine most vessel welds on a continuing basis, the capability to detect pressure boundary leakage, and protections against brittle reactor vessel failure, it is concluded that there is no significant impact on the overall level of plant quality and safety.

See the attached table for specific causes of NDE limitation for each component.

V. Alternate Examination

None.

CATEGORY B-D

ITEM NO.	COMPONENT I.D.	SYS./DWG. NO.	DESCRIPTION	NATURE OF OBSTRUCTION	EST % COMPLETE
B3.100	1B13-N8-IR	Reactor, SS-305-006-103	RPV Head Spray Nozzle	Adjacent N7 Nozzle	83%
B3.90	1B13-N8-KA	Reactor, SS-305-006-103	RPV Head Spray Nozzle	Adjacent N7 Nozzle	0 Scan = 89% 45 Scan = 95% 60 Scan = 89%

Perry Nuclear Power Plant Unit 1
RELIEF REQUEST #IR-017

I. Identification of Components

System: Reactor Pressure Vessel, Class I

A. Category: Augmented, Pressure Retaining Welds
Component Description: (See attached table for component identification numbers)

1. Piping Butt Welds $\geq$ 4 in. (Augmented, IGSCC)

II. Examination Requirements

NUREG 0313, Rev. 2 and the subsequent response to Generic Letter 88-01 committed PNPP to examine welds susceptible to IGSCC (Intergranular Stress Corrosion Cracking) with a method capable of detecting IGSCC.

Each weld will receive a basic Section XI examination. Welds containing corrosion resistant cladding (CRC) will receive an augmented examination developed specifically to examine the unique weld configurations. Welds without CRC will receive an augmented IGSCC examination. The welds included in this relief request do not contain CRC.

III. Relief Requested

Relief requested from 100% volumetric examination (see attached table for percent completion of each specific component) at the first and subsequent examinations as scheduled in Section 13 of the ISI Plan.

IV. Basis for Relief

The structural integrity of the piping pressure boundary was demonstrated during construction by meeting the requirements of the ASME Code Section III, and additionally by meeting the requirements of ASME Section XI during preservice inspections. The subject welds were examined in accordance with the appropriate Code requirements, weld techniques and welders were qualified in accordance with Code requirements, and materials were purchased and traced in accordance with the appropriate Code and NRC requirements and guidelines. There were no reportable indications during preservice inspection.

The pressure boundary passed the required hydrostatic test, and has operated for a total of about 340 equivalent full power days between November 1987 and February 1989 without leakage indication attributable to the subject welds.

In addition to partial IGSCC Examinations of the subject welds, complete examinations meeting the requirements of the ASME Code Section XI are performed on welds of similar configurations which utilize the same weld techniques, procedures and materials. The examined welds are subject to the same operating and environmental conditions as the partially examined welds.

Since the construction, operating conditions and environmental conditions of the non-examined portion of the welds are identical to the examined portions, it is reasonable to apply satisfactory results from examined to the non-examined portions.

In summary, because of acceptable initial condition, successful code hydrotest and operating experience without related leakage indications, the capability to examine most of the subject weld volumes on a continuing basis and the capability to detect pressure boundary leakage, it is concluded that there is no significant impact on the overall level of plant quality and safety.

V. Alternate Examination

None.

AUGMENTED

ITEM NO.	COMPONENT I.D.	SYS./DWG. NO.	DESCRIPTION	NATURE OF OBSTRUCTION	EST % COMPLETE
X0.1	1B13-N9A-KC	Reactor/SS-305-006-106	Jet Pump Instrumentation Safe-End to Pen. Seal	Geometry	50% (IGSCC)
X0.1	1B13-N9B-KC	Reactor/SS-305-006-106	Jet Pump Instrumentation Safe-End to Pen. Seal	Geometry	50% (IGSCC)
X0.1	1B33-0008	Reactor Recirc SS-305-602-102	22" pipe to 22" x 4" Contour Nozzle	Geometry	50% (IGSCC)
X0.1	1B33-0107	Reactor Recirc SS-305-602-103	24" to 16" cross to 24" x 12" Reducer	Geometry	50% (IGSCC)

Perry Nuclear Power Plant Unit 1
RELIEF REQUEST #IR-018

I. Identification of Components

Class 1, Category B-Y-1, Item No. B10.10 integrally welded support attachments for piping (See attached table for ID numbers).

II. ASME B&PV Section XI Requirements

Table IWB-2500-1 requires a 100% surface examination (volumetric is not applicable.)

III. Relief Requested

Relief is requested from the required 100% surface examination of the support lug to process pipe attachment welds due to inaccessibility of the weld face at the pipe clamp to support lug interface. 90% of the required surface is accessible and was examined at the first refueling outage and will be examined at subsequent inspections as scheduled in Section 13 of the ISI Plan.

IV. Basis for Relief

The structural integrity of the piping pressure boundary was demonstrated during construction by meeting the requirements of the ASME Code Section III. The subject welds were examined in accordance with the appropriate Code requirements, weld techniques and welders were qualified in accordance with Code requirements, and materials were purchased and traced in accordance with the appropriate Code and NRC requirements and guidelines.

Complete examinations meeting the requirements of the ASME Code Section XI were performed on welds of similar configurations which utilized the weld techniques, procedure and materials during preservice inspection. The inspected welds are subject to the same operating and environmental conditions as the partially inspected welds. It is, therefore, reasonable to extend the acceptable results on the inspectible welds to the partially inspectible welds.

The pressure boundary passed the required hydrostatic test, and has operated for a total of about 340 equivalent full power days between November 1987 and February 1989.

Since the construction, operating conditions and environmental conditions of the non-examined portion of the welds are identical to the examined portions, it is reasonable to apply satisfactory results from examined to the non-examined portions.

Design, procurement and operational provision against mil ductile failure of the subject welds remain as described in the Perry USAR.

In summary, because of acceptable initial condition, successful code hydrotest and operating experience, the capability to examine 90% of the subject weld surface on a continuing basis, and protection against brittle failure, it is concluded that there is no significant impact on the overall level of plant quality and safety.

V. Alternate Examination

None.

CATEGORY B-K-1

ITEM NO.	COMPONENT I.D.	SYS./DWG. NO.	DESCRIPTION	NATURE OF OBSTRUCTION	EST % COMPLETE
B10.10	1E12-H0100-WA	RHR/SS-305-642-117	Welded lugs for pipe clamp	Pipe Clamp	90%

Perry Nuclear Power Plant Unit #1
RELIEF REQUEST #IR-019

I. Identification of Components

Class 2, Category C-C (Item and component numbers in attached table), integrally welded support attachments.

II. ASME B&PV Section XI Requirements

Table IWC-2500-1 requires a 100% surface examination.

III. Relief Requested

Relief is requested from the required 100% surface examinations because of partial inaccessibility of the examination area. See attached Table, Category C-C, (Page 2 of 2) for description of obstruction. Table C-C also contains an estimate of the percentage of weld surface accessible and examined during the first refueling outage and which will be examined at subsequent intervals as scheduled in Section 13 of the ISI Plan.

IV. Basis for Relief

The structural integrity of the piping pressure boundary was demonstrated during construction by meeting the requirements of the ASME Code Section III, and additionally by meeting the requirements of ASME Section XI during preservice inspections. The subject welds were examined in accordance with the appropriate Code requirements, weld techniques and welders were qualified in accordance with Code requirements, and materials were purchased and traced in accordance with the appropriate Code and NRC requirements and guidelines. There were no reportable indications during preservice inspections.

The pressure boundary passed the required hydrostatic test, and has operated for a total of about 340 equivalent full power days between November 1987 and February 1989, without leakage indication attributable to the subject welds.

Complete examinations meeting the requirements of the ASME Code Section XI were performed on welds of similar configurations which utilized essentially similar weld techniques, procedures and materials. The examined welds are subject to the same operating and environmental conditions as the partially examined welds.

Since the construction, operating conditions and environmental conditions of the non-examined portion of the welds are identical to the examined portions, it is reasonable to apply satisfactory results from examined to the non-examined portions.

In summary, because of acceptable initial weld condition, successful code hydrotest and operating experience without related leakage indications, and the capability to examine most or similar weld surfaces on a continuing basis, it is concluded that there is no significant impact on the overall level of plant quality and safety.

V. Alternate Examination

None.

CATEGORY C-C

ITEM NO.	COMPONENT I.D.	SYS./DWG. NO.	DESCRIPTION	NATURE OF OBSTRUCTION	EST % COMPLETE
C3.20	1C11-H0032-WA	Control Rod Drive SS-305-871-103	Welded Lugs for Pipe Support	Adjacent Structure	86%
C3.20	1C11-H0048-WA	Control Rod Drive SS-305-871-101	Welded Lugs for Pipe Support	Adjacent Structure	86%
C3.20	1C11-H0665-WA	Control Rod Drive SS-305-871-104	Welded Lugs for Pipe Support	Pipe Clamp	87%
C3.20	1C11-H0675-WA	Control Rod Drive SS-305-871-102	Welded Lugs for Pipe Support	Pipe Clamp	87%
C3.20	1E12-H0354-WA	Residual Heat Removal SS-305-642-122	Pipe Anchor	Anchor Configuration	50%
C3.20	1E12-H0670-WA	Residual Heat Removal SS-305-642-137	Welded Lugs for Pipe Support	Pipe Clamp	87%
C3.20	1E22-H0027-WA	High Pressure Core Spray SS-305-701-102	Pipe Anchor	Pipe Clamp	81%

Perry Nuclear Power Plant Unit #1
RELIEF REQUEST #IR-020

I. Identification of Components

Class 2, Category C-F-2, Item C5.51, Piping Welds (See attached table for ID number).

II. ASME B&PV Section XI Requirements

Table 2 of Code Case N408 requires surface and volumetric examination.

III. Relief Requested

Relief is requested from the required volumetric examination due to adjacent socket weld connection which limits access to the required area.

IV. Basis for Relief

The structural integrity of the piping pressure boundary was demonstrated during construction by meeting the requirements of the ASME Code Section III, and additionally by meeting the requirements of ASME Section XI during preservice inspections. The subject welds were examined in accordance with the appropriate Code requirements, weld techniques and welders were qualified in accordance with Code requirements, and materials were purchased and traced in accordance with the appropriate Code and NRC requirements and guidelines. There were no reportable indications during preservice inspections.

The pressure boundary passed the required hydrostatic test, and has operated for a total of about 340 equivalent full power days between November 1987 and February 1989 without leakage indication attributable to the subject welds.

In summary, because of acceptable initial weld condition, successful code hydrotest and operating experience without related leakage indication, it is concluded that there is no significant impact on the overall level of plant quality and safety.

V. Alternate Examination

None.

CATEGORY C-F-2

ITEM NO.	COMPONENT I.D.	SYS./DWG. NO.	DESCRIPTION	NATURE OF OBSTRUCTION	EST % COMPLETE
C5.51	1E51-0031	RCIC/SS-305-631-105	Valve F013 to 6" Pipe	Adjacent S.W. Conn.	88%

Perry Nuclear Power Plant Unit #1
RELIEF REQUEST #IR-021

I. Identification of Components

Class 3, Category D-B, Item D2.20, Integral Attachment: Component supports and restraints. (See attached table for component identification).

II. ASME B&PV Section XI Requirements

Table IWD-2500-1 requires a VT-3 visual examination.

III. Relief Requested

Relief is requested from the required visual examination due to the inaccessibility of the components.

IV. Basis for Relief

The structural integrity of the piping pressure boundary was demonstrated during construction by meeting the requirements of the ASME Code Section III. All welds were inspected in accordance with the appropriate Code requirements. Weld techniques and welders were qualified in accordance with Code requirements and materials were purchased and traced in accordance with the appropriate Code and NRC requirements and guidelines. Finally, the pressure boundary received the required hydrostatic test.

Complete examinations meeting the requirements of the ASME Code Section XI were performed on integral attachments with similar configurations which utilized the same weld techniques, procedures and materials.

Since the construction, operating conditions and environmental conditions on the non-inspected portion of the components are identical to the inspected area, it is reasonable to extend the satisfactory results to the non-inspected areas.

V. Alternate Examination

None.

CATEGORY D-B

ITEM NO.	COMPONENT I.D.	SYS./DWG. NO.	DESCRIPTION	NATURE OF OBSTRUCTION	EST % COMPLETE
D2.20	1B21-H0050-WA	Main Steam SS-305-605-115	Welded Lugs for Pipe Support	Underwater, Geometry	0%
D2.20	1B21-H0157-WA	Main Steam SS-305-605-127	Welded Lugs for Pipe Support	Underwater, Geometry	0%
D2.20	1B21-H0167-WA	Main Steam SS-305-605-126	Welded Lugs for Pipe Support	Underwater, Geometry	0%
D2.20	1B21-H0179-WA	Main Steam SS-305-605-124	Welded Lugs for Pipe Support	Underwater Geometry	0%
D2.20	1P42-H0221-WA	Emer. Closed Cool. SS-305-621-104	Welded Lugs for Pipe Support	Lugs In Penetration Filled w/Sealant	0%
D2.20	1P45-H0643-WA	Emer. Service Wtr. SS-305-791-110	Welded LUGS for Pipe Support	Lugs in Penetration Filled w/Grout	0%
D2.20	2P42-H0009-WA	Emer. Closed Cool. SS-305-623-106	Welded Lugs for Pipe Support	Two of Four Lugs in Penetration Filled w/Sealant	50%

CATEGORY D-B

ITEM NO.	COMPONENT I.D.	SYS./DWG. NO.	DESCRIPTION	NATURE OF OBSTRUCTION	EST % COMPLETE
D2.20	1B21-H0176-WA	Main Steam SS-305-605-130	Welded Lugs for Pipe Support	Underwater, Geometry	0%
D2.20	1B21-H0128-WA	Main Steam SS-305-605-129	Welded Lugs for Pipe Support	Underwater, Geometry	0%
D2.20	1B21-H0156-WA	Main Steam SS-305-605-128	Welded Lugs for Pipe Support	Underwater, Geometry	0%
D2.20	1B21-H0158-WA	Main Steam SS-305-605-125	Welded Lugs for Pipe Support	Underwater, Geometry	0%
D2.20	1B21-H0173-WA	Main Steam SS-305-605-123	Welded Lugs for Pipe Support	Underwater, Geometry	0%
D2.20	1B21-H0175-WA	Main Steam SS-305-605-122	Welded Lugs for Pipe Support	Underwater, Geometry	0%
D2.20	1B21-H0155-WA	Main Steam SS-305-605-112	Welded Lugs for Pipe Support	Underwater, Geometry	0%
D2.20	1B21-H0168-WA	Main Steam SS-305-605-113	Welded Lugs for Pipe	Underwater, Geometry	0%

CATEGORY D-B

ITEM NO.	COMPONENT I.D.	SYS./DWG. NO.	DESCRIPTION	NATURE OF OBSTRUCTION	EST % COMPLETE
D2.20	1B21-H0120-WA	Main Steam SS-305-605-114	Welded Lugs for Pipe Support	Underwater, Geometry	0%
D2.20	1B21-H0159-WA	Main Steam SS-305-605-121	Welded Lugs for Pipe Support	Underwater, Geometry	0%
D2.20	1B21-H0160-WA	Main Steam SS-305-605-120	Welded Lugs for Pipe Support	Underwater, Geometry	0%
D2.20	1B21-H0186-WA	Main Steam SS-305-605-119	Welded Lugs for Pipe Support	Underwater, Geometry	0%
D2.20	1B21-H0177-WA	Main Steam SS-305-605-118	Welded Lugs for Pipe Support	Underwater, Geometry	0%
D2.20	1B21-H0163-WA	Main Steam SS-305-605-117	Welded Lugs for Pipe Support	Underwater, Geometry	0%
D2.20	1B21-H0164-WA	Main Steam SS-305-605-116	Welded Lugs for Pipe Support	Underwater, Geometry	0%

Perry Nuclear Power Plant Unit #1
RELIEF REQUEST #IR-022

I. Identification of Components

Class 3, Category F-A, Item F3.10, Component Supports. (See attached table for component identification).

II. ASME B&PV Section XI Requirements

Table IWF-2500-1, requires a VT-3, visual examination.

III. Relief Requested

Relief is requested on that portion of the component that cannot be subjected to the required visual examination. (See attached table for amount of component that is accessible).

IV. Basis for Relief

The structural integrity of the piping pressure boundary was demonstrated during construction by meeting the requirements of the ASME Code Section III. All support were inspected in accordance with the appropriate Code requirements. Weld techniques and welders were qualified in accordance with Code requirements and materials were purchased and traced in accordance with the appropriate Code and NRC requirements and guidelines.

Complete examinations meeting the requirements of ASME Code Section XI were performed on integral attachments with similar configurations which utilized the same weld techniques, procedures and materials.

Since the construction, operating conditions and environmental conditions on the inaccessible supports are identical to supports that were examined, it is reasonable to extend the satisfactory results of the accessible supports to the inaccessible supports.

V. Alternate Examination

None.

CATEGORY F-A

ITEM NO.	COMPONENT I.D.	SYS./DWG. NO.	DESCRIPTION	NATURE OF OBSTRUCTION	EST % COMPLETE
F3.10	1B21-H0050	Main Steam SS-305-605-115	Pipe Guide	Underwater, Geometry	0%
F3.10	1B21-H0157	Main Steam SS-305-605-127	Pipe Guide	Underwater, Geometry	0%
F3.10	1B21-H0167	Main Steam SS-305-605-126	Pipe Guide	Underwater, Geometry	0%
F3.10	1B21-H0179	Main Steam SS-305-605-124	Pipe Guide	Underwater, Geometry	0%
F3.10	1E12-H0476	RHR, SS-305-642-140	Pipe Guide	Guide in Pen. Filled w/Sealant	25%
F3.10	1P42-H0221	Emer. Closed Cool. SS-305-621-104	Pipe Guide	Guide in Pen. Filled w/Sealant	0%
F3.10	1P45-H0643	Emer. Service Wtr. SS-305-791-110	Pipe Guide	Guide in Pen. Filled w/Grout	0%
F3.10	2P42-H0009	Emer. Closed Cool. SS-305-623-106	Pipe Guide	Two of Four Lugs in Penetration Filled w/Sealant	50%

CATEGORY F-A

ITEM NO.	COMPONENT I.D.	SYS./DWG. NO.	DESCRIPTION	NATURE OF OBSTRUCTION	EST % COMPLETE
F3.10	1B21-H0176	Main Steam SS-305-605-130	Pipe Guide	Underwater, Geometry	0%
F3.10	1B21-H0128	Main Steam SS-305-605-129	Pipe Guide	Underwater, Geometry	0%
F3.10	1B21-H0156	Main Steam SS-305-605-128	Pipe Guide	Underwater, Geometry	0%
F3.10	1B21-H0158	Main Steam SS-305-605-125	Pipe Guide	Underwater, Geometry	0%
F3.10	1B21-H0173	Main Steam SS-305-605-123	Pipe Guide	Underwater, Geometry	0%
F3.10	1B21-H0175	Main Steam SS-305-605-122	Pipe Guide	Underwater, Geometry	0%
F3.10	1B21-H0155	Main Steam SS-305-605-112	Pipe Guide	Underwater, Geometry	0%
F3.10	1B21-H0168	Main Steam SS-305-605-113	Pipe Guide	Underwater, Geometry	0%
F3.10	1B21-H0120	Main Steam SS-305-605-114	Pipe Guide	Underwater, Geometry	0%

CATEGORY F-A

ITEM NO.	COMPONENT I.D.	SYS./DWG. NO.	DESCRIPTION	NATURE OF OBSTRUCTION	EST % COMPLETE
F3.10	1B21-H0159	Main Steam SS-305-605-121	Pipe Guide	Underwater, Geometry	0%
F3.10	1B21-H0160	Main Steam SS-305-605-120	Pipe Guide	Underwater, Geometry	0%
F3.10	1B21-H0186	Main Steam SS-305-605-119	Pipe Guide	Underwater, Geometry	0%
F3.10	1B21-H0177	Main Steam SS-305-605-118	Pipe Guide	Underwater, Geometry	0%
F3.10	1B21-H0163	Main Steam SS-305-605-117	Pipe Guide	Underwater, Geometry	0%
F3.10	1B21-H0164	Main Steam SS-305-605-116	Pipe Guide	Underwater, Geometry	0%

NJC/CODED/2833

Perry Nuclear Power Plant Unit #1
RELIEF REQUEST #IR-023

I. Identification of Components

All safety-related hydraulic and mechanical snubbers.

II. ASME B&PV Section XI Requirements

IWF-5400(b) A representative sample* of 10% of the total number of nonexempt (IWF-1230) snubbers whose load rating is less than 50 kips shall be tested with each inspection period. Each representative sample shall consist of previously untested snubbers. After all nonexempt snubbers in the plant have been tested, the tests shall be repeated taking the same snubber (or their replacement) in the same sequence as in the original tests. These tests shall verify:

(1) during low velocity displacements, the specified maximum drag or free movement force will initiate motion of the snubber rod in both tension and compression;
(2) activation (restraining action) is achieved within the specified range of velocity or acceleration in both tension and compression;
(3) snubber bleed, or release rate, where required, is within the specified range in compression or tension. For units specifically required not to displace under continuous load, the ability of the snubber to withstand load without displacement shall be demonstrated.

IWF-5400(c) Snubbers that fail the inservice tests of (b) above shall be repaired in accordance with IWF-4000 and retested. An additional sample of 10% of the total number of snubbers shall also be tested at that time. Additional sample testing shall be continued until all units within the sample have met the requirements of (b) above.

*A representative sample shall include snubbers from various locations, taking into consideration service and environment.

III. Relief Request

Relief is requested from the required method of sampling in IWF-5400(b) and (c).

IV. Basis for Relief

The PNPP Unit 1 Technical Specification 4.7.4.e- "Functional Tests," provides three alternative sampling methods for the functional testing of snubbers, the purpose of which, as described in

the Bases for Technical Specification 4.7.4, is to provide assurance of snubber functional reliability. The methods used and their stated acceptance criteria are:

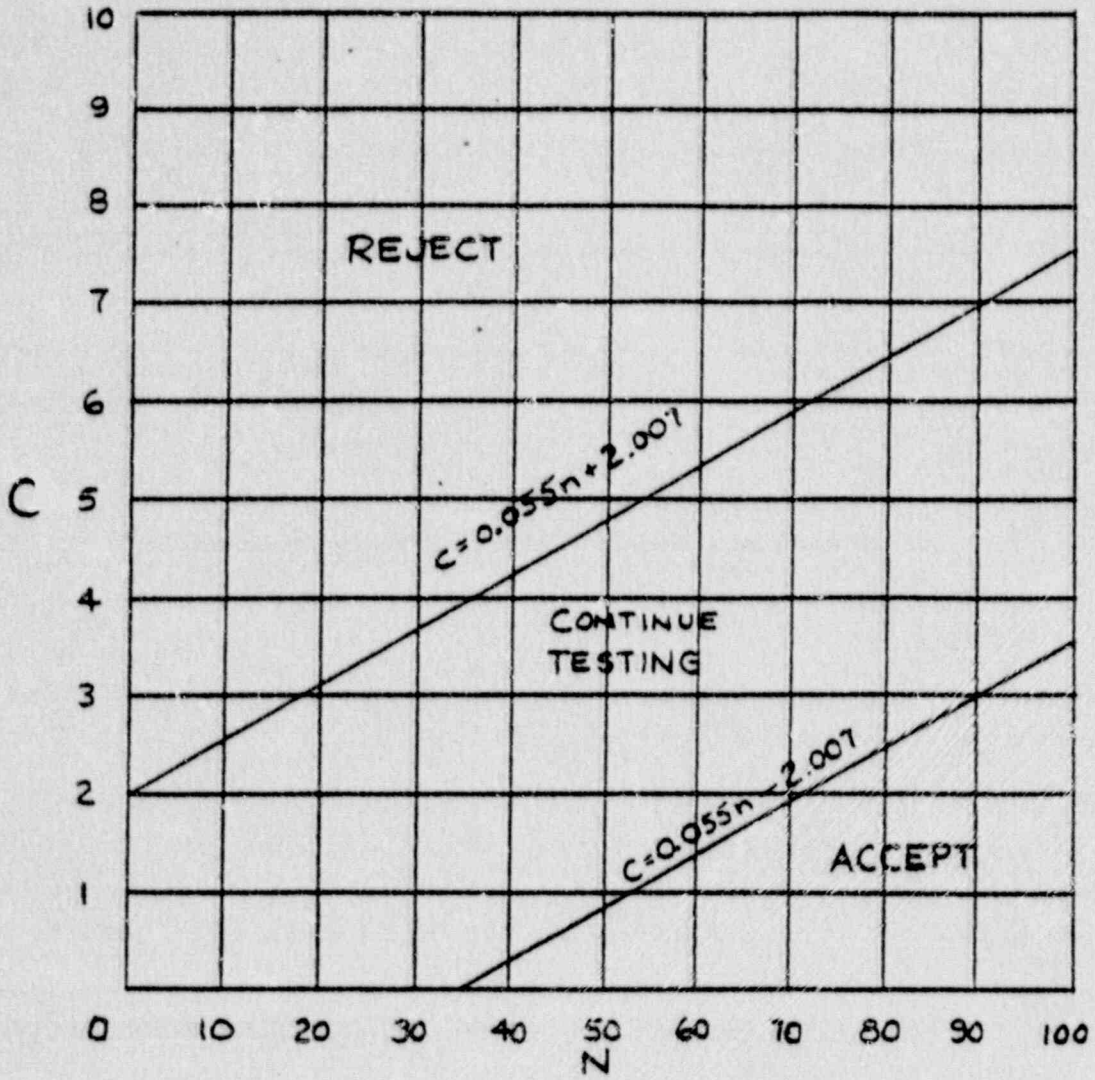
1) At least 10% of the total of each type of snubber shall be functionally tested either in-place or in a bench test. For each snubber of a type that does not meet the functional test acceptane criteria of Specification 4.7.4.f, an additional 5% of that type of snubber shall be functionally tested until no more failures are found or until all snubbers of that type have been functionally tested; or

2) A representative sample of each type of snubber shall be functionally tested in accordance with Figure 4.7.4-1. "C" is the total number of snubbers of a type found not meeting the acceptance requirements of Specification 4.7.4.f. If at any time the point plotted falls on or below the "Accept" line, testing of snubbers of that type may be terminated. The cumulative number of snubbers of a type tested is denoted by "N". At the end of each day's testing, the new values of "N" and "C" (previous day's total plus current day's increments) shall be plotted on Figure 4.7.4-1. If at any time the point plotted falls on or above the "Reject" line, all snubbers of that type shall be functionally tested. If at any time the point plotted falls on or below the "Accept" line, testing of snubbers of that type may be terminated. When the point plotted lies in the "Continue Testing" region, additional snubbers of that type shall be tested until the point falls in the "Accept" region or the "Reject" region, or all the snubber of that type have been tested. Testing equipment failure during functional testing may invalidate that day's testing and allow that day's testing to resume anew at a later time, providing all snubbers tested with the failed equipment during the day of the equipment failure are retested; or

3) An initial representative sample of 55 snubbers of each type shall be functionally tested. For each snubber type which does not meet the functional test acceptance criteria, another sample of at least one-half the size of the initial sample shall be tested until the total number tested is equal to the initial sample size multiplied by the factor, 1 + C/2, where "C" is the number of snubbers found which do not meet the functional test acceptance criteria. The results from this sample plan shall be plotted using an "Accept" line which follows the equation $N = 55(1 + C/2)$. Each snubber point should be plotted as soon as the snubber is tested. If the point plotted falls on or below the "Accept" line, testing of that type of snubber may be terminated. If the point plotted falls above the "Accept" line, testing must continue until the point falls on or below the "Accept" line or all the snubbers of that type have been tested.

V. Alternate Testing

None.



SAMPLE PLAN 2) FOR SNUBBER FUNCTIONAL TEST

PNPP UNIT 1 TECHNICAL SPECIFICATION FIGURE 4.7.4-1

NJC/CODED/2834

PERRY NUCLEAR POWER PLANT UNIT 1
RR# PT-001

I. Identification Of Components

Class 2 systems/components attached to the Reactor Coolant Pressure Boundary (Class 1) which are not provided with either pressure or test isolation (i.e., instrumentation, drain, vent, and test piping)

II. ASME B & PV Section XI Requirements

IWA-5213(c) Test Condition Holding Time, "system inservice tests - no holding time required, provided the system has been in operation for at least 4 hours."

IWC-5210(a)(2) Test, "a system pressure test conducted during a system inservice test [IWA-5211(c)] for those systems required to operate during normal plant operation;"

IWC-5221(b) System Pressure Test During System Inservice Tests, "The nominal operating pressure during system operation shall be acceptable as the pressure for the system inservice test."

III. Relief Request

Relief is requested from using the System Inservice Pressure Test requirements of hold time and test pressure for Class 2 Non-Isolable components and their instruments from the Reactor Coolant Pressure Boundary (Class 1). These components shall be examined (VT-2 Visual Examination) during the Class 1 Reactor Coolant Boundary System Leakage Pressure Test at the frequency intervals specified within Subsection IWC.

IV. Basic For Relief

Numerous components attached to the reactor coolant pressure boundary are covered by the provisions of 10CFR50.55a(c) Reactor Coolant Pressure Boundary

"(2) Components which are connected to the reactor coolant system and are part of the reactor coolant pressure boundary as defined in Section 50.2 need not meet the requirements of paragraph (c)(1) of this section, Provided:

(i) In the event of postulated failure of the component during normal reactor operation, the reactor can be shut down and cooled down in an orderly manner, assuming makeup is provided by the reactor coolant makeup system; or

(ii) The component is or can be isolated from the reactor coolant system by two valves in series (both closed, both open, or one closed and the other open). Each open valve must be capable of automatic actuation and, assuming the other valve is open, its closure time must be such that, in the event of postulated failure of the component during normal reactor operation, each valve remains operable and the reactor can be shut down and cooled down in an orderly manner, assuming makeup is provided by the reactor coolant makeup system only."

The piping systems and their associated components less than 1 inch were constructed to the requirements of ASME Code, Section III, Subsection NC, and identified as Safety Class 2 for inservice inspection. These piping systems shall be pressurized during the Class 1, System Leakage Pressure Test which has specific requirements for the concern of the reactor vessel exposure to a neutron flux (EFPY). The VT-2 Visual Examination will be performed at the required frequency during the reactor vessel pressurization. The holding time for pressure of the system leakage pressure test shall allow for detection and location of leakage.

V. Alternate Examination

None

PERRY NUCLEAR POWER PLANT UNIT 1
RR# PT-002

I. Identification Of Components

Class 2 systems/components attached to the Reactor Coolant Pressure Boundary (Class 1) which are not provided with either pressure or test isolation (i.e., instrumentation, drain, vent, and test piping)

II. ASME B & PV Section XI Requirements

IWC-5210(a)(3) Test, "A system hydrostatic pressure test [IWA-5211(d)] for each system or portions of systems and for repaired or replaced components, or altered portions of systems."

IWC-5222(a) System Hydrostatic Test, "The system hydrostatic test pressure shall be at least 1.10 times the system pressure P_{SV} for systems with Design Temperature of 200 F or less, and at least 1.25 times the system pressure P_{SV} for systems with Design Temperature above 200 F. The system pressure P_{SV} shall be the lowest pressure setting among the number of safety or relief valves provided for overpressure protection within the boundary of the system to be tested. For systems (or portions of systems) not provided with safety or relief valves, the system design pressure P_d shall be substituted for P_{SV}."

III. Relief Requested

Relief is requested from using the Class 2, System Hydrostatic Pressure Test requirements of system hydrostatic test for Class 2 Non-Isolable components and their instruments from the Reactor Coolant Pressure Boundary (Class 1). These components shall be examined (VT-2 Visual Examination) during the Class 1 Reactor Coolant Boundary System Hydrostatic Pressure Test at the frequency intervals specified within Subsection IWB.

IV. Basis For Relief

Numerous components attached to the reactor coolant pressure boundary are covered by the provisions of 10CFR50.55a(c) Reactor Coolant Pressure Boundary

"(2) Components which are connected to the reactor coolant system and are part of the reactor coolant pressure boundary as defined in Section 50.2 need not meet the requirements of paragraph (c)(1) of this section, Provided:

(i) In the event of postulated failure of the component during normal reactor operation, the reactor can be shut down and cooled down in an orderly manner, assuming makeup is provided by the reactor coolant makeup system; or

(ii) The component is or can be isolated from the reactor coolant system by two valves in series (both closed, both open, or one closed and the other open). Each open valve must be capable of automatic actuation and, assuming the other valve is open, its closure time must be such that, in the event of postulated failure of the component during normal reactor operation, each valve remains operable and the reactor can be shut down and cooled down in an orderly manner, assuming makeup is provided by the reactor coolant makeup system only."

The piping systems and their associated components less than 1 inch were constructed to the requirements of ASME Code, Section III, Subsection NC and identified as Safety Class 2 for inservice inspection. These piping systems shall be pressurized during the Class 1, System Hydrostatic Pressure Test which has specific requirements for the concern of the reactor vessel exposure to a neutron flux (EFPY). The VT-2 Visual Examination will be performed at the required frequency during the reactor vessel pressurization. The holding time and pressure shall allow for detection and location of leakage.

V. Alternate Examination

None.

PERRY NUCLEAR POWER PLANT UNIT 1
RR# PT-003

I. Identification of Components

Class 2 and 3 components which undergo routine quantitative pressurization tests in which no detectable leakage would be identified as the minimum equipment accuracy. (i.e., normally inclusive of valves, piping systems and penetrations).

II. ASME B & PV Section XI Requirements

IWA-5211 Test Description, "The pressure retaining components within each system boundary shall be subject to system pressure tests under which conditions visual examination VT-2 is performed in accordance with IWA-5240 to detect leakages. The required system pressure tests and examinations, as referenced in Table IWA-5210-1, may be conducted in conjunction with one or more of the following system tests or operations: "(b) a system functional test, (d) a system hydrostatic test, and (e) a system pneumatic test.

IWA-2500(a) Examination and Pressure Test Requirements, "Components shall be examined and pressure tested as specified in Table IWC-2500-1. The method of examination for the components and parts of the pressure retaining boundaries shall comply with those tabulated in Table IWC-2500-1, except where alternate examination methods are used that meet the requirements of IWA-2240."

IWC-5210(a) Test, "The pressure retaining components within each system boundary shall be subjected to the following system pressure tests and visually examined by the method specified in Table IWC-2500-1, Examination Category C-4: "(1) a system pressure test conducted during a system functional test, and (3) a system hydrostatic pressure test.

IWC-5210(b) Test, "The system pressure tests and visual examinations shall be conducted in accordance with IWA-5000 and this Article. The contained fluid in the system shall serve as the pressurizing medium, except that in steam systems either water or air may be used. Where air is used, the test procedure shall permit the detection and location of through-wall leakages in components of the system tested."

IWD-2500(a) Examination and Pressure Test Requirements, "Components shall be examined and pressure tested as specified in Table IWD-2500-1. The method of examination for the components and parts of the pressure retaining boundaries shall comply with those tabulated in Table IWD-2500-1 except where alternate examination methods are used that meet the requirements of IWA-2240."

IWD-5210(a) Test, "The pressure retaining components within the boundary of each system specified in the Examination Categories of Table IWD-2500-1 shall be pressure tested and examined in accordance with Table IWD-2500-1 during the following tests:" "(2) system functional test, IWA-5211(b); (3) system hydrostatic test, IWA-5211(d)."

III. Relief Requested

Relief is requested from performance of VT-2 Visual Examination in conjunction with a system pressure test where the test pressurization boundary leakage is measured (makeup or pressure decay) and quantified as within the test equipment accuracy (no detectable leakage).

IV. Basis For Relief

Numerous Class 2 and 3 components undergo leak testing using the pressure makeup or pressure decay techniques. These tests require the measurement and quantification of the test pressurization boundary leakage. The majority of pressure tests are to satisfy plant technical specifications for verifying plant component operability and structural integrity. The test equipment used to satisfy technical specifications has an accuracy and range unique to verify major safety concerns. The quantification as no detectable leakage is documented as minimum equipment accuracy (i.e., 20 sccm or 4.8 ml/min). The performance of a VT-2 Visual Examination during testing would not serve a useful purpose if no detectable leakage exists. Non-performance of the VT-2 visual examination would benefit ALARA without impacting on component reliability.

V. Alternate Examination

None

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