Ser The State	· ·					-	
`•••	REGULI	AIURY 1777-0	URMAILUN	DISTRIBUTION S	STOREM LR.	2 Pr	
	N NBR:8403270		C.DATE: 8	14/03/20 NOTAF nit 2, Washingt	RIZED: NO		DOCKET # > D5000397
AUTH.N		THOR AFFI		nt 27 Mashangt	ON FUOIT	C POWC (11000011
		nington Po CIPIENT A		ver Supply Syst	em	k	
RECIP. SCHWENC		icensing.					
SHA IFCT	• Requests and	anoval to	use non	ions of later	addonda (OF ASME	
SUBULCI	Section XI	requireme	nts∍re se	lection & exam	n of Class	s, 2	
	piping (Cato Proposed co			inservice ins	sp program	n .	
	•					•	1
DISTRIB TITLE:	UTION CODE: BO Licensing Subr	nittal: P	IES RECEI SAR/FSAR	VED:LTR ENC Amdts & Relate		ZE:	
NOTES:				7 * ,			a.
	RECIPIENT	COP	IES	RECIPIENT	CO	PIES	
	ID CODE/NAME		RENCL	ID CODE/NAME	'r •	RENCL	
	NRR/DL/ADL NRR LB2 LA	1	0 0	NRR LB2 BC Auluck,R.	01 1	0. 1	
INTERNAL:	ELD/HDS2	1	0	IE FILE	1.	1.	
TNIEKNAL:	IE/DEPER/EPB	36 3	·3	IE/DEPER/IRB	35 1	1 ¢	
	IE/DQASIP/QAE		1	NRR/DE/AEAB	1	0 1 ×	
	NRR/DE/CEB NRR/DE/EQB	11 1 13 2	2	NRR/DE/EHEB NRR/DE/GB	28 2	1× 2≮	
	NRR/DE/MEB	18 1	1	NRR/DE/MTEB	17 1	24 1	
	NRR/DE/SAB	24 1	1	NRR/DE/SGEB	25 1	1 -	•
	NRR/DHFS/HFE		1	NRR/DHFS/LQB	32 1	- 1×	
1	NRR/DHFS/PSRI NRR/DSI/AEB	3 1 26 1	1	NRR/DL/SSPB NRR/DSI/ASB	1	0	
	NRR/DSI/CPB	10 1	ĩ	NRR/DSI/CSB	09 1	1	
	NRŔ/DSI/ICSB	16 1	1	NRR/DSI/METB		1	
	NRR/DSI/PSB	19 1	1	NRR/DSI/RAB	22 1	1	
	NRR/DSI/RSB RGN5	23 1 3	1 3	REG FILE RM70DAMI/MIB	04 1	$\begin{array}{c} 1\\ 0\end{array}$.	
EXTERNAL:	ACRS	41 6	6	BNL (AMDTS ONL	.Y) 1	1	
	DMB/DSS (AMD)		1	FEMA-REP DIV		1	•
	LPDR NSIC	03 1 05 1	1	NRC PDR NTIS	02 1	1	
		- •	-		F	~	

ξ ζ

TOTAL NUMBER OF COPIES REQUIRED: LTTR

46 53 ENCL

Contraction and the second sec

3 THURSON а — Баланы Гана — макуудар Хана Сайсан, Хана — Алар Суудар улуудар 1 × 1).) RE ERENARTER ON OUR ARTERED REPORTER ON TRANSPORT TRANSPORT REPORT AND ARTER AND ARTER ARTER ARTER ARTER ARTER 医胸膜管膜炎 素皮 电接合 网络白垩 网络 4 4 **.** 1026 • *• ** per \$ *

A REAL AREAS A MARCENT DEFENSE A MARK DEST

* x • x1 * 4 * Story Forth.

S PAREMENT MANDARY

END BUILD AND A TOXAL TO CONTACT FOR OF A REAL AND THE PERCENT. - 这些情况, XX, 主义相互相任义的第三人称单数形式 网络卡斯斯卡卡 第二人的 化合合物 A FOR THE OPEN PARTY AND THE REPORT OF THE REPORT OF THE OPEN AT THE PARTY AND THE PARTY · PARTELINEA CHART HART

ł ত ইতিই কেই কেনাই ই নাল ই মন্দিই হোৱা মনি। মনই ইয়া যি ই টাই ইন ইনেই সগঙ্ট ইয়া আৰু ই ই ই সা আৰু নিই ই ই কেনে আ মাই মই মাই কিইকিয়া ই ইনেল ই মন্দির ই মাই ইনট্টী আছি নিলে প্রতি নিলেই ইনিয়া হৈছে বিষ্ণাই ইনেলেই ইয়া বিনেটি বিদে মাই মই মাই হাই ই ই ই ইংকিয়েই মাই নির্দাই মুখ্যি ইনট্টী আছি নিলেই নিলেই হৈ নিলেই ইয়া বিষ্ণাই ইয়া বিনেটি বিনেট

2 . S . N. .

		The state of the second			
	进 1月月 開 記	Allevia Naria y Allevia. Allevia Naria y Allevia (Allevia)			×. • • • • • • • • • • • • • • • • • •
<u>r</u>	r	Robert All All All All All			Alt is the co
ji.	£	l k¥ a ak	Ĥ	X.	Sec. Notes a constant f
t	i,	PR, F. F. K. C. S. A. S. S. A. K.	۴ ا	F_{1}	医结子 化二苯基苯基丁基苯基甲基苯基
i	R.	s 1 🖎 🐴 🔐	r,	£	AT I TO A FREE AND A
X.	A	PE+Eq™ i N is	R	A.	
l n	1.	A g P ing the	E I	11	е Д — н х и х х т т т
×	<u>p</u>	NE SWA KENY	ß	N	erk nost to
*	۲ ر	e de la companya de la	ji Q R	燕	WENCE PARK STAN
łt	R	in the t the t the	•	114	set of Fight is an Eight of
1.1	f:	23 JP2 🔨 🗶 🖈 1	ß.	*	1 a 🔊 🕺
*	£	 A Science in Figure 1 	Ŗ R	\$	ET CARA MAN
ä,	5	ener de la suivier de la Roma de la Companya de la	R	¥	ET OF WER N
٨	R	THE REPART NEWS	t,	*	EX CALOXXX N V
×	R	The state of the s	8	4	N. K. S. B. N. S. P. S.
1	E	Line - 二、当日登市 (Free)	R	×A	€. 1 × 1× 1×
U.	ħ	et 🕅 🚿 🛠 🖓 ar an Albert	1	to	e ⁿ ji i
R	R	CKI B BARRADA H			LE CONTRA STRATECO
¥.	₫.	11、31萬日 (唐平高四) (二)		*	●11歳6月 25分子 長いためへい
¥	8	ક્રિયા હાર્દ પ્રેક્સ્ટર	ŗ	<i>بال</i> ر	#n ³ ∮ 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
4	R	UTIN	R	\$	S. Str.

Sam 1 H re' ારે છે. આ ગામમાં ગામમ

Washington Public Power Supply System

P.O. Box 968 3000 George Washington Way Richland, Washington 99352 (509) 372-5000

March 20, 1984 G02-84-156 8403270118 840320 PDR ADDCK 05000397 Q PDR

Docket No. 50-397

Director of Nuclear Reactor Regulation Attention: Mr. A. Schwencer Chief Licensing Branch No. 2 Division of Licensing U.S. Nuclear Regulatory Commission Washington, D.C. 20555

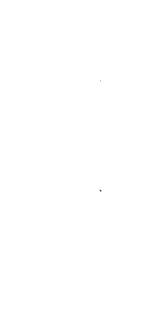
Dear Mr. Schwencer:

Subject: NUCLEAR PLANT NO. 2 USE OF PORTIONS OF LATER ADDENDA OF ASME SECTION XI EXAMINATION OF CLASS 2 SYSTEMS

The Supply System requests Nuclear Regulatory Commission approval to use paragraphs IWC1220, 1221 and 1222 and Table IWC2500, Category CF from the 1983 Edition, with Addenda through Winter 1983 (W83) of the ASME Boiler and Pressure Vessel Code, Section XI (attached). The requirements will be used for selection and examination of Class 2 piping (Category CF only) for the WNP-2 Inservice Inspection program. These requirements will be used in lieu of the mandatory requirements which according to 10CFR50.55a are ASME Section XI 1980 Edition, with Addenda through Winter 1980. For Emergency Core Cooling and Residual Heat Removal System, the mandatory Code is the 1974 Edition, with Addenda through Summer 1975.

The W-83 Addendum has not yet been referenced in 10CFR50.55a(b) as an approved Code. Therefore, specific approval is required to use the W-83 provisions.

The above paragraphs of Section XI (W-83) have been incorporated into a Code Case which is currently in the approval cycle. In February, this proposed Code Case passed ASME Subcommittee XI. However, we expect it to take another 6-12 months for it to be approved by the ASME Main Committee and be referenced in NRC Regulatory Guide 1.147. This schedule will not allow use of this Code Case by the Supply System for the WNP-2 Inservice Inspection Program.









• •

,

۰. ۰.

Mr. A. Schwencer Page Two EXAMINATION OF CLASS 2 SYSTEMS

The W-83 Addendum differs from W-80 as follows:

- Selection criteria is based on more of a random sampling of a smaller percentage of welds in a larger number of systems and portions of systems.
- o A <u>volumetric</u> and surface examination is required instead of a surface examination only.

It is expected that the NRC will approve the use of the applicable paragraphs of Section XI, 1983 Edition (annotated on the proposed Code Case - attached). The NRC representative on Subcommittee XI voted affirmation on this action on February 2, 1984.

Your prompt approval is requested to support the submittal of the WNP-2 Inservice Inspection Program, scheduled for March 31, 1984.

Very truly yours,

NC k

Mr. G. C. Sorensen, Manager Regulatory Programs

TFH:shm

Attachment

cc: R. Auluck - NRC M. Humm - NRC W. Chin - BPA A. Toth - NRC, Site

• .

•

. .

.

ч ч ,

. •

an and the state of the state o i

● 1 B

ŀ



CLASS 2 Systems 1/31/84

Proposed Code Case

Alternative Rules for Examination of Class 2 Piping

- Inquiry: 'When determining the components subject to examination and establishing examination requirements for Class 2 piping under Section XI Division 1, what alternative exemptions to those stated in IWC - 1220 and what alternative examination requirements to those stated in IWC -2500 Category CF, may be used?
- Reply: It is the opinion of the committee that the following rules may be used for determining components subject to examination and establishing examination requirements for Class 2 piping under Section XI Division 1:

1. The following components (or parts of components) of RHR, ECC and CHR systems (or portions of systems) are exempt from the volumetric and (IWC -1220) surface examination requirements of IWC-2500:

- (*IWC-1221*) (a) Vessels, piping, pumps, valves and other components NPS 4 and smaller in all systems except high pressure safety injection systems of pressurized water reactor plants.
 - (b) Vessels, piping, pumps, valves and other components NPS 1¹/₂ and smaller in high pressure safety injection systems of pressurized water reactor plants.
 - (c) Component connections NPS 4 and smaller (including nozzles, socket fittings, and other connections) in vessels, piping, pumps, valves and other components of any size in all systems except high pressure safety injection systems of pressurized water reactor plants.
 - (d) Component connections NPS 1¹/₂ and smaller (including nozzleś, socket fittings, and other connections) in vessels, piping, pumps, valves and other components of any size in high pressure safety injection systems of pressurized water reactor plants.

1. RHR, ECC, and CHR Systems are the Residual Heat Removal, Emergency Core Cooling, and Containment Heat Removal Systems, respectively.

- (e) Vessels, piping, pumps, valves, other components and component connections of any size in statically pressurized, passive (i.e., no pumps) safety injection systems² of pressurized water reactor plants.
- (f) Piping and other components of any size beyond the last shutoff valve in open ended portions of systems that do₃not contain water during normal plant operating conditions.

2. The following components (or parts of components) of systems (or portions (IWC-1222) of systems) other than RHR, ECC and CHR Systems are exempt from the volumetric and surface examination requirements of IWC-2500:

- (a) Vessels, piping, pumps, valves and other components NPS 4 and smaller.
- (b) Component connections NPS 4 and smaller (including nozzles, socket fittings, and other connections) in vessels, piping, pumps, valves and other components of any size.
- (c) Vessels, piping, pumps, valves, other components and component connections of any size in systems or portions of sytems that operate (when the system function is required) at pressure equal to or less than 275 psig and at a temperature equal to or less than 200°F.
- (d) Piping and other components of any size beyond the last shutoff valve in open ended portions of systems that do₃not contain water during normal plant operating conditions.
- 3. For welds in austenitic stainless steel or high alloy piping the requirements of attached Table 1 Examination Category CF-1 Pressure Retaining Welds in Austenitic Stainless Steel of High Alloy Piping shall be used as an alternative to the requirements of Table IWC-2500-1 Examination Category C-F, Pressure Retaining Welds in Piping.
- Statically pressurized, passive safety injection systems of pressurized water reactor plants are typically called by such names as:
 - Accumulator tank and associated system
 - Safety injection tank and associated system
 - Core flooding tank and associated system
- Normal plant operating conditions include reactor startup, operation at power, hot standby, and reactor cooldown to cold shutdown conditions, but do not include test conditions.

- 2 -

- (e) Vessels, piping, pumps, valves, other components and component connections of any size in statically pressurized, passive (i.e., no pumps) safety injection systems' of pressurized water reactor plants.
- (f) Piping and other components of any size beyond the last shutoff valve in open ended portions of systems that do₃not contain water during normal plant operating conditions.

2. The following components (or parts of components) of systems (or portions (IWC-1222) of systems) other than RHR, ECC and CHR Systems are exempt from the volumetric and surface examination requirements of IWC-2500:

- (a) Vessels, piping, pumps, valves and other components NPS 4 and smaller.
- (b) Component connections NPS 4 and smaller (including nozzles, socket fittings, and other connections) in vessels, piping, pumps, valves: and other components of any size.
- (c) Vessels, piping, pumps, valves, other components and component connections of any size in systems or portions of sytems that operate (when the system function is required) at pressure equal to or less than 275 psig and at a temperature equal to or less than 200°F.
- (d) Piping and other components of any size beyond the last shutoff valve in open ended portions of systems that do₃not contain water during normal plant operating conditions.
- 3. For welds in austenitic stainless steel or high alloy piping the requirements of attached Table 1 Examination Category CF-1 Pressure Retaining Welds in Austenitic Stainless Steel of High Alloy Piping shall be used as an alternative to the requirements of Table IWC-2500-1 Examination Category C-F, Pressure Retaining Welds in Piping.
- Statically pressurized, passive safety injection systems of pressurized water reactor plants are typically called by such names as:
 - Accumulator tank and associated system
 - Safety injection tank and associated system
 - Core flooding tank and associated system
- 3. Normal plant operating conditions include reactor startup, operation at power, hot standby, and reactor cooldown to cold shutdown conditions, but do not include test conditions.

- 2 -

1 v

.

. . Ъ

р -

. 4 .

·

р¹ 1 г.

.

- 4. For welds in carbon and low alloy steel piping. The requirements of attached Table 2, Examination Category CF-2, Pressure Retaining Welds in Carbon and Low Alloy Steel Piping shall be used as an alternative to the requirements of Table IWC-2500-1, Examination Category CF, Pressure Retaining Welds in Piping.
- 5. The examination requirements of Figures 1 and 2 shall apply to all surface and volumetric examinations including piping less than $\frac{1}{2}$ -in thick.
- 6. The examination requirements for pipe branch connections provided in Figures IWC-2500-9 through IWC-2500-13 of the 1983 Edition of Section XI shall apply to pipe branch connections NPS 2 and larger.

Applicability

This case is applicable to Section XI Editions beginning with the 1974 Edition and through the 1983 Addenda.

Application Justification

Inservice Inspection Requirements for Class 2 Systems were first included in the 1974 Edition. The provisions of this case will not be issued as part of the code until the Winter 1984 Addenda.

- 3 -



۰,

63

0

TABLE 1 (TABLE IWC-2500-1 (CONT'D) EXAMINATION CATEGORIES

 \bigcirc

ltem No.	Parts Examined	Examination Requirements/ Fig. No.6	Examination Method	Acceptance Standard 6	Extent of Examination ²	Examination ^s
C5.10	Piping Welds $\geq \frac{3}{6}$ in. Nominal Wall Thickness					
C5.11	for Piping > NPS 4 Circumferential Weld	IWC-2500-7	Surface and volumetric	IWC-3514	100% of each weld requiring examination	Each inspection interval
C5.12	Longitudinal Weld	IWC-2500-7	Surface and volumetric	IWC-3514	2.51 — at the intersecting circumferential weld	Each inspection interval
C5.20	Piping Welds > $\frac{1}{5}$ in. Nominal Wall Thickness for Piping ≥ NPS 2 and < NPS 4				•	
C5.21	Circumferential Weld	IWC-2500-7	Surface and volumetric	IWC-3514.	100% of each weld requiring examination	Each inspection interval
C5.22	Longitudinal Weld	IWC-2500-7	Surface and volumetric	IWC-3514	2.51 — at the intersecting circumferential weld	Each inspection interval
C5.30	Socket Welds	IWC-2500-7	Surface	IWC-3514	100% of each weld requiring examination	Each inspection interval
C5.40	Pipe Branch Connections of Branch Piping \geq NPS 2					
C5.41	Circumferential Weld	IWC-2500-9 to		IWC-3514	100% of each weld requiring examination	Each inspection
C5.42	Longitudinal Weld	-13, inclusive IWC-2500-12 and -13	Surface	IWC-3514	examination 2.5/ — at the intersecting circumferential weld	interval Each inspection interval
exen (2) The exen C-F- be d (a (b) (c) (3) Term of w (4) Stru fland	uirements for examination of welds in piping ≤ NPS mption criteria of WC-1220 + H15 case welds selected for examination shall include 7.5%, bi- mpted by WC-1220. (Some welds not exempted by WC- 1. These welds, however, shall be included in the total listributed as follows: austenitic stainless steel or high alloy welds in each nondestructive examinations required by Examination within a system, the examinations shall be distributed prorated, to the degree practicable, on the number within each system, examinations shall be distributed prorated, to the degree practicable, on the number within each system, examinations shall be distributed prorated, to the degree practicable, on the number chich acts as a rigid restraint or provides at least two of clural discontinuities include pipe weld joints to vessel ges, etc., conforming to ANSI B16.9), and pipe branci- welds selected for examination shall be reexamined	ut not less than 28 of 1225 are not requir weld count to which ass 2 systems prora system (i.e., if a system on Category C-F-1 s d among terminal er of nonexempt termin d between line sizes t to structures, comp legrees of translation nozzles, valve bodic: h connections and fi	se welds, of all austenitic : red to be nondestructivel in the 7.5% sampling ra tited, to the degree prac- tem contains 30% of the should be performed on rds [see Note (3)] and st prorated to the degree sonents (such as vessels, sonal restraint to piping s, pump casings, pipe fin ttings.	stainless steel o y examined per te is applied.) T ticable, on the we nonexempt w that system); ructural discont discontinuities i practicable. pumps, valves), thermal expans ttings (such as o	r high alloy welds not Examination Category 'he examinations shall number of nonexempt elds, then 30% of the tinuities [see Note (4)] in that system; and for pipe anchors, each ion.	

 \bigcirc

W83
\smile

TABLE 1 TABLE IWC-2500-1 (CONT'D) **EXAMINATION CATEGORIES**

ltem No.	Parts Examined ¹	Examination Requirements/ Fig. No.6	Examination Method	Acceptance Standard 6	Extent of Examination ²	Examination ³
C5.10	Piping Welds ≥ % in. Nominal Wall Thickness for Piping > NPS 4					
C5.11	Circumferential Weld	IWC-2500-7	Surface and volumetric	IWC-3514	100% of each weld requiring examination	Each inspection interval
C5.12	Longitudinal Weld	IWC-2500-7	Surface and volumetric	IWC-3514	2.51 — at the intersecting circumferential weld	Each inspection interval
C5.20	Piping Welds > $\frac{1}{5}$ in. Nominal Wall Thickness for Piping \geq NPS 2 and < NPS 4				•	
C5.21	Circumferential Weld	IWC-2500-7	Surface and volumetric	IWC-3514	100% of each weld requiring examination	Each Inspection interval
C5.22	Longitudinal Weld	IWC-2500-7	Surface and volumetric	IWC-3514	2.57 — at the intersecting circumferential weld	Each inspection interval
C5.30	Socket Welds	IWC-2500-7	Surface .	IWC-3514	100% of each weld requiring examination	Each inspection interval
C5.40	Pipe Branch Connections of Branch Piping ≥ NPS 2				•	•
C5.41	Circumferential Weld	IWC-2500-9 to -13, inclusive	Surface	IWC-3514	100% of each weld requiring examination	Each Inspection Interval
C5.42	Longitudinal Weld	IWC-2500-12 and -13	Surface	IWC-3514	2.51 — at the intersecting circumferential weld	Each inspection interval

(2) The welds selected for examination shall include 7.5%, but not less than 28 welds, of all austenitic stainless steel or high alloy welds not the state of the selected by two-1220. (Some welds not exempted by two-1220) are not required to be nondestructively examined per Examination Category C-F-1. These welds, however, shall be included in the total weld count to which the 7.5% sampling rate is applied.) The examinations shall be distributed as follows:

> (a) the examinations shall be distributed among the Class 2 systems prorated, to the degree practicable, on the number of nonexempt austenitic stainless steel or high alloy welds in each system (i.e., if a system contains 30% of the nonexempt welds, then 30% of the nondestructive examinations required by Examination Category C-F-1 should be performed on that system);

> (b) within a system, the examinations shall be distributed among terminal ends [see Note (3)] and structural discontinuities [see Note (4)] prorated, to the degree practicable, on the number of nonexempt terminal ends and structural discontinuities in that system; and

· (c) within each system, examinations shall be distributed between line sizes prorated to the degree practicable.

(3) Terminal ends are the extremities of piping runs that connect to structures, components (such as vessels, pumps, valves), or pipe anchors, each of which acts as a rigid restraint or provides at least two degrees of translational restraint to piping thermal expansion.

(4) Structural discontinuities include pipe weld joints to vessel nozzles, valve bodies, pump casings, pipe fittings (such as elbows, tees, reducers, Ilanges, etc., conforming to ANSI B16.9), and pipe branch connections and fittings.

(5) The welds selected for examination shall be reexamined during subsequent inspection intervals over the service lifetime of the piping component.

1983 Edition Numbers and acceptance Standards refer to those in Section XI Winter 1983 Addenda (6) Figure

۲ł

ble IWC-2500-1

HION XI

DIVISION

)				. •		9	,
(We	83	Table 2	EXAM	E IWC-2500-1 (CO INATION CATEGO	BIES	or		
_	r	EXAMINATION CATEGORY C	·/·····	RETAINING WELDS	IN CARBON A	NO LOW ALLOY STEEL PIPING	´	93 Edition
	ltem No.	Parts Examined'	Examination Requirements/ Fig. No. 7	Examination Method	Acceptance Standard 7		Frequency of Examination ³	
	C5.50 C5.51 C5.52	Piping Welds ≈ % in. Nominal Wall Thickness for Piping > NPS 4 Circumferential Weld Longitudinal Weld	IWC-2500-7 IWC-2500-7	Surface and volumetric Şurface and volumetric	IWC-3514 IWC-3514	100% of each weld requiring examination 2.51 — at the intersecting circumferential weld	Each inspection interval Each inspection interval	
	25.60 C5.61 C5.62	Piping Welds > ¹ / _s in. Nominal Wall Thickness for Piping ≥ NPS 2 and < NPS 4 Circumferential Weld Longitudinal Weld	IWC-2500-7 IWC-2500-7	Surface and volumetric Surface and volumetric	IWC-3514 IWC-3514	100% of each weld requiring examination 2.51 — at the intersecting circumferential weld	Each inspection interval Each inspection interval	REQUIREMENTS
$h \mid$	C5.70	Socket Welds Pipe Branch Connections of Branch Piping	IWC-2500-7	Surface	IWC-3514	100% of each weld requiring examination	Each inspection interval	FOR
	C5.81 C5.82	≥ NPS 2 Circumferential Weld Longitudinal Weld	IWC-2500-9 to -13, inclusive IWC-2500-12	Surface Surface	IWC-3514 IWC-3514	100% of each weld requiring examination 2.51 — at the intersecting	Each inspection interval Each inspection	CLASS 2 (
this c	excm (2) The v <i>QSC</i> exem C-F-J be di (a) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c	irements for examination of welds in piping \leq NPS ption criteria of $\sqrt{12}$ 220 $\frac{1}{220}$ $\frac{1}{20}$ 1	this ca tothess than 28 1220 are not requir weld count to which ass 2 systems prora system (i.e., if a sys on Category C-F 2 among terminal er of nonexempt termin d between line sizes t to structures, complegrees of translation nozzles, valve bodien to connections and fi during subsequent s showing reportable	C Control of all austenitia ed to be nondestructive in the 7.5% sampling of ted, to the degree pra- tem contains 30% of about be performed of the performed of the same structural prorated to the degree ponents (such as vesse onal restraint to pipin rs, pump casings, pipe ittings. inspection intervals of the preservice transverse	box ctainloss steel of ely examined per ate is applied.) I cticable, on the the nonexempt w is that system); structural discont discontinuities e practicable. s, pumps, valves g thernal expan- littings (such as wer the service e indications nee	Low) or high-alloy welds not Examination Category The examinations shall number of nonexempt yelds, then 30% of the tinuities [see Note (4)] in that system; and), or pipe anchors, each sion. elbows, tees, reducers, lifetime of the piping	interval	COMPONENTS Table IWC-2500-1

÷

:

1

3

ਚ

ı

Γ.

· · · · · · ·

•





Table 2



TABLE IWC-2500-1 (CON MINATION CATECODIC





Table IWC-2500-1

a conda



Item No.	Parts Examined'	Examination Requirements/ Fig. No. 7	Examination Method	Acceptance Standard 7	Extent of Examination ^{2.6}	Frequency of Examination ^s
\$5.50	Piping Welds $\geq \frac{3}{6}$ in. Nominal Wall Thickness for Piping > NPS 4					
5.51	Circumferential Weld	IWC-2500-7	Surface and volumetric	IWC-3514	100% of each weld requiring examination	Each inspection Interval
C5.52	Longitudinal Weld	IWC-2500-7	Surface and volumetric	IWC-3514	2.57 — at the intersecting circumferential weld	Each inspection interval
5.60	Piping Welds > $\frac{1}{5}$ in. Nominal Wall Thickness for Piping ≥ NPS 2 and < NPS 4					
25,61	Circumferential Weld	IWC-2500-7	Surface and volumetric	IWC-3514	100% of each weld requiring examination	Each inspection interval
cs.82	Longitudinal Weld	IWC-2500-7	Surface and volumetric	IWC-3514	2.51 — at the intersecting circumferential weld	Each inspection interval
C5.70	Socket Welds	IWC-2500-7	Surface	IWC-3514	100% of each weld requiring examination	Each inspection interval
C5.80	Pipe Branch Connections of Branch Piping ≥ NPS 2					
C5.81	Circúmferential Weld	IWC-2500-9 to -13, inclusive	Surface	IWC-3514	100% of each weld requiring examination	Each inspection interval
C5.82	Longitudinal Weld	IWC-2500-12 and -13	Surface	IWC-3514	2.51 — at the intersecting circumferential weld	Each inspection interval

(1) Requirements for examination of welds in piping \leq NPS 4 apply to PWR high pressure safety injection systems in accordance with the exemption criteria of WC-1220 this case. this case Carbow Low (2) The welds selected for examination shall include 7.5%, but not fess than 28 welds, of all austerilic stainless steel or high-alloy welds not

this case exempted by WC-1120 (Some welds not exempted by WC-1220) re not required to be nondestructively examined per Examination Category

C-F.2. These welds, Icyever, shall be included in the total weld count to which the 7.5% sampling rate is applied.) The examinations shall be distributed as follows:

- (a) the examination shall be distributed among the Class 2 systems prorated, to the degree practicable, on the number of nonexempt austentile Stamias steel or high alloy welds in each system (i.e., if a system contains 30% of the nonexempt welds, then 30% of the nondestructive examinations required by Examination Category C-FA should be performed on that system);
- (b) within a system (the examinations shall be distributed among terminal ends [see Note (3)] and structural discontinuities [see Note (4)] prorated, to the degree practicable, on the number of nonexempt terminal ends and structural discontinuities in that system; and , (c) within each system animations shall be distributed between line sizes prorated to the degree practicable.
- (3) Terminal ends are the extremities of piping runs that connect to structures, components (such as vessels, pumps, valves), or pipe anchors, each of which acts as a rigid restraint or provides at least two degrees of translational restraint to piping thermal expansion.
- (4) Structural discontinuities liclude pipe weld joints to vessel nozzles, valve bodies, pump casings, pipe fittings (such as elbows, tees, reducers, flanges, etc., conforming #ANSI B16.9), and pipe branch connections and fittings.
- (5) The welds selected for, mination shall be reexamined during subsequent inspection intervals over the service lifetime of the piping component.
- , steels, only those welds showing reportable preservice transverse indications need to be examined for (6) For welds in carb

transverse reflection T. TISHINE no

and acceptance standards refer to those in Section

