Sargent & Lundy

Don K. Schopter Senior Vice President 312-269-6078

> February 19, 1998 Project No. 9583-100

Docket No. 50-423

Northeast Nuclear Energy Company Millstone Nuclear Power Station, Unit No. 3 Independent Corrective Action Verification Program

United States Nuclear Regulatory Commission Attention: Document Control Desk Washington, D.C. 20555

Enclosed are discrepancy reports (DRs) identified during our sview activities for the ICAVP. These DRs are being distributed in accordance with the Communications Protocol, PI-MP3-01.

I have also enclosed the following twenty five (25) DRs for which the NU resolutions have been reviewed and accepted by S&L.

DR No. DR-MP3-0098 DR No. DR-MP3-0106 DR No. DR-MP3-0118 DR No. DR-MP3-0119 DR No. DR-MP3-0121 DR No. DR-MP3-0126 DR No. DR-MP3-0165 DR No. DR-MP3-0182 DR No. DR-MP3-0182 DR No. DR-MP3-0313 DR No. DR-MP3-0363 DR No. DR-MP3-0364

9802230131 980219 PDR ADDCK 05000423 PDR ADDCK 05000423 DR No. DR-MP3-0395 DR No. DR-MP3-0402 DR No. DR-MP3-0402 DR No. DR-MP3-0471 DR No. DR-MP3-0681 DR No. DR-MP3-0807 DR No. DR-MP3-0882 DR No. DR-MP3-0883 DR No. DR-MP3-0885 DR No. DR-MP3-0945 DR No. DR-MP3-0949 DR No. DR-MP3-0973 DR No. DR-MP3-0973

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United States Nuclear Regulatory Commission Document Control Desk February 19, 1998 Project No. 9583-100 Page 2 I have also enclosed the three (3) DRs for which the NU resolutions have been reviewed but not accepted. S&L comments on these resolutions have been provided.

DR No. DR-MP3-0366 DR No. DR-MP3-0674 DR No. DR-MP3-0703

Please direct any questions to me at (312) 269-6078.

Yours very truly,

anthon the for

D. K. Schopfer Senior Vice President and ICAVP Manager

DKS:spr Enclosures Copies: E. Imbro (1/1) Deputy Director, ICAVP Oversight T. Concannon (1/1) Nuclear Energy Advisory Council J. Fougere (1/1) NU mticavpleort/98/ur0219-a.doc

ICAVP **Discrepancy Report**

Review Group:	System		DR RESOLU	TION ACCEPTE	ED
Review Element: Discipline: Discrepancy Type: System/Process:	System Design Piping Design Calculation RSS		P	Potential Operat	illity issue
NRC Significance level:	4		D	ate FAXed to NU):
				Date Published	1: 9/14/97
Discrepancy:	Qualification of Er	nd loads for	Expansion J	oints is requi	red.
Description:	In the process of it 1, including Calcu we noted the follo The calculation 12 assumption that E D are qualified for calculation.	eviewing Ca lation Chang wing discrep 2179-NP(F)- xpansion Jo the end ioa	Alculation 12 ge Notice (Co bancy: X7923 Rev. bints 3RSS*E ds computed	179-NP(F)-X CN) No.'s 1 t 1 has an unv J1A to D and d in the revise	7923 Rev hrough 5 erified 1 EJ2A to ed
		Valid	Invalid	Review	Date
Initiator:	Singh, R.				9/4/97
VT Lead:	Neri, Anthony A		ō		9/8/97
VT Mgr:	Schopfer, Don K				9/9/97
IRC Chmn:	Singh, Anand K			ā	9/9/97
Date:		an a	a territ contralition are consider and	at the advect street of the order of the second street of the second str	Track surgical location
In Restauros					

INVALID:

Date: 2/16/98

RESOLUTION: RESponse ID: M3-IRF-00580

Disposition;

NU has concluded that the issue reported in Discrepancy Report. DR-MP3-0098 does not represent a discrepant condition. Calculation Change Notice (CCN) 4 and 5 of the subject calculation are in - process calculations. It was desirable to issue CCN 4 and 5 in an effort to expedite the reconciliation of pipe support loads, equipment nozzles, and other commodities. expansion joint loads were processed through the equipment vender and were expected to require an extended schedule. As such, confirmation required status was appropriate for the resolution of the expansion joint loads. Final approval for the expansion joint loads is currently under review and is a start-up item.

Note that CCN's 4 and 5 were issued under Stone & Webster's (S&W) calculation preparation and control procedures which allow, on an exception basis, issuing calculations with unverified assumptions. Once the calculations are issued, S&W is responsible for tracking resolution of the unverified assumptions. . Refer to Attachment A, SWNEO 5.06 which governs calculation preparation and control, and Attachment B, interoffice memorandum room R. Smith to R. Bain which allows calculations to be issued for the QSS, RSS and SI task with unverified assumt 'ions.

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Page 1 of 2

ICA Discrepan	VP cy Repo	DR	No. DR-M	IP3-009
Significance Level discrepant condition	criteria do i n.	not apply here a	as this is no	nt a
Conclusion: NU has concluded Report, DR-MP3-0 The subject calcula Stone & Webster M SWNEO 5.06, rev issue the calculation by attachment B. Significance Level discrepant condition	that the iss 1098 does no ation was is Nuclear Eng ision 4, atta on with an 10 criteria do	tue reported in trepresent a c sued per the re ineering and O chment A. The nverified assur	Discrepance discrepant of quirements operation Pr written app nption was as this is no	ey ondition of ocedure proval to provide ot a
Yes No	Non D	iscrepant Conditio	m? Yes	O No
g? Yes 🛞 No	Rei	olution Unresolve	ed? Yes	No
Singh, R. Neri, Anthony A Schopfer, Don K Singh, Anand K 2/16/98	Acceptable	Not Acceptable	Review Needed	Date 2/16/98 2/17/98 2/17/98
This discrepancy I X7923, Rev. 2. Th	has been re herefore, the	solved in Calcu are is no discrep	alation 1217 pant conditi	9-NP(F on.
	ICA Discrepan Significance Level discrepant condition Conclusion: NU has concluded Report, DR-MP3-0 The subject calculation Stone & Webster M SWNEO 5.06, rev issue the calculation by attachment B. Significance Level discrepant condition () Yes () No g? Yes () No Singh, R. Neri, Anthony A Schopfer, Don K Singh, Anand K 2/16/98 This discrepancy M X7923, Rev. 2. Th	ICAVP Discrepancy Report Significance Level criteria do r discrepant condition. Conclusion: NU has concluded that the iss Report, DR-MP3-0098 does not The subject calculation was iss Stone & Webster Nuclear Eng SWNEO 5.06, revision 4, atta- issue the calculation with an 'n by attachment B. Significance Level criteria do discrepant condition. Yes No Nor D g? Yes No Res Singh, R. Neri, Anthony A Schopfer, Don K Singh, Anand K 2/16/98 This discrepancy has been res X7923, Rev. 2. Therefore, the	ICAVP Discrepancy Report Significance Level criteria do not apply here a discrepant condition. Conclusion: NU has concluded that the issue reported in Report, DR-MP3-0098 does not represent a contract the subject calculation was issued per the restone & Webster Nuclear Engineering and O SWNEO 5.06, revision 4, attachment A. The issue the calculation with an unverified assurby attachment B. Significance Level criteria do not apply here cliscrepant condition. Yes No Yes No Non Discrepant Condition Singh, R. Acceptable Neri, Anthony A Image: Contract of the subject calculation was been resolved in Calculation at the second time of the second	ICAVP Discrepancy Report Discrepancy Report Significance Level criteria do not apply here as this is not discrepant condition. Conclusion: NU has concluded that the issue reported in Discrepance Report, DR-MP3-0098 does not represent a discrepant of The subject calculation was issued per the requirements Stone & Webster Nuclear Engineering and Operation Pr SWNEO 5.06, revision 4, attachment A. The written app issue the calculation with an 'inverified assumption was by attachment B. Significance Level criteria do not apply here as this is not discrepant condition. Yes No Non Discrepant Condition? Yes Discrepancy has been resolved in Calculation 1217 X7923, Rev. 2. Therefore, there is no discrepant condition

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ICAVP Discrepancy Report

Review Group: System **DR RESOLUTION ACCEPTED** Review Element: System Design Potential Operability Issue **Discipline:** Electrical Design) Yes Discrepancy Type: Drawing No No System/Process: QSS NRC Significance level: 4 Dato FAXed to NU: Date Published: 9/14/97 Discrepancy: Logic and Schematic Drawing Discrepancy for QSS MOVs Description: Note 6.6 on the general notes logic drawing LSK-0-3B indicates that for valves that perform a safety function, the torque switches are bypassed 95% of valve travel. The schematic drawings for the QSS MOVs (3QSS*MOV34A & B) indicate that the torque switches are bypassed with limit switch contacts. The limit switch contacts, in effect, bypass the torque switch at 100% of valve travel. Reference schematic drawings ESK-6LS and ESK-GLT. A similar condition was identified in the Service Water System via Unresolved Item Report (UIR) No. 2099. The recommended resolution of UIR 2099 is to revise note 6.6 in the general notes drawing LSK-0-3B.

		Valid	Invalid	Needed	Date
Initiator:	Morton, R.				9/8/97
VT Lead:	Neri, Anthony A				9/8/97
VT Mgr:	Schopfer, Don K				9/9/97
IRC Chmn:	Singh, Anand K				9/9/97

Date:

INVALID:

Date: 2/17/98

RESOLUTION: Disposition:

NU has concluded that Discrepancy Report DR-MP3-0106 has identified a condition not previously discovered by NU which requires correction. Drawing LSK-0-35 will be revised to eliminate the discrepancy. Condition Report (CR) M3-97-3246 has been written to provide the necessary corrective actions to resolve this issue.

Conclusion:

NU has concluded that Discrepancy Report DR-MP3-0106 has identified a condition not previously discovered by NU which requires correction. Drawing LSK-0-3B will be revised to eliminate the discrepancy. No field modifications are required. Condition Report (CR) M3-97-3246 has been written to provide the necessary corrective actions to resolve this issue.

Pro vy Identified by NU? O Yes 🔘	No	Non Discrepant Condit	ion? Yes	No No
Resolution Pending? Yes 🔘	No	Resolution Unresol	ved? Yes	No
Initiatory Montes D		Acceptable Not Acceptable	Review Needed	Date
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Northeast Utilities Millstone Unit 3	ICA Discrepar	AVP hcy Repo	ort	DR No. DR	-MP3-0106
VT Lead: VT Mgr: IRC Chmn: Date:	Neri, Anthony A Schopfer, Don K Singh, Anand K				2/17/98 2/17/98 2/17/98

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Northeast Ut?ities	ICAVP		DR No. DR-	MP3-0118
Millstone Unit 3	Discrepancy R	eport		
Review Group: S	ystern	DR RES	SOLUTION ACCEPT	ED
Review Element: S	iystem Design		Potential Opera	bility Issue
Discipline: E	lectrical Design		O Yes	
Discrepancy Type: D	Drawing		No No	
System/Process: F	185			
NRC Significance level: 4			Date FAXed to N	IU:
			Date Publishe	nd: 9/14/97
Discrepancy:	Schematic and Logic Dra	awing Discrep	ancy for RSS Pi	ump Motor
Description:	Logic Diagrams LSK-27- LSK-27-11K indicate that the start circuit of the rei P1B, P1C & P1D). The 5CQ, and 5CR) do not in starting circuit, but do sh "trip" circuit. These logic representing the loss of other similar motor start 3QSS*P3B (reference to 12E). The representation of the diagrams implies that its start circuit of the motor power interlock in the Q of power" contact in the and RSS schematic draw	there is a "L circulation pur schematic dra ndicate a "loss now the loss of c diagrams ar - wer interloo circuits, such ogic diagrams he loss of pow here is a "loss rs. The represences SS logic diag	er interlock in the of power" contact in SQSS*F3A a interlock in the of power" contact in the start cirr is 3QSS*F3A a interlock in the of power" contact sentation of the in the motor. Bot is power interlock in the of power" contact interlock in the of power interlock in the power interlock in the power interlock in the of power interlock in the power in the power in the power in the power in the pow	terlock in S*P1A, N, 5CP, lock in the in cuit with and d LSK-27- e RES log ct in the loss of mply a "lost th the QSS ndicate a
	ion of portor contact	and any and	Review	
	1	alid inva	lid Needed	Date
initiator:	Morton, R.			9/8/97
VT Lead:	Ne 1. Anthony A			9/8/97
VT Mgr:	Schopfer, Don K			9/9/97
IRC Chmn:	Singh, Anand K			9/9/97
Date	1			
INDIAL ID				

Date: 2/9/98

RESOLUTION: Disposition.

NU has concluded that Discrepancy Report DR-MP3-0118 has identified a condition not previously discovered by NU which requires correction. The drawings will be revised to eliminate the discrepancy. Condition Report (CR) M3-97-3246 has been written to provide the necessary corrective actions to resolve this issue

Conclusion:

NU has concluded that Discrepancy Report DR-MP3-0118 has identified a condition not previously discovered by NU which requires correction. Drawings LSK-27-11A, 11B, 11J and 11K will be revised to eliminate the discrepancy. No field changes

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ICAVP Discrepancy Report

DR No. DR-MP3-0118

are required. Condition Report (CR) M3-97-3246 has been written to provide the necessary corrective actions to resolve this issue.

-	Previously Identified by NU? () Yes () No	0	Non Di	screpant Conditio	n?() Yes	No
	Resolution Pending? Yes 🔘 N	0	Res	olution Unresolve	d? Ves	No
	Initiator: Morton, R. VT Lead: Neri, Anthony A VT Mgr: Schopfer, Don K IRC Chmn: Singh, Anand K Date:		Acceptable	Not Acceptable	Review Needed	Date 2/17/98 2/17/98 2/17/98

SL Comments:

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ICAVP Discrepancy Report

Review Group: System DR RESOLUTION ACCEPTED **Review Element: System Design** Potential Operability Issue **Discipline:** Electrical Design Yes Discrepancy Type: Drawing No No System/Process: RSS NRC Significance level: 4 Date FAXed to NU: Date Published: 9/14/97 Discrepancy: Logic and Schematic Drawing Disrepancy for RSS MOVs Description: Note 6.6 on the general notes logic drawing LSK-0-3B indicates that for valves that soform a safety function, the torque switches are bypassed 95% of valve travel. The schematic drawings for the RSS MOVs indicate that the torque switches are bypassed with limit switch contacts. These limit switches bypass the torque switches at different ranges of valve travel as indicated below: The limit switch contacts which are in parallel with the torque switches will bypass the torque switches at approximately: - 100% of valve travel for MOVs 20A, B, C, &D, and 23A, B, C, & D. - 85% of valve travel for MOVs 38A & B. - 80% of valve travel for MOVs 8837A & B and 8838A & E. Note, a similar condition was identified in the Service Water System via Unresolved Item Report (UIR) No. 2099. The recommended resolution of UIR 2099 is to revise note 6.6 in the general notes drawing LSK-0-3B. Review Valid Invalid Date Needed Initiator: Morton, R. 9/8/9 \boxtimes VT Lead: Neri, Anthony A 9/8/97 VT Mgr: Schopfer, Don K 9/9/97 \boxtimes

Date:

INVALID:

Date: 2/9/98

IRC Chmn: Singh, Anand K

RESOLUTION: Disposition:

NU has concluded that Discrepancy Report DR-MP3-0119 has identified a condition not previously discovered by NU which requires correction. The drawings will be revised to eliminate the discrepancy. Condition Report (CR) M3-97-3246 has been written to provide the necessary corrective actions to resolve this issue.

Conclusion:

NU has concluded that Discrepancy Report DR-MP3-0119 has identified a condition not previously discovered by NU which requires correction. Drawing LSK-0-3B will be revised to eliminate the discrepancy. No changes in the field are required. Condition Report (CR) M3-97-3246 has been written to provide

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9/9/97

ICAVP DR No. DR-MP3-0119 Northeast Utilities Discropancy Report Millstone Unit 3 the necessary corrective actions to resolve this issue. Non Discrepant Condition? Yes Previously Identified by NU? O Yes No No No No Resolution Unresolved? Yes Resolution Pending? Yes No No No Review Acceptable Not Acceptable Date Needed initiator: Morton, R. 2/17/98 \boxtimes VT Lead: Neri, Anthony A 2/17/98 VT Mgr: Schopfer, Don K 2/17/98 IRC Chmn: Singh, Anand K Date: SL Comments:

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ICAVP **Discrepancy Report**

Pa tien Group	Cuptory	NARIA DE ANTRALIST D'ANARACIETAR XIBINES	DR RESOLUT	TION ACCEPTE	nierosososososososososo D	
Review Flement	System Design		DA RE BOLO	NON MODEL IL		
Discipline:	Electrical Design		Po	stential Operabi	lity Issue	
Discrepancy Type:	Drawing			Yes		
System/Process:	SWo					
NRC Significance level:	4		Da	te FAXed to NU		
				Date Published	0/14/07	
		the Decider	Discourses	for CIAID LAC		
Discrepancy:	Logic and Schemi	atic Drawing	Discrepancy	TOT SVVP MC	vs	
(and priority	that for valves that are bypassed 95% the SWP MOVs (1 and 102A, B, C, 8 bypassed with lime effect, bypass the Reference schem 6AAK, 6AAL, 6AA Note, a similar co System via Unro. MOVs. The recom	and the form a of valve transform a of valve transform a SWP*MOV C) indicate it switch con torque switch atic diagram M, 6AAN, 6 andition was wed Item I mmended re	safety function avel. The sch (24A, B, C, & that the torquit acts. The lin ches at 100% is ESK-6DD, AA,U, 6AAV, identified in the Report (UIR) isolution of U	n, the torque hematic diagr D, 50A & B, ue switches a mit switch co of valve trav 6DE, 6DF, 6 6AAW, and 6 he Service W No. 2099, for 1R 2099 is to	switches ams for 71A & B, re ntacts, in vel. DG, BAAX. Vater rother revise	
	note 6.6 in the ge	neral notes i	drawing Lorv-	-0-3B. Baudani		
		Valid	invalid	Needed	Date	
Initiator	Morton R				9/8/97	
VTLead	Neri Anthony A	B	H	H	9/8/97	
VT Mor	Schonler Don K	D D	H	5	9/9/97	
IRC Chrmn	: Singh, Anand K		H	H	9/9/97	
Date						
INVAL ID						
INTALIO						
Date	: 2/17/98					
RESOLUTION	: Disposition:					
	NU has conclude identified a condi requires correction discrepancy. Co written to provide issue.	d that Discretion not prev on. The drawndition Report the necess	epancy Reput viously discov wings will be ort (CR) M3-9 ary corrective	rt DR-MP3-0 vered by NU revised to eli 7-3246 has actions to re	121 has which minate the been solve this	
	Conclusion:					
	NU has conclude identified a cond requires correction eliminate the disc Condition Report the necessary co	ed that Discre- ition not pre- on. Drawing crepancy. N t (CR) M3-97 prrective acti	epancy Repo viously disco LSK-0-3B w lo changes in 7-3246 has b ons to resolv	nt DR-MP3-0 vered by NU ill be revised the field are been written t e this issue.	121 has which to required o provide	
Previously Identified by NU	1? () Yes () N	o Non	Discrepant Con	dition? Yes	No	
Resolution Read	1002 Ver .	0 0	esolution libres	olved?	() Nr	
Resolution Peno	ingr ies en	C N	Contraction office	Review	@ 140	
				116 116 11		

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Northeast Utilities Millstone Unit 3	IC Discrepa	AVP ancy Repo	DF	No. DR-	MP3-0121
Initiator: VT Less: VT Mgr: IRC Chmn: Date:	Morton, R. Neri, Anthony A Schopfer, Don K Singh, Anand K	Acceptable	Not Acceptal.4e		Date 2/17/98 2/17/98 2/17/98

Northeast Utilities Millstone Unit 3	ICA Discrepan	VP cy Repo	rt	DR No. DR-N	MP3-0126
Review Group: 1	System	CONTRACTOR AND A CONTRACTOR OF CONTRACTOR	DR RESOL	UTION ACCEPTE	D
Review Element: 1 Discipline: I	System Design Electrical Design			Potential Coerab	ility Issue
Discrepancy Type: System/Process:	Drawing SWP			No No	
NRC Significance level:	4		C	ate FAXed to NL	J:
				Date Published	1: 9/14/97
Discrepancy:	Schematic and Log Lockout Relay and	pic Diagram	Discrepant Light	cy for Reset of	f Motor
Description:	Logic diagram LSP indicates that the r amber light indicat handswitch. The i the local/remote h and 5CL) indicates contact of the han (3SWP*P1B and 3 5CK and SCM) indicates contact of the han	(-9-10J (3S) eset of the ion requires nterlock is in andswitch. that the int dswitch. Sin SSWP*P1D) dicates that dswitch.	WP*P1A an motor prote an interloc dentified as The schem terlock shou milar logic co and schem the interloc	d 3SWP*P1C ction lockout r k from the loc a "local" cont atic diagram (lid be from a " diagram LSK-f hatic diagrams k is from a "re	c) relay and cal/remote act from ESK-5CJ remote" 9-108 c (ESK- mote"
		Valid	Invalid	Review Needed	Date
Initiator:	Morton, R.				9/8/97
VT Lead:	Net! Anthony A				9/8/97
VT Mgr:	Schopfer, Don K				9/9/97
IRC Chmn:	Singh, Anand K				9/11/97
Date					

INVALID:

Date: 2/17/98

RESOLUTION: Disposition:

NU has concluded that Discrepancy Report DR-MP3-0126 has identified a condition not previously discovered by NU which requires correction. The logic information between the transfer switch and the reset condition for the motor protection lockout relay and amber indicating light on LSK-09-10J will be moved from the Local to the Remote position on the transfer switch to agree with ESK-5CJ & 5CL. Condition Report (CR) M3-97-3246 has been written to provide the necessary corrective actions to resolve this issue.

Conclusion:

NU has concluded that Discrepancy Report DR-MP3-0126 has identified a condition not previously discovered by NU which requires correction. Drawing LSK-09-10J will be revised to agree with drawings ESK-5CJ and 5CL. No changes in the field are required. Condition Report (CR) M3-97-3246 has been written to provide the necessary corrective actions to resolve this issue.

-	Previously Identified by NU?	0	Yes	۲	No	Non Discrepant Condition? Yes	۲	No	
	Resolution Pending	20	Yes	۲	No	Resolution: Unresolved? Yes	۲	No	
						Review			
	Control and the first of a state of the first state of the first state of the state	president protections	dan persentation	Contractor of the second	Sector of Construction of Sec.				12

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Review Group:	System	ng se andre statement volgen kan hil	DR NESOLU	TION ACCEPTE	D
Review Element: Discipline: Discrepancy Type: System/Process:	System Design Mechanical Design Celculation RSS		P	otential Operation	ility issue
NRC Significance level:	4		D	ate FAXed to NL	J:
				Date Published	1: 9/29/97
Discrepancy:	Minimum Wall Ca Temperature and	Pressure	Reference the	FSKs for De	sign
Description:	The minimum wa (FSKs) for the de The FSKs are "Fo superseded by th temperature used value in the line l	I calculatio sign temper or Informatio e piping dia f in Calculat ist.	ns reference t rature and pre on Only" docu grams and th tion MW(F)-12	the flow diagr ssure of the iments and a e line list. The 22 is differen	ams lines. re ne desing t from the
	N	AW(F)-122	Line List		
	Temperature	235	260		
		Volid	invalid	Review	Date
Initiator	Langel D	Vanci M			9/23/97
VT Lead:	Neri, Anthony A	M	Н	H	9/23/97
VT Mgr:	Schopfer, Don K		ă	ă	9/25/97
		Bernet	Bussel.	Button a	

Date:

INVALID:

Date: 2/17/98

iRC Chmn: Singh, Anand K

RESOLUTION: Disposition:

NU has concluded that Discrepancy Report DR-MP3-0165 has identified a condition not previously discovered by NU which requires correction. Condition Report (CR) M3-97-3460 has been approved to provide the necessary corrective actions to resolve the incorrect temperature used in Calculation MW(F)-122. Minimum wall calculations continue to reference FSKs due to changes NU has made in the use of controlled documents as described below.

9/25/97

The FSK's were the documents of record for the design 8. pressure and temperature under Stone and Webster. FSKs were the proper document of reference for most piping calculations since they were performed when design control was under the Stone and Webster system. After turnover, information from the FSKs was translated under the Northeast Utilities system into Line Designation Tables and P&IDs. FSK's were then retired in place as historical documents. Some DCNs have been written against FSKs to clarify historical information. As a policy, if changes are only administrative in nature, such as changes in drawing number, changes in revision level of a reference, etc., Northeast Utilities does not revise all calculations which contain those references. If the calculation needs revision due to a change in values (such as design conditions) which affect the

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ICAVP Discrepancy Report

DR No. DR-MP3-0165

results of the calculation, then references would be updated at that time.

Pipe minimum wall requirements were based on generic b. code allowables and piping specification requirements. Minimum wall calculations viere only used when field conditions required a more precise calculation. Calculation MW(F)-122 was performed in 1982 to determine the acceptable minimum wall thickness for a pipe spool which had an indication that was less than the standard minimum wall allowance for the required pipe schedule. At that time the design temperature for that portion of the system was 235° F. This was changed to 260°F by Stone and Webster under their program in 1985 (Calculation P(R)-1186). Calculation MW(F)-122 should then have been updated to reflect the new condition. The existing wall thickness is 0.318 inches. The calculated allowed minimum wall thickness is approximately .03 inches. Therefore the existing minimum wall of the piping in question is acceptable under the changed design temperature input.

This calculation will be updated in accordance with the corrective action plan for CR M3-97-3460.

Conclusion:

NU has concluded that Discrepancy Report DR-MP3-0165 has identified a condition not previously discovered by NU which requires correction. Calculation MW(F)-122 will be revised in accordance with the approved corrective action plan for Condition Report (CR) M3-97-3460. This calculation will be updated post startup in accordance with the corrective action plan for CR M3-97-3460.

Previously Identified by HU? Resolution Pending	Yes		No	Non Di Res	screpant Conditio	n?) Yes	NoNo
Initiator: VT Leed: VT Mgr: IRC Chmn: Date:	Langel, D. Neri, Anthony Schopfer, Dor Singh, Anand 2/17/98	Ankik		Acceptable	Not Acceptable	Review Needed	Date 2/17/98 2/17/98 2/17/98

SL Comments: The item meets the deferral criteria for revising the calculation.

ICAVP **Discrepancy Report**

Review Group:	System	DR RESOLUTION ACCEPTED
Review Element:	System Design	Potential Overshillty lesue
Discipline:	Piping Design	Ves
Discrepancy Type:	Calculation	No
System/Process:	SWP	@ H0
NRC Significance level:	4	Date FAXed to NU:
		Date Published: 9/29/97
Discrepancy	Discrepancy in 'confirm calculation NP(B)-X53	nation required' status for stress analysis
Description	In the process of review	wing the following documents,
	(i) Pipe Stress Analysis 1, CCN's 1 to 5	Calculation 12179-NP(B)-X53902, Rev.
	(ii) Pipe Stress Recond	ciliation Isometric Drawing 12179-CI-SWP-
	(iii) Pipe Support Calc	ulation 12179-NP(F)-Z-739B-258, Rev. 2
	we noted the following	discrepancy:
	Background:	
	Revision 1 of the pipe require confirmation.	stress calculation (i) has two items that
	The first item is as in marked on the cover-s confirmed in CCN No.	nption 2 on page 7. It is appropriately sheet of the calculation, and has been 1.
	The second is the inst assumed in the pipe s pipe support is assum piping model. Page B	allation of a pipe support modification tress analysis. A lateral constant type (LC) ed at node point (NP) 117 of the 53902D 2 states that the installation of the assumed

support modification requires confirmation. Page B56 indicates that a support number for the support at NP 117 will be identified later. On page E12 it is stated that the new support at NP 117 is not installed. However, this confirmation required item has not been identified on the cover-sheet.

The requirement of a new support at NP 117 has not been addressed by the calculation change notices 1 through 5. A notice of confirmation removal is attached to the calculation. The notice states that confirmation requirements from the large bore pipe stress design calculation have been removed entirely. But the statment only addressus the first item. No mention is made of the second item.

According to (ii): The isometric shows a strut marked PSST-258 at the location corresponding to NP 117. The support PSST-258 has been designed and analyzed in (iii).

Discrepancy:

In the pipe stress analysis calculation (i), the installation of PSST-Page 1 of 3

Northeast Utilities Millstone Unit 3	IC/ Discrepa	DR No. DR-MP3-018			
A CONTRACT AND A CONTRACT OF A TANK OF AN A CONTRACT OF THE OWNER OF A TANK OF A TANK OF A TANK OF A TANK OF A	258 support has r	ot been con	firmed.	A 1977 MAR AND A 1978 A 1998 A 1997 A 19	Annoles do tota conservato
		Valid	Invalid	Review Needed	Date
Initiator	Prakash, A.				9/12/97
VT Lead	Neri, Anthony A		ō		9/15/97
VT Mgr	Schopfer, Don K				9/22/97
IRC Chron	Singh, Anard K				9/26/97
Date	1				
INVALID	:				

Date: 2/16/98

RESOLUTION: Response ID: M3-IRF-00588

Disposition:

NU has concluded that the issue reported in Discrepancy Report, DR-MP3-0182, does not represent a discrepant condition. Calculation Change Notice (CCN) 4 replaces the calculation Attachment E, "Stress Reconciliation Report" (SRR) with a new SRR dated 8-19-85. Question 5.a of the new SRR states that all supports are installed on line 3-SWP-006-32-3. The Pipe Stress Reconciliation Isometric Drawing CI-SWP-32A-4, revision 12 which delineates line 3-SWP-006-32-3 and support PSST-258 is referenced on page 2 of CCN-4 as being part of the reconciliation walkdown package thereby confirming the installation of support PSST-258. In addition, the Notice of Confirmation Removal form which is attached to the back of the calculation and references CCN's 1 through 5 states that confirmation requirements from the large bore pipe stress design calculation 12179-NP(B)-X53902-1 have entirely been removed. The hand written note provided at the bottom of the Inter-Office Communication (IOC) form provides additional clarification that the confirmation requirements for assumptions in the calculation were removed per CCN-4 and that CCN 1 through 5 have no Confirmation Required items added.

Significance Level criteria do not apply here as this is not a discrepant condition.

Conclusion:

NU has concluded that the issue reported in Discrepancy Report, DR-MP3-0182, does not represent a discrepant condition. The new Stress Reconciliation Report dated 8/19/85 which is part of Calculation Change Notice CCN-4 provides confirmation on page 16, question 6.a, that all pipe supports including PSST-258 have been installed.Significance Level criteria do not apply here as this is not a discrepant condition.

Resolution Pending? Yes No Resolution Unresolved? Yes Review Initiator: Prakash, A. Acceptable Not Acceptable Needed D VT Lead: Neti, Anthony A. D 2/1	Previously Identified by NU?	🔿 Yes (No	Non D	iscrepant Conditio	n? Yes	O No
Initiator: Prakash, A. Acceptable Not Acceptable Net Acceptable D. Needed D. VT Lead: Neri, Anthony A. Not Acceptable D. 2/1	Resolution Pending?	O Yes	No	Res	solution Unresolve	d? Yes	No No
	Initiator: Pr VT Lead: N	rakash, A. eri, Anthony A		Acceptable	Not Acceptable	Review Needed	Date 2/16/98 2/17/98

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Page 2 of 3

Northeast Utilities Millstone Unit 3	iCA Discrepar	VP nc'' Repo	ort	DR No. DR	-MP3-0182
IRC Chm	n: Singh, Anand K				2/17/98

1

Northeast Utilities	ICAVP	DR No. DR-MP3-0259
Millotone Unit 3	Discrepancy Rep	ort
Review Grou	ip: System	DR RESOLUTION ACCEPTED
Review Eleme	nt: System Design	Potential Operability issue
Discipli	ne: Piping Design	O 746
Discrepancy Ty	pe: Calculation	No No
System/Proce	ss: SWP	
NRC Significance lev	vel: 4	Date FAXed to NU:
		Date Published: 9/29/97
Discrepan	ky: Load combination discrepan Normal/Upset and Faulted s	cy in the computation of tresses
Descript	ion: In the process of reviewing t	the following documents,
	(i) FSAR Section 3.98.1.4.1 (ii) FSAR Table 3.98-11 Loa and 3 Piping (iii) Pipe Stress Analysis Cri	Loading Conditions ad Combinations for ASME Class 2 iteria Document, NETM-44, Revision
	2 (iv) Pipe Stress Calculation	12179-NP(B)-X53901, Rev. 6, CCN's
	1 to 3 (v) Pipe Stress Calculation	12179-NP(B)-X53900, Rev. 5
	we noted the following disc	repancy:
	Background:	
	According to (i): The structure Seismic Category I ASME consider the loading and lo 3.9B-11 (ii).	ural stress analyses performed for Code Class 1, 2, and 3 piping ad combinations specified in Table
	According to (ii), the normal conditions, ASME III Subse- include loads resulting from other than seismic, i.e. flui provided on the combination conditions.	al/upset and faulted plant operating ection NC Equation's 9N/U and 9F, m seismic loads and occasional loads d transients. However, no guidance is on of moments for the different loadin
	For Class 2 and 3 piping, t 4-6 of (iii). Here also, no g combination of moments f Class 1 systems, Section - combining moments due t procedure states that "if tw dynamic load cases act si combined, this is done by (SRSS). In the case of tim components utilized are th resultant moment".	the same table (ii) is repeated as Table uidance is provided on the for the different loading conditions. For 4.1.4.3 of (iii) provides procedures for to different loading conditions. The wo or more independent occasional multaneously and need to be square-root-of-sum-of-squares he history dynamic cases, the moment hose which produce the maximum
	The above stated momen follows: S(seismic) = S(eq. 9) - S(S(eq. 9 total) = [S(seismi Here, S represents the st	t combinations are formed in (iv) as (eq. 8) c)^2 + S(timehistory)^2]^0.5 + S(eq. 8 ress level, and eq.'s 8 & 9 refer to the
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ICAVP Discrepancy Report

DR No. DR-MP3-0259

In (v) the moment combinations are formed as follows: S(eq. 9 total) = [S(eq. 9)² + S(timehistory)²]^{0.5} This is inconsistent with the above procedure, and is unconservative.

Discrepancy:

In pipe stress calculation (v) the procedure used for combining seismic and fluid-transient induced moments is not consistent with the design criteria, and is un-conservative.

		Valid	Invalid	Needed	Date
Initiator:	Praxash, A.				9/16/97
VT Lead:	Neri, Anthony A				9/16/97
VT Mgr:	Schopfer, Don K	Ø			9/22/97
IRC Chmn:	Singh, Anand K				9/26/97

Date:

INVALID:

Date: 2/16/98

RESOLUTION: Response ID: M3-IRF-01328

Disposition

NU has concluded that the issue reported in Discrepancy Report DR-MP3-0259 has identified a condition not previously discovered by NU which requires correction. NU agrees that the method of the stress combination performed in calculation 12179-NP(B)-X53900 Rev. 5 is not conservative. However, the nonconservatism is not significant because the static stress component (Equation 8) is small. In addition, the calculation used bounding values for stress. Thus the equation 9 stress, a maximum for all piping locations with the same piping material, was combined with the maximum time history stress considering all locations in the model. Given only the summary of computer results, a simplified correct method for dynamic stress combination is to first subtract out the static components of Equation 9, SRSS the difference with the time history results, and then con ine this result by absolute sum to the static components. Since design pressure is the same as maximum pressure, the static components of Equation 9 are represented by Equation 8. Calling the total stress Equation 9T, and time history TH, one can perform the calculation as follows:

Eq. 9T = Eq. 8 + SRSS(Eq. 9 - Eq. 8, TH) (1)

As identified by Sargent & Lundy, calculation 12179-NP(B)-53900 contained a manual stress combination that included nondynamic components in the required SRSS combination. In effect, the combination was performed as:

Eq. 9T = SRSS(Eq. 9, TH) (2).

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ICAVP Discrepancy Report

DR No. DR-MP3-0259

This combination (2) is not equivalent to (1) and is not conservative.

From the calculation (v) the following stress summary information is available on pages 75 and 76A: Eq. 9 at node 2161 = 9648 psi Eq. 8 at node 40= 4683 psi

TH at node 445 = 2314 psi

Eq. 9 allowable stress = 10,440 psi

Using the formula in Equation (1) above, one can bound the total Eq. 9T stress as:

Eq. 9T = Eq. 8+SRSS(Eq. 9 - Eq. 8, TH) = 4683+SRSS(9648 - 4683, 2314)

= 10,160 psi < 10,440 psi (normal/upset allowable for equation 9)

Therefore the stress is within the allowable and the design basis for the piping is not exceeded. The net effect of the correction from the reported value of 9922 psi is only (10160 - 9922)/9922 = 0.024 or 2.4%.

Similar analysis for the faulted condition and for other locations would show even less effect. The other 10 stress calculations in the x53900 series were checked for their treatment of time history stresses. Only calculation 12179-NP(B)-x53902 Rev. 1 had any defined fluid transient loading that required analysis. In that calculation, the time history loading was combined with earthquake by SRSS within the NUPIPE-SW computer analysis. A sampling of other calculations were examined. Within the service water system, calculation 12179-NP(B)-x1900 Rev. 3 conservatively performed an absolute sum to obtain total Equation 9 stress. This calculation revision was prepared by the same individual who reviewed calculation 12179-NP(B)-x53900 Rev. 5. Calculation 12179-NP(B)-x1901 Rev. 3 had defined fluid ransient loading and was reviewed by the same individual; its time history loading was combined within the NUPIPE-SW computer run. In summary, a sample of other calculations requiring combination of time history stresses with earthquake did not find any others with a non-conservative manual combination of the dynamic stresses. It is therefore considered that the methodological error in calculation 12179-NP(B)-x53900 Rev. 5 was an isolated error. Additionally, the non-conservatism would be negligible in all but physically unrealistic cases of low seismic inertia but very high values of both equation 8 and time history.CR M3-98-0175 was initiated to address the condition. Its action plan included preparation of a calculation change notice to correct the calculation and review of other calculations to determine extent of condition. The review, described above, did not find any other calculations in which the unconservative method was used. The condition has no impact on satisfaction of the design basis; thus NU believes the item constitutes a Significance Level 4 discrepancy.

Conclusion:

NU has concluded that the issue reported in Discrepancy Report DR-MP3-0259 has identified a condition not previously discovered by NU which requires correction. The completed

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Page 3 of 4

Northeast Utilities Millstone Unit 3	l(Discrep	CAVP arcy R	еро	ort	R No. DR-N	AP3-0259
	action plan for calculation cha and a same ie r condition. The less than 5% a allowable. The which the unco impact on the Significance L	CR M3-98- nge notice eview of or net effect of nd stresse review di- inservative licensing a evel shouk	-017! (atta ther of the s rem d not e met nd de	5 included pre ached) to corre- calculations to a correction or hain within the find any othe hod was used esign NU has 4.	paration of a ect the calcu determine piping stre design bas r calculation . Since the concluded t	a extent of sses was is is in re is no he
Previously Identified by NU?	O Yes 🔘	No I	Non D	iscrepant Condit	tion? Yes	No
Resolution Pendin	g? Yes 🔘	No	Ret	solution Unresol	ved? Ves	No
Initiator: VT Lead: VT Mgr: IRC Chmn: Date	Prakash, A. Neri, Anthony A Schopfer, Don K Singh, Anand K 2/16/98	Accept D D D		Not Acceptable	Review Needed	Date 2/16/98 2/17/98 2/17/98
SL Comments	The complete "isolated" calc similar calcula review did not	d action plaulation em ations to de find any over method	an fo or. A eterm other was	r CR M3-£3-0 lso, NU has p hine the exten calculations in used.	175NU corr erformed a t of the cond n which the	ected the review of dition. This

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Northeast Utilities	ICAV	P	D	R No. DR-M	IP3-0313
Millstone Unit 3	Discrepanc	y Repor	t		
Review Group: S	ystem	n ann an a	DR RESOLUT	ION ACCEPTE	D
Review Element: S	ystem Design		Po	tential Operabi	lity issue
Discipline: N	Aechanical Design			O Yes	
Discrepancy Type: 0	alculation			No No	
System/Process: F	RSS				
NRC Significance level: 4			Dat	te FAXed to NU	•
				Date Published	: 10/23/97
Discrepancy:	Calculation P(R)-61	0 Elevation	Error		
Description:	The dimensions for The calculation use shows the pump dis	the pump of s an elevation scharge is a	discharge ele ion of 22'-9". It elevation (Drawing El -) 23'-3".	orreal. P-79N
	The calculation for is the pump head m change from the pump nozzle. The pump 29'-8". The values i is 52' instead of 6'- pump head will und orifice by approxim	the required ninus the fri imp dischar recirculatio in the calcu 5". Subtrac derestimate nately 45'.	d pressure d action losses rige to the pu in nozzle is la lation sugge ating the calc the required	rop across the minus the el mp recircula ocated at ele st that the di culation value d pressure dr	evation tion evation (-) fference e from the op of the
	The system function verified by the pre-	on is not aff operational	ected since t system test	the orifice siz	te was
		Valid	Invalid	Review Needed	Date
Initiator	Langel, D.				10/3/97
VT Lead	Neri, Anthony A				10/3/97
VT Mor	Schopfer, Don K				10/13/9
IRC Chrnn	: Singh, Anand K				10/19/9
Date	1	a discont of the set of the set of the			
INVALID	t.				
Resources of the second s	2/17/08	NACIONAL PROVINCIAL AND		NATE OF COMPANY OF CONTRACTOR STOCKED	1993.000 S (S 1993.000
DESCI UTION	Disposition				
	NU has concluded identified a condit requires correctio in NRC letter B16 PI-20 criteria and concerns and me has been written	d that Discr tion not pre n. This dis 1901 and 17 found to his ets the Unit to develop	epancy Repo viously disco crepancy me 2010. It has uve no opera t 3 deferral o and track res	ort, DR-MP3 overed by NL bets the crite been screen ability or repo criteria. CR M solution of th	-0313, ha J which ria specifi ed per US prtability M3-97-412 is item p

Conclusion:

NU has concluded that Discrepancy Report, DR-MF 3-0313, has identified a condition not previously discovered by NU which requires correction. This discrepancy meets the criteria specified in NRC letter B16901 and 17010. It has been screened per U3 PI-20 criteria and found to have no operability or reportability concerns and meets the Unit 3 deferral criteria. CR M3-97-4128

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Page 1 of 2

Northeast Utilities Millstone Unit 3	ICA Discrepan	VP cy Repo	DR	No. DR-M	P3-0313
Previously Identified by N	has been written to RP-4.	Non Di	nd track resoluti	on of this i	No
Resolution Pend Initiat VT Leo VT M IRC Chr	ding? Yes (*) No or: Langel, D. ad: Nerl, Anthony A Igr: Schopfer, Don K mn: Singh, Anand K	Res Acceptable	Not Acceptable	Review Needed	Date 2/17/98 2/17/98 2/17/98
Di SL Comme	ate: 2/17/98 nts: CR M3-97-4128 r meets the deferra	ecommends al criteria sin	s revising the c noe testing has	alculation. confirmed	This items the orifice

sizing.

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ICAVP **Discrepancy Report**

DR No. DR-MP3-0363

Review Group: System Review Element: System Design Discipline: Piping Design Discrepancy Type: Calculation System/Process: SWP NRC Significance level: 4

Northeast Utilities

Millstone Unit 3

DR RESOLUTION ACCEPTED

Potential Operability Issue

) Yes ON (O

Date FAXed to NU:

Date Published: 11/13/97

Discrepancy: Analysis method for vent/drain configurations in calc NP(B)-408 is inconsistent with design criteria Description: In the process of reviewing the following documents,

(i) Design and Installation of Small Bore Piping, NETM-24, Rev. 3 (ii) Calculation 12179-NP(B)-408-XD, Rev. 0, 4/3/84 (ii) Interoffice Memorandum, Review of Calculation 12179-NP(B)-692-XD, From RFHankinson to GPMilley, February 2, 1984

we noted the following discrepancy:

Background:

According to (i): In the evaluation of vent/drain configurations, applicable seismic accelerations at the point of attachment (to header piping or equipment) are the higher of the values from computer analysis results (of the header piping) or the zero period acceleration (ZPA). ZPA values are obtained from the applicable ARS curve for the building and elevation where vent/drain is located. These seismic acceleration values, multiplied by a factor of 1.5, should be applied to calculate seismic reaction and stresses.

According to (ii): The objective of the calculation is to perform a small bore pipe stress analysis for a general arrangement of vents and drains for all elevations of all buildings. The vents and drains and root valve piping were analyzed as free end connections. It is assumed that statically applied deflections at the connection point would not generate any forces or moments in the piping system. Therefore, static and dynamic displacements were omitted from the analysis. The piping was seismically analyzed in the x, y and z directions by using the amplified response spectra curves for all buildings and all elevations.

According to (iii):

- "If the vent/drain is rigid in comparison with the piping response, the vent/drain will experience the maximum piping response. If the vent/drain is not rigid in comparison with the piping response, the vent/drain will experience an amplification of the maximum piping response".

- "Piping is excited by the building response through its supporting metia, and as the free standing vent/drain is not attached to the building there can be no defendable justification for using building response to qualify the vent/drain".

ICAVP Discrepancy Report

Discrepancy:

The seismic analysis performed in (ii) is inconsistent with the requirements of the design criteria for small bore piping (i). Specifically, no justification is provided in (ii) to ignore the possible amplification of the siesmic excitation (aput for the small bore piping analysis resulting from the dynamic response of the header piping subjected to the seismic excitations at its attachment to the building.

		Valid	Invalid	Needed	Date
Initiator:	Prakash, A.				10/30/97
VT Lead:	Neri, Anthony A	M	Ē		10/31/97
VT Mar:	Schopfer, Don K	Ø			11/6/97
IRC Chmn:	Singh, Anand K				11/7/97

Date:

INVALID:

Date: 2/16/98

RESOLUTION: Response ID:M3-IRF-01607

Disposition:

NU has concluded that Discrepancy Report, DR-MP3-0363, has identified a condition not previously discovered by NU which requires correction. The discrepant condition should be reviewed in the contaxt of the design process. As the design process evolved, the criteria for vent and drain gualification was enhanced. Beginning with the reference (iii) Interoffice memo, Engineering attempted to develop a defendable position regarding appropriate amplification factors to be applied to vent and drain configurations. During the final stress reconciliation process in mid-1985, it was determined that the qualification method to be utilized for vent and drain connections would require that rigidity be demonstrated and that individual calculations be performed for each vent and drain configuration utilizing the worst case accelerations of either the run pipe or building ZPA. However, the reference (ii) ~ culation was performed in 1984 utilizing the earlier criteria, and therefore should have been revised and/or superseded to reflect the enhanced design requirements. The approved corrective action plan for CR M3-\$3-0302 (attached) will revise calculation NP(B)408-XD to reflect the enhanced design requirements. There is no impact on physical hardware or the individual vent and drain calculations. As such there is no effect on the license or design basis, therefore NU has concluded this to be a Significance Level 4 issue.

Conclusion:

NU has concluded that Discrepancy Report, DR-MP3-0363, has identified a condition not previously discovered by NU which requires correction. The approved corrective action plan (attached) for Condition Report (CR) M3-98-0302 will revise calculation NP(B)408-XD to reflect the enhanced design requirements. There is no impact on physical hardware or the

ICAVP Discrepancy Report

individual vent and drain calculations. As such there is no effect on the license or design basis, therefore NU has concluded this to be a Significance Level 4 issue.

DR No. DR-MP3-0363

Previously Identified by NU?	O Yes @	No	Non D	iscrepant Conditio	m?O Yes	No No
Resolution Pending	17 Yes @	No No	Rei	solution Unresolve	d?O Yes	NL
Initiator: VT Lead: VT Mgr: IRC Chmn: Date:	Prakash, A. Neri, Anthony A Schopfer, Don K Singh, Anand K 2/16/98		Acceptable	Not Acceptable	Review Needed	Date 2/16/98 2/17/98 2/17/98
SL Comments:	NU's approve revise caicul	ed co ation	mective act NP(B)408-3	ion plan for CR XD to reflect the	M3-98-030 e enhanced	2 will design

revise calculation NP(B)408-XD to reflect the enhanced design requirements. We, concur with NU that there is no effect on the license or design basis, and the Significance Level can be changed to Level 4.

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in the sect I will the	ICAV	P	DR	No. DR-MP	3-0364
Ailistone Unit 3	Discrepancy	Report			
Baulay Group	Svolem	C	RESOLUTIO	N ACCEPTED	
Review Element:	System Design		Pote	ntial Operability	y issue
Discipline:	Piping Design			O Yes	
Discrepancy Type:	Calculation			No	
System/Process	SWP		Date	FAXed to NU:	
NRC Significance level	•		D	te Published:	10/23/97
		Deal water a	ining configu	ration for V1	75
Discrepancy	Evaluation of SWP 1	24 is duplica	ted		
Description	In the process of rev	iewing the f	ollowing calc	culations,	
	a in the process of the			410/04	
	 (1) Calculation 1217 (2) Calculation 1217 (3) Calculation 1217 (4) Calculation 1217 (5) Calculation 1217 (6) Calculation 1217 	9-NP(F)-SV 19-NP(F)-SV 19-NP(F)-SV 19-NP(F)-SV 79-NP(F)-SV 79-NP(F)-SV	VP-28-V175, VP-28-V180, VP-32S-V92 VP-31A-V92 VP-97-V224	Rev 4, 10/11 Rev 4, 10/11 4, Rev 2, 4/2 3, Rev 2, 4/2 , Rev 1, 10/4	8/96 8/96 0/93 6/93 /85
	we noted the follow	ing discrepa	ncy:		
	Background:				
	Pipe stress analysis piping configuration V224. Although inc and V224 are not in More recently, roof stress analysis call by calculations (2-	s calculation ns for SVVP cluded in the ncluded in the ncluded in th t valve pipio culation (1) 1 6).	(1) evaluate values V175 calculation, he title block g configurationave been en	SWP valves of calculation ons addresse valuated ind	V923 and V180 r (1). ed by vidually
	Discrepancy:				
	It is not clear why calculation (1) hav the new calculatio should be voided.	the root valve also been ons (2-6) sup	ve configurat evaluated b ersede (1), t	tions address by calculation hen calculation	ed by is (2-6). If on (1)
	and the set is the set		Acres 1.4	Review	Date
		Valid	Invalid	(Caeded	10/3/97
Initia	Nor: Patel, Ramesh.D		Н	Н	10/7/97
VTL	ead: Nen, Anthony A	AD	Ē	Ē	10/14/97
UT INCOMENT	wgr: Schopler, Don K		П		10/17/97
INC CI	HING ON MIL MINING		Lead	and the second s	
	Date:				
INV	ALID:		CARRON NAMES AND INCOMESSION AND		PARAPARTAR STORE
In calculation of the control operation of the control of the cont	Date: 2/6/98				
RESOLU	NON: Response ID: MS	3-IRF-01593			
	Disposition: NU has conclude identified a cond requires correcti	ed that Discr lition not pre on. This disc	epancy Rep viously disco crepancy me	ort, DR-MP3 overed by NL eets the criter	-0364, has J which ia specifie

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Page 1 of 2

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Northeast Utilities Millstone Unit 3	ICA Discrepan	VP cy Repo	DR	No. DR-M	P3-0364	
	in NRC letter B16901 and 17010. It has been screened per U3 P 20 criteria and found to have no operability or reportability concerns and meets the Unit 3 deferral criteria. CR M3-98-0138 has been written to develop and track resolution of this item per RP-4.					
	Conclusion: NU has concluded identified a condition requires correction in NRC letter B169 20 criteria and four concerns and mee has been written to RP-4.	that Discre on not prev . This discr 01 and 170 nd to have ts the Unit 1 o develop a	pancy Report, I iously discovere epancy meets t 10. It has been no operability o 3 defemal criteri no track resolut	DR-MP3-03 ad by NU w he criteria screened p r reportabil a. CR M3-0 ion of this i	64, has hich specified per U3 Pl- ity 98-0138 tem per	
Previously Identified by NU?	O Yes (No	Non D	iscrepant Conditio	m? Yes	No No	
Resolution Pendin	9? Yes 🖲 No	Re	solution Unresolve	d?O Yes	No	
Initiator: VT Lead: VT Mgr: IRC Chmn: Date:	Prakash, A. Neri, Anthony A Schopfer, Don K Singh, Anand K	Acceptable	Not Acceptable	Review Needed	Date 2/16/98 2/17/98 2/17/98	

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ICAVP **Discrepancy Report**

DR No. DR-MP3-0395

Review Group:	System		DR RESOLU	TION ACCEPTE	ED	
Review Element: Discipline: Discrepancy Type: System/Process:	System Design Mechanical Design Calculation SWP		Potential Operation Yes ® No			
NRC Significance level:	4		D	ate FAXed to NU	J:	
				Date Published	d: 10/23/97	
Discrepancy:	Calculation 95-EN supersedes portio	IG-1177-M3 ns of other c	rev. 0 and 0 alculations.	CN 01 incon	rectly	
Description:	Calculation 95-EN verify the SW inle outlet temperature calculation incorre 069-1130-M3 rev. 069-1116-M3 rev. The calculation (a basis information calculations. This 1130-M3 design in design input.	IG-1177-M3 it temperatur of 95°F fro ectly superse 0 CCN 01, 0 CCN 01, 0 CCN 01, 5-ENG-1177 as it is being s calculation nformation th	is actually a re to maintai m 3HVK*CH aded portions 90-069-1065 7-M3) does n g used in the supersedes hat calc. 95-	setpoint calo n the maxim IL1A & B. Th s of calculatio -M3 rev. 0 C not provide d above ment , in calculatio ENG-1177-M	esign ioned (3) in 90-069- ioned (3) in 90-069- i3 uses as	
	accenter in point	Valid	Invalid	Review Needed	Date	
Initiator:	Dionne, B. J.				10/4/97	
VT Lead:	Neri, Anthony A				10/7/97	
VT Mgr:	Schopfer, Don K				10/14/97	
IRC Chmn:	Singh, Anand K				10/18/97	
Date				1		
INVALID						
Date	2/17/98	SINA CARDADONIA ANAL CENTRANIA	ene lanas antorantar a constantaria.com		EN WINNING VISION NOTION	

RESOL'ITION: Disposition:

NU has concluded that the issue reported in Discrepancy Report, DR-MP3-0395, has identified a condition not previously discovered by NU which requires correction. Calculation 95-ENG-1177-M3 has been superseded by Proto Power Calculation 97-123. The approved corrective action plan in CR M3-98-0406 will correct this issue by determining if calculations 90-069-1116-M3 and 90-u69-1130-M3 should be superseded by the Proto Power flow model calculations or if active, revise them to be consistent with the Proto Power flow model calculations. These corrective actions will be performed post startup.

Conclusion:

NU has concluded that the issue reported in Discrepancy Report, DR-MP3-0395 has identified a condition not previously discovered by NU which requires correction. The approved corrective action plan in CR M3-98-0406, to be completed post stanup, will determine if calculations 90-069-1116-M3 and 90-069-1130-M3 should be superseded by the Proto Power flow model calculations.

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Northeast Utilities	ICAVP			DR No. DR-MP3-0366		
Millstone Unit 3	Discrepancy	Repo	rt			
Review Group:	System	instaline fordering the star way.	DR RESOLU	TION REJECT	ED	
Review Element: Discipline:	System Design Piping Design		,	otential Operat	bility Issue	
Discrepancy Type:	Calculation			No		
NRC Sk.aificance level:	4					
terto orginitosinos tertos.			D	IT'S FAXed to N	0:	
	angy teri, Kantanga manang di panganan ana ang		ang yong person increasing per	Date Publishe	d: 10/18/97	
Discrepancy:	Density of Fiberglass inconsistant with cite	(J) insula d referen	ation used in ce	stress analy	is is	
Description:	In the proess of revie	wing the	following do	cuments,		
	(i) Pipe Stress Calcul to 3(ii) Pipe Stress Calcul	lation 121	79-NP(B)-X 179-NP(B)->	1900 Rev. 3 (53900, Rev	CCN's 1	
	we noted the followin	g discrep	ancy:			
	In pipe stress analys Fiberglass insulation Ibs/cft, and for others cited in the calculation justification is provid	Type - J as 5.25 ons, the d ed for the	tions (i) and is specified lbs/cft. Accorensity shoul use of the	(ii), the dens for some line ording to the d be 5.25 lbs lower (4 lbs/d	sity of es as 4 reference s/cft. No cft) density	
		Valid	Invalid	Peview	Date	
Initiator	Prakash, A.	53	[7]		10/2/97	
VT Lead	Neri, Anthony A	M	H	H	10/3/97	
VT Mar	Schopfer, Don K	B	H	Н	10/14/97	
IRC Chinn	Singh, Anand K		H	H	10/14/97	
Data		123				
INVAL ID						
INVALIO	•					
Date	: 2/16/98					
RESU'JUTION	Response ID: M3-IR	F-01010				
	Disposition: NU has concluded the discrepant condition lbs/ cu ft for J-type f discrepant condition minimum of J-type f General Thermal Ins 52 on 7/8/97). This 5/15/84 when a specifie Ref Inter-Office Men 5/3/84) that specifie	hat DR-M The use iberglass The use iberglass sulation - generic n cification mo from .	P3-0366 do of 4 lbs/cu. insulation d of 4 lbs/cu insulation (M921", Traininimum wa was obtaines J.E. Woods nsity of J-typ	es not repres ft. as oppose oes not repres ft is the gen See "Specific nsmitted in T s used unive d for J-type to G. Milley oe fibergalss	ent a ed to 5.25 esent a eric cation for ransmittal ersally unti insulation dated insulation	

X53900 were revised, the new density was used to perform the stress analysis on the length of affected pipe in accordance with the direction provided in Inter-Office Memo from P.Gopal and R. Bain to general distribution. Additionally, calculation 79-236-921GP Rev. 0 dated 11/12/87 addresses insulation weight

effects and envelopes the above condition.

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Northeast Utilities Millstone Unit 3	IC/ Discrepa	AVP ncy Repo	DR	No. DR-N	AP3-0395
Previously Identified by NU?	O Yes () No	Non Di	iscrepant Conditio	n? Yes	No No
Initiator: VT Lead: VT Mgr: IRC Chmn: Pate:	Dionne, B. J. Neri, Anthony A Schopfer, Don K Singh, Anand K 2/17/98	Acceptable	Not Acceptable	Review Needed	Date 2/17/98 2/17/98 2/17/98
SL Comments:	The resolution of in CR's M3-97-47	CR M3-98-0 74, 3897 and this effort wi	406 will be con d 3886. This is	found to b	e veloped

calculations that use or affected the PEGISYS model calculations.

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ICAVP

DR No. DR-MP3-0402

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istone onit o	Discrepancy	Report
Review Group:	System	DR RESOLUTION ACCEPTED
Review Element:	System Design	Potential Operability Issue
Discipline:	Calculation	O Yes
System/Process:	SWP	No
NRC Significance level:	4	Data EAXed to NU:
		Date Published: 1/22/08
Discrepancy:	Calc 00.060.1007 M3	contains errors in the database undate
Description	The suppose of Calcul	ation 00 000 1007 M2 Day 0 through
	CCN#4 was to update comprehensive Millsto several PEGISYS serv Calculation Workscop benchmark flow calcul for the "CASE" alignm NEU-1956 (dated 7/1// 069-1116 M3 (dated 5 The remaining portion discrepancies in the calcul are not an exhaustive	the small bore portion of the one Unit 3 SWS Database which is used in vice water system models. Item 2 in the e Summary, page 9, states that a lation will be compared to results obtained ont in Westinghouse Calculation FSE/SS- 63), which later became NU Calculation 90- /18/95). of this Discrepancy Report sites specific alculation reviewed. The examples given list of those found, but rather used to
	illustrate the types of o Page 49, Section 6, P at the entrance and ex heat exchangers. The contain nodes at the in RSS heat exchangers	discrepancies found. art B, Item 1 states that nodes were placed kit flanges of each component, including e nodal diagram on page 13 does not nlet or outlet of the CCP, CCS, HVK and
	On page 67, the comp HVQ*ACUS1A,1B,2A Note (3) for this section Page 33 of the referent these heat exchanger	ponent fL/D for the ,2B heat exchangers is listed as 11.12. on references calculation 90-069-1116 M3. nced calculation lists the fL/D value for s to be 11.28.
	Design input 11, page that which pumps P3A alignment, they introd system. The addition being turned off was of FSE/SS-NEU-1576. of calculation 90-069- benchmark run of cal fL/D should have bee 107 on page 99 of cal	a 12 of calculation 90-069-1116 M3 states and P3B are turned off for the CASE luce additional resistance in the piping al loss, K=fL/D, for pumps P3A and P3B determined to be 52.8 by calculation This was addressed in the CASE alignment -1116 M3, but was neglected in the culation 90-069-1097 M3. This additional in displayed for pathways 108-109 and 106- lculation 90-069-1097 M3.
	Some of the heat load the heat loads in the p load for HVK*CHL1A, but is displayed as 6,3 run printout. The heat 338,750 Btu/hr on page pages 96 and 97. Th 387,500 Btu/hr on page page 97	ds identified on page 67, do not agree with printout of the benchmark run. The heat ,B is listed as 3,275,387 Btu/hr on page 67, 315,400 Btu/hr on page 95, the benchmark at load for HVQ*ACUS1A,3 is listed as ge 67, but is displayed as 677,500 Btu/hr on the neat load for HVQ*ACUS2A,B is listed as ge 67, but is displayed as 775,000 Btu/hr on
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ICAVP Discrepancy Report

To update the small bore portion of the PEGISYS SWS database, isometric drawing were used to generate piping takeoffs. The piping takeoffs were then summarized in this calculation correseponding to the nodal diagram established for the PEGISYS SWS model. The piping takeoff summaries were subsequently input to the PEGISYS SWS database (filename = NEUSWS). The review of this calculation did not include a comprehensive review of the database updating process, however, a representative sample was reviewed and found to contain discrepencies. Examples are given below.

Errors were identified when summarizing the piping takeoffs because an inconsistent accounting method was used. When a node is located at a Tee, sometimes the Tee was included in the line upstream of the node and at other times, the Tee was included in the line downstream of the node. For example: There is a Tee at node 1071 in the line from node 107 - 1071, see page 122. In the piping summary for this line, page 197, the Tee is not included, rather, it is accounted for in the line downstream of the Tee, in line 1071-1072. This is acceptable, however, the accounting method changed in path 224-2251. A Tee is located at node 2251, see page 135A. The piping summary for this line, page 207, includes the Tee for the line upstream, 224-2251. This inconsistency led to incorrect piping summaries. The Tee at node 227, page 136, is included in the line upstream of this Tee, 226-227, page 137. The line summary for 227-19 on page 207 also includes this Tee, accounting for it twice. This inconsistency is also apparent for the line 21-22, page 137, which accounts for a Tee at both the beginning and ending nodes of the line.

Errors were also identified when transposing the piping takeoff summaries into the PEGISYS database (filename = NEUSWS) as described below.

The pipe length for line 66-42 is listed as 39.5 feet in the piping summary on page 190. The pipe length for this line was transposed to the database as 1 foot, page 257.

The piping summary for line 102-108 on page 202 listed the elevation for nodes 102 and 108 as 21.3 and 44.8 feet, respectively. When transposed to the database on page 280, the elevation for nodes 102 and 108 were input as 19.50 and 28.60 feet, respectively.

When the information for the (2) 90 deg 4D bends were transposed to the database for pathway 79-23, page 315, the values for the angle and radius of the bends were switched.

The piping summary for line 221-2211 on page 207 indicates there are (2) 45 deg elbows in the line. The line was entered into the database on page 321 with (4) 45 deg elbows.

Note: Several SWP calculations used a previous version of this service water system database for PEGISYS modeling, such as

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Northeast Utilities Millstone Unit 3	IC/ Discrepa	AVP ncy Repo	ort	DR No. DR	-MP3-0402		
	FSE/SS-NEU-1405 and 90-069-1116-M3. The discrepancies identified in the database may be applicable to other service water system calculations which used the database after the update by calculation 90-069-1097 M3. Examples include Calculation 90-069-1065 M3, and those calculations developed after the PEGISYS model was converted to PROTO-FLO in the PROTO POWER / NU calculations 94-065, 96-001, 97-041 97-						
	000, 01-001 410	Valid	Invalid	Review Needed	Date		
Initiator:	Dionne, B. J.				12/19/97		
VT Lead:	Neri, Anthony A				12/19/97		
VT Mgr:	Schopfer, Don K				12/23/97		
IRC Chmn:	Singh, Anand K				1/16/98		
Date:							
INVALID:							

Date: 2/16/98

RESOLUTION: Disposition:

NU has concluded that DR-MP3-0402 has identified a condition not previously discovored by NU which requires correction.

The referenced calculations in DR-M3-0402 have been supplemented/replaced by Protopower analysis. The corrective actions necessary to "clean up" the calculation documentation and references and resolve the issues of DR-M3-0402, will be implemented and tracked under the auspices of Condition Reports M3-98-0567 and M3-97-4774. The approved corrective action plans for CR# M3-98-0567 and M3-97-4774 will correct this issue

The corrective actions for this issue are:

Review calculation 90-69-1116-M3, and calculations referenced within this calculation, and remove all assumptions necessary for input to the Protopower PROTO Flo calculations (96-001, 97-041 and 97-035) and NL/ calculation 90-069-1065M3. Create a new calculation or technical evaluation for this information. Delete calculation 90-069-1116M3 and associated flow model calculations which are based upon the WNES Pegisys SWS flow model. Review all service water calculations to assure that they reference active calculations. Review all ICAVP DR's associated with SWP calculations to assure that all discrepancies identified as part of this administrative reconciliation have been addressed. The technical issues cited in DR-M3-0402 are no longer valid conditions as the calculations have been replaced with Protopower calculation 96-001.

The Protopower service water system flow calculation, 96-001 represents the physically installed system and has been adjusted by actual system flow test data obtained during RFO-5. This calculation is valid and confirms that the system will perform its intended safety function in accordance with the design bases, therefore, this DR is not required for start-up. NU has corricluded

ICAVP Discrepancy Report

that this discrepancy is a Significance Level 4.

Condition Reports (CR) M3-97-4774 and M3-98-0567 were written to provide the necessary corrective actions to resolve the issues of DR-M3-0402. The corrective actions for this issue are: Review calculation 90-69-1116-M3, and calculations referenced within this calculation, and remove all assumptions necessary for input to the Protopower PROTO Flo calculations (96-001, 97-041 and 97-035) and NU calculation 90-069-1065M3. Create a new calculation or technical evaluation for this information.

Conclusion:

NU has concluded that DR-MP3-0402 has identified a condition not previously discovered by NU which requires correction.

Delete calculation 90-089-1116M3 and associated flow model asculations which are based upon the WNES Pegisys SWS flow model.

Review all service water calculations to assure that they reference active calculations. Review all ICAVP DR's associated with SWP calculations to assure that all discrepancies identified as part of this administrative reconciliation have been addressed. Completion of the review of calculations referenced are not required prior to unit start-up since calculation 96-001 represents the physically installed service water system and therefore, confirms that the system will perform its intended safety function in accordance with the design bases. NU has concluded that this discrepancy is a Significance Level 4.

Previously Identified by NU?	O Yes IN	lo Non D	iscrepant Conditio	m? Yes	No
Resolution Pendin	g?) Yes 💿 N	lo Rei	solution Unresolve	d?O Yes	No
Initiator: VT Lead: VT Mgr: IRC Chmn: Date:	Diunne, B. J. Neri, Anthony A Schopfer, Don K Singh, Anand K 2/16/98	Acceptable	Not Acceptable	Review Needed	Date 2/16/98 2/17/98 2/17/98
SL Comments:	This discrepant of M3-97-4774 and changed from le Proto Flo model	condition will M3-98-0567. vel 3 to level of the SWS.	be corrocted by The significan d based on agr as confirmed by	Condition the level was eement that y testing, p	Reports as it the roves that

changed from level 3 to level 4 based on agreement that the Proto Flo model of the SWS, as confirmed by testing, proves that the system functions accordingly and this does not presen' a startup issue.

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Millstone Unit 3	Discrepancy Rep	ort				
Review Group: (Operations & Maintenance and Testin	DR RESOLUTIO	ACCEPTE)		
Review Element: (Operating Procedure	Pote	ntial Oper oil			
Discipline: (Operations	Pole	Ves	n)		
Discrepancy Type: (System/Process: 1	D & M & T Procedure SWP		No			
NRC Significance level:		Date	FAXed to NU:			
		Da	te Published:	10/23/97		
Discrep ancy:	Procedures not in place to ensure compliance with Plant					
Description:	The Technical Specifications require the service life of mechanical and hydrauli. snubbers be maritored to ensure the service life is not exceed ad. The necessary procedures to ensure compliance with this Tech. Spec. were not in place at the time of this independent review. While this DR is written against SWP it does apply to all systems.					
	Technical Specification 3/4.7.10i (page 3/4 7-26) states, "The service life of hydraulic and mechanical snubbers shall be monitored to ensure that the service life is not exceeded between surveilance inspections. The maximum expected service life for various seals, springs, and other critical parts shall be determined and established based on engineering information and shall be extended or shortened based on monitored test results and failure history. Critical snubber parts shall be replaced so that the maximum service life will not be exceeded during a period when the snubber is required to be Operable. The parts replacements shall be documented and the documentation shall be retained in accordance with					
	S&L Request for Information, RFI Number MP3-219 was submitted on 7/18/97 requesting the Snubber Procedure used for Snubber Service Life Program to satisfy MP-3 Tech. Spec. 4.7.10d, page 3/4 7-26. This should have read Tech. Spec. 4.7.10i, page 3/4 7-26. The type was the insertion of the d instead of the i. The description and page numbers were correct.					
	IRF Response ID : M3-IRF-00202 stated "Items 8 and 9 are not addressed by an existing procedure. AR 97019941 requires a new procedure or revised procedure will address these items at a later date".					
	Action Request, AR 97019 "Develop appropriate trigg Technical Specification 4.1 examined following unexp transients within 6 months did not address the Service	941 was issued o er to ensure comp 1.10d which requi ected, potentially of the event". The E Life Program is	n 8/11/97 s pliance with res snubber damaging s his Action R sue.	tating, rs to be system equest		
	Procedures necessary to o personnel satisfy Technica place.	emonstrate how I Specification 3/	Millstone C. 4 7.10i are	not in		
		here the	Review	Dete		
	Vaik	Invalid	Needed	Date		
Initiator	Pinner, W.			10/13/97 Decret		

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Vortheast Utilities Millstone Unit 3	Discrepa	AVP	rt C	R No. DR-	MP3-0471
Initiator: VT Lead: VT Mgr: IRC Chrm:	Pinner, W. Bass, Ken Schopfer, Don K Singh, Anand K				10/13/97 10/13/97 10/15/97 10/18/97
Date: INVALID:					
Date: RESOLUTION:	2/16/98 Disposition: NU has conclude identified a cond requires correction program to satist by NU and docum Finding 03. The expected correct 035, 2/15/94. All mechanical and implement a form	ed that Discreption previous on. The lack fy Tech Spec mented on Q/ Unit Director's live action is f R 95046951 w hydraulic serv mal program.	pancy Report ly discovered of a snubber 4.7.10.i was AS Audit A23 response to ound in attact vas initiated 7 vice life progra The initial so	t, DR-MP3-0 I by NU whi service life previously o 058, 1/24/9 the audit a ched memo 7/18/95 to re ram and, if i chedule refe	0471, has ch monitoring discovered 4, as nd MP-3-94- eview the necessary, erence for
	corrective action outage 4 (T <fo4 time period is we corrective action 95046951-02 we required to be co</fo4). The NU cor ell documente hs were not im as re-schedule ompleted prio	d as faulty. plemented in d for the curr to restart	n program d Because of a timely m rent outage	eling luring this this, the lanner. and is
	corrective action outage 4 (KFO4 time period is we corrective action 95046951-02 wa required to be con- Conclusion: NU has conclud identified a cond requires correct QAS Audit A230 to initiate AR 95 program and im- is scheduled to	ed that Discredition previous ion. This issu both to revious ion. This issu both 951 to revious plement a for be completed	plemented in d as faulty. plemented in d for the curr to restart pancy Repor ly discovere e was previo 's response t view the snut mal program prior to resta	t, DR-MP3- d by NU wh usly discove o the QAS / ober service if necessar	eling luring this this, the anner. and is 0471, has ich ered in Audit was life y. This AR
Previously Identified by NU?	Conclusion: NU has conclud identified a conc requires correct QAS Audit A230 to initiate AR 95 program and im is scheduled to	ed that Discredition previous ion. This issue base on the the the the the the the dition previous ion. This issue 046951 to revious plement a for be completed No Non D	pancy Repor by discovere was previo 's response t view the snut prior to restant	t, DR-MP3- d by NU wh usly discove o the QAS / ober service if necessar art.	eling luring this this, the anner. and is 0471, has ich ered in Audit was life y. This AR
Previously Identified by NU? Resolution Pendir	Conclusion: NU has conclud identified a conc requires correct QAS Audit A230 to initiate AR 95 program and im is scheduled to	A was complet). The NU cor ell documente is were not im as re-schedule ompleted prio ed that Discred dition previous ion. This issue 058. The Unit 046951 to rev plement a for be completed No Re	pancy Repor ly discovere e was previo 's response t view the snut prior to restant prior to restant prior to restant	t, DR-MP3- d by NU wh usly discove o the QAS / ober service if necessar art.	eling luring this this, the anner. and is 0471, has ich ered in Audit was life y. This AR s () No s () No

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DR No. DR-MP3-0681 ICAVP Northeast Utilities **Discrepancy Report Millstone Unit 3 DR RESOLUTION ACCEPTED Review Group:** System **Review Element: System Design Potential Operability Issue Discipline: Mechanical Design**) Yes **Discrepancy Type:** Calculation No System/Process: HVX NRC Significance level: 4 Date FAXed to NU: Date Published: 1/22/98 Discrepancy: MCC & Rod Control Area Co. ling Load and Ventilation Calculations Description: During review of the cooling load and ventilation calculations for the MCC & Rod Control Area Air Conditioning System discrepancies regarding the loads and airflows were identified. References: 1. Calculation P(B)-1184, Rev. 0 2. Calculation P(B)-1129, Rev. 2 3, Calculation P(B)-1129, Rev. 2, CCN 1 4. Calculation P(B)-1129, Rev. 2, CCN 2 5. Calculation P(B)-1129, Rev. 2, CCN 3 6. P&ID EM-148A-24 7. Duct drawing EE-45H-12 8. Duct drawing EB-45M-9 Background: Calculation P(B)-1184 evaluates the affect of a 6"x2" hole in the 3HVR*ACU1A supply duct on system performance. Calculation P(B)-1129 determines the cooling load and vertilation requirements for the MCC and Rod Control Area Air-Conditioning system. Air conditioning units 3HVR*ACU1A & 1B provide cooling for the east and west MCC & Rod Control Areas in the Auxiliary Building as shown on P&ID EM-148A. Discrepancies: 1) The hole in the supply duct is caused by a missile from fan 3HVR-FN4A, 3HVR-FN4B or 3HVR-FN5 which are located near the 52" x 28" supply duct to the east MCC & Rod control area on elevation 66'-6" of the auxiliary building. The location of the fans and duct are shown on drawings EB-45H-12 and EB-45M-9. Calculation P(B)-1184 determined that 428 cfm would be lost

Calculation P(B)-1184 determined that 428 cfm would be lost through the hole in the ductwork. In evaluating the impact the hole in the ductwork would have on system performance the calculation considered the effect on overall system performance instead of the effect it would have on the east MCC & Rod Control Area.

2) Calculation P(B)-1184 was not revised when calculation P(B)-1129 was updated to evaluate lower than design airflow to the east MCC & Red Control Areas with 3HVR*ACU1B running.

3) The supply air lost through the hole in the supply duct on elevation 66'-6" of the auxiliary building will result in air infiltration into the areas served by 3HVR*ACIJ1A/1B. This would Page 1 of 4

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Millsto	ne	Unit	3

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increase the cooling load on the system since the temperatures in the surrounding areas have a higher design temperature. Calculations P(B)-1129 and P(B)-1184 do not address this impact on the room cooling loads.

DR No. DR-MP3-06U1

4) Calculation P(B)-1129 takes credit for heat loss to auxiliary building ductwork passing though the MCC & rod control area. This is not valid for accident conditions when the non-safetyrelated fars (3HVR-HVU2B and 3HVR-FN11) associated with this ductwork are not operating.

		Valid	Invalid	Needed	Date
Initiator:	Stout, M. D.				12/11/97
VT Lead:	Neri, Anthony A				12/16/97
VT Mgr:	Schopfer, Don K				12/23/97
IRC Chmn:	Singh, Anand K				1/17/98

Date:

INVALID:

Date: 2/16/98

RESOLUTION: NU has concluded that the issues reported in DR-MP3-0681, Items 2 & 3, have identified conditions not previously discovered by NU which require correction. CR M3-98-0475 (Attached) has been written to develop the corrective actions associated with this DR.

> For Item # 2, Calc P(B)-1184 will be evaluated for the effect of lower than design air flow to the East MCC/RCA with 3HVR*ACU1B running. Reevaluation of calc P(B)-1184 for reduced air flows, as evaluated on CCN#3 to Calc. P(B) 1129, should have minimal impact as the calculated required air temperature leaving the coils for the reduced flow rate is higher than the actual air temperature leaving the coils under a!! analyzed conditions.

For Item # 3, Calcs P(B)-1129 and P(B)-1184 will be evaluated for the effect of infiltration of warmer air from the surrounding areas due to loss of cooling air through the hole in the ductwork. The impact of air infiltration from surrounding areas as noted in Item # 3 will be minimal. The areas served by 3HVR*ACU1A/1B are in the Aux. Building, enclosed by key-locked fire doors, and in-leakage will be minor. Worst case is in-leakage equivalent to the flow through the postulated missile hole, of 428cfm, (not revised for the lower flow rate to the East area with ACU1B running) at a temperature of 104 F, 18 Cag, above the MCC/RCA normal design temperature. This represents approximately 4% of the total flow. CR M3-98-0475 has been issued to address the issues identified in Items 2 & 3.

In addition, the MP3 Hazards Review Program for the Aux building, HAZ-01449-M3, has stated that no unacceptable interactions have been identified due to the postulated fan missile. The System performance will not be significantly degraded by flow losses associated with estimated 12 sq. in.

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ICAVP Discrepancy Report

DR No. DR-MP3-0681

hole caused by missile.

Based on the above, there is no indication that 'he unit is outside its' licensing or design basis. The DR is considered by NU to ba Significance Level 4, and the Corrective Action specified in the CR will be deferred until after restart. NU has concluded that the issues identified in Items #1 & 4 in DR-MP3-0681 are not considered to be discrepant conditions. For Item #1, evaluating the impact the hole in the ductwork would have on system performance, the heat load used in the calculation P(B) 1184 is the heat load for the East MCC/RCA, taken from Rev. 0 of P(B)-1129, and thus is not considering the effect on overall system performance. For item # 4, Calc P(B)-129 only takes credit for heat loss to the d stwork passing through the MCC/RCA for Case III, Loss of Chilled Water. This is the same as Case I, Normal Operation, except that the heat load is being transferred to the Service Water System instead of the Chilled Water System. Heat load during accident conditions, with the lower heat loads from the electrical and control equipment in these areas is covered by Case II of Calc. P(B)-1129. Case II does not take credit for heat ioss to ductwork passing through the MCC/RCA area, and is bounded by Case III, Loss of Chilled Water. In addition, Calculation P(B)-1:29 will be evaluated / revised for the impact on the heat load of the increased fan motor horsepower from 37.2 to 47.1 for 3HVR*ACU1A,1B, identified in DR-MP3-0344 Also the Engineering Calculations Data Base (PASSPORT) will be updated to include Calc. No. P(B)-1184 as a reference in Calculation P(B)-1129. Attachment: CR M3-98-0475 Non Discrepant Condition? Yes No Previously Identified by NU? O Yes No Resolution Unresolved? Yes No Resolution Pending? Yes No Review Date Not Acceptable Needed Acceptable Initiator: Stout, M. D. 2/16/98 \boxtimes VT Lead: Neri, Anthony A 2/17/98 \boxtimes VT Mgr: Schopfer, Don K 2/17/98 \boxtimes IRC Chmn: Singh, Anand K Date: 2/16/98 SL Comments: Agree that a 4% reduction in airflow due to the hole in the duct probably would not increase the temperature in the area above the 120°F design temperature when margin in the service water cooling coil and internal heat loads are taken into account.

On item #4, calculation P(B)-1129, Rev. 2, CCN 3 states that Case II is enveloped by Case III, therefore Case III should addresscredit for heat loss to the auxiliary building duct running

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ICAVP Discrepancy Report

through the MCC and Rod Control Area.

Refer to DR-MP3-0687 regarding fan missile hazard analysis noted in NU's response.

The normal electrical loads used in Case III (normal operation) are higher than the electrical loads expected for Case II (accident conditions) and sufficient margin appears to be available to account for the 4% reduction in airflow due to the hole in the duct. Therefore, the significance level for the DR has been changed to Level 4.

Northeast Utilities	ICA	VP	1	DR No. DR-	MP3-0807
Millstone Unit 3	Discrepan	cy Repo	ort		
Review Group:	System	Language in the substitution of	DR RESOLU	TION ACCEPT	ED
Review Element:	System Design				
Discipline:	Other		n	otential Operat	SHRY ISSUE
Discrepancy Type:	Component Data				
System/Process:	DGX			0 110	
NRC Significance level:	3		Da	te FAxed to N	U:
				Date Publishe	d: 1/10/98
Discrepancy:	Means for meeting	commitme	nt not identif	led	
Description:	Section 8.3 of the related equipment automatic fire prot have demonstrate be caused by the 1 Per item 453 in the review specificatio TBD." This note in	FSAR conta in all plant ection efflue d their opera fire protections e annotaded ons for cable indicates that	ains the follow areas is eithe ents or, on the ability in the on effluents. d SAR this is a, equipment, t CO2 effects	an open iter etc., in CO s will be eva	nt. Safety from st data, that may n; "Yet to 2 areas - luated.
	However informati Halon effluent effe	ion could no	en evaluated	which indica d for those a	reas
	where Halon syste	ems are inst	alled.	Review	
		Valid	Invalid	Needed	Date
Initiator:	Rich, J. M.				12/16/97
VT Lead:	Neri, Anthony A				12/17/97
VT Mgr:	Schopfer, Don K				12/23/97
IRC Chmn:	Singh, Anand K				12/31/97
Date:					
INVALID:					
Date:	2/5/98	CARACULARIES PER ANDER SECOND	an man ya ta'a ku na kun na kuta ku ku ku ku ku	alla, and some a gradient and	NALING CARACTERISTICS
RESOLUTION:	NU has concluded DR-MP3-0807, do The intent of item	that the iss es not repre	sue reported esent a discre address the	in Discrepan epant conditi use of CO2	cy Report on. as a total
	flooding agent in s significant testing as a cold agent, a components and f	safety-relate was perform nu the impa fuel tanks.	ed areas. Du ned to addre act it would ha	ring licensin ss the effoct ave on elect	g of MP-3, s of CO2 rical
	The global issue of suppression syste 1985, in the "Inad Equipment" report Information Notice GDC 3 of Append evaluation of the and concluded that plant to achieve a updated by an act scheduled to be con-	of the inadver- ms at MP-3 vertent Ope t. This issue e 83-41, BT ix A to 10C use of Halor at there was and maintain tive assignm ompleted pe	ertent operation was previous ration/Rupture was identif P CMEB 9.5- FR50. The mo- n, which was no impact on safe shutdo nent, A/R 970 ost start-up.	ion of all fire sly evaluate re of Fire Prified by the N -1, item C.1. eport include limited to 3 n the ability wn. The stu 021368, which	d in June, otection RC in I&E b(8), and b(8), and locations, of the dy is being ch is
	The only additionation the MP-1 Fire Pure	al area that mp House, w	could effect which is prote	MP-3 operat	ion is in on. Halon

ICAVP Discrepancy Report

DR No. DR-MP3-0807

could have an effect on the operation of the diesel fire pump engine (Halon in the combustion air). To address this concern, the engine has an independent air intake piped directly from the outside. The fire pump is relied upon to supply fire fighting water to MP-3. This issue was evaluated in January, 1984, in the MP-1 "Inadvertent Operation/Rupture of Fire Protection Equipment" report.

It is generally recognized that Halon does not have the same effect on equipment as CO2. It is electrically safe, does not leave a residue and can be used in occupied spaces. While CO2 is utilized at concentrations between 40% and 60%, Halon systems use concentrations of between 5% and 10% (7% at MP-3). This is well documented in the NFPA Standards.

Memo (GMP-84-535) dated November 19, 1984, details the results of a CO2 discharge test performed on November 9, 1984. One objective of this test was to determine the impact of CO2 impingement on specific mechanical and electrical equipment / components within the Diesel Fuel Oil Vault. This test monitored both surface and internal temperatures on electrical components. Three electrical components were positioned within the vault. They included a spare relay, an inverter and a TV camera which was utilized to monitor the cor.ditions within the vault. These components were deemed representative of both energized and heat producing equipment (inverter / Camera) and non-energized equipment (relay).

Halon system discharge testing performed in November 1985, was used to verify proper concentrations within the Control Room computer room and the Control Building instrument rack room and to verif; no significant temperature effects. This test did not show any significant temperature effects as a result of discharge of Halon into the "under floor" areas of these room, therefore, the evaluation of effects of fire protection effluents has been made and there is no discrepant condition.

Significance Level Criteria do not apply as this is not a discrepant condition.

Previously Identified by NU?	O Yes	No	Non D	iscrepant Conditio	m? Yes	() No
Resolution Pendin	g?O Yes	No	Rei	solution Unresolve	id?() Yes	. NO
initiator: VT Lead: VT Mgr: IRC Chmn: Date: SL Comments:	Rich, J. M. Neri, Anthony Schopfer, Do Singh, Anand	A n K I K	Acceptable	Not Acceptable	Review Needed	Date 2/5/98 2/13/98 2/16/98 2/17/98

ICAVP

DR No. DR-MP3-0864

Discrepancy Report

Review Group: System Review Element: System Design Discipline: Electrical Design **Discrepancy Type:** Licensing Document System/Process: DGX NRC Significance level: 4

DR RESOLUTION ACCEPTED

Potential Operability Issue) Yes

No

Date FAXed to NU:

Date Published: 1/10/98

Discrepancy: FSAR Table 8.3-3 appears to be incomplete.

Description

FSAR Section 8.3.1.1.4, Page 8.3-25 states:

Loads with a non-safety function which are connected to safety related buses are protected for short circuit and overload conditions. These loads are listed in Table 8.3-3.

Lighting PnI ESF Bldg 3LAK-PNL3ESF2P is connected to 3EHS*MCC1B4 Heat Tracing Panel 3HTS-PHLA3 is connected to 3EHS*MCC1B4.

Lighting Panel DSL Gen Bldg 3L AD-PNL3DG01 is connected to 3EHS*MCC1A1.

These loads do not appear to be listed in Table 8.3-3.

The loads were determined by a review of the following drawings:

EE-1AJ rev. 28 480V MCC One Line Diag ESF Building Sh. 2 EE-1AK rev. 27 480V MCC One Line Diag Dsl Encl & Aux

BIr A

		Valid	Invalid	Needed	Date
Initiator:	Warner, I.				12/21/97
VT Lead:	Neri, Anthony A				12/20/97
VT Mgr:	Schopfer, Don K				12/23/97
IRC Chmn:	Singh, Anand K				12/31/97

Date:

INVALID:

Date: 2/13/98

RESOLUTION: NU has concluded that the issue reported Discrepancy Report, DP-MP3-0864, does not represent a discrepant condition. In Table 8.3-3 (Nonsafety-Related Equipment Connected to Safety-Related Equipment) under the column titled Equipment ID No. is listed as a general item "All Isolation Transformers". Panels SLAK-PNL3ESF2P, 3HTS-PNLA3, and 3LAD-PNL3DG01 are panels that are powered from Isolation Transformers which in turn are powered from Class 1E distribution. Rather than individually listing all the isolation transformers and their associated panels in Table 8.3-3, they were encompassed under the torm Isolation Transformers. The three panels listed above are individually listed in Table 8.3-6 (Electrical Equipment not

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ICAVP Discrepancy Report

DR No. DR-MP3-0864

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Requiring Internal Cable Separation). Significance level criteria do not a 'v as this is not a discrepant condition.

Conclusion: NU has concluded to the issue reported Discrepancy Report, DR-MP3-086 does not represent a discrepant condition. The subject penels are encompassed under the general term "Isolation Transformers" in Table 8.3-3 and individually listed in Table 8.3-6.

Significance level criteria do not apply as this is not a discrepant condition.

Previously Identified by NU? Resolution Pending	O Yes	NoNo	Non D	iscrepant Conditio	m? Yes	No No
Initiator: VT Lead: VT Mgr: IRC Chmn: Date: SL Comments:	Crockett, Ed. Neri, Anthony / Schopfer, Don Singh, Anand I	ĸ	Acceptable	Not Acceptable	Review Needed	Date 2/13/98 2/17/98 2/17/98

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ortheast Utilities	ICAVP		DR	No. DR-MI	P3-1 882
Aillstone Unit 3	Discrepancy F	Repor	t		
Review Group: S	stem	INC. IN COMPANY OF CANADIDA	DR RESOLUTI	ON ACC PTED	
Review Element: S	ystem Design		Pole	ilidera O initra	
Discipline: P	iping Design		Poli	C Yes	ay secre
Discrepancy Type: C	alculation			No No	
System/Process: D	GX				
NRC Significance level: 3			Date	FAXed to NU:	
			D	ate Published:	1/17/98
Discrepancy:	Evaluation/Acceptance addressed in calculation	of pene	tration seal ri	ng loads not	
Description:	In the process of review analysis calculations,	ving the	following DG	X system pi	pe stress
	 (Calculation No. 121 	79-NP(F 79-NP(F 79-NP(F 79-NP(F 79-NP(F 79-NP(F	F)-752-XD, R F)-886-XD, R F)-786-XD, R B)-X6000 Re F)-891-XL F F)-10018-XD,	ev. 3 CCN 2 ev. 0 CCN 4 ev. 1 CCN 2 v. 0 CCN 3 ev. 1 CCN 1 Rev. 0 CCN	12
	we noted the following	discrept	ancy.		
	Background:				
	Penetration seal ring k to the stress reconcilia	tion grou	identified beli up for evalua	ow were tran tion.	smitted
	(1) Sleeve # 3	Line #	3-CNS-750-1	70-4 Ca	IC. (1)
	(2) Sleeve # 11	Line #	3-EGF-002-3	31-3 Ca	IC. (2)
	(3) Sleeve # 5	Line #	3-EGF-150-1	10-3 Ca	alc. (3)
	(4) Sleeve # N.P.40	Line #	3-EGF-003-2	27-3 Ca	IC. (4)
	(5) Sleeve # 7	Line #	3-EGF-003-	26-3 Ca	alc. (4)
	(6) Sleeve # 8	Line #	3-EGF-003-2	29-3 CI	alc. (4)
	(7) Sleeve # N.P. 95	Line #	3-EGF-003-3	30-3 Ca	alc. (4)
	(8) Sleeve # 10EP60	Line #	3-EGF-002-	28-3 C	alc. (5)
	(9) Seal Ring # S-9	Line #	3-EGF-150-2	23-3 C4	alc. (6)
	Discrepancy:				
	The evaluation/accep nor referenced in the	tance bs above c	asis for these alculations (1	loads is not -6).	provided
		Valid	Invalid	Needed	Date
Initiator	Patel, Ramesh D	157	17		12/22/97
VTLead	Neri Anthony A	M	E	F	12/20/97
VT May	Schopfer, Don K	M	H	E	12/23/97
IRC Chron	: Singh, Anand K			D	1/13/98
Dete	1		na na ann a ta t		And the control of the state of the second
INVALIE	k.				
Dete	: 2/13/98				
RESOLUTION	Response ID: M3-IR	-01606			

ICAVP Discrepancy Report

Disposition:

NU has concluded that the issue reported in Discrepancy Report DR-MP3-00882 does not represent a discrepant condition.

There is no programmatic requirement for the stress calculation to contain the ultimate disposition of load transmittals. The calculation is not a tracking document. The objective of the stress calculations with respect to structural loads is to determine and transmit the loads. Thus the calculation documents the load transmittal but no confirmation is required because there were project procedures in place to address such items. Since there is no requirement for closure within the calculation, there is no discrepancy.

The seal ring loads were reconciled in accordance with project procedure NETM-59 and documented in calculation 12179-NS(B)-157 Rev. 0. (This is a large two volume calculation; the pertinent pages 1-7H and 183-185 are attached.) All subject ioad transmittals are logged in this calculation. As described on page 4 of the calculation, it performed a sampling evaluation of all seal ring anchor loads in accordance with NETM-59. Separate evaluation of each anchor was not required. One of the subject seal rings was selected for evaluation within the calculation; it is documented on pages 133-185.

Significance Level does not apply here as this is not a discrepant item.

Conclusion:

NU has concluded that the issue reported in Discrepancy Report DR-MP3-00882 does not represent a discrepant condition. The stress calculation is not required to contain the final disposition of seal ring loads. Seal ring loads were addressed in Calculation 12179-NS(B)-157. Significance Level does not apply here as this is not a discrepant item.

Previously Identified by NU?	O Yes		No	Non Di	screpant Conditio	n? Yes	O No
Resolution Pending	? Yes	•	No	Res	solution Unresolve	d? Yes	No
Initiator: VT Lead: VT Mgr: IRC Chmn: Date: SL Comments:	Patel, Ramer Neri, Anthon Schopfer, Do Singh, Anan	sh.D y A on K d K		Acceptable	Not Acceptable	Review Needed	Date 2/13/98 2/13/98 2/16/98 2/17/98

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ICAVP iscrepancy Report

DR No. I	DR-MP	3-0883
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				NAMES OF TAXABLE PARTY AND ADDRESS OF TAXABLE PARTY.	STATISTICS INCOME.
Review Group: S	ystem	NAMES & CONTRACTOR OF STATES	DR RESOLUT	ION ACCEPTED)
Review Element: S	ystem Design		Pol	tential Operabil	ity Issue
Discipline: P	iping Design			O Yes	
Discrepancy Type: C	alculation			No No	
System/Process: D	GX				
NRC Significance level: 4			Dat	e FAXed to NU:	
			(Date Published:	1/17/98
Discrepancy:	Pipe stress analysis P & ID drawing (1)	s does not re	eflect the pip	ing as shown	on the
Description:	In the process of re system,	viewing the	following do	cuments for	the DG)
	(1) P & ID DWG. I (2) Calculation No. (3) Calculation No.	NP(F)-458- NP(F)-459-	E-1, Rev. 1 XD, Rev. 0, XD, Rev. 1,	CCN 3, 7-9-8 CCN 1, 8-16	36 -86
	we noted the follow	ving discrepa	ancy:		
	Background:				
	As shown on the P and 3-EGD-001-14 extends to equipm respectively. A pip the reducer.	& ID drawin I-3 have a 3 ent 3-EGD* e class brea	ng (1), 1" line /4"x1" reduc SP1A & SP1 k SC3/NNS	es 3-EGD-00 er, and the 3 B (Oil separa is shown at t	1-13-3 /4" pipe ators) he end
	In the pipe stress a beginning of the re reducer and the 3/ in the analysis.	analysis (2 8 educer (1" si 4" pipe conr	43) only 1" (de) is include nected to equ	piping upto the d. The 3/4" uipment is no	ne x1" ot includ
	Discrepancy:				
	No justification for piping which conn	ects to the e	e 3/4"x1" red equipment is	lucer and the provided.	3/4"
		Valid	Invalid	Needed	Da
Initiation	Patel Ramesh D	53			12/22/
Initiator:	Neri Anthony A	M	h	ā	12/20/
VT Mor	Schopfer, Don K	M	Ē		12/23/
IRC Chmn	Singh, Anand K				1/13/5
Association and an and a second secon				and the second second second second	
Date:					

Disposition: NU has concluded that Discrepancy Report, DR-MP3-0883, has identified a condition not previously

Page 1 of 2

Northeast Utilities Millstone Unit 3	ICA Discrepand	/P cy Repo	DR	No. DR-M	P3-0883
	discovered by NU w meets the criteria sp has been screened operability or report criteria. CR M3-98- resolution of this ite	which require pecified in M per U3 PI-2 ability conc 0515 has be own per RP-4	es correction. T NRC letter B166 20 criteria and f erns and meets een written to d	This discrep 201 and 17 ound to have the Unit 3 evelop and	oancy 010 It ve no deferral I track
	Conclusion: NU has concluded i identified a condition requires correction. In NRC letter B169 20 criteria and four concerns and meet has been written to RP-4.	that Discrep on not , revi This discre 01 and 170 ad to have r is the Unit 3 develop ar	bancy Report, E ously discovere apancy meets the 10 It has been to operability on deferral criterion d track resolut	DR-MP3-08 bd by NU w he criteria s screened p reportabili a. CR M3-9 ion of this i	83, has hich specified er U3 Pl- ity 98-0515 tern per
Previously Identified by NU?	Yes No	Non Di	screpant Conditio	n? Yes	No
Resolution Pending Initiator: VT Lead: VT Mgr: IRC Chmn:	Patel, Ramesh.D Neri, Anthony A Schopfer, Don K Singh, Anand K	Acceptable	Not Acceptable	Review Needed	Date 2/16/98 2/17/98 2/17/98
Sate: SL Comments:	2/16/98 In the pipe stress a 3/4"x1" reducer, in pipe. However, sin	analysis, pip istead it sho ice stresses	bing is anchored build have been are low, the m	d on 1" side anchored o odeling err	of the on the 3/4 or will not

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ICAVP Discrepancy Report

	procrepancy repo	
Review Group: Review Element: Discipline: Discrepancy Type:	Operations & Maintenance and Testing Maintenance Procedure I & C Design O & M & T Implementation	DR RESOLUTION ACCEPTED Potential Operability Issue Ves No
System/Process: NRC Significance level:	SWP 3	Date FAXed to NU.

Date Published: 1/25/98

Discrepancy: Service water strainer timers not in calibration program

Description: Plant Design Change Request (PDCR) # MP3-92-013 replaced four time delay relays in the Service Water Pump Strainers. The PDCR was identified as a AQ, Cat. I activity and that the new time delay relays were required to be qualified as class 1E devices. Further, the PDCR documented the requirement to up date procedure PT 31459A, MP3 Timing Device Calibration Program, Revision 2 CH 2 of this procedure which has an effective date of October 1, 1997 does not include the replaced time delay relays.

> NU's Quality Assurance Program (NUQAP) states that "Periodic calibration and adjustment of measuring and test equipment is performed and controlled to assure accuracy is maintained within limits necessary to verify and control to assure accuracy is maintained within limits necessary to verify that design and operating condition requirements have been met. The operating requirements for these relays is identified in the PDCR as providing a safe and reliable means of allowing the system to remain in its automatic mode to provide automatic gross filtering of the service water system cooling water.

No documentation was provided that would verify the service water pump strainer timers were included in the Millstone Unit 3 timing device calibration program or were calibrated on a scheduled frequency.

In death a time and in such

	TDT5M105 TDU5M119	L ID for the	timers in qui	estion are.	
	TDT5M108 TDU5M120				
Initiator: VT Leed: VT Mgr: IRC Chmn: Date: INVALID:	Spear, R. Bass, Ken Schopfer, Don K Singh, Anand K	Valid S S S	invalid	Review Needed	Date 1/9/98 1/9/98 1/19/98 1/22/98
Date:	2/10/98		AN ADDRESS OF THE OWNER OF THE OWNER	an a	anna mara shiri ucha hasi kut
RESOLUTION:	Disposition: NU has concluded DR-MP3-0885, do Service Water Pu	d that the iss bes not represent the iss	sue reported esent a discr ges through	in Discrepan epant conditi a separate se	on. Each
Printed 2/19/98 11:34:13 AM		and a second	Economic and second and second		Page 1 of 3

ICAVP Discrepancy Report

DR No. DR-MP3-0885

cleaning strainer. Backwash is an automatic function that initiates on high differential pressure across the strainer or a four hour time delay between motor starts. When the strainer motors are started on automatic timer function, they operate for approximately three minutes. The automatic timer function is credited in the plants accident analysis. The high differential pressure across the strainer is the credited safety function. Group D timers do not perform a safety function. Group D timers are QA Category I only because of their use of safety orade power and are in a safety circuit. Therefore, they must be gualified as 1E electrical equipment. The procedure PT 31459A states that Group D timers are not calibrated at regular intervals and are not individually identified as part of the procedure for scheduled timing device calibration. The second character in the timing device PMMS ID identifies the Group. The timers listed in this discrepancy report are Group D. MP3 Timing Device Calibration Program do not recuire calibration of Group D timers. The documentation for the timers was changed in revision 2 of PT31459A which is attached. Item 7 in the procedure change summary sheet deletes TBT5M105, TCU5M119, TBT5M108 and TCU5M120 and makes them Group D timers. Significance Level criteria do not apply here as this is not a discrepant condition.

Conclusion:

NU has concluded that the issue reported in Discrepancy Report, DR-MP3-0885, does not represent a discrepant condition. The Service Water Strainer Motor Timers are Group D timers. The timers do not perform a safety function and are not credited in the plants accident analysis. The Strainer Motor Group D timers are qualified QA Category I only because of their use of safety grade power and are in a safety circuit. The procedure PT 31459A identifies that Group D timers are not calibrated at regular intervals and are not individually identified as part of the procedure for scheduled timing device calibration. The PDCR documentation requirements were completed in revision 2 of PT 31459A.

Significance Level criteria do not apply here as this is not a discrepant condition.

Previously identified by NU?	O Yes	No	Non D	iscrepant Conditio	m? Yes	O No
Resolution Pending	20 Yes (No No	Rei	solution Unresolve	d? Yes	No
Initiator: VT Lead: VT Mgr: IRC Chmn: Date:	Spear, R. Bass, Ken Schopfer, Don Singh, Anand K 2/10/98	ĸ	Acceptable	Not Acceptable	Review Needed	Date 2/10/98 2/10/98 2/12/98 2/17/98
SL Comments:	S&L concur strainers is t properly ide	s that the cre ntified	the high diff dited safety as a "Grou	ferential pressu y functio: and to p D" timer.	re across th hat the time	ie ers are
	However, S surveillance	&L rec	commends t	hat these timer	s be includ	ed in a gular

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ICAVP

DR No. DR-MP3-0885

Discrepancy Report

basis. This would be prudent because of the previously demonstrated unreliability and the need to cycle the strainers every eight hours based on operating experience.

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dilletone Unit 3	Discrepancy R	eno	rt	DF NO. DK-MP3-0945			
ninstone onto	Discrepancy n	10 P.C.			REPAIL OF BRIDE DELIVERY		
Review Group: (Operations & Maintenance and T	esting	DR RESOLUTI	ON ACCEPTED	,		
Review Element: (Corrective Action Process		Pot	ential Operabil	ity issue		
Discipline: (Operations			O Yes			
Discrepancy Type:	Conjective Action . Tiplementation			(No			
NRC Significance level:	4	Date	FAXed to NU:				
			C	ate Published:	1/25/98		
Discrepancy:	A commitment to instruct	t oper	ators to open n deleted	D/G exhaus	t hatch		
Description:	In a letter in the NRC da provide instructions to s build-up on the diesel get tornado alert that the ha existed in OP 3346A to	ated 5/ tation enerat tches addre	17/84, the sta personnel tha or exhaust ac should be op ss this issue.	ition commit t in the even cess hatch o ened. A pred	ted to it of ice ir a caution		
	Revision 19 of OP 3346 memo MP3-DE-950863 950863, datad 7/17/95 open the access hatche memo does not address open the access hatche precaution that was del build-up and a tornado	A rem (PLA was w es in th s the e es due eted in alert,	AR 3-94-4). If ritten to remo- ne event of a t elimination of to the build-u n OP 3346A a this is a discret	caution base Memo MP3-I ve the requir ornado alert the requirem p of ice. Sir iddressed bo epancy.	ed on DE- rement to . The hent to hee the oth ice		
	DR No. DR-MP3-0949	addre	sses a similar	problem.			
		1-11-0	Invalid	Review	Date		
		Dila	invalid	Meeded	1/8/98		
Initiator	: Tamiyn, Tom		Ц	H	1/0/08		
VT Lead	: Bass, Ken			H	1/10/08		
VT Mar	: Schopfer, Don K			Ц	1/13/30		
					1/21/90		
IRC Chmr	: Singh, Anand K				and the second s		
IRC Chrm Date	a: Singh, Anand K						
IRC Chmr Date INVALI	a: Singh, Anand K e: D:						
IRC Chmr Date INVALIE	1: Singh, Anand K 2: 0: 0: 0:						
IRC Chmr Date INVALIE Date RES:UTIO	a: Singh, Anand K e: o: e: 2/17/98 N: Disposition:						
IRC Chmr Date INVALIE Date RES:UTION	 singh, Anand K <	t Disco previou for AC uated r exha ed the ado to erefor e ever ot hav er requ e insp NU ha dentifi	repancy Repo usly discovere CR M3-96-031 the need to o site, exhaust and path, avai analysis it wa o damage eith- e, there is no nt of a tornado ve to be opene uired. Hence bections are no s concluded the ied a condition	ert, DR-MP3- ed by NU. Th 9, based up pen the acce previous an enclosure op lable missile s concluded er or both of need to open o alert. Since d, the inspe- , such proceed that Discrepa	0945, he on PLAAI ess hatche alysis penings, s and that it is the EDG n the e the ctions for dural ncy Repr discover		

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ICAVP Discrepancy Report

and the associated approved correction action plan determined the access hatches in the exhaust lines did not have to be opened for tornado alerts.

DR No. DR-MP3-0945

Previously Identified by NU?		Yes	0	No	Non D	iscrepant Conditio	n?O Yes	No
Resolution Pending	20	Yes	۲	No	Ret	solution Unresolve	d? Yes	No
Initiator: VT Lead: VT Mgr: IRC Chmn: 25ste: SL Comments:	Spea Bass Scho Singl	r, R. , Ken pfer, D h, Anan	on K id K		Acceptable	Not Acceptable	Review Needed	Date 2/17/98 2/18/98 2/18/98

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Northeast Utilities	ICA	VP	D	R No. DR-N	AP3-0949	
Millstone Unit 3	Discrepan	cy Repo	rt			
Review Group: (Operations & Methonance	e and Testing	DR RESOLUT	ION ACCEPTE	D	
Review Element: 0	Corrective Action Process	•	Po	tential Operab	lity Issue	
Discipline: 0	Operations			O Yes		
Discrepancy Type: 0	Corrective Action Impleme	entation		1 No		
NRC Significance level: 4	JGA I		Det	- EAVed to MI		
			Det	e FALed to NU	1. 10500	
Dissesses			a of D/C out	wet botch if	. 1/20/00	
Discrepancy:	potential for ice bu	ildup exists	n of D/G exha	aust nator; if	8	
Description:	In various commun resulted in a communiclude in an abno periodically inspect event of an ice sto hatch remains ope	nications be nitment by th rmal operati at the diesel rm, snow st erable.	tween the applicant the applicant the applicant the second	plicant and t hat they wore the require haust hatch ng rain to en	he NRC uld ment to in the hsure the	
	The review could in that would satisfy to operating procedu but it only address	not identify a this requiren re for seven les tornado o	any abnormal nent. There i e weather cor or hurricane c	operating p is an abnorm nditions, AO conditions.	procedure nal P 3569,	
		N. 14	Invalid	Review	Date	
Initiator	Tamlyn Tom	M		Investiged	1/8/98	
VT Lead:	Bass, Ken		H	H	1.9/98	
VT Mgr:	Schopfer, Don K	×	H	Ē	1/19/98	
IRC Chmn:	Singh, Anand K	\boxtimes			1/21/98	
Date:						
INVALID						
Date:	2/17/98	Albertanis Dati Nonconse, Chiernoopha	NEW MERCE PERCENT OF A CARDON	STACLER IN STRATES - POINT	AND SAME FOR A DOUBLE	
RESOLUTION	NU has concluded identified a condit corrective action of 3-94-4 concerns, in the diesel gene conservatively me expected tornado piping thickness. not credible for a exhaust systems. exhaust hatches ice buildup is not requirements for Conclusion:	d that Discretion previous plan for ACF evaluated the rator exhau- odeled the sistength an From the a tornado to o Therefore, in the event do not have longer requi- these inspec-	epancy Report sly discovered R M3-96-0319 he need to op st stacks. A p site, exhaust end path, availand nalysis it was damage eithe there is no n of a tornado to be opened red. Hence, st ctions are not epancy Repo	t, DR-MP3-0 d by NU. The enthe acception of the acception	0949, has e on PLAAR ss hatche alysis benings, s and that it is the EDG the the the tions for ural	
	identified a condi 0319 identified co approved correct	tion previou oncerns with ion action p	ISIY discovere PLAAR 3-94 Ian determine	d by NU. AC -4 and the a d the acces	CR M3-96 associated is hatches	

Northeast Utilities Millstone Unit 3	ICA Discrepar	VP ncy Repo	DR	DR No. DR-MP3-0949		
Résolution Pendin	g? Yes 🖲 No	Rei	solution Unresolve	resolved? Yes		
Initiator: VT Lead: VT Mgr: IRC Chmn: Date: SL Comments	Spear, R. Bass, Ken Schopfer, Don K Singh, Anand K	Acceptable	Not Acceptable	Review Needed	Date 2/17/98 2/18/98 2/18/98	

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DR No. DR-MP3-0973 **ICAVP** Northeast Utilities **Discrepancy Report** Millstone Unit 3 DR RESOLUTION ACCEPTED Review Group: Programmatic Review Element: Corrective Action Process Potential Operability issue **Discipline:** Operations Yes Discrepancy Type: Corrective Action No System/Process: RSS NRC Significance level: 3 Date FAXed to NU: Date Published: 1/25/98 Discrepancy: Corrective Action incurrectly scheduled Description: The corrective action for UIR-2278 involves issuing changes to procedures which implement Technical Specification requirements relative to valve lineup. Identifying this UIR as "not startup required" is inconsistent with NUC PI-20, Priority Code 2 criteria which identify "Ceficiencies affecting plant technical specifications" and "Documentation that may have operability and/or reportability concerns associated with it." Review Valid Invalid Needed Date 1/15/98 Initiator: Wrons, 3. P. \boxtimes 1/19/98 \boxtimes VT Lead: Ryan, Thomas J 1/20/98 \boxtimes VT Mgr: Schopfer, Don K 1/22/98 IRC Chmn: Singh, Anand K \boxtimes Nate: INVALID: Date: 2/6/98

RESOLUTION: Disposition

NU has concluded that the issue reported in Discrepancy Report, DR-MP3-0973, does not represent a discrepant condition. Unresolved Item Report (UIR) #2278 identified procedures SP3606.5 and SP3606.6 as performing valve lineup verifications to meet Technical Specification Requirements 4.5.2.b.2 and 4.6.2.2.a.

These surveillance requirements state that "at least once per 31 days by verifying that each valve (manual, power-operated, or automatic) in the flow path is not locked, sealed, or otherwise secured in position, is in its correct position." Procedure Forms, SP3606.5-1 and SP3606.6-1 had contained the following locked valves for verification of position: RSS*V920, RSS*V921, RSS*V922, RSS*V923, RSS*V946, RSS*V947, RSS*V9248 and RSS*V949. These valves are all identified as locked closed on the P&ID and Operations Procedure Form 3260B-1 "Locked Component Checklist."

Based on Expert Panel Sub-Committee review of this condition, the UIR was Voided based on MEMO MP3-DE-0907 which allows UIRs previously approved by the Expert Panel that can now be categorized as non-Startup by referring to Attachment 11 criteria provided in U3 PI-20, Rev. 1. The surveillance requirements of Technical Specifications 4.5.2.b.2 and 4.6.2.2.a. were being met by performing the valve alignment check in two places (SP 3606.5-1/3606.6-1 and Operations Procedure Form 32602 1) therefore the UIR was voided. Condition Report, M3-97-

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Northeast	Utilities
Millstone L	Jnit 3

ICAVP Discrepancy Report

1485, was initiated to identify and track the correction of these redundant surveillance procedures which implement Technical Specification requirements related to valve position verification.

DR No. DR-MP3-0973

Identifying the UIR as "not startup required" is not inconsistent with NUC PI-20, Priority Code 2 criteria which identify "Deficiencies affecting plant technical specifications" and "Documentation that may have operability and/or reportability concerns associated with it." The surveillance requirement of valve lineup verifications was being verified in two forms 1) the locked valves were identified and controlled in accordance with OP 5, 60-1 locked component checklist and 2) Procedures SP3606.5-1 and SP3606.6-1 verified valve position on a monthly basis. Performing these surveillance's by two methods does not constitute a deficiency affectir a plant technical specifications or documentation that may have operability or reportability concerns. The procedures went beyond the requirements of the Technical Specifications. Neither operability nor lack of adherence to Technical Specifications were issues in relation to UIR-2278.

Significance Level Criteria do not apply as this is not a discrepant condition.

Conclusion

NU has concluded that the issue reported in Discrepancy Report, DR-MP3-0973, does not represent a discrepant condition. The procedures listed in the UIR went beyond the Technical Specification Surveillance Requirements of 4.5.2.b.2 and 4.5.2.2.a. No operability or Technical Specification compliance issues were associated with UIR-2278, therefore voiding the UIR was appropriate.

Significance Level Criteria do not apply as this is not a discrepant condition.

Previously Identified by NU?	O Yes	No	Non D	iscrepant Conditio	n? Yes	O No
Resolution Pending	? Yes	No	Rei	solution Unresolve	d?O Yes	No No
initiator: VT Lead: VT Mgr: IRC Chmn: Date:	Navarro, Mark Ry.e., Thoma Schopfer, Doi Singh, Anand	k sj n K I K	Acceptable	Not Acceptable	Review Needed	Date 2/6/98 2/9/93 2/12/98 2/17/98
SL Comments:						

Northeast Utilities Millstone Unit 3	iCA Discrepar	VP icy Repo	rt r	R No. DR-N	1P3-0985
Review Group: P	roorammatic	SO REAL PARAMETERS IN CONSTRUCTION	DR RESOLU	TION ACCEPTE	D
Review Element: C Discipline: C Discrepancy Type: C System/Process: D NRC Significance level: 4	corrective Action Procest wher corrective Action Impler	nentation	P	otential Operable Ves No No	lity Issue
				Date Published	: 1/25/98
Discrepancy:	Unresolved Item	Report (UIR	259) Closure)	
Description:	change to operati FSAR. ACR M3-9 procedure howey described nor is t an ESAR update	ng procedure 96-0186 was er no action here any doo was not requ	e OP3346A a generated to was taken to cumented ev ired.	and an update revise the o update the F idence to sup	e to the perating SAR as oport that
		Mallat	Invalid	Review	Date
Initiator: VT Lead: VT Mgr: IRC Chmn:	Navarro, Mark Ryan, Thomas J Schopfer, Don K Singh, Anand K				1/19/98 1/21/98 1/22/98 1/22/98
Date: INVALID:					
Date: RESOLUTION:	2/16/98 Disposition				and a submitted at

NU has concluded that the issue reported in Discrepancy Report, DR-MP3-0985, does not represent a discrepant condition. In the Description Section of UIR 259 the recommended actions were to delete the requirement to open the EDG exhaust during severe weather or a tornado, and to delete associated license requirement and update the FSAR. The procedure OP 3346 Rev. 18 change 6 deleted step 6.9 which contained this requirement. The section of the FSAR involved is the Q&A portion which is historical in nature and is no longer updated.PI 20 provides guidelines for completing non-ACR assignment forms, that is the Discrepancy Item Closure Package (DICP). This guideline only requires identified actions to be listed. Since updating the FSAR was not repeated in either the Recommendation Disposition Details or the Final Disposition, the DICP did not address the FSAR update issue. The Expert Panel has reviewed the UIR through the PI 14/20 process and concurred with the disposition and required actions. Therefore, UIR 259 DICP is complete.Significance Level criteria do not apply here as this is not a discrepant condition.

Conclusion

NU has concluded that the issue reported in Discrepancy Report, DR-MP3-0985, does not represent a discrepant condition. PI 20 guideline only requires identified actions to be listed. Therefore, UIR 256 DICP is complete Dignificance Sevel criteria do not apply here as this is not a discrepant condition.

DR No. DR-MP3-0985 ICAVP **Discrepancy Report** Non Discrepant Condition? (Yes) Yes Previously identified by NU? No

Resolution Pending? Yes No	Rei	solution Unresolve	d? Ves	No
	Acceptable	No: Acceptable	Review Needed	Date
Initiator: Navarro, Mark				2/16/98
VT Lead: Ryan, Thomas J		H	H	2/17/98
VT Mgr: Schopier, Don K	M	Ē		2/17/98
IRC Chimn: Singh, Anand K	ñ	H	H	211100

Date: 2/16/98

SL Comments: Based on further explanation provided in NUs response, we agree that FSAR Q&A section is historical and need not be updated. However, we disagree that corrective action closeout packages do not require evidence that issues documented in the initial concern need not be addressed even if the final conclusion(s) with respect to any particular issue was that no action was required. Inadequate documentation only invites questions which the licensee must then address. As noted in your response, PI 20 requires that actions to be taken be listed in the non-ACR assignment forms as appropriate. PI 20 does not prevent the good practice of briefly explaining in a closeout package that a particular concern which was initially documented warranted no action and why. Without thorough documentation, the Reviewer (with a questioning attitude and knowledgeable of the process) has no choice but to ask if the issue was addressed. Note that PI 20 also states that "the DICP should be viewed as a stand-alone document. An outside reviewer should have enough information within the DICP to fully answer all potential questions regarding issue background and resolution." PI 20 also states that "the Disposition listed on the closure request shall contain a discussion on the related findings and stated solutions".

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Northeast Utilities Millstone Unit 3	ICA Discrepan	VP cy Repo	rt	R No. DR-	AP3-0366	
Review Group: S	ystem	nisten auf fahrolet va kan en trov orsaken	DR RESOLU	TION REJECTE	D	
Review Element: S Discipline: F Discrepancy Type: 0 System/Process: S	lystem Design Piping Design C⁺fhulation SWP		Potential Operability Ist Yes No			
NRC Significance level: 4	1		Da	te FAXed to NL	J:	
				Cate Published	1: 10/18/97	
Discrepancy:	Density of Fibergla inconsistant with c	ass (J) insula ited reference	ation used in	stress analy	sis is	
Description:	In the proess of re	viewing the	following doo	cuments,		
	(i) Pipe Stress Cal to 3 (ii) Pipe Stress Ca	Iculation 121	79-NP(B)-X1	1900 Rev. 3 53900, Rev.	CCN's 1 5	
	we noted the follo	wing discrep	ancy:			
	In pipe stress ana Fiberglass insulat Ibs/cft, and for oth cited in the calcul justification is pro	lysis calculation Type - J ters as 5.25 ations, the divided for the	tions (i) and is specified f lbs/cft. Accor ensity should use of the lo	(ii), the dens for some line rding to the r b be 5.25 lbs ower (4 lbs/c	ity of is as 4 reference /cft. No ft) density.	
		Valid	Invalid	Review	Date	
inifiator: VT Lead: VT Mgr: IRC Chmn:	Prakash, A. Neri, Anthony A Schopfer, Don K Singh, Anand K				10/2/97 10/3/97 10/14/97 10/14/9?	
Date: INVALID:						

Date: 2/16/98

RESOLUTION: Response ID: M3-IRF-01010

Disposition:

NU has concluded that DR-MP3-0366 does not represent a discrepant condition. The use of 4 lbs/cu.ft. as opposed to 5.25 Ibs/ cu ft for J-type fiberglass insulation does not represent a discrepant condition. The use of 4 lbs/cu ft is the generic minimum of J-type fiberglass insulation (See "Specification for General Thermal Insulation - M921", Transmitted in Transmittal 52 on 7/8/97). This generic minimum was used universally until 5/15/84 when a specification was obtained for J-type insulation (Ref Inter-Office Memo from J.E. Woods to G. Milley dated 5/3/84) that specified the density of J-type fibergalss insulation as 5.25 lbs/cu ft. Subsequently, when NP(B)-X1900 and NP(B)-X53900 were revised, the new density was used to perform the stress analysis on the length of affected pipe in accordance with the direction provided in Inter-Office Memo from P.Gopal and R. Bain to general distribution. Additionally, calculation 79-236-921GP Rev. 0 dated 11/12/87 addresses insulation weight effects and envelopes the above condition.

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ICAVP **Discrepancy Report**

DR No. DR-MP3-0366

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Significance level criteria does not apply as this is not a discrepant condition.

Conclusion:

NU has concluded that Discrepancy Report DR-MP3-0366 does not represent a discrepant condition. As detailed in the disposition, the use of 4 lbs/cu ft as the density of J-type fiberglass insulation is the generic minimum density of J-type fiberglass insulation specified in the Specification for General Thermal Insulation -M921. This generic minimum was used universally until 5/15/84 when a specification was obtained for Jtype insulation that specified the density of J-type fibergalss insulation as 5.25 lbs/cu ft Significance level criteria do not apply as this is not a discrepant condition.

Attachment References:

1) Inter-Office Memo from J.E. Woods to G. Milley dated 5/3/84 (2 pages)

2) Inter-Office Memo From P. Gopal and R. Bain dated 5/15/84 (1 page)

3) Calculation 79-236-921GP Rev. 0 dated 11/12/87 (15 pages)

viously k	ientified by NU?	0	Yes	۲	No	Non D	iscrepant Conditio	m? Yes	No
Re	solution Pending	20	Yes	۲	No	Ret	solution Unresolve	d? Yes	No
	Initiator: VT Lead: VT Mgr: IRC Chmn: Date:	Praka Neri, Schoj Singt	ash, A. Anthony pfer, Do n, Anano 2/16/94	A n K K B		Acceptable	Not Acceptable	Review Needed	Date 2/17/98 2/17/98 2/17/98

SL Comments: Current revisions of calculations NP(B)-X1900 and NP(B)-X53900 still show the 'old' density value of 4 lb/cu ft in the 'Piping Data' for some pipe segments. Therefore, we still consider this as a Significance Level 4 discrepancy.

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ICAVP **Discrepancy Report**

DR No. DR-MP3-0674

Review Group: Programmatic **Review Element:** Corrective Action Process **Discipline: Mechanical Design Discrepancy Type:** Corrective Action System/Process: RSS NRC Significance level: 4

DR RESOLUTION REJECTED

Potential Operability Issue) Yes No No

Date FAXed to NU:

Date Published: 1/3/98

Discrepancy: Closure of Design Deficiency Report (DDR) No. 641 Description: Discussion

> DDR 641 was written to document a concern regarding the potential for trapped air in the RSS system being delivered to the suction of the operating Chargin 7 and Safety Injection pumps. Closure of the DDR relied in chas as to Operating Pro-EOP 35 ES 1.3 to address the iss a. These changes will be incorporated into EOP 35 ES-1.3 Rev. 1 Change 1 per HURC meeting number 3-80-14. Later, Revision 4 of EOP 35 ES-1.3 removed the changes that had been made without a safety evaluation per PORC meeting No. 3-91-209. The lack of safety evaluation to remove the changes (which had been made to resolve DDR 641) has been documented by NU in CR M3-97-1260. The corrective action for this CR is to "determine what changes, if any, should be incorporated into ES 1.3 after RSS modifications are complete to the system."

RFI 652 requested a description of specific changes which were to be made to ES1.3 resulting from CR M3-97-1260. NU's response (sent via IRF 874) states that "the changes were originally made to the procedure in order to resolve the concern with air intrusion into the operating SIH and CHS pumps following an accident. This concern is now being addressed by permanent plant modification DCR M3 97-045."

The executive summary and supporting design change package details for DCR M3-97045 Rev. C were submitted by NU as attachments to IRF 874 and have been reviewed. Contrary to the IRF response that DDR 641 issues (air intrusion in SIH and CHS pumps) were now being addressed by permanent plant mod M3-97045.

1. There is no description in DCR M3-97045 which restates the problems and specific concerns which are documented in DDR 641. Based on our review of the documentation provided, it is not clear that the concerns in DDR 641 are being addressed in the modification.

2. DDR 641 is not listed as a design input or reference

3. The DCR contains listings of various documents which are being addressed by the modifications, these include a listing of ACR's addressed, a listing of UIR's addressed, a listing of OIRs addressed

and LERs addressed. DDR 641 is not listed among those documented issues being addressed by the modification.

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Northeast Utilities Millstone Unit 3	ICA Discrepar	AVP hcy Repo	ort	DR No. DR-MP3-06			
	In summary, based on the DCR M3-97-045 Rev. C modification documents reviewed, it does not appear that the issues described in DDR 641 are being resolved as stated in NUs response, IRF 874.						
		Valid	Invalid	Needed	Date		
Initiator:	Navarro, Mark				12/3/97		
VT Lead:	Ryan, Thomas J				12/5/97		
VT Mgr:	Schopfer, Don K				12/11/97		
IRC Chmn:	Singh, Anand K				12/22/97		
Date:	and the second						
INVALID							
Date	2/11/98	REAL CONTRACTOR	ING NORMAL OVERSIAN INTERNO	NCINESCON NEW PROBABILISTS OF	88525.2000034539782498Publ		
RESOLUTION	Disposition						

NU has concluded that Discrepancy Report, DR-MP3-0674, has identified a condition not previously discovered by NU which requires correction. This discrepancy meets the criteria specified in NRC letter B16901 and 17010 It has been screened per U3 PI-20 criteria and found to have no operability or reportability concerns and meets the Unit 3 deferral criteria. CR M3-98-0474 has been written to develop and track resolution of this item per RP-4.

Conclusion

NU has concluded that Discrepancy Report, DR-MP3-0674, has identified a condition not previously discovered by NU which requires correction. This discrepancy meets the criteria specified in NRC letter B16901 and 17010 It has been screened per U3 PI-20 criteria and found to have no operability or reportability concerns and meets the Unit 3 deferral criteria. CR M3-98-0474 has been written to develop and track resolution of this item per RP-4.

Previously Identified by NU?	🔿 Yes 🛞 No	Non D	iscrepant Conditio	m? Yes	No
Resolution Pending	g? Yes 💿 No	Rei	solution Unresolve	d? Yes	No
Initiator: VT Lead: VT Mgr: IRC Chmn: Date:	Navarro, Mark Ryan, Thomas J Schopfer, Don K Singh, Anand K 2/11/98	Acceptable	Not Acceptable	Review Needed	Date 2/17/98 2/17/98 2/17/98
SL Comments:	Insufficient specif has been properly our understanding startup required. should be addres	ic information addressd in that impler Therefore, the sed in the m	on provided to d n modification D nentation of DC ne concerns do odification or fu	CR M3-97 CR M3-970 CR M3-970 Curnented i arther spec	hat issue 045. It is 45 is n the DR ific

should be addressed in the modification or further specific justification needs to be provided why resolution of this DR prior to startup is not required.

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ortheast Utilities	ICA	VP	DI	R No. DR-	MP3-0703
lillstone Unit 3	Discrepan	cy Repor	rt		
Review Group: 1	System	REAL PROPERTY AND A DESCRIPTION OF A DES	DR RESOLUTI	ION REJECTE	D
Review Element:	System Design		Pot	ential Operati	ality Issue
Discipline:	Mechanical Design		FOI	O Yes	any loode
Discrepancy Type:	Drawing			No	
System/Process:	HVX			· ···	
NRC Significance level:	Date FAXed to NU:		J:		
			D	ate Published	1: 12/21/97
Discrepancy:	Emergency General Minimum Position	ator Enclosu	re Ventilation	Inlet Damp	per
Description:	During review of P&ID EM-150C-16 for the emergency generation enclosure ventilation system a discrepancy regarding the minimum open position for the inlet dampers was identified:				
	FSAR Section 9.4. diesel engines hav are stopped manua panel in the control open position, the and open, respecti	6.5 states "V re stopped (le ally from the ol room. The outlet and re ively."	Vhen the eme ess than 250 main heating inlet damper circulating da	ergency ge rpm), the s g and ventil goes to the ampers go	nerator upply fans ation minimum fully close
	P&ID EM-150C-16 (minimum airflow)	does not ide for inlet dan	entify the min opers 3HVP*	nimum oper MOD23A/B	n position
		N-84	Insuellind	Review	Date
	0	Vand	mvand	r-1	11/24/97
initiator:	Stout, M. D.		Ц	Н	11/20/07
VT Lead:	Neri, Anthony A			H	11/20107
VT Mgr:	Schopfer, Don K		H	H	12/9/97
	Singh, Anano K	123	<u> </u>		
Date:					
INVALID:					
Date:	2/16/98		A The second		
RESOLUTION	NU has concluded identified a condit requires correction in NRC letter B16 20 criteria and fou concerns and mee has been written t	that Discreption not previous. This discreption. This discreption 901 and 170 and to have not ets the Unit 3 o develop an	bancy Report ously discove pancy meetr 10. It has been to operability deferral crite and track resol	, DR-MP3-(ered by NU the criteria or screened or reportate eria. CR M3 ution of this	0703, has which a specified d per U3 P bility 3-98-0164 s item per
	RP-4.				
	Attachments: CR M3-98-0164				
Previously Identified by NU7	Attachments: C:R M3-98-0164	Non Di	screpant Condi	tion? Ye	s 🖲 No
Previously Identified by NU7 Resolution Pendir	Attachments: CR M3-98-0164 Yes (@ No ng? Yes (@ No	Non Di Res	screpant Condi	tion? Yes lved? Yes Review	8 🖲 No 8 🖲 No
Previously Identified by NU7 Resolution Pendir	RP-4. Attachments: C:R M3-98-0164 Yes () No ng? Yes () No	Non Di Res Acceptable	screpant Condi olution Unresol Not Acceptabl	tion? Yes lved? Yes Review e Needed	s 💌 No s 💌 No Date
Previously Identified by NU? Resolution Pendir Initiator:	RP-4. Attachments: C:R M3-98-0164 Yes No ng? Yes No Stout, M. D.	Non Di Res Acceptable	screpant Condi olution Unresol Not Acceptabl	tion? Yes lved? Yes Review e Needed	s () No s () No Date 2/16/98
Previously Identified by NU7 Resolution Pendir Initiator: VT Lead:	RP-4. Attachments: C:R M3-98-0164 Yes No ng? Yes No Stout, M. D. Neri, Anthony A	Non Di Res Acceptable	screpant Condi olution Unresol Not Acceptabl	tion? Yes lved? Yes Review e Needed	 No No Date 2/16/98 2/17/96
Previously Identified by NU7 Resolution Pendir Initiator: VT Lead: VT Mgr: IRC Chrm:	RP-4. Attachments: C:R M3-98-0164 Yes (*) No ng? Yes (*) No Stout, M. D. Stout, M. D. Neri, Anthony A Schopfer, Don K Singh, Anar.d K	Non Di Res Acceptable	screpant Condi olution Unresol Not Acceptabl	tion? Yes lved? Yes Review e Needed	 No No Date 2/16/98 2/17/96 2/17/96

Iortheast Utilities ICAVP		DR No. DR-MP3-0703
Millstone Unit 3	Discrepancy Report	
Reversion of American American Street and Stre	anan ne kanan ne kilika bilakilikilinin menanga per munitikan kanan kanan kanan kanan menemban kanan menangan Mananga kanan ne kilika bilakilikilinin menanga per munitikan kanan menanga kananga menemban kananga kananga kan	NUCLANARIUM CARABARINARI BUAL BUAR BUAR STORES OF STATES OF COMPARISONS

SL Comments: The corrective action is not apparent from the description in CR M3-98-0164 and comment "P&ID not required to show this level of detail" entered on DR screening form.

The DR should have been put in the FSAR "bin" instead of the Drawing "bin"

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