#### Masters, Anthony

From: Sent: To: Subject: Attachments: Lake, Louis Thursday, December 03, 2009 12:41 PM Dan naus; Masters, Anthony; Carrion, Robert; Thomas, George Emailing: 12-3\_All questoins.pdf 12-3\_All questoins.pdf

84 pgs.

Categories: Perform Review

Here is the latest list of questions and responses. Note that that closed info from this morning's conference call is not included.

Lou

The message is ready to be sent with the following file or link attachments:

12-3\_All questoins.pdf

Note: To protect against computer viruses, e-mail programs may prevent sending or receiving certain types of file attachments. Check your e-mail security settings to determine how attachments are handled.

176

				. C	3-Dec-09	9:05:22 AM
Request Numb	er:					
Individual Con	tacted:	Sid Powell		Date Contacted:	10/15	/2009
Requestor/Ins	pector:	Anthony Masters		Category:	(	Question
Request:	There is an area on the containment dome on the south, approximately half way between the walking platform and the peak of the dome that is depressed. There appears to be a grout covering that is seriously deteriorated. Is this evidence of repeat delamination damage?					
References:	•					
Response Ass	igned to:	Craig Miller		Date Due to Inspe	ector:	10/16/2009
Response:						
the same as it h pours of the do curvature and h Furthermore, as returning to the insert into our o	nas been me due to nad seven s part of c dome thi lata base	in my past trips as part the original delaminal al localized uneven are ur ongoing Condition I s evening (10/16/2009 on this subject so that	t of tendon surv tion, the final su eas. The one ir Monitoring of Si ) with Dayna M we have a refe	reillance. I believe that inface did not end up be a question is exactly that tructures effort (EGR-N endez to obtain digital prence point for future in	ing a smo eing a smo at. IGGC-035 <sup>2</sup> photograph nspections	), I will be ns of the area to
Misc Notes:						10000000000000000000000000000000000000
Response By:	Joe Les	9				
Reviewed By:				Date Response Prov	vided:	10/16/2009
Status:	Open			Date CI	osed:	
	,					
				2 •		

	1				03-Dec-09	9:05:23 AM
Request Numb	per:	2				
Individual Con	tacted:	Sid Powell		Date Contacted:	10/16/2	2009
Requestor/Ins	pector:	Anthony Maste	rs	Category:	Informa	tion Request
Request:	The Insp	ector has reques	sted a procedure that	was used for tensioni	ng the tendo	ns originally.
References:				87 2014 10 10 10 10 10 10 10 10 10 10 10 10 10		
Response Ass	igned to:	Sid Powell		Date Due to Insp	ector:	10/16/2009
Response:						
Prescon Field I A\POWELL Q-/	nstallation A\Request	Manual.tif was   2, Original Tend	placed in folder L:\Sr don Tensioning Proc	ared\2009 NRC SPEC edure		TION TEAM Q-
Misc Notes:						
Response By:						
Reviewed By:				Date Response Prov	vided:	
Status:	Open			Date C	losed:	
				·		

rptAll Questions

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				03-Dec-0	9 9:05:23 AM
Request Numb	ber:	· 3			
Individual Con	tacted:	Paul Fagan	Date Contacte	ed: 10	/16/2009
Requestor/Ins	pector:	George Thomas	Catego	ry: Info	ormation Request
Request:	George T copy and o issued yet	homas of the NRC reque delivered to Mr. Thomas	sted a copy of our EC 74801 at 0900. This is a preliminary	on the core b copy since t	oores. I printed a he EC has not been
References:	,				
Response Ass	signed to:	Glenn Pugh	Date Due to I	nspector:	10/16/2009
Response:					
An approved (is 10/28/09.	ssued) cop	y of Revision 1 of the EC	74801 was printed and hand	carried to G	eorge Thomas on
Misc Notes:	See quest	ion #19 for continued sul	omittal of NDE and Core Bore	Plan change	es.
Response By:	Glenn Pu	gh		ennet ander de la de La	NEW CONTRACTION OF A CONTRACT OF
Reviewed By:	Charles \	Villiams	Date Response	Provided:	10/28/2009
Status:	Closed		Dat	te Closed:	·

				03-Dec-0	9 9:05:23 AM			
Request Num	ber:	4		.1				
Individual Cor	ntacted:	Sid Powell	Date Contacted:	10/	16/2009			
Requestor/Ins	pector:	George Thomas	Category:	Information Request				
Request:	Please pr original c concrete	ovide the concrete mix des onstruction of the containm used in the original constru	sign and associated material test ent wall. Also provide original tes iction of the containment wall.	d associated material test data for concrete use in II. Also provide original test data of production f the containment wall.				
References:	Calculatio	on S00-0047		· · · · · · · · · · · · · · · · · · ·				
Response As	signed to	Sid Powell	Date Due to Insp	ector:	10/17/2009			
Response:								
The construction For example the several pages data, and othe and Root Cause Cause Files\R Services is atte required, pleas C. G. Pugh 10	on microfid ne records of informa r relevant se team. / equested empting to se let Glen /17/09	che listing then gives a corr for pour number 685RB ar tion including the mix desig data. CR3 Document Serv At this time, there are some by NRC. (A copy of calculat scan the pours between b n Pugh	esponding microfiche card numb e on card 1P08022. A typical mi gn, batch tickets (truck slips), the rices are attempting to scan these examples of the pour cards at L tion S00-0047 is also included at uttresses 3 and 4 (all elevations)	er for ead crofiche o date of th cards fo :\Shared\ this locat first. If a	ch of these pours. card will contain ne pour, curing or use by the NRC Containment Root tion. Document different location is			
Misc Notes:		· .	· .					
Response By:	Glenn P	ugh	].		**************************************			
Reviewed By:	3 6		Date Response Pro	vided:	10/16/2009			
Status:	Closed	·	Date C	losed:				
		· .						

				03-Dec-	09 9:05:23 AM
Request Numl	ber:	5			
Individual Con	ntacted:	Sid Powell	Date Contact	ed: 10	)/16/2009
Requestor/Ins	pector:	George Thomas	Catego	ory: Inf	ormation Request
Request:	With reg and surro prior to te After rest	ard to the SGR Constructio bunding areas for the Dead endon detensioning and ren oration of opening and tend	n Opening, please provide s load + Prestress load comb noval (ii) after tendon remov lon retensioning.	stress plots o ination for the al; (iii) with S	f the SGR Opening e following cases: (i) GR opening and (iv)
References:	· · ·	·			
Response Ass	signed to	Sid Powell	Date Due to	Inspector:	10/17/2009
Response:					
etc.) were indiv factors applied structural analy conditions thro plots.	vidually ev to the de ysis packa ughout th	aluated. Additionally each sign basis evaluations. The age and processed, as nece e outage. Unfortunately, th	were run at unit values, as t results of these analyses w essary, to address the load o e program used does not ha	o support the vere then ext combinations ave the ability	<ul> <li>various amplification</li> <li>racted from the</li> <li>for various building</li> <li>to develop stress</li> </ul>
Misc Notes:	Respons structura applicab configura the pertin pending	e inadequate. By this ques I behavior and response of e Prestress Load) in and an ations prior to, during and fo ment information in an easily response to Question 28.	tion, the NRC is seeking inf the Containment Wall under ound the SGR construction llowing creation of the SGR reviewable form. This info	ormation to u r real loads (i opening are construction rmation may	understand the i.e., Dead + a for the opening. Provide be provided with
Response By:	Dan Joj	pling			
Reviewed By:			Date Response	Provided:	10/20/2009
Status:	Open		Da	ate Closed:	

				03	3-Dec-09	9:05:23 AM
Request Numl	per:	6				
Individual Cor	tacted:	Sid Powell	-	Date Contacted:	10/16/2009	
Requestor/Ins	pector:	George Thomas		Category:	(	Question
Request: Were the vertical and hoop tendons in the SGR opening area subject to lift-off measurer before detensioning and removal. If so provide lift off measurements. Were the removed tendons inspected/examined and if so what were the findings.						neasurements removed
References:		· · · · · · · · · · · · · · · · · · ·				
Response Ass	signed to	: Sid Powell		Date Due to Inspe	ctor:	10/16/2009
Response:						
No lift off meas	urements	were made for the	e tendons that were	removed from the oper	ning.	
IWL examinations w examinations w was removed a	ons were vere perfo and exami	performed on the c rmed on the two lo ned for the two lon	concrete and bearin ongest tendons that gest tendons.	g plates for the removed were non-destructively	d tendons removed.	tendon end One wire each
Misc Notes:	Does CR elongatic higher th predicted Question	3 plan on performi on) on a wire samp an anticipated loss I value criteria in IV o 22.	ing tension testing le from one or more of prestressing for VL)? This informat	(i.e., ultimate strength, y e of the removed hoop to ce (i.e., hoop tendons th ion may be provided wit	ield streng endons th nat did not h pending	oth and at exhibited meet the 95% response to
Response By:	Sid Pow	rell				
Reviewed By:	:			Date Response Provi	ided:	10/16/2009
Status:	Open			Date Clo	sed:	

					03-Dec-09	9:05:23 AM	
Request Numt	oer:	7					
Individual Con	tacted:	Garry Miller		Date Contacted:	10/22/	2009	
Requestor/Ins	pector:	Dan Naus		Category:	Inform	ation Request	
Request:Provide de-tensioning sequence in R16 for the construction opening. Provide procedure? Did anyone hear anything?Follow up request:Documents related to the dome delamination seem to indicate that a loud noise or boom was heard on December 4, 1974, however, no noticeable damage was observed during a subsequent visual inspection. Did anyone hear a loud noise or boom during the detensioning procedure related to the SGR contruction opening?							
References:		<u>9</u>					
Response Ass	signed to:	Charles Williams		Date Due to Insp	bector:	10/26/2009	
Response:							
R16 Tendon D sequence.}	etensiong	sequence.pdf: {E-mail fro	om the SGR	Tendon Field Engine	eer on the de	etensioning	
Containment C responses as v Z3R5 PSC Fiel address Tendo	pening - T vell as sor Id and Qua on Detensi	Fendon Removal Timeline ne plant shutdown/mode ti ality Control Manual1.pdf: oning/Removal, Plasma Te	xlsx: {Spre mes and ter {PSC Proc endon Deter	adsheet containing s ndon detensioning se edures [ALL], F&Q 8 nsion, and Tendon R	ome intervie equence info .0, 8.1, and <sup>-</sup> emoval}	w questions and mation.} 10.0 specifically <sub>.</sub>	
Misc Notes:			••• •				
Response By:	Rick Por	tmann					
Reviewed By:				Date Response Pro	vided:	11/2/2009	
Status:	Open			Date C	Closed:		

				. (	03-Dec-09	9:05:23 AM	
Request Number		8					
Individual Conta	cted:	Garry Miller	(	Date Contacted:	10/22/	/2009	
Requestor/Inspe	ctor:	Dan Naus		Category:	Informa	ation Request	
Request: Ar co	Request: Any information on significant repairs (concrete related) between buttress 3 and 4 from original construction to today.						
References:					·· , ,	• • •	
Response Assigned to: Charles Williams Date Due to Inspector: 10/26/2009							
Response:							
for any Work Orde "concrete crack." away by reviewing The results were However, none of L:\Shared\CR3 Co In addition, conve that was employe the area of interes is original constru Misc Notes:	Performed a search of the document control system, both the SEEK system and historical QA records. Looked for any Work Orders, NCRs, Correspondence, or other documents using the keywords "concrete repair" and 'concrete crack." There were several "hits" on these key words. The majority of these "hits" were screened away by reviewing the title of the document. Any "hits" where the title was not clear were reviewed individually. The results were several AR's and Work Orders to repair damaged or cracked concrete on the RB containment. However, none of the items reviewed were in the area of concern. Document search summaries are here: L:\Shared\CR3 Containment\NRC SIT Team Questions & Info\Request 8, Q2 Response Info- Pugh In addition, conversations were held with several people in maintenance and engineering, including one person that was employed in the early 1970's. No one could remember making any repairs on the RB shell concrete in the area of interest. No modifications could be identified. Conclude that the concrete between buttress 3 and 4 is original construction.						
Response By:	Blenn Pu	gh					
Reviewed By: C	hales V	/illiams		Date Response Prov	vided:	10/28/2009	
Status: C	losed			Date Cl	osed:		

				C	)3-Dec-09	9:05:23 AM
Request Num	Der:	9				
Individual Cor	ntacted:	Garry Miller		Date Contacted:	10/22/2	2009
Requestor/Ins	pector:	Dan Naus		Category:	Q	uestion
Request:	Was there (done at the Follow up tendon su dtermine, by examine	e any analysis of v that time of surveil prequest: Since lo urveillanceds for a evaluate and elim nation criteria.	why re-tensioning wa lance testing)? ower than expected I significant number o inate the cause(s) o	s required in past tend ift-off loads have been if horizontal tendons, o f the condition not me	don surveilla obtained in describe you eting the IW	ance activities the recent 3 ur plan, if any, to /L acceptance
References:						•
Response Ass Response:	signed to:	Charles William	S	Date Due to Inspe	ector:	10/26/2009
There was no a Additional infor folder, under su related to tendo Misc Notes:	analysis po mation in ub-folder: on lift-off to	erformed during pa response to the at "IWL - Tendon Su esting and re-tensi	ast surveillance testi pove question: See rveillance History" fo oning.	ng years in which tenc License Request No. or information, discuss	dons were re 24 – NRC S sions and ac	⊱tensioned. SIT Question# 18 tions taken
Response By: Reviewed By:	Rick Por	tmann		Date Response Prov	vided:	11/2/2009
Status:	Open			Date Cl	osed:	

						03-Dec	-09 9:0	)5:23 AM	
Request Numb	ber:	10							
Individual Con	tacted:	Garry Miller		]	Date Contacte	d: 1	10/22/2009		
Requestor/Ins	pector:	Dan Naus			Categor	y:	Questic	วท	
Request: When C1 part of C		L is using IR a	and IE, can th dures?	ney determi	ne relative concret	e quality o	flocations	tested as	
References:	•	• • • • • • •		·	· · · · ·	*			
Response Ass	signed to	: Paul Fagan			Date Due to Ir	spector:	10/26	5/2009	
Response:									
the test point. I significant void delamination w difference in qu RBCN-0014-N the concrete, w areas with subs	ne aspec or honey hich effec iality of co (Core #1 /hich char sequent b	ts in concrete comb and char tively reduces oncrete is typic 3) where a hig nged density ar oroscope exan	Influencing if nge in concre the thickness ally reflected gher mobility nd modulus i ninations.	R results ind ete propertie s of wall or l in the test value was in that locali	sude presence of es. The most signif slab responding to results. For examp obtained by NDT; zed area, no delar	ficant facto the impac le, a core had less c nination w	r is the pre t. Consider removed fr oarse aggr as noted in	g, sence of rable om panel regate in these	
Misc Notes:									
Response By:	Paul Fa	gan			ning te-seening allowed shirt shirt and a second a statement of				
Reviewed By:					Date Response F	Provided:	1	1/12/2009	
Status:	Closed				Date Closed:				

					03-Dec-09	9:05:23 AM	
Request Num	ber:	11					
Individual Cor	ntacted:	Garry Miller		Date Contacted:	10/22/	(2009	
Requestor/Ins	pector:	Louis Lake	· .	Category:	Question		
Request:	Does the personne	PGN Testing Procedure I, and equipment set-up	e identify how ( ) (i.e., frequenc	CTL calibrates their e ies)? Provide Testin	equipment, qu g Procedure	ualification of to NRC.	
References:	· · · ·		•	····· · ·			
Response As	signed to	: Paul Fagan		Date Due to Insp	pector:	10/26/2009	
Response:							
Revision 2. The question is Area 1 – Calibi Step 3.2 Respi- Step 3.2.1 The Condition Provide equipr Step 3.3 Limits Step 3.3.2 The equipment of validating th assessments u Step 5.3 Repo Step 5.3.1 An equipment calibration/vali Enclosure 7 For a critical si calibration. Enclosure 8 Individual equi individual NDT requires an Eco Number is trace Area 2 – Quali Step 3.2.1 The Condition supervision ar Step 3.2.1 The Condition	s split into ration onsibilities Assessme nent list as s & Precau t utilized to e test produtilizing NE rts list with ca dation doo tructure of locations quipment pac locations quipment pac locations quipme	three areas with specific ent Consultant is respon nd associated calibration associated calibration of perform the NDT was cess and equipment for DT. alibration documentation cument will be included i this scale, more correla with a calibrated equipr Package have been estab with a calibrated equipr Package Number to be re a permanent plant record s ent Consultant, CTLGro- trained in the use of this ent Consultant is respon	c procedure ste sible for: n documentatio calibrated in the a specific appli n will be provide n the report. tion data is des blished to track ment package. ecorded for eac d documenting	n e field during trial use cation is standard pr ed for the NDT used. sired in order to finali specific calibrated ed The Exterior Contain ch NDT location. Th the calibration record	e by CTLGron actice for cor The NDT pr ze a more co quipment in c nment Inspec e Equipment ds for the equ g that all indivi ent.	up. This method ncrete condition rocess omprehensive order to link ction Log Package uipment. viduals under his	
Step 3.5.2 Init ENSURE that inspection.	ial Conditi all person	ons nel are familiar with the	operating man	uals of the equipmer	nt to be used	during the	

rptAll Questions

		03-Dec-09	9:05:23 AM
Step 5.3 Report Step 5.3.1 The report will in Area 3 – Equipt Step 3.2 Respo Step 3.2.1 The Condition A Provide calibrat dedication of the Step 3.3 Limits Step 3.3.2 The equipment of validating the assessments uf Enclosure 5, pa TURN ON the of Enclosure 6, pa	nclude personnel qualification record nent´set-up nsibilities Assessment Consultant is responsib ion/validation documentation to sub- e software (SMASH) being used to e & Precautions utilized to perform the NDT was cali test process and equipment for a s tilizing NDT. uge 1 computer to start setup process. uge 1 computer to start setup process.	ds of lead engineers who performed the NE le for: stantiate the NDT methods to be used and evaluate the NDT data. ibrated in the field during trial use by CTLG pecific application is standard practice for o	DT. to support the roup. This method
Misc Notes:			
Response By:	Paul Fagan		
Reviewed By:		Date Response Provided:	11/12/2009
Status:	Open ·	Date Closed:	

				(	)3-Dec-09	9:05:23	3 AM		
Request Numb	ber:	12							
Individual Con	tacted:	Garry Miller		Date Contacted:		10/22/2009			
Requestor/Inspector:		Dan Naus		Category:	C	luestion			
Request:	Request: Once the construction opening is refilled with concrete, how and for how long will the concrete be allowed to cure, and what is decision process for start of post-tensioning the structure?								
References:	s								
Response Ass	signed to	: Don Dyksterhouse		Date Due to Insp	ector:	10/26/20	09		
Response:									
Response loca	ted in L:\\$	Shared\2009 NRC SPE	CIAL INSPECTI	ON TEAM Q-A\DYKS	STERHOUS	E Q-A			
Misc Notes:				· · · · · · · · · · · · · · · · · · ·					
Response By:				ning mangang ang ang ang ang ang ang ang ang a					
Reviewed By:				Date Response Prov	vided:		•		
Status:	Open			Date Cl	osed:				

				03	-Dec-09	9:05:23 AM
Request Num	ber:	13				
Individual Cor	ntacted:	Garry Miller		Date Contacted:	10/22/20	009
Requestor/Inspector:		George Thomas		Category:	. Qu	estion
Request:	Before ac these ter	dditional tendons a dons.	are de-tensioned, w	ill there be as-found lift o	ff measuren	nents taken for
References:						
Response As:	signed to	: Charles William	notzenarti-actioartinumunantinumuna-mineraturationet NS	Date Due to Inspec	tor: 1	0/26/2009
Planning and s are going to be & 34V18 thru 3 See lift-off data	cheduling detension 4V22 and provided	are currently in p ned. The root cau horizontal tendor in Request 6 resp	progress to obtain lif use team has reque ns 42H22 thru 42H2 ponse.	t-off measurements of so sted lift-off data on vertica 26 & 42H35 thru 42H39.	me of the te al tendons 3	ndons which 4V3 thru 34V7
Misc Notes:						-
Response By:	Rick Pol	tmann				
Reviewed By:				Date Response Próvic	ied:	11/4/2009
Status:	Closed			Date Clos	sed:	

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						03-Dec-	09 9:05:	23 AM	
Request Numl	ber:	14			· · ·				
Individual Cor	ntacted:	Garry Miller			Date Contacted:	1(	10/22/2009		
Requestor/Ins	pector:	Dan Naus			Category:		Question		
Request:	For the o near it?	riginal stru	ctural integrity	test, were the	ere any strain gauges	s in the S	GR opening	area or	
References:									
Response Assigned to: Charles Williams Date Due to Inspector: 10/26/2009									
Response:						•			
Section 5.3.2 o attached.	of the Dom	e Repair r	eport included	with Letter 3	-1276-10 outlines wh	nere the	strain gauges	s were	
In addition to th a detailed listin buttresses 3 ar area. The clos	ne final re ig of strair nd 4) from sest would	port, Attach gages for Elevations be at azin	nment 1 to Sup the SIT. The s 180' to 210'. huths 90o and	oplement num construction The listing in 200o at Eleva	ber 2 (transmitted vis opening is centered of Attachment 1, does ation 204' (gages 13,	a letter 3 on azimu not shov and 15)	F1076-05) cơ th 150o (betv v any gages i	ontained ween in this	
The SIT report B, Page B-5 of	(GAI Rep the GAI r	ort 1930, c eport).	dated 12/7/76)	contains radi	al displacements for	these ga	ges (See Ap	pendix	
Documents for Info\Request 1	this respo 4, Q8 Res	onse are lo sponse Info	ocated here: L: o- Pugh	:\Shared\CR3	Containment\NRC S	SIT Tean	n Questions &	3	
Misc Notes:	:								
Response By:	Glen Pu	gh							
Reviewed By:	Charles	Williams			Date Response Pro	ovided:	10/	28/2009	
Status:	itus: Closed Date Closed:								

		,		03-	Dec-09	9:05:23 AM
Request Numl	ber:	15				
Individual Cor	ntacted:	Garry Miller	D	ate Contacted:	10/22/2	2009
Requestor/Ins	pector:	Louis Lake		Category:	Q	uestion
Request:	When the containm a) was th	e 1976 roof delamination iss ent, including a "notch sensi e concrete different in the co	ue occurred, wa itivity" review? ontainment vers	as there any evalua Refer to the FPC F sus the dome?	tion of the inal Repor	rest of t Page # 110.
References:						
Response Ass	signed to:	Charles Williams	·	Date Due to Inspec	tor:	10/26/2009
Response:						
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Misc Notes:			. •			
an a						
Response By:		· · · · · · · · · · · · · · · · · · ·				
Reviewed By:			Date	e Response Provid	led:	
Status:	Open			Date Clos	ed:	
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Request Numb	ber:	16						
Individual Con	tacted:	Garry Miller		Date	Contacted:	10/2	22/2009	
Requestor/Ins	pector:	Louis Lake			Category:	Infor	mation Request	t
Request:	Discuss t information B) Discus	he planned NDI on. ss supplementa	E method, its reli ry verification pla	iability, industry	y experience, esults are rel	and other	rpertinent	
References:	:	•					n. Internet	
Response Ass	signed to	: Paul Fagan		Date	Due to Insp	pector:	10/26/2009	
Response:								
The IR method the element un Both the hamm records for both domain using th Average Mobili velocity respon range is directh of significant vo value. On the of value. On the of value. The test identified throu Comparing to a impact approxi IR hammer imp opposed to the kHz, The influe test, while dela makes it ideal the reinforcing bars the absolute de determined in the The IR test me is in the process characterize de fossil power pla B) According to with high mobil removed in area the slightly elev the IR test resu At this time, the characterizing procedure, a p are obtained to been accurate	uses a lo der test. her and the her fast F- ty is the k ding to the y related f biding to the y related f biding or a other hand results ca gh a scale another w mately 10 bact in a b reflective ence of rei mination to evaluat s prior to epth of de the IR tes thod has as of being effects in c ants. CT the Prog lity values eas where vated valu- ults along e approxin the exten op ulation to detect	w strain impact The response to e geophone are mer force and to ourier Transform ey parameter th e impact divided to the modulus, an internally dela d, a sound conce an be analyzed ed color scheme ell-known NDT of the analyzed ell-known NDT of the ending mode of the delarised to eve the testing in a to lamination; rath ting. been used to eve the testing in a to concrete. IR test to delamination of core samples the sound concr a delamination	from a hammer of the input stress a linked to a porta he geophone vel n (FFT) algorithm nat the dynamic I d by the force inp density and the aminated or un-b rete element with and presented in the IE test. This give ver a very much test which norm I tendons in the s llow depth, if any of delamination of time critical proje er it's on a comp valuate concrete by ASTM. CTLG has been used ence for nuclear ocedure PT-407 .0) to confirm the s in the "Gray" (I positioned through f delamination in the steam ge s is also removed in the concrete.	equipped with s is measured u able field comp locity response n. IR test produce but [(m/s)/N]. The effective thickn bonded layer w hout distress w in the form of co Echo (IE) test, for greater stress i lower frequence ally requires a structure has g y, will dominate without having ect. However, the barative basis. structure cond roup has exten in evaluating co related structure to presence of co between 0.4 ar h evaluation. M the section whe dicated the IR enerator openin d from areas w ased on the co	a load cell to using a veloci uter for data are transform is. It is define he mean mol- less of the ele- ill result in an ill produce a ontour plots. the IR test us nput means to y range (0-1 frequency ra- enerally less the signal re- to layout loca- ne IR test car The width or ition in the pa- sive experier oncrete struc- tres has beer crete core sar delamination. any cores ha- nere steam ge- results have ng area. Also here low mol- re samples re-	send a stri ity transdu acquisitior med into the d as the si- polity value ement. In g increased relatively l The suspe es a comp that the plat kHz for pl impact the esponse in ations of te not detect size of cra ast 20 year not detect size of cra ast 20 year not detect size of cra ast 20 year to verify the ve been re- enerator of been accu- according polity value emoved, the	ress wave throu licer (geophone) in and storage. T the frequency tructural surface over the 0.1-11 general, presen- d average mobil ow average mobil or areas can be pressive stress ate responds to ate structures), proximately 5 to an it would for IE IR testing. It endon and t with high certa ck cannot be rs. The test mett izing this metho oth nuclear and t (see attached) removed in area aples are also ne condition, un emoved based of pening is locate urate in g to the test is (less than 0.4 ne IR results have	igh is interview of the second secon

rptAll Questions

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		03-Dec-	09 9:05:23 AM
Misc Notes:			
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Response By:	Paul Fagan	антания на на на служ служ са на селе селе на	
Reviewed By:		Date Response Provided:	11/12/2009
Status:	Open	Date Closed:	

rptAll Questions

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				03-Dec-09	9:05:23 AM	
Request Numb	er:	17	17			
Individual Contacted:		Garry Miller	Date Contacted:	10/2	2/2009	
Requestor/Ins	pector:	George Thomas	Category:		Question	
Request:	For petro	graphic analysis, who are	the labs and what are their crede	entials?		
	Follow up Photome	) Request: Provide inform trics who are performing/s	nation on the qualification of the p supervising petrographic examina	etrographe ition work fo	rs from CTL and or CR3.	
References:						
Response Ass	igned to	: Paul Fagan	Date Due to Ins	pector:	10/26/2009	
Response:						
& Consulting ar program, while data point. The for CR3 is attact A third laborato standard. The r involve method examinations, t electron micros from the Photol Misc Notes:	performe of CTL G CTL performe resume a sched, as v ry, Photo material e s intende but using cope (SE Metrics w	a petrographic analyses in roup. MACTEC performed ormed an informational "c ind qualification package vell as the CTL analyst's r Metrics, is also performing xaminations being perform d to examine similar cond tools and techniques mor M) and micro-hardness e ebsite is attached.	d petrographic analysis under the omparison" analysis as an addition of the Mactec individual who perf esume and petrography literature g material analysis, although not p med by Dr.Mostafa at the PhotoM litions and attributes evaluated un e frequently used in material scien xaminations that are more thorou	ir Appendix onal, indepe- ormed the a from the C per the AST letrics labor ider petrogr nce, e.g., s gh. Informa	rigineering B andent analysis TL website. M atory raphic canning ation	
Response By:	Craig M	iller				
Reviewed By:			Date Response Pro	ovided:	11/18/2009	
Status:	Open	· ·	Date (	Closed:		

			-		03-Dec-09	9:05:23 AM
Request Numb	per:	18				
Individual Contacted:		Garry Miller		Date Contacted:	10/22	2/2009
Requestor/Ins	pector:	George Thomas		Category:		Question
Request:	How are o A) How w	ore samples being process ill you determine that the re	sed and se esults are o	nt to the labs for petr consistent between th	ography? e labs?	
	Follow up results be	Request: Please expand y tween the labs. This may b	your respo pe provide	nse on the quesiton of with response to ne	of determinir w quesiton	ng consistency ofbelow.
References:						
The subscript for the subscript of the s					****	
Response Ass	signed to:	Paul Fagan		Date Due to Insp	pector:	10/26/2009
Response:				· .		
aluminum foil a shipped via Fea and #7 were se #6 was sent to The labs are ea the relative age Final reports w	nd plastic, dex for ove ent to MAC PhotoMetta ach perform of the cra ill be issue	wrapped in bubble wrap, a ernight delivery. Chain of C TEC for analysis. MACTEC rics using the same process ning independent analyses cked surface. Each lab was d with results.	and packag ustody for C cut core s. . The prim s given thi	ged in wooden crates ns are used to track of #5 longitudinally and ary goal of the analys s objective when the	. The packa each core. C sent half to ses was to e work was au	ges were Cores #5 CTL. Core stimate uthorized.
Misc Notes:						
Response By:	Craig Mil	ler				
Reviewed By:				Date Response Pro	vided:	11/18/2009
Status:	Open			Date C	losed:	I
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· .				03-Dec-(	9:05:23 AM					
Request Numb	er:	19								
Individual Cont	tacted:	Garry Miller	Date Contac	ted: 10	/22/2009					
Requestor/Insp	pector:	George Thomas	Catego	ory:	Question					
Request: What is the sampling plan for NDE and core samples,										
References:		· · · · · ·								
Response Ass	igned to:	Paul Fagan	Date Due to	Inspector:	10/26/2009					
Response:										
progress on the Intermediate Bu Exposed Surface Exposed Surface included in the of surfaces has ph Adjoining Buildi Surfaces within the condition as plan; however, 1) areas with we contaminated a Core Bores The location an Team. Core bo characterized b the delaminatio characterized b	containm ilding, an ces condition nysical co ng Surfac adjoining seessmen physical c all attach reas. d numbel ores are ta y NDT ar n in the b y NDT.	sed via work platforms, scaf assessment of structure. A nstraints that make access buildings are accessed via t of the structure. A large p constraints exist in each of t ments that limit access to th r of core bores is defined by aken to provide samples for e used to confirm the test re ay between buttresses 3 an	folding, ladders, and roofs small percentage of the ov mpractical. permanent platforms, scat ercentage of the accessible the three adjoining buildings e concrete surface, 2) lock the on-going NDT results concrete testing. Cores in sults. Core bores have be d 4 to confirm the boundar	of adjoining b verall surface folding, and la e surfaces are s that limit acc ed high radiat and input fron both solid an en drilled aro y of the delan	willary Building, williary Building, area of exposed adders included in e included in the cess. Examples are tion areas, and 3) In the Root Cause d delaminated areas und the perimeter of hination					
Response By:	Paul Fag	gan	anna an sharan an sharan s	**********	errandaring and an and an					
Reviewed By:			Date Response	e Provided:	11/12/2009					
Status:	Open		D	ate Closed:						

					03-Dec-	-09	9:05:23 AM	
Request Numb	per:	20						
Individual Contacted: Requestor/Inspector:		Garry Miller George Thomas		Date Contact	ted: 1	10/22/2009		
				Catego	ory:	Question		
Request:	What are	your examination p	plans for below (	grade?				
References:	· · · · · · · · · · · · · · · · · · ·			·····	· · · ·			
Response Ass	igned to:	Paul Fagan		Date Due to	Inspector:	10	)/26/2009	
Response:		,						
The containment Intermediate, a the foundation in to concrete bein permanent plat percentage of t each of the three access to the c	nt exterior nd Fuel Tr mat is at E ng in conta forms, sca he access se adjoinin oncrete su	concrete surfaces ansfer Buildings. L. 93'-0" (ref. draw act with backfill (be ffolding, and ladde ible surfaces are ir g buildings that lim urface, 2) locked hi	not exposed to The containmen ving 421-004). Not elow grade). Sur ers are included included in this a nit access. Exar igh radiation are	the elements are ac t wall rests on the for lo portion of the cor faces within adjoinin in the condition assessment; howeve nples are 1) areas v as, and 3) contamin	ccessed from oundation maintainment wang buildings essment of the r, physical co vith wall attac ated areas.	within at. The all is ina are acc he struc onstrair chment	the Auxiliary, top surface of ccessible due essed via sture. A large nts exist in s that limit	
Misc Notes:	- - -							
Response Bv:	Paul Fao	an		NAMES OF A DESCRIPTION OF A				
Reviewed By:		· · · · · · · · · · · · · · · · · · ·		Date Response	Provided:		11/12/2009	
Status:	Open			Da	ite Closed:			

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Request Numb	per:	21							
Individual Con	tacted:	Garry Miller	I I I I I I I I I I I I I I I I	Date Contacted:	10/22/2009				
Requestor/Inspector:		George Thomas		Category:	Information Re		equest		
Request:	Request: Provide interview observations from personnel involved with hydro-demolition and detensioning/cutting of tendons (when their comments note something of interest). Provide information from additional interviews of personnel when they become available. Also,								
	include in	terviews conducted by	PII.		, 5000110	available	. 7		
References:	r								
Response Ass Response: Response loca Response Info	signed to: ted in L:\S - Portman	Charles Williams hared\2009 NRC SPE	, CIAL INSPECTI	Date Due to Insp	ector:	10/26/ A\Reques	2009 t 21, Q15		
Misc Notes:	Charles	Williams		nen deu seu anna an taoinn an tha tha ann an taoinn					
Response by:				Data Dagnanga Bra	waad.				
Revieweu By:									
Status: Open Date Closed:						j			

				03-Dec-09	9:05:23 AM			
Request Numl	ber:	22						
Individual Cor	ntacted:	Garry Miller	Date Contacted:	10/22/20	009			
Requestor/Inspector:		George Thomas	Category:	Qu	estion			
Request:	Have rem	noved tendons been inspec	cted and were there any significa	nt findings?				
Does CR3 plan on performing tension testing (i.e., ultimate strength, yield strength and elongation) on a wire sample from one or more of the removed hoop tendons that exhibited higher than anticipated loss of prestressing force (i.e., hoop tendons that did not meet the 95% predicted value criteria in IWL)?								
References:	•	······································						
Response As: Response:	signed to:	Charles Williams	Date Due to Insp	ector: 1	0/26/2009			
There was no r of the SGR Ter {Containment ( {10 28 interview {Interview with	requested, ndon Field Opening - w Cliff Pete Gary Goe	required inspections perfo Engineer and PSC Lead Tendon Removal Timeline ers Gary Goetsch.pdf} tsch.pdf}	rmed of the removed tendons. V Individual, responses documente e.xlsx}	arious questic d in the enclos	ons were asked sed.			
Misc Notes:		· · · ·		• • • • •				
Response By:	Rick Por	tmann			,			
Reviewed By:		•	Date Response Pro	vided:	11/2/2009			
Status:	Closed		Date C	losed:	1			

					03-Dec-0	9 9:05:23 AM			
Request Numl	ber:	23							
Individual Cor	ntacted:	Garry Miller		Date Contacted	: 10/	22/2009			
Requestor/Ins	pector:	George Thomas		Category	•	Question			
Request:	When we construct	vere observations of surface feature changes and water leakage noted below the opening?							
	At what I of progre	ocation of the SGR opening ssion for the creation of the	cation of the SGR opening area did hydro-demolition begin and what was the sequence sion for the creation of the opening?						
	Provide a demolitic	a copy of NCR 358724 that n.	t identified vo	ids in the RB conc	rete in the a	area of hydro-			
References:									
Response Ass	signed to	: Charles Williams		Date Due to Ins	spector:	10/26/2009			
Response:									
The below is the pages attached 10/1/2009 4:28 10/1/2009 1:15 10/2/2009 3:55 10/2/2009 5:15 transfer openin 10/2/2009 6:41 10/7/2009 12:5 Copy of NCR 3 A\Request 23,	timeline d) : 3:59 AM B 5:08 PM H 5:53 AM F 5:30 AM S 1:11 AM V 52:15 PM 358724 al Q17 Res	e of events as noted in the egin hydro-demolition ydro-demolition to first laye estart hydro-demolition tream of water identified ex demolition suspended. oiding identified in RB wall 2 ft x 4 ft loose concrete be so provided in L:\Shared\20 ponse Info - Miller	Outage Auto er of rebar is xiting RB wall elow the conta 009 NRC SPI	og system (releva complete, begin cu from below/to the ainment opening. ECIAL INSPECTIC	nt Autolog utting rebar right of the DN TEAM C	Q-A\WILLIAMS Q-			
Misc Notes:	:	~							
Response By:	Charles	Williams							
Reviewed By:				Date Response P	rovided:	11/18/2009			
Status:	Open	·		Date	Closed:				

			03	-Dec-09 9:05:23 AM
Request Num	ber:	24	ć	
Individual Contacted:		Garry Miller	Date Contacted:	10/22/2009
Requestor/Inspector:		George Thomas	Category:	Question
Request:	What wer reports)? Provide i	e results of the last three IWE/IN	VL surveillance reports (provid	de actual complete
References:			· · · · · · · · · · · · · · · · · · ·	1
Response Ass	signed to:	Charles Williams	Date Due to Inspec	tor: 10/26/2009
Response:			•	· · · · · ·
Response loca Response Info-	ted in L:\\$ Portmann	Shared\2009 NRC SPECIAL INS	SPECTION TEAM Q-A\WILLIA	MS Q-A\Request 24, Q18
Misc Notes:	· · ·		· · · · · · · · · · · · · · · · · · ·	
Response By:	Charles	Williams	nan den en general de la company de la co La company de la company de	and a second
Reviewed By:			Date Response Provid	led:
Status:	Closed		Date Clos	sed:
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Request Numb	per:	25				
Individual Con	tacted:	Garry Miller		Date Contacted:	10/22/2	.009
Requestor/Insi	pector:	George Thomas		Category:	Informat	tion Request
Request:	Provide r	esults of current visual ins	pections.			
References:	· · · ·		· · · ·	· · · ·		
Response Ass	igned to	Paul Fagan		Date Due to Inspo	ector:	10/26/2009
Response:		"			· ·	
has been provid The only IWL et and following th However as a r compare to the file RO-16 IWL Info". The SGR-QC a those tendons a required IAW IV Rev. 1: The SG provided in this Misc Notes:	ded to you xaminatio ne ILRT of esult of th R15 infor Exam Re Ilso perfor affected b NL SR-QC ex NRC fold	a under NRC Folder "WILL ns scheduled are the As- h the repair/replacement a e containment crack we c mation as part of the root ports.pdf enclosed in the l med visual inspections of y the containment opening amination reports ( File: T ler.	LIAMS Q-A" file Left Pre-Service area which is ye lid an augment cause investig NRC folder "FA the tendon end g Engineering endon Bearing	e "Request 24, Q18 e IWL exams to be p et to be completed. ed IWL scope betwe ation. I have include GAN Q-A" file "Req ds, bearing plates an Change (EC). Thes Plate and Concrete	Response In performed pr een buttresse ad these repo uest 25, Q19 nd surroundin e inspections	fo-Portmann"]. ior to, during, es 3-4 to orts, reference Response ng concrete for s were not .pdf) has been
Response By:	Rick Po	tmann				
Reviewed By:			D	ate Response Prov	/ided:	11/30/2009
Status:	Open			Date CI	osed:	i 
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					. 03	3-Dec-09	9:05:23 AM
Request Numb	per:	26	• ×				
Individual Con	tacted:	Garry Miller		Date C	ontacted:	10/22/2	2009
Requestor/Ins	pector:	Louis Lake			Category:	Q	uestion
Request:	Will PGN	be doing the ove	erall IWL inspect	on this R16 out	age concurre	ent with ILF	<b>ΧΤ?</b>
References:	:					······	
				· · · · · · · ·			
Response Ass	signed to:	Paul Fagan	<u> </u>	Date C	)ue to Inspe	ctor:	10/26/2009
Response:							
The IWL Inspect inspection in R Pre-Service ISI following the IL Visual Examina includes the ter	ctions requ 15 (2007). VT exami RT. In su ation be pe ndon galle	ired by ASME S During R16 the nation be perfor oport of the cont rformed on the ry and the vertic	Section XI are rec ASME Section rmed on the cont tainment root cau containment betw al face of contain	quired every 5 y XI Repair / Rep ainment openin ise it has been veen Buttresses iment only.	ears. CR3 la lacement rec g repair area requested th s 3 and 4. Th	ast perform juirements prior to, du at an Augm nis Augmer	ed this require that a uring and nented IWL nted area
Misc Notes:	· · · ·				· · · · · · · · · · · · · · · · · · ·		
Response By:	Rick Port	mann					
Reviewed By:				Date Res	ponse Provi	ded:	11/4/2009
Status:	Open				Date Clo	sed:	
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Request Num	ber:	27				
Individual Cor	ntacted:	Garry Miller		Date Contacted:	10/2	2/2009
Requestor/Ins	pector:	George Thomas		Category:		Question
Request:	What was analysis?	technical analysis for	decision to deter	nsion only specific te	endons? P	rovide the
References:				···· · ··· ·		
Response As	signed to:	Charles Williams		Date Due to Insp	ector:	10/26/2009
Response:		•				· •
Misc Notes:						
Response By:	Autor (1999)		***************************************	anna na marainn an a		
Reviewed By:		•	D	ate Response Pro	vided:	
Status:	Open			Date C	losed:	

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Request Numb	ber:	28					
Individual Contacted:		Garry Miller		Date Contacted:	I: 10/22/2009		
Requestor/Inspector:		George Thomas		Category:		Questior	1
Request:	What wer A) Prior to B) After d C) After d By this qu response and aroun following reviewabl	e forces acting o o tendon de-tens e-tensioning and letention and cor uestion, the NRC of the Containm nd the SGR cons creation of the S le form.	on SGR opening area sioning and concrete d tendon removal? ncrete removal? C is seeking information tent Wall under real I struction opening are SGR construction opening	and adjacent areas: removal? on to understand the st bads (i.e., Dead + appli a for the configurations ning. Provide the perti	ructural cable P prior to nent info	behavior a restress Lo , during an prmation in	nd bad) in d an easily
References:							
Response Ass	igned to:	Don Dyksterho	ouse	Date Due to Inspe	ector:	10/26/	2009
Response:							
Refer to Calcul requested by G References: 1. Calculation	ation S09 eorge The S09-0048	-0048 stress plot omas. 3, Revision 1, Str	ts. These plots are fo ress Plots for SGR C	r dead load + vertical a ontainment Analysis	nd hoop	) prestress	as
Misc Notes:							
Response By:	Don Dyk	sterhouse					
Reviewed By:	:			Date Response Prov	vided:		
Status: Open				Date CI	osed:		

						03-Dec-	09 9:	05:23 AM	
Request Numb	er:	29							
Individual Con	tacted:	Garry Miller George Thomas			Date Contacted:		10/22/2009		
Requestor/Ins	pector:				Categor	у:	Questi	on	
Request:	How were and the fe	e the forces prces becarr	acting on the line unbalanced	outtress analy ?	zed when the ho	rizontal ter	idons wer	e released	
References:		-							
Response Ass	igned to	Don Dyks	sterhouse		Date Due to In	spector:	10/2	6/2009	
Response:									
direction of the load cases 6 ar lock-off stress - References: 1. Calculation Activities. 2. Calculation Access Openin	tensioned id 10 and - tendon I S06-0004 g and Nu	I tendon. Wi load combin osses at the 5, Revision 1 I, Revision 0 mber of Hoc	hen these tend nations 102 an time of the ste 1, Containmen D, Containmen op and Vertical	lons are deter id 104). The u eam generato t Shell Analys Tendons to b	nsioned the signs inbalanced forces r replacement ou is for SGR – She is for SGR –Prop be Detensioned.	s reverse (F s are derive itage (Ref. II Evaluation perties of no	Ref. 1, Atta ed from th 2, Sectior on During ew Concre	achment 2, e original 1 4.2.1.2). Replacement ete for	
Misc Notes:				-					
Response By:	Don Dyl	sterhouse							
Reviewed By:					Date Response F	Provided:			
Status:	Open				Date	e Closed:			

			. 03	i-Dec-09 9:05:23 AM
Request Num	ber:	30		
Individual Contacted:		Garry Miller	Date Contacted:	10/22/2009
Requestor/Inspector:		George Thomas	Category:	10/22/09
Request:	Where is A) What i	PII based, and provide a de s their root cause approach	escription of their credentials? n?	
	Provide F	PII's failure mode chart refe	rred to in item (5) under the title, "U	Inique Qualification" of the
	Identify th title "Unic report.	ne root cause failure analys que Qualification" of the res	is report for the MOX facility referrent ponse, if submitted to the NRC, or	ed to in Item (6) under the provide a copy of the
References:			· · ·	
Response As	signed to	: Charles Williams	Date Due to Inspec	ctor: 10/26/2009
Response:				
PII location, ba response was SPECIAL INSI	ackground provided a PECTION	, qualification and methods and discussed on 10/28/09. TEAM Q-A\WILLIAMS Q-A	were reviewed with George Thoma Electronic copy of this file is in L:\ \Request 30, Q24 Response Info -	as. A hard copy of the Shared\2009 NRC Williams
Misc Notes:				
Response By:	Charles	Williams		ARDINANGUNUN ARDINANG AND ANG
Reviewed By:		•	Date Response Provid	ded: 10/28/200
Status:	Open	-	Date Clos	sed:

			(	)3-Dec-09	9:05:23 AM
Request Numl	ber:	31			
Individual Cor	ntacted:	Garry Miller	Date Contacted:	10/2	2/2009
Requestor/Inspector:		George Thomas	Category:		Question
Request:	What are	the various root causes an	d fault tree scenarios being cons	idered?	•
	Provide a (i.e., brea evaluated	a list of root cause failure m ak down each of the 9 categ d for CR3 containment).	odes being considered under eac pories into the approximately 79 f	ch of the 9 ailure mod	broad categories es being
References:					
Response Ass	signed to	: Charles Williams	Date Due to Insp	ector:	10/26/2009
Response:					
A listing of pote response was L:\Shared\2009 Williams	ential caus provided a P NRC SP	ses categories and example and discussed with George ECIAL INSPECTION TEAM	es were reviewed with George Th Thomas on 10/28/09. Electronic I Q-A\WILLIAMS Q-A\Request 3	omas. A l copy of th 1, Q25 Re	nard copy is file is in sponse Info -
Misc Notes:		uning a second			
Response By:	Charles	Williams	• • • • • • • • • • • • • • • • • • •		
Reviewed By:			Date Response Prov	vided:	10/28/2009
Status:	Open		Date C	losed:	

					03-Dec-09	9:05:23 AM		
Request Numb	oer:	32						
Individual Con	tacted:	Garry Miller		Date Contacted:	. 10/22	/2009		
Requestor/Inspector:		George Thomas		Category:		Question		
Request: When and what will be the deliverable for the NRC to review, i.e., schedule for root cause, NDE results of core bore samples, and design basis analysis? Provide a response to part of the original question "What deliverables related to root cause analysis, extent of condition (NDE/core bores), design basis analysis and repair options would b provided to the NRC for review?"								
	Provide w	eekly updates to the sched	dule.					
References:								
Response Ass Response:	signed to:	Charles Williams		Date Due to Insp	ector:	10/26/2009		
l asked George current schedu hard copy was INSPECTION	e Thomas le for activ provided o FEAM Q-A	or a clarification of this rec ities for the Root Cause, C on 10/29/09. Electronic co WILLIAMS Q-A\Request 3	uest on 10/28 ondition Asse py of this file 32, Q26 Resp	8/09. He said he we essment, Design Ba s in L:\Shared\2009 onse Info - William	ould like a c asis and Rep ) NRC SPE s	opy of the pair teams. A CIAL		
Misc Notes:	,				×			
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Response By:	Charles <sup>v</sup>	Villiams		annen ander an an and				
Reviewed By:			D	ate Response Pro	vided:	10/28/2009		
Status:	Open			Date C	losed:			

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Request Numb	er:	33							
Individual Con	tacted:	Garry Miller	D	ate Contacted:	10/22/2009				
Requestor/Ins	pector:	George Thomas		Category:	Information Re		equest		
Request:	Provide c	opy of PGN's and PII's Ro	oot Cause Analys	is procedure.					
Include a statement on PII's root cause analysis procedure or if they would be working to PE' procedure.									
References:									
Response Ass	igned to	Charles Williams		ate Due to Inspe	ctor:	10/26/	/2009		
Response:									
A hard copy of PII does not ha of response to Q-A\WILLIAMS	the PGN ve a writte Request 3 Q-A\Rec	root cause procedure CAP en procedure. The PII Roc 30. Electronic copy of this uest 33, Q27 Response In	P-NGGC-0205 wa ot Cause process file is in L:\Share nfo - Williams	as provided to Geo was discussed w d\2009 NRC SPE	orge Thon ith Georg CIAL INS	nas on 1 e Thoma PECTIC	0/28/09. as as part N TEAM		
Misc Notes:	•								
Deconco Put	Charles	Williams							
Response by.	Chanes			Decharge Dravi	idad.	1(	1/28/2009		
Revieweu by:				nesponse riov	ucu.		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Status:	Open			Date Cit	sea:				
					03-Dec-09	9 9:05	5:23 AM		
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Request Num	ber:	34			· .				
Individual Contacted:		Garry Miller		Date Contacted:		10/22/2009			
Requestor/Inspector:		George Thomas		Category:		Questior	<u>ו</u>		
Request:	Who is the efforts?	contractor doing Design E	3asis Analysis	? How does this	relate to R	oot Cause	e analysis		
References:		· · · · · · · ·					•		
Response As	signed to:	Don Dyksterhouse		Date Due to Ins	pector:	10/26/2	2009		
Response:									
The selected v Aided Enginee finite element r The Root Cau Oceanside, Ca root cause(s) ic impact on the c	endor to pe ring (CAE) nodel. se Analysis lifornia and dentified by design ana	erform Design Basis Analys Associates, Middlebury, C team efforts are being su has independent technica the Root Cause Analysis ysis and on the design bas	sis is MPR Ass onnecticut, is pported by Pe al capabilities t team will be e sis.	sociates, Inc. Alex supporting MPR i rformance Improv o support the Roc valuated by the D	andria, Vii n the deve rement Inte ot Cause A esign Basi	rginia. Co lopment c ernational, nalysis te is Analysis	mputer of the 3-D , PII, am. The s team for		
Misc Notes:		,	mannah bir ca a ci Uni nanisi ci sina i siya			, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
Response By:	Don Dyks	sterhouse					*****		
Reviewed By:	•		Da	te Response Pro	vided:				
Status:	Closed			Date C	losed:		1		

rptAll Questions

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Request Numbe	er:	35				
Individual Cont	acted:	Garry Miller		Date Contacted:	10/2	2/2009
Requestor/Insp	ector:	George Thomas		Category:		Question
Request: A a A	Are you ch inalyses b A) Are you	anging the design or li e required? changing the ACI 318	censing basis? -63 code of rec	Will a License Amer	idment or	10CFR50.59 type
References:			· · · · · · · · · · · · · · · · · · ·			
Response Assi	gned to:	Don Dyksterhouse	·	Date Due to Inspe	ector:	10/26/2009
Response:						
				1. j.		· · ·
Misc Notes:						
Response By:	*			antala (antal antal antal and a dala (antal antal a	Marine Carlos Marine Rad	
Reviewed By:				Date Response Prov	vided:	-
Status:	Open			Date Cl	osed:	

			3-Dec-09	9:05:23 AM				
Request Numb	er:	36						
Individual Con	tacted:	Garry Miller		Date Contacted:		10/22/2009		
Requestor/Inspector:		George Thomas		Category:	Question			
Request: Will there		be a past-operability a	nalysis complete	ed?	<u>-</u>			
References:								
Caroli, Madministration and the state of the				· · · · ·				
Response Ass	igned to:	Don Dyksterhouse	,	Date Due to Inspe	ctor:	10/26/2009		
Response:								
				۰.				
Misc Notes			46-11-14-11-14-11-14-14-14-14-14-14-14-14-			3		
		<b>,</b>						
Response By:		Stanows were and a substance and a substance of a substance of the substance		en og som en		nn All an tha an		
Reviewed By:		•	·	ate Response Provi	ded:	1		
Status:	Open			Date Clo	sed:			

10/22/2009		
on		
is analysis?		
6/2009		
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P1. ,		
P-11-14-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-		

			, .		03-Dec-(	09 9:05:23 AM
Request Numl	ber:	38		· .		л <sup>а</sup>
Individual Contacted: 'Requestor/Inspector:		Garry Miller		Date Contact	ed: 10	/22/2009
		Anthony Master	<sup>°</sup> S	Catego	ery: Info	ormation Request
Request: Provide procedures and drawings for tendon installatio (containment walls and dome), and also after the 1976					essing in orig pair.	inal construction
References:		- ·			· · · ·	
Response Ass	signed to	: Don Dyksterho	use	Date Due to	Inspector:	10/26/2009
Response:						
Design drawing System. Gene that starts with included in the series of drawi	gs for both rally the c 421-300 shared du ngs are a	n original design a lrawing series that contains the dome rive. Drawing cop vailable only on ap	and post-dome r t start with 421- e repair drawing bies are included perture cards.	epair are included in th 001 is the original plan is. Specifications for co d in the drive where ava A drawing list is in the B	t design drav oncrete and ailable. Seve Excel file.	Iment Control wings. The series reinforcement are eral of the 421-300
L:\Shared\CR3	Containr	nent\ROOT CAUS	SE ANALYSIS F	iles\(1) Concrete Desig	gn\Concrete	Design Drawings
Misc Notes:	···		· · · · · · · · · · · · · · · · · · ·			
Response By:	Glenn P	ugh				
Reviewed By:	Charles	Williams		Date Response	Provided:	10/28/2009
Status:	Open			Dat	te Closed:	

						03-Dec	-09	9:05:23 AM
Request Numb	ber:	39						
Individual Contacted:		Garry Miller			Date Contac	ted: 1	10/22/2009	
Requestor/Inspector:		Louis Lake		·	Categ	ory:	Qu	estion
Request:	Were ther rebars)?	e any chan	nges to the don	me made in 1	976 (additional	new anchors	s and/o	r radial
References:	g					· · · ·		
Response Ass	signed to:	Don Dyks	sterhouse		Date Due to	Inspector:	1	0/26/2009
Response:								
and only a port References: Final Report - F SC-421-341, R SC-421-342, R SC-421-343, R SC-421-344, R Reinforcement SC-421-345, R Misc Notes:	Reactor Bu eactor Bu eactor Bui eactor Bui eactor Bui	ilding Dom Iding – Cor Iding – Cor Iding – Cor Iding – Cor Iding – Cor	ne Delamination ncrete Dome R ncrete Dome R ncrete Dome R ncrete Dome R ncrete Dome R	# 8 bar was o en Report, De Repair Dome Repair Dome Repair Dome Repair Dome	cember 10, 197 Reinforcement I Reinforcement S Reinforcement S Reinforcement S Reinforcement S	e embed bar 6 North Half – South Half – North Half – South Half – Sections & E	Top Re Top Re Bottom Botton	einforcement einforcement Reinforcemen n
224 248 VIII DI								
Response By:	Don Dyk	sterhouse						
Reviewed By:					Date Response	e Provided:		11/13/2009
Status:	Open				Da	ate Closed:	[ 	

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				03-Dec-09 9:05:23 AM
Request Numb	per:	40		
Individual Contacted:		Garry Miller	Date Contacted:	10/22/2009
Requestor/Ins	pector:	Anthony Masters	Category:	Question
Request:	What is th A) Email from the f	e cause of the low spot on the d rom Lese said it was same as pr inal documentation and photogra	ome? evious inspections since 1 aphs in 1976?	976. Can this be confirmed
References:				
Response Ass	signed to:	Don Dyksterhouse	Date Due to Insp	Dector: 10/26/2009
Response:				
The construction range in number (2C02064 and 2 these microfich mention a low s However, to he Mr. Gallion was time of the repart that existed from dome. Would a This confirms s	In microlic er from 2C 2C02065) e records spot or other of a answer a an emplo air where n m the initia also consi	of the database contains a listing of 01024 to 2C02089. A search of containing nonconformance's ar did not reveal any information or er problem. Thereing this question a conversation by ee at the time of the dome reparation of the dome reparation of the dome reparation of the experienced as could be. al concrete pours. These are no der that these existing since the by Mr. Joe Lese.	the database titles showed and corrective actions for the a low spot. A check of the air. He reported that the co There were several low sp t considered detrimental to repair project.	I several microfiche cards e repair project. A review of e pour cards also did not st Gallion about this repair. Increte finishers used at the pots and other imperfections the qualification of the
A copy of the C	Constructions	n Microfiche log is included here crete Construction\Construction	: L:\Shared\CR3 Containr MicroFiche Index.pdf	nent\ROOT CAUSE
Misc Notes:	Related t	o question #1		
Response By:	Glenn P	ugh	анан манала бай байна. Талан алан даг на байна байн байн байн байн байн байн	
Reviewed By:	Charles	Williams	Date Response Pro	vided: 10/28/2009
Status:	Open		Date C	losed:

			03-	Dec-09 9:05:23 AM
Request Numl	ber:	41		·
Individual Con	tacted:	Garry Miller	Date Contacted:	10/22/2009
Requestor/Ins	pector:	Anthony Masters	Category:	Question
Request:	NCR 360 expecting	269 mentions SGR expected g a thin wall sheath?	flexible tendon sheaths? What w	as the basis for them
References:		·		
Response Ass	signed to	: Charles Williams	Date Due to Inspec	tor: 10/26/2009
Response:				
Enclosed in this FW_ NRC Que	s folder in stion - D	response to the above quest Jopling Response.pdf	ion:	
Misc Notes:				
Response By:	Rick Po	rtmann	anna benéloky na akakalasta. Ta ang kanakang kanakang ang tang kanakang ang kanakang kanakang kanakang kanakang	nan men an that we can be a supported and the canada and the canada and the canada and the canada and the canad
Reviewed By:		•	Date Response Provid	ed: 11/2/2009
Status:	Closed		Date Clos	ed:
			·	

					03-Dec-09	9:05:23 AM			
Request Numb	er:	42							
Individual Con	tacted:	Garry Miller		Date Contacted:	10/22/2009				
Requestor/Ins	pector:	Anthony Masters		Category:		Question			
Request:	Request: Were radial tension stresses due to the hoop tendons considered in the original design?								
Referencès:	References:								
Response Ass	Response Assigned to: Don Dyksterhouse Date Due to Inspector: 10/26/2009								
Response:									
Cannot readily that the tendon stresses in mer memorandum o the tensile stres considered the Copies of calcu	determine design is idional, an butlining th ses in the tensile stru- lation pag	from the old Gilbert C pased on limiting the d hoop directions. So e critical loading of th concrete for the load esses in the concrete es are included at foll	Calculations what concrete tensile ee Book 2, Section e cylindrical RE I combinations. e outside the ten lowing drive loc	at the direct answer is a stress to 212 psi. Th ion 1.01.7, pages 1.01 wall. The tendon pre However, it does not don's influence.	to the req is limit bou 1.7/6 and 2 -stress is appear tha	uest. It appears unds the tensile I.01.7/7 for a brief designed to limit at the calculations			
L:\Shared\2009	NRC SPE		TEAM Q-A\WIL	LIAMS Q-A\Request 4	2, Q36 Re	sponse Info- Pugh			
Misc Notes:	Considera	ition is on-going by G	eorge/Anthony						
Response By:	Glenn Pu	gh							
Reviewed By:	Charles \	Villiams	. ,, ,	Date Response Pro	vided:	10/28/2009			
Status:	Closed		•	Date C	losed:				
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				0	3-Dec-09	9:05:23 AM	
Request Numb	er:	43					
Individual Contacted:		Dennis Herrin		Date Contacted:		11/2/2009	
Requestor/Inspector:		Anthony Masters		Category:	Inform	ation Request	
Request: Please p Specifica Reports: Calculatio		ovide Drawings: SC-40 ions: SP-5566, 5569, 5 VT-3C Report VT-07-10 ns: S-07-0019 and S-0	0-007, 008, 00 583, 5618, 564 06 and VT-3C <b>I</b> 7-0033	9, and 015; and S-425 8, and 5909 Report VT-07-111	5-011 and \$	S-425-012	
References:							
Response Ass	igned to:	Don Dyksterhouse		Date Due to Inspe	ctor:	11/2/2009	
Response:							
Enclosed in this 5566, SP-5583	folder in 11/3/09	response to the above o Update. The last 2 spec	question: All r c's requested h	equested information p ave been included in	provided ex the file.	xcept for SP-	
Misc Notes:						•	
Response By:	Rick Port	mann		n an			
Reviewed By:		-	•	Date Response Provi	ided:		
Status:	Closed			Date Clo	osed:		

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			03	3-Dec-09 9:05:23 AM
Request Num	ber:	44		
Individual Contacted:		Dennis Herrin	Date Contacted:	11/3/2009
Requestor/Ins	pector:	Anthony Masters	Category:	Information Request
Request: In contin		uing evaluation of the IWI	L inspection and maintenance progra	im:
,	If possibl listed as	e, I would like to speak w the inspectors on two pre	vith Mr. Bernard Komara and Mr. Mar avious inspection reports that I have r	c LeBlanc as they were eviewed.
References:		•		
Response As	signed to	: Don Dyksterhouse	Date Due to Inspe	ctor:
Response:				
Mr. Marc LeBla refuel 16. Mr. the site QC Or Bernie's availa	anc (NIC 0 Bernard K ganizatior bility.	Contractor Inspector) was comara (NIC Contractor In . The Supervisor for Mr.	s here in refuel 15 (2007) and to my k nspector)has returned to CR3 for refu Komara is Jeff Bennett. Please cor	nowledge is not here for uel 16 and is working for ntact Jeff (x-3323) for
Misc Notes:	Evaluatio	on of containment liner bu	Ilges still in progress.	
Response By:	Rick Po	rtmann		
Reviewed By:			Date Response Provi	ded: 11/9/2009
Status:	Closed		Date Clo	sed:

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					0:	3-Dec-09	9:0	5:23 AM	
Request Num	oer:	45							
Individual Contacted:		Dennis	Herrin		Date Contacted:	11/	11/3/2009		
Requestor/Ins	pector:	Anthony	/ Masters		Category:	Information Reque		Request	
Request:	In continu	uing evalu	ation of the IW	/L inspection	and maintenance progra	am:		normania ete an etate a 4.10-	
SP-182, Rev. 16 (Dated 5/22/09) Reactor Building Structural Integrity Tendon Surveillance Program, indicates compliance with the 1992 addenda of the 1992 Edition of ASME Section XI, Subsection IWL, while the document titled ASME Section XI/ASME OM Code Program, Interval 4: Containment Inspection Program (2nd CISI) Revision 3 (Dated 5/6/09) indicates the 2001 Edition through the 2003 Addenda. Please clarify.									
References:									
Response As: Response:	signed to	: Don Dy	/ksterhouse		Date Due to Inspe	ctor:			
The last perform record during t accordance with ASME Section August 13, 2000 through the 20 to its next requ	mance of hat time v th 10CFR XI once e 08 and the 03 Adden ired 5 yea	the Tendo vas the 19 50.55a, lic every 10 y e new inte da is the o ar tendon	on Surveillance 192 addenda of censees are re ears or inspect rval (4th) bega code of record surveillance.	e under SP-18 f the 1992 Ed quired to upd tion interval. n on August . The SP-182	32 was in 2007. The AS ition of ASME Section X ate their ISI Programs to The 3rd inspection inter 14, 2008. For the 4th int 2 will be revised to reflec	ME Sec I, Subse o meet th val was terval , th t the nev	tion XI co ction IWI ne require complete ne 2001 I v code e	ode of L. In ements of ed on Edition dition prior	
Misc Notes:									
Response By:	Rick Po	rtmann							
Reviewed By:					Date Response Prov	ided:		11/9/2009	
Status:	Closed				Date Clo	osed:			

			. 03	-Dec-09 9:05:23 AM
Request Numb	oer:	46		
Individual Contacted:		Dennis Herrin	Date Contacted:	. 11/3/2009
Requestor/Ins	pector:	Anthony Masters	Category:	Information Request
Request:	In continu	ing evaluation of the IWL i	nspection and maintenance progra	m:
	SP-182, I Program, survellian and VT-3 review th	Rev. 16 (Dated 5/22/09) Re has some concrete inspec ices. Are the documented C examinations credited fo e additional documentation	eactor Building Structural Integrity T action activites associated with it as p and reported in separate documen or this (i.e. VT-07-111 and VT-07-28 a.	endon Surveillance part of the tendon tation or are the VT-1C 39)? If not, I would like to
References:	. ,			•
Response Ass Response:	signed to	Don Dyksterhouse	Date Due to Inspec	ztor:
The visual exar examinations. See the Reque	minations The last t st #24, Nf	for the tendon surveillance wo tendon surveillances an RC SIT Question #18 folder	s are documented separately from ad the last two IWL examination rep r for these examination reports.	the IWL concrete ports have been supplied.
Misc Notes:			•	
Response By:	Rick Por	tmann		
Reviewed By:			Date Response Provid	ded: 11/9/2009
Status:	Closed	•	Date Clos	sed:

				0	3-Dec-09	9:05:23 AM	
Request Num	ber:	47					
Individual Contacted:		Dennis Herrin		Date Contacted:	11/3/2009		
Requestor/Ins	pector:	Anthony Masters		Category:	Informa	ition Request	
Request:	In continu	ing evaluation o	f the IWL inspecti	on and maintenance progr	am:		
	SP-182, F Program,, would like	Rev. 16 (Dated 5 Section 3.5.3.1 to review a sam	/22/09) Reactor E specifies require pple of those reco	Building Structural Integrity ments for calibration for all rds also.	Tendon Su measuring	rveillance devices. I	
References:			· · · · · · · · · · · · · · · · · · ·				
Response As	signed to:	Don Dyksterho	ouse	Date Due to Inspe	ector:		
Response:							
The tendon su tendon surveill examination re	rveillance r ances repo ports.	eports have the orts have been s	calibration record upplied. See the	ls for the tendon testing eq Request #24, NRC SIT Qເ	uipment. Thuestion #18	ne last two folder for these	
Misc Notes:							
Response By:	Rick Por	mann		annan mar ann an ann an ann ann ann ann ann ann			
Reviewed By:				Date Response Prov	ided:	11/9/2009	
Status:	Closed			Date Clo	osed:		
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Request Numl	ber:	48						
Individual Contacted:		Dennis Herrin		Date Contacted:	11/3/2009			
Requestor/Ins	pector:	Anthony Masters		Category:		Question		
Request:	In continu	ing evaluation of the IV	VL inspection a	and maintenance prog	gram:			
SP-182, Rev. 16 (Dated 5/22/09) Reactor Building Structural Integrity Tendon Surveillance Program, Section 3.6 specifies acceptance criteria. Section 3.6.2 states that "abnormal conditions determined as the result of a visual inspection of the exterior concrete surface of the containment shall be recorded and documented, and investigated by Engineering for possible degradation of the structure." Also, "Cracks found in concrete adjacent to the tendons (within 2 feet of the bearing plate) having widths greater than 0.010 inch shall be recorded and reported to Engineering for evaluation and resolution. Any crack widths greater than 0.050 inch shall be cause for investigation by Engineering to determine the cause and if there is any abnormal degradation of the structural integrity of the containment." Photographs VT-07-289-8 and VT-07-289-11, which are associated with VT-1C Report VT-07- 289, appear to show cracks within 2 feet of the bearing plate. Have these been documented and evaluated?								
References:	:				· ·			
Response As:	signed to:	Don Dyksterhouse	***************************************	Date Due to Inst	pector:			
Response:								
The SP-182 cr surveillances. recording and requirements. 256010 for eva Misc Notes:	iteria speci The report acceptance These par iluation.	fied applies to the and s discussed are from t e criteria may differ as ticular indications desc	horage and be he ASME Sect the performan cribed on R15 I	aring plate inspection ion XI IWL examination or requirements come WL Report VT-07-28	s performed ons perform e from sepa 9 were inclu	d for the tendon led. The lrate lided in NCR		
Response By:	Rick Por	tmann						
Reviewed By:	:	· · · · · · · · · · · · · · · · · · ·	· ······	Date Response Pro	vided:	11/9/2009		
Status:	Closed			Date C	losed:			
				. · ·				

				03-Dec-09	9:05:23 AM			
Request Numb	er:	49						
Individual Contacted:		Dennis Herrin	Date Contacted:	11/3/2	009			
Requestor/Inspector:		Anthony Masters	nthony Masters Category:		Jestion			
Request:	In continu	ing evaluation of the IWL ir	spection and maintenance pro	gram:				
SP-182, Rev. 16 (Dated 5/22/09) Reactor Building Structural Integrity Tendon Surveillance Program, Section 3.7.1 recommends equipment for implementation of this inspection and 3.7.1.12 lists "optical comparators with 0.005 inch accuracy for measuring crack widths in concrete." Is this being used? VT-07-111 and VT-07-289 do not have it listed in the inspection equipment area on the reports. These reports list a 6"scale and measuring tape. Is 0.005 inch accuracy (or the 0.010 inch as acceptance criteria section 3.6.2 states) possible with these?								
References:	•							
Response Ass Response:	igned to:	Don Dyksterhouse	Date Due to Ins	pector:				
The inspection are NDEP-0620 Tendon examin equipment utiliz surveillances ca the certification L:\Shared\2009 Portmann\IWL	reports re 0 and NAF nations (no zed for the an be four s have be 0 NRC SP - Tendon	ferenced were performed a P-02. The SP-182 surveilla of the IWL Examinations). T Tendon Examinations. Ar nd on pages 77-78 of the 6t een enclosed in this file. This ECIAL INSPECTION TEAM Surveillance History	s part of the IWL Examinations nce procedure referenced is us The accuracy stated comes from a example of the certification rea h surveillance report {WR 3416 s report can be found: 1 Q-A\WILLIAMS Q-A\Request	. The controllied in conjunct m the PSC Procord for one of 02_6th-Surv. 24, Q18 Resp	ng procedures ion with the ocedures and the past pdf}. Copies of onse Info-			
Misc Notes:								
Response By:	Rick Por	tmann			00000000000000000000000000000000000000			
Reviewed By:			Date Response Pr	ovided:	11/12/2009			
Status:	Open		Date (	Closed:				

				(	03-Dec-09	9:05:23 AM
Request Numl	ber:	50				
Individual Cor	ntacted:	Dennis Herrin		Date Contacted:	11/3	/2009
Requestor/Ins	pector:	Anthony Masters		Category:		Question
Request:	In continu	uing evaluation of the	IWL inspection an	d maintenance prog	ram:	
	SP-182, I Program, gauges, o Are the m	Rev. 16 (Dated 5/22/ Section 3.7.2.11 sta comparators, and all neasuring devices us	tes as an prerequision building tes as an prerequision other measuring during the calibrated per S	g Structural Integrity site to "verify that stre evices have been ca tep. 3.5.3.1?	librated pe	s, pressure r Step 3.5.3.1"
References:						
Response Ass Response:	signed to	Don Dyksterhouse		Date Due to Insp	ector:	
Measuring dev the past survei This report can L:\Shared\2009 Portmann\IWL	ices are c llances ca be found 9 NRC SP - Tendon	alibrated per Step 3.5 n be found on pages : ECIAL INSPECTION Surveillance History	5.3.1 of SP-182. A 58-82 in the 6th s TEAM Q-A\WILLI	n example of the cer urveillance report {W AMS Q-A\Request 2	tification re R 341602_ 4, Q18 Re	cords for one of 6th-Surv.pdf}. sponse Info-
Misc Notes:						
- -	1 			n siyanaya ang kang kang kang kang kang kang kang		
Response By:	Rick Po	tmann	•.			
Reviewed By:	:			Date Response Prov	vided:	11/12/2009
Status:	Open	·		Date Cl	losed:	

				0	3-Dec-09	9:05:23 AM		
Request Numb	er:	51			·			
Individual Con	tacted:	Dennis Herrin	D	ate Contacted:	11/3/2	2009		
Requestor/Ins	pector:	Anthony Masters		Category:	Q	uestion		
Request:	In continu	ing evaluation of the IWL in	spection and m	naintenance progra	am:			
	SP-182, Rev. 16 (Dated 5/22/09) Reactor Building Structural Integrity Tendon Surveillance Program, Enclosure 1 lists tendons in the 5th and 7th surveillance as 46H21, 46H28, etc; however, Enclosure 11 indicates that they are numbered as 64H21, 64H28, etc I believe these are in fact the same tendons, but should the numbers not be consistent?							
References:								
Response: These are the son the containing buttresses 6 and spreadsheet hat spreadsheet is Enclosed in the Spreadsheet: Misc Notes:	Response Assigned to:  Don Dyksterhouse  Date Due to Inspector:    Response:							
Résponse By:	Rick Por	mann						
Reviewed By:			Date	e Response Prov	ided:	11/9/2009		
Status:	Closed		-	Date Clo	osed:			

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						03-Dec-	09 9:0	5:23 AM
Request Numb	per:	52						
Individual Con	tacted:	Dennis	Herrin		Date Contacted	<b>d:</b> 1	11/3/2009	
Requestor/Ins	pector:	Anthony	Masters		Categor	y:	Questio	n
Request:	In continu	ng evalu	ation of the IV	WL inspection	and maintenance pr	rogram:		
SP-182, Rev. 16 (Dated 5/22/09) Reactor Building Structural Integrity Tendon Surveillance Program, Enclosure 5 is titled "Reduced Force Dome Tendons" and lists 18 tendons. What is meant by this term "reduced force"? When, how, and why did they become reduced? D 125 is shown on this list and is also listed as tested in the 3rd Surveillance. Please clarify.								
<u></u>								
Response Assigned to: Don Dyksterhouse Date Due to Inspector:								
Response:					и <sup>*</sup>			
Following the ir stressed to pre- lower than the off, and wire re During the rand or due to interfe substitute tende Although still cl anchorage, free A review of the for D125.	nvestigatio determined remaining moval test dom select erences ca on located assified as e water an 3rd Surve	n and ev d values, tendons ing. ion proce nnot be as close e exempt d corrosi illance te	aluation of the of which app (Approx. 646 ess if one of the safely tested as possible t the original e on protection andon lift-off d	e 1976 Dome or roximately even KIPS vs. 1635 nese exempt to per the IWL co o the exempt tendor medium exam ata shows tha	delamination event t ery 8th tendon was s is KIPS). These tend endons (or in genera de) happens to be s endon gets selected is still subject to the ination requirement t tendon D123 was t	he dome to stressed at lons are ex al a tendon selected fo d for exami e examinat e examinat s if possibl tested. No	endons wer a value mu kempt from that is inac r testing, th nation and ion tendon e. test data w	e re- ch, much tendon lift cessible en a testing. vas found
Misc Notes:							•	-
Response By:	Rick Por	mann			an a			
Reviewed By:					Date Response P	Provided:	11	1/18/2009
Status:	Open				Date	Closed:		]

				03-Dec-09 9:05:23 AM
Request Num	ber:	53		
Individual Cor	ntacted:	Dennis Herrin	Date Contacted:	11/4/2009
Requestor/Ins	pector:	Anthony Masters	Category:	Question
Request:	In continu	uing evaluation of the IWL in	nspection and maintenance prog	ıram:
	SP-182, I Program, before or	Rev. 16 (Dated 5/22/09) Re Enclosure 11 lists original after the repair?	actor Building Structural Integrit lift-off values. Are the values for	y Tendon Surveillance • the dome in this listing
References:	· · · · · · · · · · · · · · · · · · ·		an a anna - an an anna anna anna anna a	
Response Ass Response:	signed to	Don Dyksterhouse	Date Due to Insp	
The values liste	ed in SP-1	82, Enclosure 11 are follov	ving the 1976 delamination even	t repair of the Dome.
Misc Notes:				
Response By:	Rick Por	tmann		
Reviewed By:	,		Date Response Pro	vided: 11/9/2009
Status:	Closed		Date C	losed:

			03	3-Dec-09 9:05:23 AM
Request Num	ber:	54		
Individual Co	ntacted:	Dennis Herrin	Date Contacted:	11/4/2009
Requestor/Ins	spector:	Anthony Masters	Category:	Information Request
Request:	In continu	uing evaluation of the IWL	inspection and maintenance progra	im:
	I have re	eviewed some inspection r	eports for the IWL inspections for th	e shell, but would like to
References:				
Response As	signed to	: Don Dyksterhouse	Date Due to Inspec	ctor:
Response:				
The last two IV examination of	VL examin the dome	ation reports for 2001 (R1 e. See the Request #24, N	2 and 2007 (R15) have been suppli IRC SIT Question #18 folder for the	ed and include se examination reports.
Misc Notes:				
Response By:	Rick Po	rtmann		THE REAL PROPERTY OF
Reviewed By:			Date Response Provi	ded: 11/9/2009

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				03-Dec-0	9 9:05:23 AM			
Request Numb	Der:	55						
Individual Contacted:		Dennis Herrin	Date Contacted:	11	1/4/2009			
Requestor/Ins	pector:	Anthony Masters Category:			Question			
Request:	In continu	nuing evaluation of the IWL inspection and maintenance program:						
	VT-07-111 and VT-07-289 documents some cracks and spalls and measured depths. How were the depths obtained for the cracks and spalls?							
References:								
Response Assigned to: Don Dyksterhouse Date Due to Inspector:								
Response:								
lift (around the or man lift). Using the proce performed and considered are During the VT- characterized t characterized a and 6" scale. A fit. Technique u scale. Misc Notes:	equipmen edure and any areas as of distra 1C, previo o documen and record short leng used with t	t hatch), and a step ladder criteria provided in the En- of distress identified were ess not previously identifie usly existing areas of distra- nt changes to previous dat ed. In all cases, size and c oth of 3/32" bare wire weld he bare wire was to insert	(lower elevations not accessibl gineering letter as threshold for further evaluated during a VT-1 d, as well as changes to previou ess were compared with previou a recorded. Areas of distress no lepth were dimensioned and rec ing rod was used for tight spots into the opening, and measure	e by suspe recording, IC. The VT usly identif us data an ot previous corded with where the maximum	inded work platform the VT-3C was F-3C also ied areas of distress d further ly identified were n a tape measure 6" scale would not depth against the 6"			
			·					
Response By:	Rick Por	tmann						
Reviewed By:			Date Response Pr	ovided:	11/18/2009			
Status:	Open		Date	Closed:				

				03-Dec-09	9:05:23 AM
Request Num	oer:	56			
Individual Con	tacted:	Dennis Herrin	Date Contact	ed: 11/4/	/2009
Requestor/Ins	pector:	Anthony Masters	Catego	ory:	Question
Request:	In continu	uing evaluation of the IW	L inspection and maintenance	program:	
	VT-07-11 boxes (sl	1 and 289, Item #11 indi nown in photographs VT-	cates that spalls were due to s 07-289-6 and VT-07-289-15).	ome embedded What were thes	cables near se cables?
References:	;				
Response: It is believed th original Structu	at these c ral Integri	ables and boxes are aba ty Test in 1976. (stress &	andoned remnants from the tes & strain gages etc.)	sting equipment	utilized during the
Misc Notes:					
Response By:	Rick Po	rtmann			an an ann an ann ann ann ann ann ann an
Reviewed By:	· · · · · · · · · · · · · · · · · · ·		Date Response	Provided:	11/9/2009
Status:	Closed		Da	te Closed:	
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				. (	)3-Dec-09	9:05:	:23 AM
Request Num	ber:	57					
Individual Cor	ntacted:	Dennis Herrin		Date Contacted:	11/4/2009		
Requestor/Ins	pector:	Anthony Masters		Category:	Question		
Request:	In continu	ing evaluation of the IV	VL inspection a	nd maintenance prog	ram:		
	The name	es and dates on theVT- ns/reports done on the	1C and VT-3C same day by th	reports are identical. e same staff?	Are both		
References:							
water and a second s							
Response As	signed to	Don Dyksterhouse		Date Due to Insp	ector:		
Response:		· ·					
Yes, the VT ex closer VT-1 ex	aminers k amination	now that certain indicat and may elect to perfor	ions found durir rm both examin	ng a VT-3 examinatio ations in series since	n require ar they are alr	additior eady at	nal, the area.
Misc Notes:		· · · · · · · · · · · · · · · · · · ·		· .			
Response By:				an a			
Reviewed By:				Date Response Prov	vided:		1
Status:	Open			Date Cl	osed:		

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				03-Dec-	09 9:05:23 AM
Request Numb	ber:	58			
Individual Con	tacted:	Dennis Herrin	Date Con	tacted: 1	1/4/2009
Requestor/Ins	oector:	Anthony Masters	Cat	tegory:	Question
Request:	In continu	ing evaluation of the IWL in	spection and maintena	nce program:	
	FSAR, Se years after thereafter behavior Are signif	ection 5.2, Section 5.2.5.2.1. er the initial containment stru- r. A report of each inspection reported to the Commission icant deterioration or abnorr	1.h.5 states: 5. The sur ctural integrity test and will be recorded and s nal behaviors being rep	rveillance was p is performed ev significant deterio ported to the Cor	erformed 1, 3, and 5 very 5 years oration or abnormal mmission?
References:					
Response Ass	igned to:	Don Dyksterhouse	Date Due	to Inspector:	
Response:					
Yes - Significan 5.3.2 and 5.3.4 requirements.	nt deteriora ) and the l	ation or abnormal behaviors Improved Technical Specific	are being reported to t ations (5.7.2 Special R	he Commission eports) describe	SP-182 (Para's the reporting
Misc Notes:					
Response By:	Rick Por	tmann	nan kanan tanan kanan kanan kanan san kanan k	ann a chuir an	ייייייייייייייייייייייייייייייייייייי
Reviewed By:	 [		Date Respo	nse Provided:	11/12/2009
Status:	Open	· · ·	ά.	Date Closed:	

				03	3-Dec-09	9:05:23 AM
Request Num	ber:	59				
Individual Co	ntacted:	Dennis Herrin		Date Contacted:	11/4/20	)9
Requestor/Ins	spector:	Anthony Masters		Category:	Informatio	on Request
Request:	In continu	uing evaluation of th	e IWL inspection	and maintenance progra	am:	
;	I would li for inspe	ke to review SP-180 ctions of the dome i	) and understand epairs.	the basis surrounding th	ne use and dis	scontinuance
References:	:					
Response As	signed to	: Don Dyksterhous	5e	Date Due to Inspe	ctor:	
Response:						
A copy of SP- <sup>2</sup> document was developed and	180 for ins obtained implemen	pection of the dome from microfiche and nted prior to the dev	e was provided to d d is not available e velopment of the IV	George Thomas on Nov lectronically. Also note VL program.	ember 18, 20 e that the pro	09. The cedure was
Misc Notes:	1		· · ·			
Response By:	1	· · ·	· ·			
Reviewed By:			. ,	Date Response Prov	ided:	•
Ctature:						

					03-Dec-09	9:05:23 AM
Request Numb	er:	60				
Individual Con	tacted:	Dennis Herrin		Date Contacted:	11/4	/2009
Requestor/Ins	pector:	Louis Lake		Category:		Question
Request:	What are	the repair options being	g considered as	a fix to the CR3 con	tainment d	elamination issue?
References:			· · ·			• • • •
Response Ass	igned to:	Sammy Radford		Date Due to Insp	ector:	11/6/2009
Response:						
1. Remove the rebar ties. The delaminated do 2. The next op be determined a grouting the del some NDT to e problems identi size of some of	ere two o e delamina wall will b me sectio tion we co and ancho laminatior nsure we fied with t the crack	ptions that had being co ated concrete that is bet e reformed and replace n during construction an onsidered was to install or the delaminated section in using a cementitious g have filled all the voids he use of the grout with areas.	ween is between d with new con nd the method anchors into the on and solid se prout and epoxy between the two the potential o	en Buttress #3 and B crete. This was the m we will be using . le solid concrete port ection together. Then grout to bond the tw o layers. This option f the debris blocking	uttress #4 a nethod used ion of the w we will be ro layer.We was elimin flow paths	and install addition d to repair the rall on a spacing to pressuring will be using ated due to of the grout and
Misc Notes:						
				· -		***************************************
Response By:	Sammy	Radford	 			
Reviewed By:		· ·		Date Response Pro	vided:	11/18/2009
Status:	Open	-		Date C	losed:	
•				`		

				С	3-Dec-09	9:05	5:24 AM
Request Num	ber:	61					
Individual Cor	ntacted:	Dennis Herrin		Date Contacted:	11/4	/2009	)
Requestor/Ins	pector:	Louis Lake		Category:		Questior	<u>ו</u>
Request:	What pos following integrity?	st modification testing repair of the delamin	of the CR3 conta ated condition in	inment is being plann order to demonstrate s	ed to be po structural a	erformed and leak-	1 -tight
References:	•						·
Response As	signed to	: Sammy Radford		Date Due to Inspe	ector:	11/6/2	2009
Response:							
We are looking mod testing.	at the rea	quirements for post m	nod testing. At the	present time we plan	to use the	ILRT as	the post
Misc Notes:	·						
Doonoooo Ruu		Dadfard		ar Solatopace and a statistical and a statistic statistic statistical a	************************		
Response by.	Sammy	Raululu					
Reviewed By:				Date Response Prov	rided:	11	/18/2009
Status:	Open		·	Date CI	osed:		
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			0	3-Dec-09 9:05:24 AM
Request Numb	per:	62		
Individual Con	tacted:	Charles Williams	Date Contacted:	11/18/2009
Requestor/Ins	pector:	George Thomas	Category:	Information Request
Request:	Provide s	strain gage data and map.	· · · · · · · · · · · · · · · · · · ·	· · ·
References:				· · · · · · · · · · · · · · · · · · ·
Response Ass	signed to	: Paul Fagan	Date Due to Inspe	ctor: 11/18/2009
Response:				
Strain gage and SPECIAL INSP	d displace ECTION	ement data provided on 11/ TEAM Q-A\FAGAN Q-A\Re	18/09. Electronic copies available equest 62 - Worthington - Williams	on L:\Shared\2009 NRC
Misc Notes:			· · · · · · · · · · · · · · · · · · ·	
Response By:	Worthin	gton		
Reviewed By:	Charles	Williams	Date Response Prov	ided: 11/18/2009
Status:	Closed		Date Cic	osed:
		· · · · · · · · · · · · · · · · · · ·		· ·

		03-	Dec-09 9:05:24 AM
Request Number:	63		
Individual Contacted:	Garry Miller	Date Contacted:	12/2/2009
Requestor/Inspector:		Category:	
Request: Provide containr	survey data results for the nent and survey data resu	e dome [repeated survey surveilance t ults for external buttresses.	est ], internal diameter of
References:		· · · · · · · · ·	· · ·
Response Assigned to	o: Paul Fagan	Date Due to Inspec	tor:
Response:			
Misc Notes:			
Response By:			
Reviewed By:		Date Response Provid	led:
Status:		Date Clos	ed:
			v

		0	3-Dec-09 9:05:24 AM
Request Number:	64		
Individual Contacted:	Garry Miller	Date Contacted:	12/2/2009
Requestor/Inspector:		Category:	
Request: Provide e	valuation of crack identified	Lin AR 368389 [core number 54 b	pelow the equipment hatch].
References:		· · · · · · · · · · · · ·	
Response Assigned to:	Paul Fagan	Date Due to Inspe	ector:
Response:			
Misc Notes:		· · · ·	
Response By:			
Reviewed By:		Date Response Prov	ided:
Status:		Date Clo	osed:

		03-	Dec-09 9:05:24 AM
Request Number:	65		
Individual Contacted	Garry Miller	Date Contacted:	12/2/2009
Requestor/Inspector:		Category:	
Request: Provide contain	e credentials of MPR Associa ment structural analysis and	ates and CAE , specifically with rega I design for nuclear plants.	rd to concrete
References:	· · · ·		· · · · · · ·
Response Assigned	to: Don Dyksterhouse	Date Due to Inspec	tor:
Response:			
· · ·	· · ·		
Misc Notes:			
Response By:			
Reviewed By:		Date Response Provid	led:

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					03-Dec-09	9:05:24 AM
Request Num	ber:	66				
Individual Cor	ntacted:	Garry Miller		Date Contacted:	12/2/20	009
Requestor/Ins	pector:			Category:		
Request:	Please con repair optic construction detensioning the extent redistributi	nfirm that the condition a on analysis efforts, curre on sequence (initial tendo ing, concrete placement, of condition of the affect ion in the containment wa	ssessment, c ntly ongoing on detensioni repair, tendo ed areas, and all within the	lesign basis analysis, for CR3, account for ng, concrete removal n retensioning) loadiu d is properly consider opening and its adjac	root cause a the following: l, additional te ng and stiffne ed to accoun ent areas.	nalysis, and SGR endon ss, based on t for the stress
References:						· · · · · · · · · · · · · · · · · · ·
Response As: Response:	signed to:	Don Dyksterhouse	· · · · · · · · · · · · · · · · · · ·	Date Due to Insp	ector:	
Misc Notes:			,			· · · · · · · · · · · · · · · · · · ·
Response By:						
Reviewed By:	e e e la constantina e tata dorrer	· · · · · ·		Date Response Pro	vided:	· · · · · · · · · · · · · · · · · · ·
Status:				Date C	losed:	1

				03-Dec-09 9:05:24 AM
Request Num	ber:	67	,	
Individual Co	ntacted:	Garry Miller	Date Contact	ed: 12/2/2009
Requestor/Ins	spector:		Catego	ry:
Request:	Refer to S modeled Containm operating However included Explain a current de	Slide #59 of the 11/20 p for the Design Basis Ar nent Design Basis docu and accident condition , in your current FEA m as a structural load-car nd justify how the way esign basis?	ublic meeting presentation. This nalysis. Based on your current d ment 1/1, the liner serves as a le s, and not as a structural elemen nodel developed for the delamina rying member. the liner is modeled in the ANSY	s is with regard to how the liner is lesign basis in the FSAR and eak-tight membrane during nt resisting design basis loads. ation issue, the liner seems to be 'S model are consistent with your
	How will How will	the liner be evaluated a you evaluate the effects	gainst design basis acceptance on the liner during detensioning	criteria? g, repair, and retensioning?
References:		n na sena da a sena da a da ana da		
Response As Response:	signed to	Don Dyksterhouse	Date Due to	Inspector:
Misc Notes:			•	
Response By:	······			na kana kana kana kana kana kana kana k
Reviewed By:			Date Response	Provided:
Status:			Da	te Closed:

					03-Dec-0	)9	9:05:24 AM
Request Numb	ber:	68					
Individual Con	tacted:	Garry Miller		Date Contacted:	· 12	2/2/20	09
Requestor/Ins	pector:			Category:			
Request:	Refer to Sl original de	lide #75 of the 11/20 publ sign building elastic desig	lic meeting pr gn results."	resentation. Slide st	ates: "Ru	in con	parison to
	Explain ho combinatic in the FSA strains, dis liner and p evaluation	w you plan to evaluate yo ons against acceptance c R. How would you proce splacements or other app restressing tendons? Ho ?	our analysis r riteria in acco ess your analy licable design w is reinforco	esults for design ba ordance with the coc ysis results to perfor n basis acceptance ement being accoun	sis loads le of reco m code c criteria fo ted for in	and lo rd, i.e hecks r cond your	oad ., ACI 318-63, 5 for stresses, crete, rebar, design basis
	The slide of service or that needs modified c	only inidicates evaluation other load combinations i to be documented? How ontainment following repa	for controlling in the design w would your air of the dela	g factored load com basis with a differer calculation docume aminated condition?	binations at set of a nt the des	. Are ccept sign b	there not ance criteria asis of the
	How will st your appro Design Ba and restor	tresses in the concrete ar bach to performing the fin sis Analysis considering ation SGR construction o	nd rebar be d ite element a the various ir pening, the d	etermined from the nalysis and design on terim configurations lelaminated condition	ANSYS a checks in associat n and the	inalys suppo ed wit asso	is? Provide ort of the th the creation ciated repair?
References:							
Response Ass	signed to:	Don Dyksterhouse		Date Due to Ins	pector:		
Response:							
				· · · ·			
Misc Notes:							
Response By:	2						
Reviewed By:			l	Date Response Pro	vided:		
Status:		, , , , , , , , , , , , , , , , , , ,		Date C	losed:		

						03-Dec-0	9 9:05:24 AM			
Request Numb	ver:	69					·			
Individual Con	tacted:	Garry N	Ailler		Date Contacted:	12	2/2/2009			
Requestor/Ins	pector:	[			Category:					
Request: Refer to Slide #74 - "Planned Analysis Steps" of the 11/20 public meeting presentation. Footr (1) against "Delamination states "Analysis will consider time of delamination and specific conc properties."										
	Since the final root cause analysis results will not be known until later, do you plan on running two different cases with regard to timing of delamination at this time? Specifically, with regard to making a decision on the number of tendons that will be required to be detensioned prior to repair and retensioned following repair.									
	Regarding controlling analysis n deformed	the bul design nodel or configui	let that states: ' cases." As you ANSYS softwa ration of the pre	"SAVE path c u go through ire is capable evious step as	lependent model for si the planned analysis s of starting the next ar s the initial conditions	tarting point steps, exp nalysis ste for the ne	int to Run 5 blain how your op using the xt analysis step?			
	Are you pl implemen incorporat	anning t ting repa ed into	to use the same air of the delam your analysis?	e concrete mi inated area?	ix design as for the SG How are properties o	GR construction f the new	uction opening in concrete being			
References:										
Response As:	signed to:	Don D	yksterhouse		Date Due to Ins	pector:				
Response:										
Misc Notes:										
Response By:	<b></b>				nan an		1993/9993/9993/29996/29999/2014/9999/2014/9999/2014/9999/2014/9999/2014/9999/2014/9999/2014/9999/2014/9999/201			
Reviewed By:				·	Date Response Pro	ovided:				
Status: `					Date (	Closed:				

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						03-Dec-	-09	9:05:24 AM
Request Num	ber:	70			;			-
Individual Cor	ntacted:	Garry M	iller		Date Contacted:	1	2/2/20	09
Requestor/Ins	pector:				Category:	tegory:		
Request:	With refer Equipment above the there are detension hatch area refine you	ence to 1 t Hatch r EQ hatc also remaing/reten a, how do r model a	1/20 public n nodeling; and h area; slide oved vertical sioning scher you plan to a around the EC	neeting presen I Slide 34 - sh 35 shows hoop tendons that w me involves ten address it in yo Q hatch area.	tation, Slide 65 - show ows that the delamina o tendons that wrap ar yrap around EQ hatch ndon elements that inf our design basis mode	vs appro ted conc ound EC If your luence f P? Desc	ximatic ditions o Q hatch orces in cribe ar	on in extends to n. Further, n the EQ ny plans to
References:	:					. ,		
Response Ass Response:	signed to:	Don Dy	ksterhouse		Date Due to Ins	pector:		
•							•	
Misc Notes:								
Response By:					anna a an			
Reviewed By:			Ś.		Date Response Pro	vided:		
Status:					Date C	losed:		

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					03-Dec-0	9:09	5:24 AM
Request Num	ber:	71					
Individual Co	ntacted:	Garry Miller		Date Contacted:	12	2/2/2009	
Requestor/Ins	spector:			Category:			
Request:	Refer to s model.	lide 58 of the 11/20 pub	lic meeting pre	sentation - describe	es a 180 c	legree syr	nmetric
	Please co to 360 deg	nfirm whether, for your a grees for your runs or no	analysis, the ex ot.	plicitly developed 1	80 degree	e model is	extruded
	Please co represent	nfirm if there are any un ed in a symmetric model	symmetric con I but may affec	tainment features th t the response of th	nat may ne e affected	ot be adeo I area.	luately
References:	۰	)					
Response As	signed to:	Don Dyksterhouse		Date Due to Ins	pector:		
Response:			·. · .				-
Misc Notes:	······································						
	•						
Response By:				annan an a			
Reviewed By:		·		Date Response Pro	vided:		·
Status:				Date C	Closed:		
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						·.			03-D	ec-09	9:0	5:24 AM
Request Num	ber:	72										
Individual Cor	ntacted:	Garry M	iller				Date Co	ontacted	l:	12/2/2	2009	
Requestor/Ins	pector:				С	ategory	ory:					
Request:	Refer to S analysis s opening; a around th below the combinati	lide 74 (a teps are: and (iii) R e vicinity ring girde on.	and 76) o (i) Dead emove S of the SC er) for ea	of the 11/ Load + GR ope GR open Ich of the	/20 publ Tendon ning. P ing (bel e above	lic mee ns; (ii) F Provide tween l e config	ting pres Remove stress a Buttresse urations	Sentation Hoop + N nd defor es 3 & 4 fo rthe D	n. The f Vertical mation from at Dead +	irst thre Tendor plots fo pove the Prestre	ee plan ns in S or the a e EQ h ss load	nned GR area in and latch to d
References:	1	No 1001-100-000 - 100-000						······································				
Response As Response:	signed to:	Don Dy	ksterhou	ISE			Date D	ue to Ins	specto	r: [		
Misc Notes:					•							
Response By:									******			
Reviewed By:						Da	ate Resp	onse Pi	rovideo	1:		
Status:	· .							Date	Closed	1:		

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• • •	-				03-Dec-09	9:05:24 AM
Request Num	ber:	73		· · ·		
Individual Cor	ntacted:	Garry Miller		Date Contacted:	12/2	2/2009
Requestor/Ins	spector:			Category:		
Request:	Refer to S	Slide 81 of the 11/20 public	c meeting pre	sentation with rega	rd to Post F	Repair Testing.
	Provide th accordanc containme Provide th	ne name and credentials /c ce with ASME Section XI, ent structure related to the ne date the individual was	qualifications Subsection IV SGR project designated a	of the designated F WL, for repair/replac and the Containme s the Responsible I	Responsible cement of t ent Delamin Engineer.	Engineer, in he CR3 ation project.
	Second b pressuriza instrumer analysis." the post-r specifical correspor	ullet on the slide states: "C ation and following depres nation based on the final re For the major containment epair system pressure tes ly provide verification of the nding structural behavior a	Concrete extension." Tepair that is in ent repair/replating would more than containment as predicted b	erior will be visually Third bullet states: " mplemented, and a acement activity inv eet the requirement nt structural integrity by the design basis a	examined p Evaluating s driven by: olved at CF s of IWL-50 v under acc analysis.	prior to other additional root cause R3, describe how 000, and ident pressure and
References:						
Response As Response:	signed to:	Charles Williams		Date Due to Ins	pector:	
Misc Notes:					•	
Response By:						
Reviewed By:		· · · · · · · · · · · · · · · · · · ·	r	Date Response Pro	ovided:	
Status:				Date (	Closed:	
		•				
				• •		
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					03-Dec-09	9:05:24 AM
Request Num	ber:	74				
Individual Cor	ntacted:	Garry Miller		Date Contacted:	12/2/2	2009
Requestor/Ins	pector:		•	Category:		
Request:	Refer to p	photos on Slide 14 of th	ne 11/20 public i	meeting presentation	•	
	Explain th	ne gap between the line	er and the conc	ete? Have you verifi	ed how far it	goes?
· ·	It is our u and conc was dispo existed p concrete. evaluatio current d	inderstanding that there rete at several location ositioned as construction rior to original concrete . What was the accept n for accepting the bulk esign basis.	e is bulging in th is all around bet on/fabrication er pour, explain h ance criteria use ging as-is and e	e containment liner w ween approximate El rors that existed prior ow there is voiding be ed to evaluate this? F xplain how this evalua	/ith air voidin _ 180 and 22 <sup>-</sup> to concrete etween the li <sup>2</sup> rovide the e ation is cons	ig between liner 25 ft; and that it pour. If this iner and engineering istent with CR3
References:	, ;			· · · · · · · · · · · · · · · · · · ·		
Response As:	signed to	: Paul Fagan		Date Due to Insp	ector:	
Response:						
		· ·				
Misc Notes:	•	· · · · · · · · · · · · · · · · · · ·				
Response By:	· ·	• • • •				99 Mar 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -
Reviewed By:				Date Response Pro	vided:	
Status:				Date C	losed:	

				C	3-Dec-09	9:05:24 AM
Request Num	nber:	75				
Individual Co	ntacted:	Garry Miller		Date Contacted:	12/2/2	009
Requestor/In	spector:			Category:		
Request:	Describe cause(s)?	your plans [PII] for finite	e element simu	lation of the delaminat	ion to confir	m the root
References:				· · ·		
Response As	signed to:	Charles Willaims		Date Due to Inspe	ector:	
Response:						
Misc Notes:	······································		No			
Response By	ж	and a second			988 HILL III. CHI HILL MILL MILL MILL MILL MILL MILL MI	
Reviewed By:		· ·		Date Response Prov	vided:	
Status:				Date CI	osed:	

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				(	03-Dec-09	9:05:24 AM
Request Num	ber:	76				
Individual Co	ntacted:	Garry Miller		Date Contacted:	12/2/2	009
Requestor/Ins	spector:			Category:		
Request:	Refer to th Pouring." tendon sh What was	the Refuting evidence fo There are photographs eathing are all not cent the design location of t	r failure mode s of the SGR o ered on a verti he tendon she	2.8 "Inadequate Supp pening area that show cal line. athing?	oort of Tendo v that the as-	ns during found hoop
	Was the i installatior	nstallation of the tendo specification must hav	n sheathing ou /e had a tolera	t-of-tolerance in the a nce for tendon sheath	is-found conc ning installation	lition (Tendon on)?
References:	1					
natur de medicantes en andre anticipation de la companya de la companya de la companya de la companya de la com					101011111.101071010.001710.0010110110010001101	
Response As	signed to:	Charles Williams		Date Due to Insp	ector:	
Response:						
Misc Notes:	· · · ·					
Response By:				n an	# 1.8012000.0001.0012.0012.0012.0012.001	00000000000000000000000000000000000000
Reviewed By:	3			Date Response Prov	vided:	
Status:			·	Date CI	losed:	

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				03	-Dec-09	9:05:24 AM
Request Num	ber:	77				
Individual Co	ntacted:	Garry Miller	Da	te Contacted:	12/2/2	009
Requestor/Ins	spector:			Category:		
Request:	Confirm v included	whether "the lack of bon as a possible failure mo	d between the smoo de in the root cause	oth tendon sheathi investigation.	ng and the	concrete" is
References:	· · · ·			. ,	· · ·	
Response As	signed to	: Charles Williams	D	ate Due to Inspec	tor:	
Response:			- ·			
		- -				
			Na	N. A. A. M.	11.00.0000, analas ana ang ang ang ang ang ang ang ang ang	
Misc Notes:						
Response By:				58.000/9559.000/07.200/0558600/0510/07/07/07/07/07/07/07/07/07/07/07/07/07	สกรมเหตุรายร์และระทรา หรุงราว	
Reviewed By:			Date	Response Provi	ded:	
Status:			······	Date Clo	sed:	
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				03-Dec-09	9:05:24 AM
Request Num	ber:	78			
Individual Cor	ntacted:	Garry Miller	Date Contacted:	12/	2/2009
Requestor/Ins	pector:		Category:		
Request:	Considerir constructio extended to to confirm performed address/re spot or de	ng the delamination and subsequent on, what non-destructive examination to the dome during the current invest that the 1976 dome repairs remaind on the dome. Also, explain how the solve the concerns raised in the pro- pressed area on the dome.	t repair of the CR3 dom on, core boring and/or stigation of the containr d good? Provide result e results for these exar evious Requests #1 an	ne during o other appr nent wall o s of the ex minations d #40 with	original opriate testing was delamination issue aminations would help regard to the low
References:	2	<i>.</i> .			
Response As Response:	signed to:	Paul Fagan	Date Due to Insp	ector:	
Misc Notes:					
Response By:		· · · · · · · · · · · · · · · · · · ·			
Reviewed By:			Date Response Pro	vided:	
Status:			Date C	losed:	

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Request Numl	per:	79									
Individual Cor	ntacted:	Garry Mill	er			Date Cont	tacted:	1	2/2/200	9	
Requestor/Ins	pector:			,		Cat	egory:				
Request:	Explain ho testing, co comprehe containme	ow your coure bore sa nsive and ent.	ndition as mpling, b accurate	sessmer oroscopi determin	nt perform c examina ation of th	ned in accord ation etc.) pro ne extent of c	ance wi ovides a delamina	th Proce a reasona ated con	dure P able ass dition o	T-407T (I surance of f the	NDE of a
References:	i										
Response Ass	signed to:	Paul Fag	an			Date Due	e to insp	pector:	,		
Response:											
											• .
Misc Notes:		-									
Response By:		<b>.</b>		······································				2)////////////////////////////////////			
Reviewed By:	:		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			Date Respo	nse Pro	vided:			
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Request Num	ber:	80				
Individual Co	ntacted:	Garry Miller		Date Contacted:	12/2/2	009
Requestor/In:	spector:		1	Category:		
Request:	Provide in examinat sent. Ho labs? Ho examinat	nformation of the ion for the conta w did you detern w did you establ ion?	e total number of inment delamina nine/ensure cons lish that a reaso	core samples that were s tion issue. Indicate the la sistency of the examinatio nable number os samples	ent for petrogr bs to which ea 'n and results t were sent for	aphic ach sample was between the petrographic
References:						
Response As Response:	signed to	Charles Willia		Date Due to Ins	pector:	
Misc Notes:	· · · · · · · · · · · · · · · · · · ·					
Response By:				<b>1977 (BARK) MARKAN MARKAN KAN</b> ANG MARKAN KANA KANA KANA KANA KANA KANA KANA		
Reviewed By:				Date Response Pr	ovided:	
Status:				Date	Closed:	1

						03-Dec	-09 9:0	5:24 AM
Request Num	ber:	81						
Individual Co	ntacted:	Garry M	Miller		Date Contacted	1:	12/2/2009	
Requestor/Ins	pector:	Categ				/:		
Request:	Accordin be perfor is no disc observati results a	g to Mac med on s cussion o ons were nd where	Tec petrog sample 21 f how it wa e reported. e is it docu	graphic report da 1270A (Core #2) /as used. Also, if J. What examina umented?	ated November 11, 200 which was used as a c t does not appear that tions were performed	9, limited control sar any result on this sa	observatio nple. How s from thes mple, what	ns were to ever, there e were the
References:								
Response As Response:	signed to	: Charle	es Williams	15	Date Due to In	spector:		······
Misc Notes:	······································							
Response By:	······································							
Reviewed By:				· · · · · · · · · · · · · · · · · · ·	Date Response P	rovided:		
Status:					Date	Closed:		

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Request Number:       82         Individual Contacted:       Garry Miller       Date Contacted:       12/2/2009         Requestor/Inspector:       Category:					0	3-Dec-09	9:05	:24 AM	
Individual Contacted:       Garry Miller       Date Contacted:       12/2/2009         Requestor/Inspector:       Category:	Request Num	ber:	82						
Requestor/Inspector:       Category:         Request:       According to MacTec petrographic report dated November 11, 2009 from MacTec, one-half or sample 21270 (Core #2) was sent to CTL for petrographic examination. In the CTL report date November 2, 2009 there does not appear to be any reference to this sample. Were petrograph examinations performed on this sample, and if so, what are the results and where is it documented?         References:	Individual Contacted:		Garry Miller		Date Contacted:		12/2/2009		
Request:       According to MacTec petrographic report dated November 11, 2009 from MacTec, one-half o         sample 21270 (Core #2) was sent to CTL for petrographic examination. In the CTL report dated November 2, 2009 there does not appear to be any reference to this sample. Were petrographic examinations performed on this sample, and if so, what are the results and where is it documented?         References:	Requestor/Ins	spector:			Category:				
References:         Response Assigned to:       Charles Williams         Date Due to Inspector:         Response:         Misc Notes:         Response By:         Reviewed By:         Date Response Provided:	Request:	According sample 2 Novembe examinat documen	g to MacTec petrogra 1270 (Core #2) was s er 2, 2009 there does ions performed on thi ited?	phic report dated sent to CTL for pe not appear to be is sample, and if s	November 11, 2009 fr trographic examination any reference to this s so, what are the results	om MacTeo n. In the C ample. We s and where	>, one-h ΓL repoi ere petro e is it	alf of rt dated ographic	
Response Assigned to:       Charles Williams       Date Due to Inspector:         Response:	References:				·				
Misc Notes:  Response By: Reviewed By: Date Response Provided:	Response As Response:	signed to	: Charles Williams	Солитичность на	Date Due to Inspe	ctor:			
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	Reviewed By:	-			Date Response Prov	ided:			
Status: Date Closed:	Status:	•			Date Clo	sed:	`		

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Request Numb	er:	83					
Individual Cont	acted:	Garry Mille	۲		Date Contacted:	12/2/2	2009
Requestor/Insp	ector:				Category:		
Request: [ t	Describe he areas propagate	what confirn that did not ed any furthe	natory NDE w show any del er due to addit	ould be perfo lamination in tional detens	ormed, after detension order to verify that t ioning.	oning of addit he delaminati	ional tendons, in on has not
References:					·······		
Response Assi	igned to:	Paul Faga	IN		Date Due to Ins	pector:	
Response:				X			
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Misc Notes:							<u>.</u>
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