

NRC QUESTIONS (ALL QUESTIONS) - BY QUESTION NUMBER

13-Feb-04

QUESTION #	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
1	1/7/2004	Documentation	Guey	No	Closed

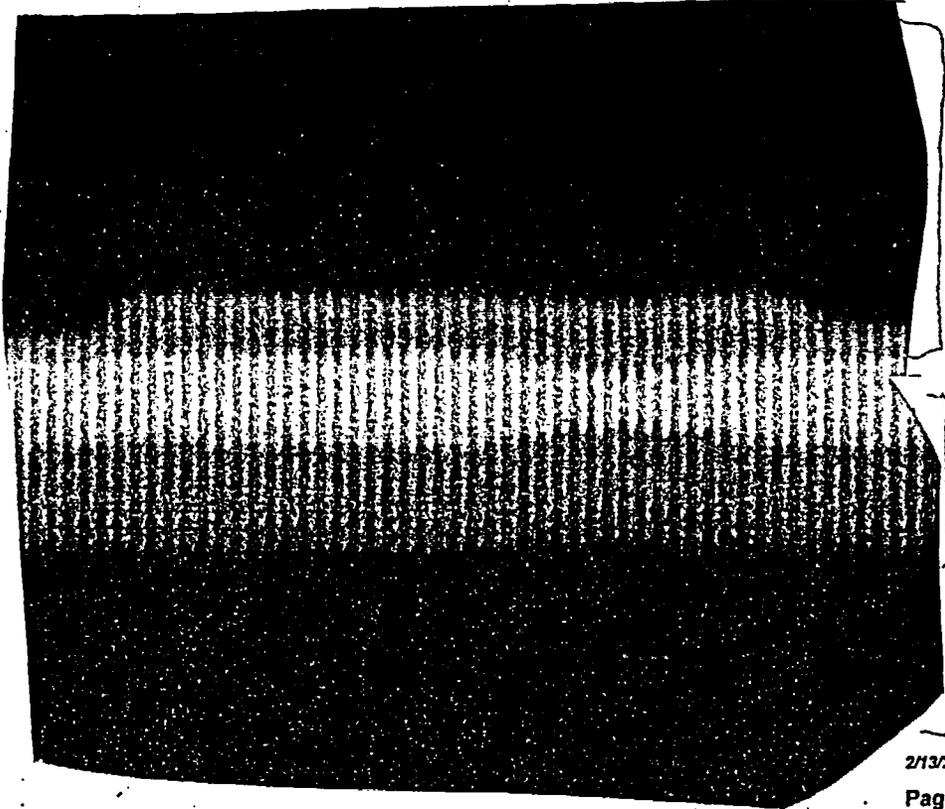
FILLION

NRC REQUEST OR CONCERN

What contributes to the risk of rod control (fire zone 61 or 63) area? Ignition source or fire hazard in this fire zone is low. What equipment is assumed to fail due to fire in the zone?

UTILITY RESPONSE

Zone 63, Area R: Reactor Control Rod Equipment Room, Unit 3 (2.7E-6/year)
 Zone 61, Area T: Reactor Control Rod Equipment Room, Unit 4 (2.7E-6/year)



Information in this record was deleted
 in accordance with the Freedom of Information
 Act, exemptions 4
 FOIA-2004-277

00-3

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INSPECTOR					
				<p>During power operation, only one of three charging pumps is normally running, therefore all charging pumps would not be affected by the suction isolation. Again, the manual actions list directs the operator to reestablish suction flow to the charging pumps (the operator is also directed to trip one of the charging pumps, "preserving" it for operation when the suction is restored).</p>	
				<p>The analysis associated with these zones is conservative since it postulates an electrical fire that involves both vital and non-vital sides of the B MCC. The most likely outcome of a low voltage electrical fire in low voltage equipment such as exists in these zones is the failure of the individual MCC cubicle or, at most, tripping of the MCC's feeder. Spurious operation of multiple equipment is postulated. In addition, the fire is assumed to propagate to a cable located above the MCC cubicle. As mentioned earlier, EPRI is pursuing development of methods to better characterizing the energetics of electrical cabinet fires. These zones are not considered to be a significant fire hazard.</p>	
2	1/7/2004	Info Request	Guey	No	Closed
ROGERS				<p><u>NRC REQUEST OR CONCERN</u> Ignition Source Data Sheet for the top 50 risk significant fire zones.</p> <p><u>UTILITY RESPONSE</u> Electronic version of PTN2004NRCISDS is included in documentation folder #4.</p>	

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3 ROGERS	1/7/2004	Question	Guey	No <u>NRC REQUEST OR CONCERN</u> Is there a risk analysis on the Fire Zone 45 or 55 for the Charging Pump Room? <u>UTILITY RESPONSE</u> Hard copy provided. Electronic versions provided in documentation folder #34.	Closed
4 O'DONOHUE	1/8/2004	Question	Thaker	No <u>NRC REQUEST OR CONCERN</u> On the Alternate Shutdown Panel are the position indicators for A-Train components (e.g.. PORV and Lock Valve) powered by a B-Channel power source? <u>UTILITY RESPONSE</u> Indicating lights for Train A components provided at the Alternate Shutdown Panel (ASP) are powered from the protected Train.B power supply: e.g.. SI Pump 4A, CS Pump 4A, PCV 456, Mov 536. Reference EWD are attached for ready reference. Reference: 5614-E-25 Sh. 95C Rev.1 and Sh. 95C1 Rev. 1	Closed
5 O'DONOHUE	1/8/2004	Info Request	M. George	No <u>NRC REQUEST OR CONCERN</u> What is the annunciator response procedure number for the Control Room fire alarm panel? <u>UTILITY RESPONSE</u> 0-ONOP-016.8 hard copy provided.	Closed

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6 WISEMAN	1/8/2004	Documentation	Dunstan	No <u>NRC REQUEST OR CONCERN</u> For Unit 3 Hydrogen Seal Oil unit, indicate quantity/type of oil, curb dimensions, does curb meet NFPA 30 with respect to 100% volume? Provide similar information for the main and startup transformers. <u>UTILITY RESPONSE</u> Main Transformer: 23,300 gal S/U Transformer: 9909 gal (Calc PTN-BFSC-00-2002 Rev.0) Hydrogen Seal Oil Vent: 846 gal (~74 sq. ft., overflow) Lube Oil Reservoir: 13,875 gal (overflow) Aux Transformer: 4978 gal Drawings 5610-C-377 Sh. 1 Rev. 9 & 5610-C-375 Sh. 1 Rev. 7. NFPA 30 Compliance Report (pages 10, 11,12-18) shows no deviation; however, per UFSAR Appendix 9.6A Section 2.4.D.2(d) and Table 9.6A-12, NFPA 30 is not a design basis code of record. However, NFPA compliance issues are being addressed via CR 04-0369.	Closed
7 WISEMAN	1/8/2004	Documentation	Zyne	No <u>NRC REQUEST OR CONCERN</u> What is the material type of Hydrazine? <u>UTILITY RESPONSE</u> Hydrazine, N2 H4, is used at PTN at a 35% concentration. On the Secondary side, it is used as a corrosion inhibitor. Hydrazine is used on the Primary side as a de-oxygenator on Start-up. Material Safety Data Sheet for Hydrazine 35 Corrosion Inhibitor is attached.	Closed
8 WISEMAN	1/8/2004	Info Request	Pineda	No <u>NRC REQUEST OR CONCERN</u> Type of T-Lag at PB5475 (protected raceway between U4 Main & U4 S/U transformers). <u>UTILITY RESPONSE</u> T-Lag 330-1 material per SPEC MN-3.21, para 7.1.1.3 and PCM 97-052 Rev. 1 Page 14 (hard copy excerpts provided).	Closed
9 FILLION	1/8/2004	Info Request	Thaker	No <u>NRC REQUEST OR CONCERN</u> Provide copies of the main single line diagrams for the AC and DC systems. <u>UTILITY RESPONSE</u> The following drawings are provided: 5610-E-1, Sh. 1 [Rev 33], Sh. 2 [Rev 8], Sh. 3 [Rev 9], 5610-T-E-1591 Sh. 1 [Rev 57], 5610-T-E-1592 Sh. 1 [Rev 39].	Closed

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INSPECTOR					
10 FILLION	1/7/2004	Question	Tucker	No <u>NRC REQUEST OR CONCERN</u> Pre-Fire Plan (PFP) are keyed to fire zones. For a fire in a specified fire zone how would operations treat PFP for an adjacent fire zone within the same indoor fire area. <u>UTILITY RESPONSE</u> O-ONOP-016 Pre-Fire Plans & Manual Actions are indeed listed by zone. Procedurally we are only driven to take the manual actions for the affected zone. There is no procedural requirement to conspire taking manual actions for adjacent fire zones. However, this may certainly be done at the discretion of the NPS/EC depending on the situation. There are examples where other fire zones are mentioned within a given pre-fire plan. (see zones 31 & 32)	Closed
11 FILLION	1/8/2004	Info Request	Thaker	No <u>NRC REQUEST OR CONCERN</u> Provide marked-up P&ID drawings identifying credited flowpaths for fire safe shutdown for the CCW and DVDS Systems. <u>UTILITY RESPONSE</u> The following P&IDs have been marked up, (color coded) and provided to the NRC. The "required" flow paths are credited, portions of which are ok to have. The "not required" paths are either not credited but allowed (e.g. RCP bearing) or not credited and prevented. (e.g. CCW to ECC.) Drawings Enclosed: 5613-M-3047 Sh. 1 Rev. 17 5613-M-3047 Sh. 2 Rev. 38 5613-M-3047 Sh. 3 Rev. 20 5613-M-3030 Sh. 1 Rev. 19 5613-M-3030 Sh. 2 Rev. 9 5613-M-3030 Sh. 3 Rev. 13 5613-M-3030 Sh. 4 Rev. 22 5613-M-3030 Sh. 5 Rev. 16.	Closed
12 WISEMAN	1/8/2004	Documentation	Busch	No <u>NRC REQUEST OR CONCERN</u> Provide Smoking Policy <u>UTILITY RESPONSE</u> Map of designated areas supplied per PTN Information Bulletin 03-26 dated July 21, 2003.	Closed

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13	WISEMAN	1/8/2004	Documentation	Busch	No <u>NRC REQUEST OR CONCERN</u> Provide List of CRs from 2001, 2002, 2003 that contain, in the description, the following words: fire, smoke, sparks, arcing, and equipment overheating. <u>UTILITY RESPONSE</u> List supplied from Lotus Notes database search results.	Closed
14	WISEMAN	1/8/2004	Documentation	Busch	No <u>NRC REQUEST OR CONCERN</u> Provide List of all TCPs for Fire Zones 063, 067, 081, & 106 for 2001, 2002, 2003. <u>UTILITY RESPONSE</u> List supplied. For these areas, a total of four (4) permits were issued and were for Fire Zone 81 only since 01/01/01.	Closed
15	WISEMAN	1/8/2004	Info Request	Busch	No <u>NRC REQUEST OR CONCERN</u> Provide list of contiguous fire zones to Fire Zone 063, e.g. bottom, top, North, South, East, West. <u>UTILITY RESPONSE</u> Fire Zones 062, 064, 065, 079, 079A, 084, 098 are contiguous with 063.	Closed
16	WISEMAN	1/8/2004	Info Request	Busch	No <u>NRC REQUEST OR CONCERN</u> Provide list of contiguous fire zones to Fire Zone 067, e.g. bottom, top, North, South, East, West. <u>UTILITY RESPONSE</u> Fire Zones 068, 079, 081, 082, 091, 093, 094, 105 & 117 are contiguous with 067.	Closed
17	WISEMAN	1/8/2004	Info Request	Busch	No <u>NRC REQUEST OR CONCERN</u> Provide List of Penetrations: West wall of FZ 067 North wall of FZ 067 West wall of FZ 063 North wall of FZ 063 <u>UTILITY RESPONSE</u> 067 west wall - 067W-E001 (E1 type seal). 067 north wall - 067N-E003 (E1 type seal), 067N-E011 (E1 type seal), 067N-E013 (E1 type seal). 063 west wall - 067W-E001 (E1 type seal). 063 north wall - no seals.	Closed

QUESTION # INSPECTOR	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
18 WISEMAN	1/8/2004	Documentation	Delgado/Pineda	No <u>NRC REQUEST OR CONCERN</u> Provide documentation on removal of requirement for Structural Steel Fireproofing from barrier between FZ 067 & FZ 068. <u>UTILITY RESPONSE</u> The removal of structural steel fireproofing requirement in Fire Zones 067 and 068 is based on evaluation performed in Calculation M12-202-06, Appendix E (see attached pages). Additional information available in Section 108 of the 1999 self-assessment.	Closed
19 WISEMAN	1/8/2004	Info Request	Dunstan	No <u>NRC REQUEST OR CONCERN</u> Provide dimensions for FZ 063, 067 & 106. <u>UTILITY RESPONSE</u> Estimated dimensions from drawings: 3B Rod Control Equipment Room (5610-A-1) 41' 4" x 13' x 11' high Control Room (5610-A-3) 71' x 50' 6" x 14' high (8' drop ceiling) 4B Switchgear (5610-C-114) 72' 11" x 18' x 23' high	Closed
20 WISEMAN	1/8/2004	Documentation	Dunstan	No <u>NRC REQUEST OR CONCERN</u> Provide detector placement analysis for FZ 063, 067 & 106. <u>UTILITY RESPONSE</u> PTN-FPER-01-008, Revision 0 included in Folder #16.	Closed
21 WISEMAN	1/8/2004	Documentation	Busch	No <u>NRC REQUEST OR CONCERN</u> Provide response to OE 16761. <u>UTILITY RESPONSE</u> Hard copy provided.	Closed
22 WISEMAN	1/8/2004	Documentation	Busch	No <u>NRC REQUEST OR CONCERN</u> Provide resolutions to CRs listed in last audit (01-01) (see hard copy) <u>UTILITY RESPONSE</u> CR's 01- 0230, 0293, 0300, 0310, 0318, 0319, 0320, 0326 & 0333 provided.	Closed
23 WISEMAN	1/8/2004	Question	Busch	No <u>NRC REQUEST OR CONCERN</u> Is leaching at 4-LAT-70 acceptable? <u>UTILITY RESPONSE</u> Raceway fire protection (Thermolag) is not impaired. Topcoat is degraded. WO 33001305 provided.	Closed

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24 WISEMAN	1/8/2004	Info Request	Reed	No <u>NRC REQUEST OR CONCERN</u> Provide Licensing Basis on separate CD-ROM. <u>UTILITY RESPONSE</u> Documentation included in Folder #28.	Closed
25 FILLION	1/8/2004	Info Request	Thaker	No <u>NRC REQUEST OR CONCERN</u> Provide EWD for the following components: LCV-3-115B, LCV-3-115C, MOV-3-350, CV-3-303B; MOV-3-716B, MOV-3-626, MOV-3-730. <u>UTILITY RESPONSE</u> Following drawings are provided: 5613-E-25, Sh 27C [Rev 2], Sh 32F [Rev 4], Sh 32H [Rev 5], Sh 32H1 [Rev 2], Sh 33A [Rev 2], Sh 33A1 [Rev 1], Sh 34A [Rev 6], Sh 34A1 [Rev 1], Sh 65B [Rev 2], Sh 65B1 [Rev 0], Sh 67B [Rev 2], 5610-M-430-203 Sh 2 [Rev 0], 5610-M-401C-96 Sh 114 [Rev 4], Sh 115 [Rev 5]. Also included are pages 9 - 16 and 35 - 44 of CR 03-1330-1 that provides CV-3-303B cable routes and corrections to ECL [Drawing 5610-E-2000] for some of the valves listed above.	Closed
26 WISEMAN	1/8/2004	Info Request	Dunstan	No <u>NRC REQUEST OR CONCERN</u> Is moisture barrier (foam) on pipes in Fire Zones 067 & 068 included in the FHA? Who is manufacturer? What are characteristics? (Section 4.0) <u>UTILITY RESPONSE</u> Addressed via CR 01-0310 and PTN-FPER-01-007 Revision 0.	Closed
27 WISEMAN	1/8/2004	Documentation	Busch	No <u>NRC REQUEST OR CONCERN</u> Provide record of last 50 Fire Drills with response times. <u>UTILITY RESPONSE</u> Provided hard copy list.	Closed
28 WISEMAN	1/8/2004	Info Request	Busch	No <u>NRC REQUEST OR CONCERN</u> Provide list of contiguous Fire Zones to Fire Zone 106. i.e.; bottom, top, north, south, east, west. <u>UTILITY RESPONSE</u> Fire Zones (outdoors) 106R, 118, 079, 084, 064 and (indoors) 097, 098, 107, 108A, 108B, 109, 110, 132 are contiguous with 106.	Closed

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29 WISEMAN	1/9/2004	Documentation	Thaker	No	Closed
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NRC REQUEST OR CONCERN

Provide analysis/evaluation that ensures availability of the communication system during a fire. This information is required during the inspection weeks.

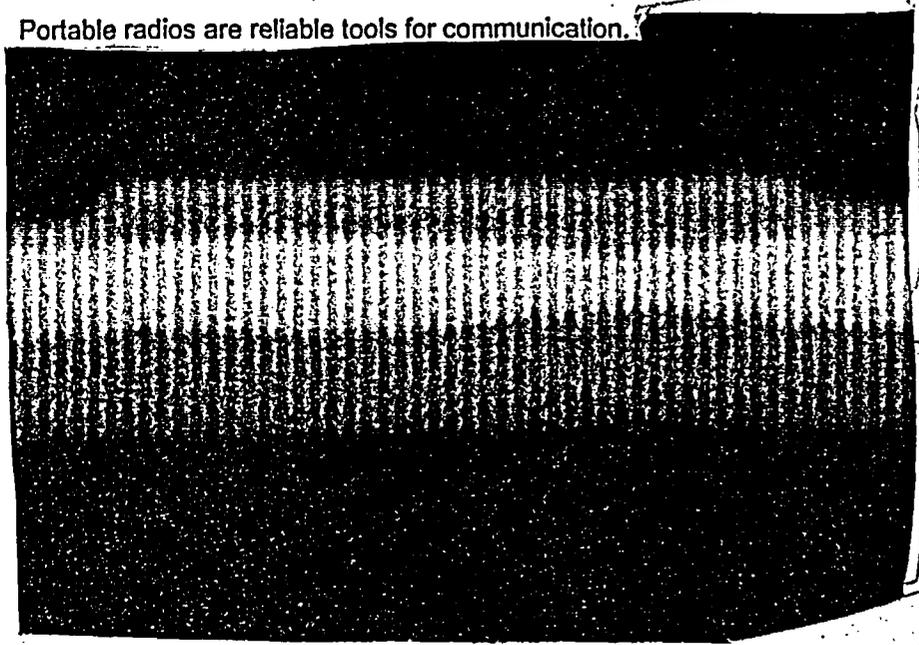
UTILITY RESPONSE

There are two major systems used for onsite communication: The plant public address [PA] system and the portable radio system. Both can be used for communication following a fire event in any plant fire area. A modification to the PA system was implemented [PCM 85-015] to assure availability of this system from the alternate shutdown panels, used following control room evacuation due to a fire. This system can be isolated from the alternate shutdown fire areas/zones and is powered from a dedicated power source that is assured available during the fire event.

For other plant fire areas, communication will be available through the PA or portable radio system.

The system is powered from a reliable power source and the PA system will be used if available.

Portable radios are reliable tools for communication.



E+Y

E+Y

E+Y

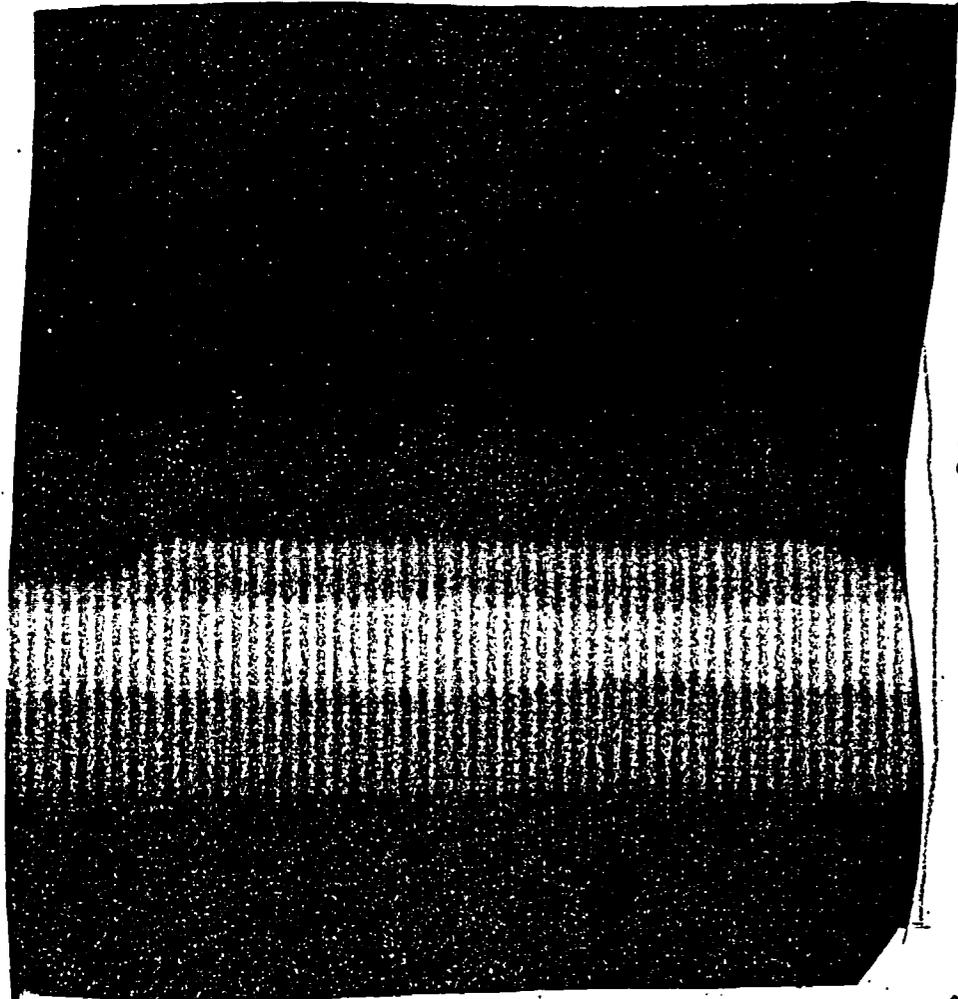
QUESTION #	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
30 PAYNE	1/7/2004	Info Request	Delgado	No	Closed
				<u>NRC REQUEST OR CONCERN</u>	
				<p>During walkdown to the 4kv Switchgear rooms, the following questions were asked for which it was stated that information would be provided:</p>	
				<ol style="list-style-type: none"> 1. There are several light-green painted pipelines at the southwest ceiling of 4B switchgear room. What is the purpose of these pipelines? 2. There is a 6" x 8" hollow horizontal beam installed between Column lines C29.5 & E29.5 in the 4A Switchgear room. What is purpose of this beam? Does it form part of the structural support? 	
				<u>UTILITY RESPONSE</u>	
				<p>Q1 Response:</p>	
				<p>These pipes are associated with Circulating Water System Condenser Water Box Priming system and connected to the vacuum tanks on the operating deck of turbine building. These pipes do not carry any liquid or gas.</p>	
				<p>Q2. Response:</p>	
				<p>The subject beam is structural tube steel TS 8 X 6 X 1/2 and is shown on drawing 5610-C-1354. The beam was not part of the original plant design. It was installed per PC/M 83-050 to provide additional lateral restrain to block walls T-18-5B and T-18-6B during a seismic event (IE Bulletin 80-11). Review of Bechtel calculations C-133-31 and C-133-32 shows that the beam interaction ratio is 0.52. Therefore, the beam will be loaded to 52% of its capacity under worst loading condition. The subject block walls and beam are located in fire zones 67 and 68. Review of Drawing 5610-A-61 shows that these fire zones do not require structural steel fireproofing.</p>	



Ext 4

QUESTION #	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
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31 FILLION	1/9/2004	Info Request	Thaker	No <u>NRC REQUEST OR CONCERN</u> Provide information on cables contained in the following unprotected cable trays in the 4kv switchgear rooms: 4AMT05 and 4AWT10 <u>UTILITY RESPONSE</u> The following summarizes the types of functions of cables included in the above cable trays. This is based on Raceway Schedule from CARS, drawing 5610-E-305, and Rev. 51, and drawing 5610-E-160 Sh. 1 Rev. 46.	Closed
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EN.Y

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32 ROGERS	1/9/2004	Info Request	Thaker	No <u>NRC REQUEST OR CONCERN</u> Provide information on the voltage level at the rod control system cabinets inside the 3B MCC Room <u>UTILITY RESPONSE</u> The M-G Set output voltage is 260V AC 3-phase. The M-G Set output feeds the Power Cabinets 1(2)AC and 1(2)BD located in the 3B MCC room. Nothing greater than 480V. Reference Drawings: 5610-T-D-12A, Sheet 1, Revision 10 5610-M-403-54, Sheet 1, Revision 1	Closed



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33 STAPLES	1/26/2004	Info Request	Thaker	No <u>NRC REQUEST OR CONCERN</u> Provide documents for cables contained in tray 4AWT10, P&ID 5613-M-3062, Sheet 1, copy of CR 04-033 <u>UTILITY RESPONSE</u> The following documents are provided: CARS pages 4811 and 4812, Rev. 51 for cable tray 4AWT10 5610-E-160, Sheet 1, Rev. 46 for location of 4AWT10 5613-M-3062, Sheet 1, Rev. 27 5613-M-3062, Sheet 2, Rev. 17 Draft disposition of CR 04-0033 [CR is under review and input from various disciplines] The below listed documents are provided for the following cables to establish their function: 4INIS/4C23A-4QR33/001, and 4INIS/4C23A-4QR38/001. CARS Raceway Schedule, 5610-E-305, Revision 51, Pages 2010 and 2011. 5614-M-430-146, Sheet 8A, Revision 4 5614-M-430-146, Sheet 8B, Revision 4 5614-E-342, Revision 7 5613-E-18, Sheet 1, Revision 10 5614-E-27A-14, Revision 1	Closed

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34	FILLION	1/9/2004	Question	Thaker	No <u>NRC REQUEST OR CONCERN</u> During walk-down of the Control Room, it was observed that a copper lug is used in the center fuse block of XRE fuse blocks (cluster of three) at Control Panel 3C04. Identify if the copper lug as used is OK. <u>UTILITY RESPONSE</u> A copper fuse is used in the center fuse block of XRE cluster of three fuse blocks. The XRE fuse blocks are the EDG 3A metering PT [potential transformer] secondary side fuses. The PT is two single phase 4200/120 V transformers connected in grounded "V" connection with the center leg grounded. The copper lug in the center leg serves as an physical isolation device [for maintenance] and does not serve as an electrical isolation device. As such the configuration as found is electrically per design. Reference drawings: 5613-E-28, Sheet 36B, Revision 2 5610-M-301-65, Sheet 13, Revision 12	Closed
35	WISEMAN	1/26/2004	Documentation	Busch	No <u>NRC REQUEST OR CONCERN</u> Provide CR response on Fire Brigade dress-out areas. <u>UTILITY RESPONSE</u> CR 03-2310 provided	Closed
36	WISEMAN	1/26/2004	Documentation	Busch	No <u>NRC REQUEST OR CONCERN</u> Provide list of combustibile storage areas <u>UTILITY RESPONSE</u> provided list	Closed
37	WISEMAN	1/26/2004	Documentation	Busch	No <u>NRC REQUEST OR CONCERN</u> Provide Fire Reports since last inspection. <u>UTILITY RESPONSE</u> supplied list & incident reports.	Closed

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38 WISEMAN	1/26/2004	Documentation	Busch	No <u>NRC REQUEST OR CONCERN</u> Provide monthly fire inspections since last inspection. <u>UTILITY RESPONSE</u> Archived files of 0-SFP-016.5, Fire Protection Equipment Surveillance, have been installed on the external FPP site in folder "PCC\DeptShares\NRC FP INSP\33 FP Surveillance"	Closed
39 FILLION	1/26/2004	Question	Dunstan	No <u>NRC REQUEST OR CONCERN</u> A portion of fire proofing of what appears to be a structural member or a conduit at the south ceiling across from 4kv breaker 4AA16 and above T-Lagged conduit B-4A-064 [B-4A064] in the 4A Switchgear room is not fully fire proofed. - Provide information what is this member and does it require fire proofing? <u>UTILITY RESPONSE</u> The scope of structural steel fireproofing is described in Procedure 0-SFP-016.3 and is limited to Fire Zones 26, 93, 95, 101 and 104. The indicated fireproofing in the 4A Switchgear Room (Fire Zone 68) is not required and is abandoned in place.	Closed
40 FILLION	1/26/2004	Question	Dunstan	No <u>NRC REQUEST OR CONCERN</u> CV-303A/B/C provide return flow path for RCP #1 Seal. Should this valve spuriously close, is the pipe between the RCP seal discharge and CV-303 A, B or C rated for the increased pressure expected. <u>UTILITY RESPONSE</u> Per Drawing 5610-M-3047 Sh.3, the piping is Class 2501. This pipe class is rated for 2580 psig at 650F, per Specification MN-3.11 (spec hard copy provided).	Closed

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41 WISEMAN	1/27/2004	Question	Dunstan	No <u>NRC REQUEST OR CONCERN</u> Is the cable insulation in cabinets, panels, etc. included in the FHA for Fire Zones 63, 67 and 106? If not, why not? <u>UTILITY RESPONSE</u> The FHA is described under Section 4.0 of UFSAR Appendix 9.6A. The basis for combustible loading is described in Section 4.XX.1.2. Only cable in trays is considered for the described inventory as being susceptible to exposure fire. Since trays are conservatively assumed to be at least 40% full and the cable inventory in cabinets is generally much smaller than in trays, the inventory of cable insulation inside cabinets is considered a relatively insignificant contribution to combustible material inventory. [see also Question# 42]	Closed

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42 WISEMAN	1/27/2004	Question	Guey	No <u>NRC REQUEST OR CONCERN</u> Regarding the IPEEE: 1. Based on the fire incident reports for the past three years, there were three fires involving electrical equipment in cabinets. Is the 3-fires-in-3-years frequency bounded by IPEEE assumptions for fire frequency? 2. On this basis, what heat release rate is used for cabinets and the basis for this heat rate? Does it match the values described in the FHA (Section 4.0 of UFSAR Appendix 9.6A)? <u>UTILITY RESPONSE</u> 1. Based on the fire incident reports for the past three years, there were three fires involving electrical equipment in cabinets. Is the 3-fires-in-3-years frequency bounded by IPEEE assumptions for fire frequency? Yes.. The three cabinet fires in question were all very small fires which did not cause a reactor trip and did not propagate beyond the cabinets themselves. In the IPEEE for Turkey Point, it was assumed, conservatively, that a fire in any zone destroyed all of the components in that zone. No detailed fire modeling or assessment of manual actions were performed; instead, conservative assumptions were made to simplify the analysis. Fire incidents which do not cause a reactor trip and do not propagate beyond the cabinets themselves will have no effect on the IPEEE results due to this conservative approach. 2. On this basis, what heat release rate is used for cabinets and the basis for this heat rate? Does it match the values described in the FHA (Section 4.0 of UFSAR Appendix 9.6A)? As explained above, in the IPEEE for Turkey Point, it was assumed, conservatively, that a fire in any of the zones destroyed all of the components in that zone. No detailed fire modeling was performed; the conservative assumption is thus robust (i.e., insensitive or provides an upperbound) to the heat release rates that can be postulated for the electrical cabinets.	Closed

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43	O'DONOHUE	1/27/2004	Info Request	Barry/Hanek	No <u>NRC REQUEST OR CONCERN</u> Provide training material (JPMs, classrooms, simulator, night orders, etc.) received by operators for response to fire. <u>UTILITY RESPONSE</u> Provided copies of Lesson Plans, JPMs and simulator scenarios for all positions.	Closed
44	O'DONOHUE	1/27/2004	Documentation	Barry	No <u>NRC REQUEST OR CONCERN</u> What other procedures (besides 0-ONOP-016.10) are involved for fires in Fire Zones 63 and 67? Consider both operational procedures as well as fire response (alarm) procedures. <u>UTILITY RESPONSE</u> Provided copy of potential procedures that would be entered based on the extent of the fire. *-EOP-E-0 *-EOP-ES-0.1 *-ONOP-041.1 *-ONOP-16.8	Closed
45	WISEMAN	1/27/2004	Documentation	Busch	No <u>NRC REQUEST OR CONCERN</u> Provide documentation on E nozzles. <u>UTILITY RESPONSE</u> Procedure 0-SFP-016.5, Fire Protection Equipment Surveillance, requires E nozzles to be verified in place on a monthly basis.	Closed
46	WISEMAN	1/27/2004	Info Request	Delgado	No <u>NRC REQUEST OR CONCERN</u> Provide drainage diagrams for Fire Zones 063, 067, 106 and 106R. <u>UTILITY RESPONSE</u> There are no area drains in the Control Room (FZ 106). Hard copies of the following drawings provided: Fire Zone 63 5610-C-302 Fire Zone 67 5610-C-114 General Area 5610-M-75, -76, -83 Fire Zone 106R 5610-M-83 & 5610-C-312	Closed

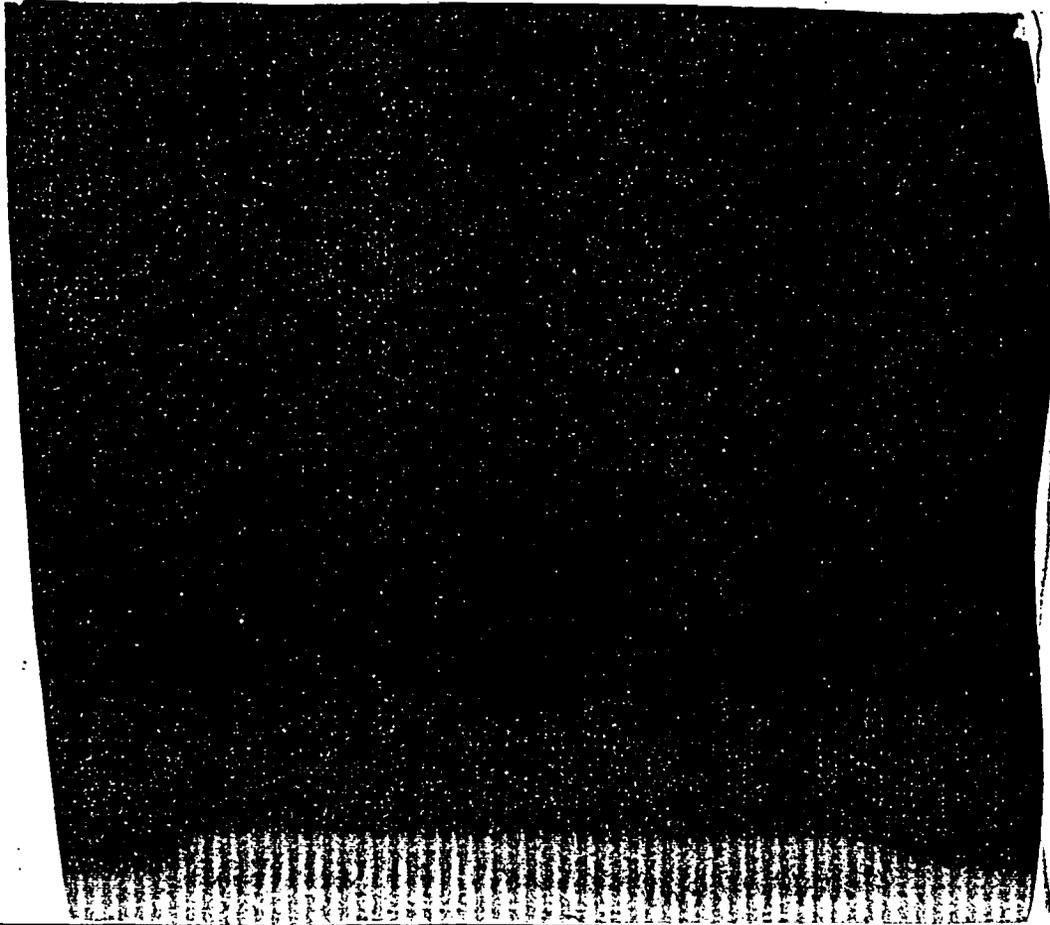
QUESTION # INSPECTOR	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
47 WISEMAN	1/27/2004	Documentation	Dunstan	No <u>NRC REQUEST OR CONCERN</u> Provide flow calculations for HS-03-08 and HS-04-06. <u>UTILITY RESPONSE</u> Flow calculations have not been prepared specifically to determine hose station flows. However, hose station capabilities were addressed during the 1999 self-assessment and determined to provide the required hose stream capabilities. A hard copy of an excerpt from the self-assessment (Page 107-3) is provided.	Closed
48 WISEMAN	1/27/2004	Question	Busch	No <u>NRC REQUEST OR CONCERN</u> Explain discrepancy between FSAR and drawing on starting pressures for EDFP and DDFP. Which pressures are correct? <u>UTILITY RESPONSE</u> Documentation submitted. UFSAR indicates minimum values. The P&ID indicates nominal values.	Closed
49 WISEMAN	1/27/2004	Question	Dunstan	No <u>NRC REQUEST OR CONCERN</u> What is Code of Record for NFPA 20? <u>UTILITY RESPONSE</u> The EDFP was an original plant installation, serving the fossil units prior to nuclear unit installation. Therefore, the code of record is regarded as circa 1966. However, the second tank, DDFP and associated systems were installed via PCM 82-162, whereby the applicable NFPA 20 version would be circa 1980. Surveillance and operability testing procedures appear inconsistent with the 1980 version. CR 04-0385 was initiated to address the issue.	Closed
50 WISEMAN	1/27/2004	Info Request	Thaker	No <u>NRC REQUEST OR CONCERN</u> Provide cable routing for DDFP, P101, controller. <u>UTILITY RESPONSE</u> The diesel driven Fire Pump P101 has its own starting batteries and controller, both local at the pump. There is no start / stop control in the control room that could adversely affect the diesel start circuits or the pump. Hence, there are no control cables associated with the diesel driven fire pump to be analyzed.	Closed

QUESTION #	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
51 WISEMAN	1/27/2004	Question	Thaker	No <u>NRC REQUEST OR CONCERN</u> Will LOOP affect Diesel Fire Pump P101? <u>UTILITY RESPONSE</u> The diesel driven Fire Pump P101 controller is powered from an offsite power which is not backed by onsite EDG. Two power sources are provided at DP76, which in turn powers LP320-12 that provides power supply to the controller. There is diesel engine start battery local at the fire pump. There is no start / stop control in the control room that could adversely affect the diesel engine start circuits. In the event of loss of both AC power sources, the diesel engine is featured to start automatically. Additionally, the motor driven fire pump can be used if available. The motor driven fire pump is powered from the plant power system [LC 3C]. This LC is backed by onsite EDG. The motor driven fire pump can be powered from LC 3C and loaded on to the EDG manually. Additionally one diesel driven service water pump and three motor driven service water pumps can be aligned to the fire water system if needed and used if available. The following drawings [attached] provide the power sources to the Distribution Panels that provide power supply to the DDFP controller: Breaker List for DP85, Rev. 325. Breaker List for LC 3B15, Rev. 309 Breaker List for DP76, Rev. 305 Breaker List for LP320, Rev. 331 5610-E-761, Rev. 8 5610-M-89-24, Rev. 1 5610-M-89-25, Rev. 2 5610-E-1280, Rev. 9 5610-E-1390, Rev. 7 Vendor Manual J259 CR 04-0385 initiated to address DDFP acceptance criteria. In addition, a one-time start scenario was performed SAT for loss of AC power to the DDFP by opening the breaker. Copy of CR Interim #2 provided 2/11/04.	Closed

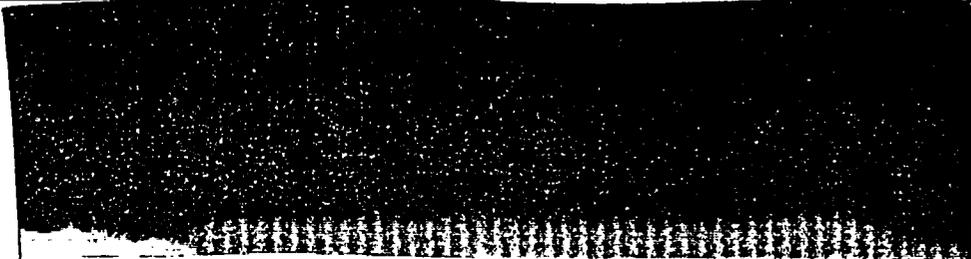
QUESTION #	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
52 FILLION	1/27/2004	Documentation	Thaker	No <u>NRC REQUEST OR CONCERN</u> Provide a copy of the following: SSA for F/A MM/106, and CR that added CV-303A/B/C and MOV-381 to EEL. <u>UTILITY RESPONSE</u> The following documents are attached: SSA, 5610-M-722, Rev. 28, Pages 746 through 826. CR 03-1330-1, Attachment A, Pages 9 through 16, and Pages 35 through 44.	Closed
53 WISEMAN	1/27/2004	Question	Thaker	No <u>NRC REQUEST OR CONCERN</u> Provide cable routing from bus 3B03 Fire Zone 096 to EDFP, P39, in Fire Zone 122. Provide cable routing from Bus 3D01 to 3B03. Does routing pass through Fire Zone 106? <u>UTILITY RESPONSE</u> Cable fire area routing of motor driven fire pump P39 is provided in ECL, drawing 5610-E-2000, Revision 27, Page 74 [attached]. Cable fire area routing for DC control supply cable from 3D01 [3D0108] to LC 3B03 is provided on Page 189 of ECL [attached]. Drawings 5610-E-27, Sheet 3Y, Revision 4 and 5610-E-27, Sheet 3Y1, Revision 1 [both attached] provide control scheme and cables for the motor driven fire pump P39. None of the above cables are routed through Fire Area MM/106.	Closed
54 WISEMAN	1/27/2004	Question	Dunstan	No <u>NRC REQUEST OR CONCERN</u> Fire Pumps are included in Essential Equipment List. We say all safety related pumps are covered by detection. There is no detection in Fire Zone 122. Explain design. <u>UTILITY RESPONSE</u> There are no safety-related pumps in Fire Zone 122. The fire pumps are classified in the plant total equipment database as quality-related based on fire protection application.	Closed

Release

QUESTION #	INSPECTOR	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
55	WISEMAN	1/27/2004	Question	Dunstan	No <u>NRC REQUEST OR CONCERN</u> Section 2.4.G.1 of Appendix 9.6A states we comply with NFPA 51B welding. Why is it not on list? What year edition of 51B do we comply with? <u>UTILITY RESPONSE</u> The welding and cutting practices are performed in accordance with plant procedures and follow the guidelines of NFPA 51B, as noted. No one code year applies to the work performed but that in effect at the time of procedure review cycle. However, NFPA compliance issues, including applicable code year, are being addressed via CR 04-0369.	Closed
56	WISEMAN	1/27/2004	Info Request	Dunstan	No <u>NRC REQUEST OR CONCERN</u> What will we do about what appears to be a discrepancy in License Basis? Not all codes committed to are on list. <u>UTILITY RESPONSE</u> The listing in Table 9.6A-12 is based on original plant and early Appendix R implementation. Reviews of Appendix 9.6A produced search results; however, a search of the Adobe files of SERs confirmed that some NFPA standards are missing from Table 9.6A-12. Accordingly, CR 04-0369 was initiated to address the issue.	Closed

QUESTION #	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
57 O'DONOHUE	1/27/2004	Question	Thaker		Closed

EX-4

QUESTION # INSPECTOR	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
58 STAPLES	1/27/2004	Info Request	Thaker	No <u>NRC REQUEST OR CONCERN</u> Provide information on the cables contained in the following raceways: B-3A1558 A-3A1580 A-4A1520 B-4A1656 4AZT20 <u>UTILITY RESPONSE</u> Pages of raceway schedule from CARS, 5610-E-305, Revision 51 are attached [Pages 1530, 1535, 4929, 4959 and 4812], which provide list of cables contained in the raceways.	Closed
59 WISEMAN	1/27/2004	Question	Busch	No <u>NRC REQUEST OR CONCERN</u> Does PTN perform inspection/maintenance on the DDFP Discharge Check Valve, 10-757? <u>UTILITY RESPONSE</u> Yes. PM 016017. Attached.	Closed
60 WISEMAN	1/27/2004	Question	Busch		Closed EAT
61 FILLION	1/27/2004	Info Request	Thaker	No <u>NRC REQUEST OR CONCERN</u> Provide an EWD for Charging Pump 3B. <u>UTILITY RESPONSE</u> EWD 5613-E-25, Sheet 5B, Revision 4 is attached.	Closed

QUESTION #	INSPECTOR	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
62	O'DONOHUE	1/27/2004	Info Request	Thaker	No <u>NRC REQUEST OR CONCERN</u> Are the RCP parameter indications protected for a fire in Zones 67 and 63? <u>UTILITY RESPONSE</u> The RCP seal injection flow verification instrumentation [example for RCP 3A: FE-3-156C, FT-3-156A/B, FR-3-154A/B and return line TI-3-133] are not protected. TI and FR are located inside the control room [VPA] and will be used if available. However, these instrumentation circuits are not assured available for a plant fire.	Closed
63	O'DONOHUE	1/27/2004	Procedures	Barry	No <u>NRC REQUEST OR CONCERN</u> Does PTN have a constrained language list regarding procedure usage? If so, provide a copy. <u>UTILITY RESPONSE</u> Definitions in procedure preparation guide. No constrained language list available. Provided copy of Enclosure 8 Action verbs/terms from O-ADM-101 Procedure Writers Guide	Closed
64	O'DONOHUE	1/27/2004	Info Request	Barry	No <u>NRC REQUEST OR CONCERN</u> Provide method for the tracking of shift coverage and the tracking of qualification for these positions. <u>UTILITY RESPONSE</u> The Training Department provides status of operator qualifications for tracking in the operator out-of-service book in the Control Room. Health Physics tracks physicals and respirator qualifications in the HIS-20 database, which is verified by the NPS weekly. This information is also verified by the NWE for individual qualifications when appointing shift positions.	Closed

Release

QUESTION #	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
65 INSPECTOR PAYNE	1/27/2004	Question	Guey	No <u>NRC REQUEST OR CONCERN</u> What is the probability of a LOOP in event of fire in Zone 67 or 63? <u>UTILITY RESPONSE</u> Shutdown is required for a fire in Zones 67 or 63. In the IPEEE, it is assumed that a reactor trip has occurred given a fire in either of these two zones. No investigation was done to determine if the trip occurred due to the fire or operator actions following the fire. Likewise, no cable identification and routing was performed in the IPEEE to determine whether a LOOP would occur due to a fire in either of the two zones. However, no credit was taken for the use of MFW in the fire risk calculations, an assumption consistent with occurrence of a LOOP. In addition, no credit was taken for bleed-and-feed in the fire risk calculations.	Closed
66 INSPECTOR PAYNE	1/27/2004	Documentation	Dunstan/Redmond	No <u>NRC REQUEST OR CONCERN</u> Provide evidence, if available, of NRC approval (SER) of single-spurious as our licensing basis for safe shutdown analysis.. <u>UTILITY RESPONSE</u> NRC Inspection Report Nos. 50-250/89-37 and 50-251/89-37, dated January 4, 1990, states: "The licensee's analysis for spurious operations for Appendix R alternate shutdown and safe shutdown systems was based on the following: (a) Safe shutdown capability should not be adversely affected by any one spurious actuation or signal resulting from fire in any plant area (zone); and (b) The safe shutdown capability should not be adversely affected by a fire in any plant area (zone) which results in the loss of all automatic functions (signals, logic) from the circuits located in the area (zone) in conjunction with one worst case spurious actuation or signal resulting from the fire..." With regard to manual actions, there are numerous correspondences (6/6/83, 7/13/95, 7/31/97) where FPL stated that manual actions will be credited. Also, NRC SERs (dated 12/22/98 and 5/5/99) for the Thermolag exemption request contains a note that clearly indicates that manual actions are credited for safe shutdown. The note applies to areas that are III.G.2 fire areas. Again in NRC SER Supplements (dated 4/16/85 and 5/10/82) manual actions are described as the basis for approval.	Closed

Release

QUESTION #	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
67 FILLION	1/28/2004	Documentation	Sweeney	No <u>NRC REQUEST OR CONCERN</u> Provide fuse coordination calculation for fuses FU7/FU8 and XBG with respect to their upstream fuse/breaker for LCV-3-115B [EWD 5613-E-25, Sheet 65B]. <u>UTILITY RESPONSE</u> Fuses XBG are located in Control Room Panel 3C03 and provide the normal power source for solenoid valve SV-3-115B. They are 6 amp Gould/Shawmut OT Type fuses. The upstream DC Breaker 3D2307 is a 50 amp, two pole ITE Type EF. Coordination for this circuit is provided in Calculation 5177-265-EG-22, Revision 2. Coordination and selectivity is demonstrated in Figure 8b (Attachment 47) of the calculation with a maximum fault current of 581 amps for this particular circuit. Fuses FU7/FU8 are located in Alternate Shutdown Panel 3C264 and provide power for solenoid valve SV-3-115B following a fire requiring control room evacuation. They are 6 amp Bussman ABC or FO3A fast acting type fuses. The upstream DC Breaker 3D2320 is a 125 amp, two pole ITE Type JL. Normally, the circuit downstream of these fuses is de-energized. No coordination calculation exists for these alternate shutdown fuses. The Type JL breaker has an adjustable instantaneous trip of 750 to 1600 amps. Based on similarity with Figure 8b of Calculation 5177-265-EG-22, Revision 2, coordination is likely assured. No fault current calculation was performed for this circuit to demonstrate selectivity based on the alternate shutdown function. Following isolation from the control room circuits, the remaining circuits are not routed in the fire area and no further faults are postulated. Attached are pages 20, 22, 24 [Rev 1] and Att. 47 Sheet 1 [Rev 2] of Calculation 5177-265-EG-22, Revision 2.	Closed

Revisions

QUESTION #	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
68 FILLION	1/28/2004	Documentation	Sweeney	No <u>NRC REQUEST OR CONCERN</u> Provide fuse coordination calculation for fuses EK and FU with respect to their upstream fuse/breaker for Charging Pump 3B [EWD 5613-E-25, Sheet 5B] <u>UTILITY RESPONSE</u> Fuses EK are located in Load Center 3B and provide the normal control power source for the 3B Charging Pump Breaker. They are 30A amp Gould/Shawmut OT Type fuses. The upstream DC Breaker 3D2302 is a 100 amp, two pole ITE Type EF. Coordination for this circuit is provided in Calculation 5177-265-EG-22, Revision 2. Coordination is demonstrated in Figure 9b (Attachment 39) of the calculation. However, selectivity is not assured since the calculated fault current was within the instantaneous region of the breaker. Coordination and selectivity was assured by replacing the DC power cable to limit the short circuit current (Reference Circuit Breaker/Fuse Coordination Study for Turkey Point Units 3 & 4, Revision 2 and PC/M 83-151). Fuses FU are located in Alternate Shutdown Panel 3C264 and provide control power for the 3B Charging Pump Breaker following a fire requiring control room evacuation. They are 30 amp Bussman ABC or FO3A fast acting type fuses. The upstream DC Breaker 3D2320 is a 125 amp, two pole ITE Type JL. Normally, the circuit downstream of these fuses is de-energized. No coordination calculation exists for these alternate shutdown fuses. The Type JL breaker has an adjustable instantaneous trip of 750 to 1600 amps. Based on similarity with Figure 9b of Calculation 5177-265-EG-22, Revision 2, coordination is likely assured. No fault current calculation was performed for this circuit to demonstrate selectivity based on the alternate shutdown function. Following isolation from the control room circuits, the remaining circuits are not routed in the fire area and no further faults are postulated. Attached are revelent pages from calculation 5177-265-EG-22, Rev. 2 [pages 29 - 40 and Attach 39], and Circuit Breaker Fuse Coordination Study [Revision 2, 8/17/1987], pages 7-9.	Closed

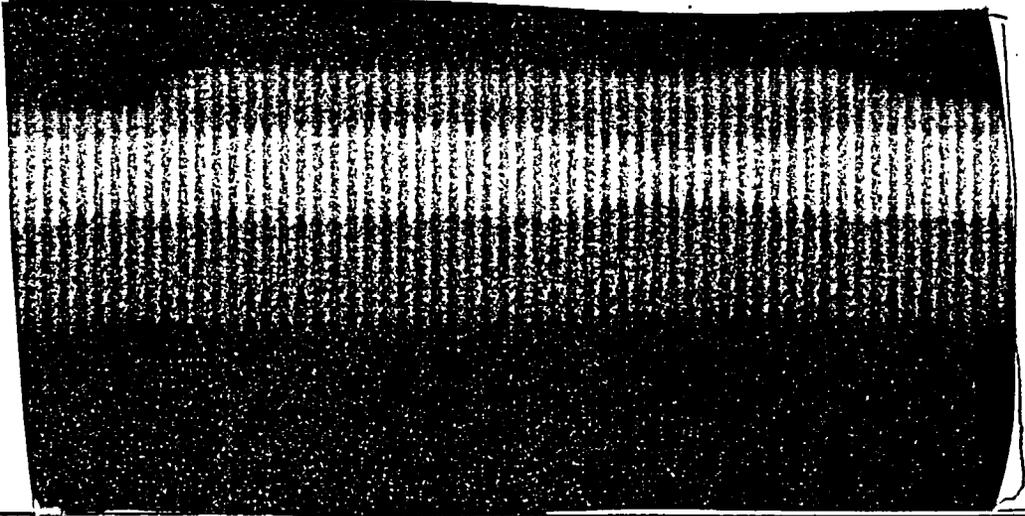
QUESTION # INSPECTOR	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
69 FILLION	1/28/2004	Info Request	Thaker	No <u>NRC REQUEST OR CONCERN</u> Provide EWD for the incoming breakers to 4A 4kv bus from the auxiliary and startup transformers. <u>UTILITY RESPONSE</u> EWD 5614-E-28, Sheets 1A[Rev 6], 1A1[Rev 6], 2A[Rev 5] and 2A1[Rev 6]	Closed
70 STAPLES	1/28/2004	Info Request	Thaker	No <u>NRC REQUEST OR CONCERN</u> Provide EWD for EDG 4B voltmeter and wattmeter instrumentation at the ASP 4C264 and the control room, including their respective fire area routing. <u>UTILITY RESPONSE</u> The following drawings are attached: 5614-E-28, Sheet 36C1, Revision 1 5614-E-28, Sheet 36C4, Revision 0 5614-E-28, Sheet 36C5, Revision 3 5610-E-2000, Revision 27, Pages 495, 496.	Closed
71 STAPLES	1/28/2004	Info Request	Thaker	No <u>NRC REQUEST OR CONCERN</u> Provide drawing for ND/NI-4-6649B. <u>UTILITY RESPONSE</u> Drawing 5614-J-804, Sheet 1B, Revision 1 is attached.	Closed
72 STAPLES	1/28/2004	Question	Thaker	No <u>NRC REQUEST OR CONCERN</u> What is the normal alignment of LC 4H for a fire in FZ U/67. <u>UTILITY RESPONSE</u> LC 4H is normally aligned to LC 4D, which is a Train B component. LC 4H can be aligned to LC 4C [Train A]. Prior to a postulated plant fire, the LC 4H could have been aligned to either LC 4C or LC 4D. However, the LC 4H will be re-aligned to the protected train post fire if this load center is credited for a specific plant fire area. For FZ U/67 LC 4H is not credited. SSA [5610-M-722] for FZ67 provides a manual action to isolate LC4H [see M/A 636]. 0-ONOP-16.10 reflects these actions in Steps 9.0 and 10.0.	Closed

Reliance

QUESTION # INSPECTOR	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
73 PAYNE	1/29/2004	Documentation	Dunstan	No <u>NRC REQUEST OR CONCERN</u> Provide evidence, if available, of NRC approval with single-spurious actuation as a licensing issue. <u>UTILITY RESPONSE</u> See response to #66.	Closed
74 WISEMAN	1/29/2004	Question	Dunstan/Busch	No <u>NRC REQUEST OR CONCERN</u> There are no floor drains in the 4B Switchgear Room and the sump pump is not protected. Is there a potential for water intrusion to the 4A Switchgear Room? If so, are manual actions in 4A hindered? Will entry to adjacent areas hinder access? <u>UTILITY RESPONSE</u> A curb is not considered essential at D067-3. Absence of a curb does not compromise door fire rating. The floors slope toward the respective sumps in 067 and 068. The sump pump power sources are not protected so water removal capability is not assured. Water migrating from 067 to 068 is impeded by a nominal 1.5" rise just north of the door, which channels water to the sump. Conversely, water intrusion from 068 to 067 flows directly to the sump. Fog nozzles are used to fight fires in switchgear rooms. As flow rates from fog nozzles are lower than those for hose streams, the water accumulation rate would be lower. For an assumed net floor area of 700 sq.ft, a sustained fog spray of 80 gpm could be laid down for more than 8 minutes before water level would backup above the nominal 1.5" rise at the door (see response to Question 82 for actual nozzle performance characteristics). Therefore, performance of operator actions in 068 is not expected to be hindered by water intrusion.	Closed
75 WISEMAN	1/29/2004	Question	Dunstan	No <u>NRC REQUEST OR CONCERN</u> What is the basis for sizing the curb at the door between Fire Zone 93(LC) and Fire Zone 67? <u>UTILITY RESPONSE</u> The curb between the LC Room and 4B Switchgear Room is sized to prevent migration of burning fluid to the switchgear room and to prevent creating a trip hazard. The nominal 4" curb is higher than needed to make it more noticeable as a potential trip hazard.	Closed

Release

QUESTION #	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
76 WISEMAN	1/29/2004	Info Request	Dunstan	No <u>NRC REQUEST OR CONCERN</u> The curbs around the Hydrogen Seal Oil Units and Turbine Lube Oil Storage Tanks cannot contain the full volume of oil in the areas, as prescribed by NFPA 30. Determine the design basis for containment sizing and determine conformance. Also, regardless of conformance, assess the flow patterns and secondary constraints, if any, for the overflow run off. <u>UTILITY RESPONSE</u> The curb for the Unit 3 Turbine LO Storage Tank is nominal 7". There is no drain but there is a nominal 3.5" weir along the west side which directs overflow into the Unit 4 Startup Transformer pit. The transformer contains 9909 gal. The tank contains 13,875 gal. The transformer pit alone can accommodate 14,313 gal. Therefore, the combined available volume in the pit and curbed area should accommodate a lube oil spill without overflow to other areas. The containment wall encompassing the Unit 4 Turbine LO Storage Tank appears sufficient to contain the 13,875 gal. inventory. Curbing and equipment pad for each Hydrogen Seal Oil Unit is nominal 6". The FHA reflects an oil inventory volume of 846 gallons. The net containment volume (curbed volume less equipment pad and pipe support volumes) is less than this inventory. There is a drain in the contained area to support containment that drains to the oil/separator at the fossil plant discharge (Drawings 5610-M-75 and 5610-C-13). Also, any overflow would spread on the turbine building floor to nearby area drains to the east and west of the curbed area. Spreading eastward would be limited by the "speed bump". The east drain was recently installed in conjunction with Thermo-Lag upgrades via PCM 97-024. Likewise, the speed bump was installed and ramps 2' on either side of the peak approximately 2.5" above nominal floor level (layout drawings attached). Therefore, most of the spillage beyond the curb would be removed by area drains such that oil spread and depth beyond the curb area would be minimal. In addition, compliance with NFPA 30 is "in General" (Page 9.6A-32), meaning that PTN mostly complies with the guidance but not absolutely. Appendix 9.6A, page 9.6A-14, references Table 9.6A-12 for a listing of the NFPA codes used at Turkey Point for applicable guidance and NFPA 30 is not on that list. The current Technical Specifications, those in effect prior to converting the Technical Specifications into the UFSAR, and the SER for the License Amendment that authorized that shift made no specific mention	Closed

QUESTION #	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
INSPECTOR				<p>of compliance with NFPA 30. No specific commitment to NFPA 30 was found than on page 9.6A-32. Note that CR 04-0369 was initiated to address PTN compliance requirements to NFPA.</p> <p>The NRC noted that conformance to NFPA 30 was indicated in their SER dated 8/12/87 granting exemption for suppression and detection in outdoor areas. [Note that this exemption has been superseded by exemptions associated with recent Thermo-Lag upgrades and is not part of the present license basis] The conformance was regarding combustible liquid in containers, defined in NFPA 30 as any vessel of 60 gallons capacity or less used for transporting or storing liquids, and local protection including automatic fire suppression systems. The FPL submittal dated 4/25/86 cited the lube oil storage tank and station transformers as containers.</p> <p>A Night Order was issued for increased awareness, by Operators, of unusual heat sources in the areas of the hydrogen seal oil units. Also, a preliminary risk-significance assessment was performed assuming spillage from the hydrogen seal oil units is not contained by the curbs but overflows to the turbine building floor. An illustration of assumed oil pool spreading limits and relative distance to a vulnerable target (Train A cable) are illustrated. The NUREG-1805 spreadsheet for this condition is also provided and indicates screens below cable qualification limits prior to reaching the vulnerable cable. This assessment will be finalized via CR 04-0477.</p>	
77	1/29/2004 Question		Barry/Dunstan		Closed
PAYNE					

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Release

QUESTION #	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
78 PAYNE	1/29/2004	Documentation	Sweeney	No <u>NRC REQUEST OR CONCERN</u> Do we have an exemption for the use of temporary lighting? (flash lights, portable lights) <u>UTILITY RESPONSE</u> Exemptions were granted from providing installed emergency lighting units in the Units 3 & 4 Containments to facilitate manual operator actions (Refer to UFSAR, Section 9.6A Exemptions P.2 & Q.2). Dedicated portable sealed beam battery-operated lighting units, are stored in fire cabinets outside the containment buildings for containment entry if required during an Appendix R Fire to achieve and maintain cold shutdown. Additionally, dedicated portable hand-held 8-hour battery-powered emergency lighting units are strategically located throughout the facility to aid in access/egress, actions outdoors, actions in cabinets and resetting of HVAC fire dampers. Specifically, these emergency lighting units are used during an Appendix R fire to supplement the stationary lighting units, enhance the lighting for a specific manual action and/or for actions outdoors, inside cabinets/panels and fire dampers where fixed lighting are not practical. These portable lights are located in storage lockers and are periodically inspected and tested in accordance with 0-SME-104.1 and 0-SME-104.2. Drawing 5610-A-62, Sh.3 specifies the portable light storage locker physical location, number of lights, associated panel/breaker and their associated equipment purpose. Attached are the FSAR 9.6A Pages 100, 101, 180, 183, 184, 186, 189 and 190.	Closed

QUESTION # INSPECTOR	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
79 O'DONOHUE	1/29/2004	Question	Sweeney	No <u>NRC REQUEST OR CONCERN</u> Where is the lighting in containment powered from? Will we lose this if we have a fire in Zones 67 & 63? <u>UTILITY RESPONSE</u> Exemptions were granted from providing installed emergency lighting units in the Units 3 & 4 Containments to facilitate manual operator actions (Refer to UFSAR, Section 9.6A Exemptions P.2 & Q.2). Credit is taken for dedicated portable sealed beam battery-operated lighting units, stored in fire cabinets outside the containment buildings for containment entry if required during an Appendix R Fire to achieve and maintain cold shutdown. The lighting in containment is powered from non-vital power sources as indicated below: Unit 3 - LP36 (MCC 3B/Bkr. 30658/FZ 63) & LP36A (MCC 3B/Bkr.30680/FZ 63). Unit 3 - LP37 (MCC 3C/Bkr. 30768/FZ 58) Unit 4 - LP46 (MCC 4B/Bkr. 40658/FZ 61) & LP46A (MCC 4B/Bkr.40680/FZ 61) Unit 4 - LP47 (MCC 4C/Bkr. 40768/FZ58). Under an Appendix R Fire in Fire Zones 67 & 63 and with a coincident loss of offsite power, lighting in containment will be lost. If offsite power is available during the event, lighting in containment may be available.	Closed
80 WISEMAN	1/29/2004	Info Request	Delgado	No <u>NRC REQUEST OR CONCERN</u> Appendix 9.6A section 2.4.D.1(f) (page 9.6A-27) indicates flame spread and smoke development characteristics for the suspended ceiling. Provide the supporting documentation (manufacturer data) for these characteristics. <u>UTILITY RESPONSE</u> Suspended ceiling specification 5177-230-A-118 is shown on drawing 5610-A-51 for the Control Room. Test data for the Squaregride ceiling panels as tested by United States Testing Company, Inc. is attached.	Closed

QUESTION #	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
81 WISEMAN	1/29/2004	Info Request	Delgado	No <u>NRC REQUEST OR CONCERN</u> UFSAR Appendix 9.6A Section 2.4.D.1(d) (page 2.6A-27), indicates Control Room carpet has been tested to NFPA 253 and ASTM E-662 and is NML-approved. Provide the supporting documentation (manufacturer data) for this statement. <u>UTILITY RESPONSE</u> Control Room carpet specification 5177-230-A-196 is shown on drawing 5610-A-51. This spec provides performance criteria including critical radiant flux and smoke development criteria. Carpet test data for UTP carpet is attached. Testing was conducted by Commercial Testing Company. All Control Room carpet is purchased to this specification (see recent example attached).	Closed
82 WISEMAN	1/29/2004	Info Request	George	No <u>NRC REQUEST OR CONCERN</u> The PFP indicates hose stations near FZs 106, 62 & 63. 1. What are the flow characteristics and manufactures specs for the nozzles installed? 2. Are any other nozzles available for use? If so, what are their flow characteristics? <u>UTILITY RESPONSE</u> 1.) The installed nozzles on the hose stations near Fire Zones 106, 62 & 63 are manufactured by Brooks Equipment Co., Inc. - Model E15. Manufacturer specs attached. 2.) Other nozzles available for use are manufactured by Akron Brass - Model 1717. Manufacturer specs attached.	Closed

QUESTION #	INSPECTOR	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
83	FILLION	1/29/2004	Documentation	Thaker	No <u>NRC REQUEST OR CONCERN</u> Provide loop drawings for the pressurizer pressure and level. <u>UTILITY RESPONSE</u> The following drawings are attached: 5610-M-430-233, Revision 2 5610-M-430-234, Revision 4 5610-M-430-235, Revision 4 5610-M-430-236, Sheet 1, Revision 4 5610-M-430-236, Sheet 2, Revision 0 5610-M-430-237, Sheet 1, Revision 3 5610-M-430-237, Sheet 2, Revision 0 5610-M-430-238, Sheet 1, Revision 3 5610-M-430-238, Sheet 2, Revision 0	Closed
84	FILLION	1/29/2004	Info Request	Thaker	No <u>NRC REQUEST OR CONCERN</u> Provide EWD for Pressurizer Backup Heater 4B. <u>UTILITY RESPONSE</u> Drawings 5614-E-25, Sheet 8B [Rev 3] and Sheet 8B1 [Rev 2] are attached.	Closed
85	FILLION	1/29/2004	Info Request	Thaker	No <u>NRC REQUEST OR CONCERN</u> Provide EWD for 4A EDG breaker. <u>UTILITY RESPONSE</u> Drawing 5614-E-28, Sheet 8A [Rev 5] and Sheet 8A1 [Rev 4] attached.	Closed
86	FILLION	1/29/2004	Documentation	Thaker	No <u>NRC REQUEST OR CONCERN</u> Provide a copy of evaluation for IN 92-18. <u>UTILITY RESPONSE</u> A copy of evaluation, JPN-PTN-SEEP-93-011, Revision 0, is attached.	Closed

QUESTION #	INSPECTOR	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
87	WISEMAN	1/29/2004	Documentation	Delgado	No <u>NRC REQUEST OR CONCERN</u> Provide engineering/construction documentation and analysis that the block construction wall between FZ067 and FZ068 provides 3-hour fire rating resistance. <u>UTILITY RESPONSE</u> Per Drawings 5610-C-1371 and -1354, the subject block walls are 8" CMU and grouted to provide 3-hour fire rated barriers via PCMs 83-50 and 83-141. Calculation C-SJ202-04 qualifies a grouted block wall to a 3-hour fire rating.	Closed

QUESTION #	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
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88 WISEMAN	1/29/2004	Info Request	Antignano/Redmond	No	Closed
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NRC REQUEST OR CONCERN

What is the detector spacing in FZ067 (area detection on ceiling). Does it meet the criteria presented on MC0609 Appendix F Attachment 2?

UTILITY RESPONSE

The detector spacing in the 480V Load Centers in question is as follows: Ceiling is 23 feet in height. Detectors involved are 2-16, 2-17, 2-18 & 2-19

- 9'-6" off wall to detector 2-16
- 11'-6" detector 2-16 to detector 2-17
- 20'-0" detector 2-17 to detector 2-18
- 27'-6" detector 2-18 to detector 2-19

Copy of Drawing 5610-E-938 provided. Based upon the matrix presented by the NRC for a Medium Rate, this room has partial compliance with the table in the F2-6 attachment for two detectors while two others detector are outside of the matrix. This is based on use of a 25' ceiling height, since the room height is 2 feet less at 23 feet in height. The recommended spacing as per F2-6 for a 25' height is 18' maximum.

Fire Zone 67 is approximately 22' x 75' and has a ceiling height of approximately 22'. This detection system was installed during original plant construction. A review of NFPA 72E, 1982 edition, was reviewed for guidance pertaining to the conformance to the applicable code of record.

A measurement of the detector spacing was performed during a walk down of the fire zone. The following detector spacing was measured from the west wall, starting at detector 2-16. Detector 2-16 is approximately 9'-6" from the west wall. Detector 2-17 is approximately 11'-6" from detector 2-16, which is approximately 21' from the west wall. Detector 2-18 is approximately 20' from detector 2-17 (approximately 41' from the west wall). Detector 2-19 is approximately 27'-6" from Detector 2-18 (approximately 68'-5" from the west wall and approximately 7' from the east wall).

1. Code Requirements: Section 4-3.1 states: "The location and spacing of smoke detectors shall result from an evaluation based on engineering judgement supplemented by the guidelines detailed in this standard."

Code Evaluation: Detectors in Fire Zone 67 meet this requirement.

QUESTION #	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
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2. Code Requirements: Section 4-3.1.1 states: "Where the intent is to protect from a specific hazard, the detector(s) may be installed closer to the hazard in a position where the detector will readily intercept the smoke."

Code Evaluation: Detectors in Fire Zone 67 meet this requirement, since six (6) smoke detectors are placed over cable trays.

3. Code Requirements: Section 4-3.1.2 of NFPA 72E states "Stratification. The possible effect of smoke stratification at levels below the ceiling shall also be considered."

Appendix B-1.2 states: "Generally, height is the most important single dimension where ceiling heights exceed 16 ft"

Appendix A-4-3.1.2 provides design considerations to be considered in the selection of smoke detector types, installation location, and spacing of smoke detectors installed in high ceiling areas.

Code Evaluation: The ceiling height of Fire Zone 67 is approximately 22 feet. One mitigating strategy in A-4-3.1.2 is to drop detectors below the ceiling so that some detectors are closer to the hazard. There are six (6) detectors strategically placed approximately 1'-6" above cable trays that protect safety-related cables. These spot detectors are not intended to mitigate the high ceiling configuration for fire zone 67 and provide an additional margin of fire safety in that a quicker response time could be achieved for overheating or smoldering cables.

4. Code Requirements: Section 4-3.2 of NFPA 72E states "Spot-type smoke detectors shall be located on the ceiling not less than 4 inches from a sidewall to the near edge, or if on the sidewall, between 4 in. and 12 in. down from the ceiling to the top of the detector."

Code Evaluation: Detectors in Fire Zone 67 meet this requirement.

5. Code Requirements: Section 4-3.5.1 states: "On smooth ceilings, spacing of the 30 ft may be used as a guide. In all cases, the manufacturer's recommendations shall be followed. Other spacing may be used depending on ceiling height, different conditions or response requirements."

Release

QUESTION #	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
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Code Evaluation: Detectors in Fire Zone 67 meet the 30-ft spacing guide.

6. Code Requirement: Section 4-3.7.3 of NFPA 72E states " If beams exceed 18 in. in depth and are more than 8 ft. on centers, each bay shall be treated as a separate area requiring at least one spot-type or line-type detector."

Code Evaluation: Detectors in Fire Zone 67 meet this requirement.

Although the fire detection system is compliant with NFPA 72E, the spacing of the detectors does not satisfy the recommendations contained in the Attachment 2 of the Fire Protection Significance Determination Process. Based upon the recommendations of the table in Attachment 2 of Appendix F, the recommended spacing for a smoke detector exposed to a medium rate fire and a 25' ceiling height is 18' between detectors. By extrapolation for a 22' ceiling height, the recommended spacing would be approximately 21'. There is one detector, Detector 2-18 that does not meet the recommended spacing of Attachment 2 to the Fire Protection Significance Determination Process, Appendix F. All other detectors are within the recommended detector spacing. Additionally, the 6 spot detectors placed over the cable trays are determined in compliance in order to mitigate the stratification concerns identified in NFPA 72E. Therefore, 1 out of 10 detectors is considered to be outside the spacing guidance of Attachment 2.

Additional guidance provided in Attachment 2 suggests that the condition has a moderate impact (degradation) on the fire detection system if: "The placement and spacing of 10 percent of the detectors within the fire area, zone, or room under consideration do not meet the spacing/placement conditions specified by the code-of-record or by their UL listing.

The purpose is to estimate the risk significance of degraded (moderate) detection features in Fire Zone 67. Defense-in-depth characteristics are collectively assessed with ignition frequency as the Fire Mitigation Frequency (FMF).

$$FMF = IF + FB + MS + AS + CC$$

- Where: IF = fire ignition frequency (log)
- FB = fire barrier
- MS = manual suppression/detection

Release

QUESTION #	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
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..AS = automatic suppression/detection
 ..CC = dependencies/common cause contribution

From Table 5.1 of Appendix F,

..AS = 0, (no automatic suppression)
 ..MS = -0.5, (moderately degraded due to the potential for delayed response time)
 FB = 0, (fire barrier not used in the FMF since we are applying the Single Room Term (SRT))
 CC = 0, (no dependencies or common cause contribution)
 IF = -2.725, (log 1.88-03- fire frequency from IPEEE)

..FMF= IF + MS+ AS + CC,.....

 IF= FIRE IGNITION FREQUENCY (LOG),log,0.00188,=-2.72584

 FB= FIRE BARRIER = N/A (SRT),=, 0

 MS = MANUAL SUPPRESSION/ DETECTION =,=-.5

 AS = AUTOMATIC SUPPRESSION/DETECTION,.....=,0

 CC = DEPENDENCIES/ COMMON CAUSE CONTRIBUTION
,=,0

,FMF= ..-3.22584

* Manual Suppression is shown as moderate degradation due to the low potential for delayed response time.

From Table 5.4, a FMF value of -3.22 equates to approximate frequency (1 per year) of 103 to 104. From Table 5.5, this frequency range corresponds to an estimated Likelihood Rating of D for >.30 days exposure to the degraded condition. From Table 5.6, the Risk Significance Rating is "Green", or not risk significant based on the loss of a single train plus recovery of a failed train for the 4B 4KV Switchgear Room.

Release

QUESTION #	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
				<p>Detector response time is based on many variables (ventilation, ceiling height, fire size and type, etc.). Arguably, the dominant factor for detector response time is the fire size and type/fuel. A small smoldering fire in Fire Zone 67 would not likely be detected rapidly (unless the source is below one of the spot detectors located above cable tray); however, a small smoldering fire would have no adverse effect on safe shutdown since this type of fire will not affect redundant safe shutdown functions. A large fire event that has the potential to cause damage to safe shutdown cables would be detected rapidly by the existing smoke detectors so that an effective and prompt fire brigade response can be credited with mitigating the effects of a worst case fire event in Fire Zone 67. Therefore, the spacing and location of the detectors in Fire Zone 67 are considered adequate for the hazards and will ensure prompt detection of a fire that has the potential to affect safety-related or safe shutdown circuits and components.</p>	

Release

QUESTION #	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
89 WISEMAN	1/29/2004	Question	Dunstan	No <u>NRC REQUEST OR CONCERN</u> Fire Detection for: Fire Area MM Zones 106, 106R & 97 The Fire Protection Program Report FSAR 9.6A Section 3.5, Section specifically 3.5.2, states that the design of fire detection system is based on guideline set forth in Appendix A to BPT 9.5-1 and Appendix R Section III.G. Section III.G.2b says the fire detector shall be installed in fire areas where redundant trains are separated by 20ft or enclosed by 1hr fire barriers. During walkdown of Fire Zone 97 on 1/28/04 the NRC inspector observed that no general area/room detectors were installed. A single duct detector (6-25) is installed inside ductwork (assuming to alarm a charcoal fire identified in FHA Section 4.MM.1.2). Explain compliance with Appendix R III.G since both A train SF-29A equipment and B train SF-29B equipment are located <20' separation in this zone. <u>UTILITY RESPONSE</u> The supply fans are used for the emergency recirculation mode of operation and are neither protected nor credited for Appendix R safe shutdown. Only the main air handling units and an outside air damper are credited for safe shutdown. The air handling unit motors are credible ignition sources; however, charcoal inside the emergency filter is the largest concentrated combustible load. The detector in the main process duct alarms in the Control Room and is expected to readily detect fire in the charcoal. The 20' separation criterion is not credited for Fire Zone 097. Rather, the room is an extension of the Control Room pressure boundary. However, consideration of this issue prompted investigation of requirements for area detection in the room. It was noted that exemption was requested and granted for automatic suppression in the Control Room pursuant to III.G.3. The granting basis included continuous occupancy during plant operation and area fire detection (SER dated March 27, 1984). Since then, the Control Room boundary for alternative safe shutdown was defined to include the condensing units on the roof (Fire Zone 106R) and the air handling units in Fire Zone 097. In this regard, CR 04-0476 (hard copy attached) was initiated to reconstitute the licensing basis and evaluate	Closed

Release

QUESTION # INSPECTOR	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
				acceptability of having no area detection in these extended fire zones. There is no operability concern because an hourly rove has been established for Fire Zones 097 and 106R.	
90 O'DONOHUE	1/29/2004	Info Request	Sweeney	No <u>NRC REQUEST OR CONCERN</u> Request a recent sample of Electrical Department's surveillance results on Appendix R lighting [both quarterly and yearly] <u>UTILITY RESPONSE</u> Hard copies of select pages from the following Work Orders are have been provided: WO Number 33015664-01 [0-SME-104.1] WO Number 33005737-01 [0-SME-104.1] WO Number 33005736-01 [0-SME-104.2] WO Number 32003084-01 [0-SME-104.2]	Closed
91 O'DONOHUE	1/29/2004	Question	Thaker	No <u>NRC REQUEST OR CONCERN</u> What is the purpose of panel 4C281 in the 4B switchgear room. <u>UTILITY RESPONSE</u> 4C281 is the instrumentation rack for the alternate shutdown components.	Closed
92 O'DONOHUE	1/28/2004	Question	Thaker	No <u>NRC REQUEST OR CONCERN</u> Provide documentation to show that MOV-4-716A or MOV-3-716A are not affected by a fire in FZ63 & FZ67. <u>UTILITY RESPONSE</u> Attached are pages 144, 145 and 432 of the Appendix R Essential Cable List [ECL], drawing 5610-E-2000, Revision 27. The attached pages provide the fire area routing of cables for both of MOV-3/4-716A. The review of the cable routing will show that none of the cables for the MOVs are routed in FZ 63 or FZ67. As such these valve cables are not affected by the fire in these fire zones.	Closed

Release

QUESTION #	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS																					
93 PAYNE	10/29/2004	Question	Sweeney	No <u>NRC REQUEST OR CONCERN</u> Step 17 in 0-ONOP-16.10 for FZ 67 positions portable fan at the door D101-1 and connects to a dedicated receptacle 412A-1. The receptacle is not clearly marked. If this is the designated receptacles for the fan, is the plug on the fan the correct type for the designated receptacle. <u>UTILITY RESPONSE</u> The receptacles for the portable fan at the door D101-1 are located on the west walls of the MG SET Rooms and are tagged 'RECEPTACLE FOR EMERGENCY VENTILATION'. The plugs on the fan are the correct type for the designated receptacles.	Closed																					
94 STAPLES	1/29/2004	Question	Sweeney	No <u>NRC REQUEST OR CONCERN</u> Provide fire area routing information on power and control circuit cables for the AHUs in FZ67 and FZ68. Which AHU is credited in FZ68 for a fire in FZ67. What is the power source for the credited AHU and is the power source available. Explain how the manual actions performed in FZ68 [for a fire in FZ67] are not adversely affected due to possible smoke infiltration inside the FZ68. <u>UTILITY RESPONSE</u> The following table provides information for AHUs in FZ67 and FZ68. <table border="1"><thead><tr><th>Fire Zone</th><th>Room Description</th><th>AHU.Tag</th><th>Power Source</th><th>Cable Routing</th></tr></thead><tbody><tr><td rowspan="2">FZ67</td><td rowspan="2">Switchgear Room 4B</td><td>4E244A</td><td>MCC 4L</td><td>FZ67, FZ68</td></tr><tr><td>4E244B</td><td>MCC 4M</td><td>FZ67</td></tr><tr><td rowspan="2">FZ68</td><td rowspan="2">Switchgear Room 4A</td><td>4E243A</td><td>MCC 4L</td><td>FZ68</td></tr><tr><td>4E243B</td><td>MCC 4M</td><td>FZ67, FZ68</td></tr></tbody></table> Air Handling Unit 4E243A is credited in FZ68 for a fire in FZ67. The power source MCC 4L located in Switchgear Room 4A and power will be available. There is no direct communication of air between the two rooms. The ventilation systems for each room are separate.	Fire Zone	Room Description	AHU.Tag	Power Source	Cable Routing	FZ67	Switchgear Room 4B	4E244A	MCC 4L	FZ67, FZ68	4E244B	MCC 4M	FZ67	FZ68	Switchgear Room 4A	4E243A	MCC 4L	FZ68	4E243B	MCC 4M	FZ67, FZ68	Closed
Fire Zone	Room Description	AHU.Tag	Power Source	Cable Routing																						
FZ67	Switchgear Room 4B	4E244A	MCC 4L	FZ67, FZ68																						
		4E244B	MCC 4M	FZ67																						
FZ68	Switchgear Room 4A	4E243A	MCC 4L	FZ68																						
		4E243B	MCC 4M	FZ67, FZ68																						

Release

QUESTION #	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
95 PAYNE	1/29/2004	Question	Thaker	No <u>NRC REQUEST OR CONCERN</u> Will there be a fire-induced LOOP for a fire in FZ63. <u>UTILITY RESPONSE</u> Cables that could cause a fire induced LOOP have not been identified or analyzed for any fire areas. As such there is no analytical answer. However, based on the location of the FZ63 [3B MCC Room] in the control building, there is no reason why cables associated with components that could cause a LOOP may be routed in this fire zone.	Closed
96 WISEMAN	1/29/2004	Question	Averett	No <u>NRC REQUEST OR CONCERN</u> Is there a process or means for capturing actual fires and assessing them for impact on IPEEE assumptions? <u>UTILITY RESPONSE</u> There is no formal process, other than reviewing CRs, to regularly assess actual fires with respect to IPEEE assumptions. Unless it was a significant fire (i.e., one which actually caused some damage outside the ignition source itself), it would not affect the IPEEE fire ignition frequencies. Also, given the considerable size of the industry database from which the IPEEE ignition frequencies are calculated, it would take a substantial number of PTN fires to significantly influence the current ignition frequencies' values.	Closed

Release

QUESTION #	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
97 FILLION	1/29/2004	Procedures	Barry/Dunstan	No <u>NRC REQUEST OR CONCERN</u> Do procedures accommodate a control room fire without control room evacuation? <u>UTILITY RESPONSE</u> No. 0-ONOP-105 is implemented when the SRO determines that the fire in the Control Room is or may be jeopardizing equipment necessary to place the unit in safe shutdown. This determination is based on his extensive knowledge of plant systems and their inter-relationship. Procedures 0-ONOP-016.10 and 0-ONOP-105 are "designed" for response to instantaneous exposure fire in the affected area with T-zero at reactor trip. However, there is the necessary element of NPS discretion (see response to Question #98) whereby safe shutdown actions may be initiated pre-emptively or delayed as actual conditions present themselves. In any case, conditions would have to be perceived as very severe to prompt Control Room evacuation. The effectiveness of operator actions to achieve safe shutdown is demonstrated through training and by actual experience with LOOP and component failure conditions. With regard to manual actions, most are prescribed to prevent adverse impact from spurious actuations, as discussed in Evaluation PTN-ENG-SEMS-03-045. Their performance and effectiveness are a matter of probability, practically if not specifically quantified. The SSA and ONOPs were developed by taking a single-spurious, one-at-a-time (see response to Question #66). Without knowing which spurious will occur, actions are prescribed to address all adverse spurious actuations in order to prevent any one. Whether all actions can be performed in time to prevent the one spurious is a matter of probability. Even so, the rationale presented in Evaluation PTN-ENG-SEMS-03-045 is considered to provide reasonable assurance that the prescribed actions are timely to effect safe shutdown and prevent adverse spurious actuations. Furthermore, this assurance is enhanced by appropriate prioritization of actions to prevent the worst first.	Closed

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QUESTION # INSPECTOR	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
98 O'DONOHUE	1/29/2004	Question	Barry.	No <u>NRC REQUEST OR CONCERN</u> Under what conditions would the NPS elect to enter O-ONOP-105? What are the procedural and/or training bases? <u>UTILITY RESPONSE</u> Section 2.0 of O-ONOP-105 lists possible conditions under which the NPS would determine the necessity to evacuate the Control Room and enter O-ONOP-105. Specifically, see 2.2 (hard copy attached).	Closed
99 O'DONOHUE	1/29/2004	Question	Dunstan	No <u>NRC REQUEST OR CONCERN</u> What is the basis for the 3-minute time frame? <u>UTILITY RESPONSE</u> The 3-minute time frame is not a go/no go or success/failure limit. Rather it is a measure of relative urgency in the realm of "immediate". With respect to RCC seal cooling, the 3-minute time frame was applied with RCPs running, along with 20 minutes for RCPs not running, based on extrapolation of Westinghouse data for Turkey Point, as documented in Bechtel letter SFB-1626 dated 2/25/85 (hard copy attached) (PCC reel 1145/frame 880).	Closed
100 WISEMAN	1/30/2004	Info Request	M. George	No <u>NRC REQUEST OR CONCERN</u> What is the minimum flow pressure (psi) required to maintain the "E" rating for the installed hose station nozzles? <u>UTILITY RESPONSE</u> Fire Protection contacted Brooks Equipment Co. Inc., the manufacturer of the nozzle, and was informed that the nozzles are tested from 50 to 200 psi. In order to maintain the "E" rating the fog nozzle is designed to not go to a straight stream. (refer to attached documents(2))	Closed
101 WISEMAN	1/30/2004	Documentation	Dunstan/Pineda	No <u>NRC REQUEST OR CONCERN</u> Temperature response of unfireproofed I-beams M12-202-11. Structural steel fireproofing requirements M08-265-03 <u>UTILITY RESPONSE</u> Copies provided. M08-265-03 was superseded by M12-202-06. Also, front portion of M12-202-11 provided (3" computer print-out omitted but available onsite for review).	Closed

QUESTION #	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
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102	1/30/2004	Documentation	Sweeney / Savine	No	Closed
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FILLION

NRC REQUEST OR CONCERN

Provide fuse coordination calculation for DC control circuit fuses for the CCW 4B breaker control circuits.

UTILITY RESPONSE

Fuses FU-2-UA (15amp), FU-4-UB (35amp) and FU-3-UD (35 amp) provide the normal power source for CCW 4B breaker control circuit. The control circuit fuses are Gould Shawmut Type OT and are located at the CCW 4B switchgear breaker (i.e., 4AB13). The upstream control circuit DC Breaker 4D0109 is a 100 amp, two pole ITE Type EF. Coordination for this circuit is provided in Calculation 5177-265-EG-22, Revision 2. A graphic display of the coordination and selectivity results are demonstrated in Figure 9a (Attachment 38) of the calculation. The corresponding maximum fault current, with the fault located just below the fuse, is 1486 amps for this particular circuit. As shown by the graph, the fault current available at the down stream fuse exceeds the instantaneous pickup of the upstream molded case breaker. Therefore, selectivity between the fuse and the upstream breaker can not be assured.

Circuits that did not demonstrate selective coordination between the fuse and the upstream breaker were further evaluated and the results provided in letter SFB-4575. The CCW 4B breaker control circuit (Breaker 4D0109) is addressed in Section 4.6.a of letter SFB-4575. In summary, the evaluation determined the maximum required control cable length, downstream of the fuse, required to reduce the fault current to a level that selective coordination could be assured. The required control cable length was determined to be 33 feet of # 12AWG. It was further determined that the control circuit required more than 33 feet of control cable to exit the 4B Switchgear Room. As such, all CCW 4B control circuit faults outside of the 4B Switchgear Room will result in selective coordination between the control circuit fuses and upstream breaker 4D0109. In the event of a Safe Shutdown fire within the 4B Switchgear Room, there is no assurance that coordination will exist. However, the upstream breaker (i.e., 4D0109) does not supply equipment other than the 4B Switchgear and opening of the breaker will only affect the equipment already considered damaged by the fire.

The following documents are included in the hard copy:

- EWD 5614-E-25, Sheet 2B, Revision 5.
- Calculation 5177-265-EG-22 [Revision 2] Pages 29, 35, 38, Attachment 38.

QUESTION # INSPECTOR	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
103 WISEMAN	1/30/2004	Info Request	M. George	No	Closed
<p>Pages 7 & 8 of Circuit Breaker / Fuse Coordination Study, Revision 2, dated 8/17/1987.</p> <p><u>NRC REQUEST OR CONCERN</u> What is Turkey Points response to consumer product safety commission (CPSC) release 03-117, STAR ME-1 Dry Fire Sprinklers?</p> <p><u>UTILITY RESPONSE</u> Turkey Point Nuclear does not have any Star brand sprinkler heads - in particular Star ME-1 dry fire sprinklers, installed in any of the fire protection suppression systems. As per Self Assessment #99-10 performed 10-13-99.</p>					
104 O'DONOHUE	1/30/2004	Question	Dunstan	No	Closed
<p><u>NRC REQUEST OR CONCERN</u> What is the rationale for use of hand-held lanterns in the context of Appendix R Section III.J?</p> <p><u>UTILITY RESPONSE</u> Fixed emergency lighting units are provided in all areas needed for operation and in access/egress routes thereto except containments where hand-held lanterns are credited per granted exemption. The fixed lighting is placed and directed to provide sufficient illumination to negotiate routes and reach the area of operation. Use of hand-held lanterns is consistent with Section III.J because hand-held lanterns are: 8-hour battery powered available and conveniently located used for supplemental lighting to facilitate performance of such local actions, such as breaker rack-out in opened cabinets periodically inspected and tested not required to be fixed or stationary</p>					

Release

QUESTION # INSPECTOR	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
105 WISEMAN	1/30/2004	Documentation	Delgado	No <u>NRC REQUEST OR CONCERN</u> Provide documentation of qualifications that fire features are rated 3 hour or 1 hour on fire doors 063-2, 067-2, 067-3 and 106-1. <u>UTILITY RESPONSE</u> The following documents are found and attached. 1. Bechtel SPEC 5177-265-A-068, Rev.1, - Original SPEC of Fire Doors 2. EVAL FPL-FPER-89-001, Rev.4, - Generic EVAL for Minor Mod on Fire Doors 3. EVAL FPL-FPER-86-01, Rev.0 - Upgrade of Door 106-1 to serve as Fire Door 4. EVAL FPE 89-003, Rev.0 - Evaluation of Conduit Penetration on door frame of Door 63-2	Closed
106 WISEMAN	1/30/2004	Documentation	Busch	No <u>NRC REQUEST OR CONCERN</u> Provide copies of last 3 surveillances on fire doors 063-2, 067-2, 067-3 and 106-1. <u>UTILITY RESPONSE</u> Scanned and emailed copies to NRC.	Closed
107 WISEMAN	1/30/2004	Documentation	Dunstan	No <u>NRC REQUEST OR CONCERN</u> Provide UL 555 (test) on Fire Dampers FD-6 and FD-7 in Fire Zone 106. <u>UTILITY RESPONSE</u> FD-6 and FD-7 (toilet and kitchen exhausts, respectively) were procured to Material Requisition 5177-230-M-616 (hard copy attached) and installed via PCM 82-114 during Control Room upgrades. The dampers are 3-hour fire rated and labeled to UL Standard 555-1979 (hardcopy attached).	Closed
108 WISEMAN	1/30/2004	Documentation	Dunstan	No <u>NRC REQUEST OR CONCERN</u> Provide calculations M08-265-21 (damper closure with air flow) and M12-202-02 (manual actions to mitigate effects of fire damper closure). <u>UTILITY RESPONSE</u> Hard copies provided.	Closed

QUESTION # INSPECTOR	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
109 WISEMAN	1/30/2004	Documentation	Dunstan	No <u>NRC REQUEST OR CONCERN</u> Provide engineering documentation to justify qualification as rated on the following penetration seals: 067W-E001, 067N-E003, 067N-E002, 067S-E006, 063S-E003, 063F-E006, 063E-E005. <u>UTILITY RESPONSE</u> The Penseals database is attached to PTN-FPER-99-005. Fire barriers with penetrations are shown on Drawing series 5610-A-178 with penseal generic details shown on Sheets 2A through 2L. Penetration 067N-E002 is grouted so is not included in the penseal category. The other penetrations contain elastomer seals per Sheet 2F of the generic details. The design verification used to qualify the generic details is also listed on Sheet 2F. The design basis for elastomer seals is presented in Evaluation PTN-ENG-SEMS-96-056. Specific justification of the selected penseals is provided via PTN-ENG-SEMS-97-096 and PTN-FPER-96-024 respectively, as noted in the database.	Closed
110 WISEMAN	1/30/2004	Documentation	Pineda	No <u>NRC REQUEST OR CONCERN</u> Temperature response of unfireproofed I-beams M12-202-11. Structural steel fireproofing requirements M08-265-03. <u>UTILITY RESPONSE</u> See response to Question #101.	Closed

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QUESTION #	INSPECTOR	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
111	WISEMAN	1/30/2004	Info Request	Antignano	No	Closed
<p><u>NRC REQUEST OR CONCERN</u> What is Turkey Point's response to Consumer Products Safety Commission (CPSC) announcement of the recall of certain Siebe Actuators.</p> <p><u>UTILITY RESPONSE</u> Turkey Point uses Ruskin Manufacturing NIBD-23 Curtain Type Fire Dampers, Type A, Type C & Type CR, UL-Labeled, 3 Hr Vertical and Horizontal design. They operate automatically when the temperature in the duct exceeds the melting point of the fusible links which hold the dampers open. These are blade type design packaged, which are folded in place held in place by an "S" hook and fusible link. There are nine dampers identified that have ETLs (Electrical Thermal Links) while the remaining dampers have melt away fusible links, which will actuate at 165°F.</p> <p>An additional search of the manufacturers that were identified in the recall of the actuators was performed. IBS (Invensys Building Systems) and / or Siebe, MA 200 and M 200-1 series, and models as listed: MA-220, MA-220-1, MA-221, MA-221-0-1, MA-221-0-2, MA-223, MA-223-0-1, MA-223-0-2, MA-230, MA-230-0-1, MA-233, MA-233-0-1, MA-240, MA-240-0-1, MA240-701-1, MA-243, MA-243-0-1, MA-243-701, MAH-241-0-1, MAH-241-701. These were used in fire/smoke dampers manufactured during Dec. 1993 and October 1999 which have been on a recall list. PTN does not have any or use these companies' actuators on site.</p>						
112	STAPLES	2/4/2004	Documentation	Dunstan	No	Closed
<p><u>NRC REQUEST OR CONCERN</u> Provide a copy of the 1999 Fire Protection Self-Assessment and a listing of CRs generated during that process.</p> <p><u>UTILITY RESPONSE</u> An electronic copy of the 1999 self-assessment, which includes a listing and description of CRs generated, was submitted.</p>						

QUESTION #	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
113 STAPLES	2/5/2004	Documentation	Thaker	No <u>NRC REQUEST OR CONCERN</u> For Fire Zones 63, 67 and 106 provide the following: 1. Cold shutdown repairs credited. 2. List of material, tools and procedures for the repairs. 3. Staging information for the material, tools and procedures. <u>UTILITY RESPONSE</u> The cold shutdown repair credited is fuse pulling for certain components prior to manual alignment of that component for a cold shutdown configuration. The SSA Manual Action description identifies fuse pulling of such components, which then is reflected in the SSD procedures 0-ONOP-016.10 and 0-ONOP-105. The fuse pullers are available in the control room as well as at the alternate shutdown panels. Section 5.5.D of STD-M-006, Revision 1 [Folder 24, Licensing Basis] further discusses the scope of repairs. Procedures 3/4-OSP-300.2 discusses prestaging and surveillance of the fuse pullers.	Closed
114 STAPLES	2/9/2004	Question	Dunstan	No <u>NRC REQUEST OR CONCERN</u> What fire zones were selected for the 2003 evaluation? What was the selection criteria? <u>UTILITY RESPONSE</u> Report PTN-BMSM-03-013 (hardcopy provided) includes manual action timelines for the following fire zones: 9, 15, 25, 28, 30, 40, 45, 55, 58, 61, 63, 67, 68, 70, 71, 78, 82, 84, 86, 87, 88, 92, 93, 94, 95, 101, 104, 105 and 108B. As described in PTN-ENG-SEMS-03-045, the selection of these fire zones was based on risk-significance (other than areas involving Control Room evacuation) and with relatively extensive (more than 5 pages) manual action sequences. The risk-significance was determined using IPEEE criteria described in an RAI (Cover sheet and pages 20 and 21 of JPN-PTN-SENJ-95-002, Rev. 1 attached). The criteria of extensive manual actions was subjective with the additional intent to include nominally 25% of power block fire zones.	Closed

QUESTION #	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
115 STAPLES	2/9/2004	Question	Dunstan	No <u>NRC REQUEST OR CONCERN</u> Who performed the 1999 Operator walk-through for the FP self-assessment? What acceptance criteria were used? <u>UTILITY RESPONSE</u> Initial walk-through performed by Operations and Engineering representatives. Expansion walk-through performed by Operators only. The team lead for this walk-through was Brian Stamp. The scope, results and inspection criteria are presented in Section 116 of the 1999 self-assessment (hardcopy attached).	Closed
116 O'DONOHUE	2/9/2004	Question	Thaker	No <u>NRC REQUEST OR CONCERN</u> How are the portable lights controlled and surveilled? <u>UTILITY RESPONSE</u> The Appendix R portable lights are controlled, tested and surveilled in the same way as the permanently installed Appendix R lights by Procedures 0-SME-104.1 and 0-SME-104.2. Select pages of the procedure are attached [pages 17, 18, 74 of 0-SME-104.1 and pages 20, 21, 72, 79 of 0-SME-104.2]. The portable lights are kept in a locker and are on charge to ensure their availability when needed. These are dedicated for Fire Protection use only.	Closed

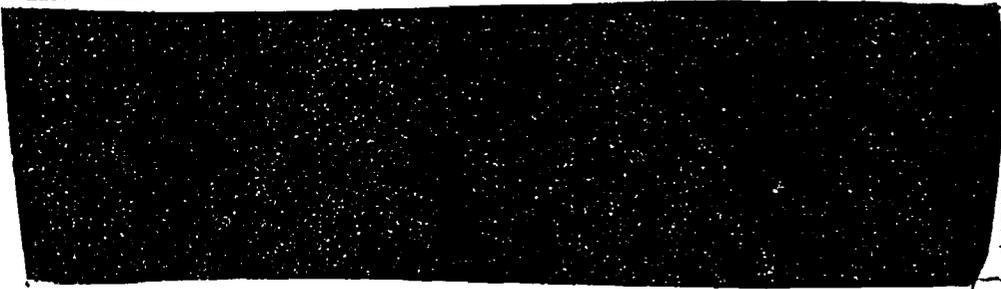
QUESTION #	INSPECTOR	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
122	WISEMAN	1/9/2004	Question	Dunstan	No <u>NRC REQUEST OR CONCERN</u> Explain question #76. 08/12/87 SER assumes we were NFPA compliant. <u>UTILITY RESPONSE</u> Response to #76 augmented.	Closed
123	PAYNE	2/9/2004	Documentation	Sweeney	No <u>NRC REQUEST OR CONCERN</u> Do we have testing on cables (or components) that backs up the assumption for how long we assume before a spurious action would occur? <u>UTILITY RESPONSE</u> FPL has not performed any testing on cables or components associated with the likelihood or time frame that fire induced circuit failures occur. We have utilized NUREG/CR-6834, "Circuit Analysis - Failure Mode and Likelihood Analysis" as a guideline. This study suggests that circuit failures occur in a finite timeframe and not instantaneously. Also, there is a general opinion that hot shorts eventually become open-circuit faults due to continued degeneration of cable insulation and that the transition time from hot short to open circuit is normally distributed with 5th and 95th percentile of 5 and 35 minutes, respectively. As such, there is a statistical sense that miss-operations do not occur at or near the same time.	Closed

QUESTION # INSPECTOR	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
124 PAYNE	2/9/2004	Question	Sweeney	No <u>NRC REQUEST OR CONCERN</u> After a spurious actuation, how long before a spurious signal would clear? Provide analysis or testing. <u>UTILITY RESPONSE</u> In accordance with Generic Letter 86-10 guidance, we would postulate that a "hot short" condition exists until action has been taken to isolate the given circuit from the fire area, or other actions as appropriate have been taken to negate the effects of the spurious actuation. We do not postulate that the fire would eventually clear the "hot short." For motor operated valves, an analysis was performed in response to NRC Information Notice 92-18. The information Notice addressed the possible consequences of "hot shorts" causing spurious operation of MOVs that bypassed the torque/limit switches and thermal overload protection. This analysis is captured in Evaluation JPN-PTN-SEEP-93-011, Revision 0. Of specific concern was the possibility that mechanical damage could occur that would prevent manual operation of the valve. With limited exceptions, the evaluation concluded that the MOVs would be capable of being repositioned following the spurious operation.	Closed

Release

QUESTION #	INSPECTOR	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
125	PAYNE	2/9/2004	Question	Dunstan	No <u>NRC REQUEST OR CONCERN</u> What is the basis for assuming a spurious actuation does not occur immediately? <u>UTILITY RESPONSE</u> It is assumed that spurious actuation could occur immediately at the start of the event but would more likely occur some finite time after ignition. At the genesis of the safe shutdown analysis this was an assumption based on intuition. More recently, this assumption has been supported by circuit analysis failure testing performed by Sandia Labs (NUREG/CR-6834) and is discussed in Evaluation PTN-ENG-SEMS-03-045, Pages 6, 7 and 9 (hardcopies attached). On the other hand, there is a finite time after which spurious actuation would not occur. This is not a quantified timeframe but seems commonly to be after 1 hour (refinement based on fire brigade response and extinguishing capability could reduce or increase the time frame on a case-by-case basis). In this regard, manual actions taken to initiate cooldown and achieve cold shutdown would focus on assuring process functions. Regarding spurious actuations, actions would be focused primarily on assuring component status rather than preventing spurious actuations.	Closed
126	PAYNE	2/9/2004	Question	Dunstan	No <u>NRC REQUEST OR CONCERN</u> How long do you assume you have (basis/analysis) before a spurious action would occur in zones 63, 67 or 106 (control room)? <u>UTILITY RESPONSE</u> A spurious actuation could occur immediately upon ignition or later as a result of circuit failure and exposure fire. The safe shutdown analysis assumes that spurious actuation would occur some finite time after ignition. This is an extrapolation from an issue raised in the early 1980s regarding PORV spurious operation (see Paragraph 5.3.4 from STD-M-006, hardcopy attached). However, it is also acknowledged that some consequences of spurious actuation are worse than others so manual action times were prescribed on a prioritized basis. The bases for manual actions for Fire Zones 63, 67 and 106 are common for all fire zones and is summarized in Section 3.1 and Attachment 1 to Evaluation PTN-ENG-SEMS-03-045 (hardcopy previously provided).	Closed

QUESTION #	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
127 PAYNE	2/9/2004	Question	LaDuca/Barnes	No <u>NRC REQUEST OR CONCERN</u> Provide the calculation used to determine how long pressurizer level will stay in the indicating range with no charging. <u>UTILITY RESPONSE</u> No specific calculation was located to determine how long pressurizer level will stay in the indicating range with no charging system flow to the RCS. A preliminary analysis was performed to determine this value. As a representative example, it is assumed that there is a fire in Zone 063. As an immediate action, Step 2 of the Safe Shutdown Manual Actions stops the 3A Charging Pump. Assuming this was the only running pump, charging is not available while the RCS inventory is decreasing through letdown, RCP seal leakoff and other RCS leakage. In the most probable scenario, upon stopping the last running charging pump, OPS would immediately enter 0-ONOP-047.1 for a loss of charging flow. One of the immediate actions is to isolate letdown, conservatively assumed to be at 2 minutes. Since only one charging pump was assumed to be running, the maximum letdown flow is assumed to be 60 gpm. Therefore, the total loss of RCS inventory is 70 gpm (60 gpm letdown, 3 gpm per RCP seal leakoff, and 1 gpm to account for identified and unidentified RCS leakage). In the two minutes prior to letdown isolation, the RCS would have lost 140 gal. The remaining inventory would continue to decrease at 10 gpm for 360 minutes until pressurizer level indication is lost. Thus without charging flow to the RCS, pressurizer level indication would be available for a minimum of 362 minutes, or over 6 hours. (provided hardcopy of analysis details)	Closed

QUESTION #	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
128 O'DONOHUE	2/9/2004	Question	Barry/Stamp	 0-ADM-205, Administrative Control of Valves, Locks and Switches, step 5.4:1.3 describes their control. See Attached ONOP-105 does not require their use.	Closed E.V.Y.

Palmer

QUESTION #	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
129 INSPECTOR PAYNE	2/9/2004	Info Request	Dunstan	No <u>NRC REQUEST OR CONCERN</u> For Fire Zones 63, 67 and 106 (control room) what is the Time=0? What does the analysis assume is the time before the fire develops and manual action is required in these zones? <u>UTILITY RESPONSE</u> Time "Zero" (TZ) would be defined automatically if LOOP or reactor trip occurred with fire ignition. For most scenarios, however, ignition would likely occur alone and first. For Turkey Point, TZ is when the NPS decides that the fire size and/or location is significant enough to warrant a plant operational response (PTN-ENG-SEMS-03-045 Section 3.1 (hardcopy attached). This decision may occur prior to reactor trip (if trip is necessary), which would automatically initiate response to a unit/plant transient. For Fire Zones 63, 67 and 106, it is considered likely that fire effects would become manifest on component operation as well as area ionization detection. A hot short within a cable or at a terminus would likely occur in an energized circuit. Whatever function the circuit serves would be affected and, for associated controls or indicators in the Control Room, would likely be readily noticed. In this case, operator response to the loss of function could occur prior to detection. On the other hand, the hot short could cause failure of an adjacent or nearby cable, which may or may not be energized. If not energized, its failure may not be readily noticed until the function is needed. As such, manual action would not prevent failure. Even so, such involvement in a fire would take a finite period of time, meanwhile developing into a detectable fire. If the circuit were energized, then its would become manifest as a functional failure. Based on the preceding, TZ as an operator response to the NPS decision is considered appropriate to provide reasonable assurance that the intended manual actions would be timely and effective.	Closed

QUESTION #	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
130 PAYNE	2/9/2004	Question	Barry	No <u>NRC REQUEST OR CONCERN</u> The 2003 self assessment requires 4 operators to complete manual actions. Which operators fill the dedicated 3 positions and who is the 4th operator when needed? <u>UTILITY RESPONSE</u> Three field operators are dedicated ONOP-105 positions or non-fire brigade members. These three operators are available to take action required in ONOP-016.10 and when a 4th operator is needed then the dedicated ONOP-105 Admin RCO will be dispatched from the Control Room.	Closed
131 PAYNE	2/9/2004	Question	Dunstan	No <u>NRC REQUEST OR CONCERN</u> How will you ensure that the required actions in the pre-fire plan guidelines would occur with sufficient priority to protect dedicated shutdown equipment and prevent spurious actuation's from defeating the actions directed by the EOPs and ONOPs? How do you use your people? <u>UTILITY RESPONSE</u> A spurious actuation is assumed to occur anytime during the event. It is acknowledged that it could occur immediately upon ignition (before T-Zero); however, occurrence of the initiating condition is internal to the circuit and, therefore, independent of circuit protection features. A spurious actuation due to exposure fire (not the initiating condition) requires a finite time to manifest. Studies indicate a normal distribution of occurrences between 5 and 35 minutes after initial exposure. Most of the manual actions to prevent spurious actuation effects that could compromise maintaining hot shutdown capability are performed in the first 15 minutes. Furthermore, the prescribed actions are prioritized to prevent the worst spurious effects first. This is discussed in Evaluation PTN-ENG-SEMS-03-045 Section 3.0 (hardcopy Pages 6-11 attached).	Closed

QUESTION # INSPECTOR	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
132 PAYNE	2/9/2004	Question	Dunstan		Closed
133 O'DONOHUE	2/9/2004	Info Request	Mowbray	<p>No <u>NRC REQUEST OR CONCERN</u> What is the operating duty time for the charging pumps? (What is the run time on each pump this year?)</p> <p><u>UTILITY RESPONSE</u> Duty time for packing and pump valves 3000 to 5000 hours. Duty time for pump block 15 years, minimum.</p> <p>Run time last 12 months</p> <p>3A = 2319 hours 4A = 2476 hours 3B = 5248 hours 4B = 4455 hours 3C = 1694 hours 4C = 1181 hours</p>	Closed
134 O'DONOHUE	2/9/2004	Question	Sweeney	<p>No <u>NRC REQUEST OR CONCERN</u> How does LCV-115B fail on loss of air or solenoid valve power? Can this valve be locally opened?</p> <p><u>UTILITY RESPONSE</u> Valve LCV-115B fails closed on loss of instrument air and/or solenoid valve power. Valve LCV-115B can not be opened locally. However, a manually operated bypass valve (3/4-358) is provided as discussed in 0-ONOP- 016.10.</p>	Closed

EX4

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QUESTION # INSPECTOR	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
135 O'DONOHUE	2/9/2004	Info Request	Sweeney	No <u>NRC REQUEST OR CONCERN</u> Identify the location in the control room of MOV-716B, CV-303B, MOV-115C and LCV-115B control switches. <u>UTILITY RESPONSE</u> See attached sketch and photograph.	Closed
136 PAYNE	2/9/2004	Question	Barry/Stamp	No <u>NRC REQUEST OR CONCERN</u> For actions required in ONOP-016.10 - where do the NLO's start from? What is the reason for assuming that starting point? <u>UTILITY RESPONSE</u> The Control Room is assumed to be the starting point for field operator actions in ONOP-016.10. At any given time operators may be in the power block, at their work station or in the Control Room. For that reason the Control Room was viewed as the most conservative starting point.	Closed

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QUESTION #	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
137 O'DONOHUE	2/9/2004	Question	Sweeney	<p><u>NRC REQUEST OR CONCERN</u></p> <p>What is the adverse consequence of using a radio near panel 4C281? When is the risk - at power or during S/D?</p> <p><u>UTILITY RESPONSE</u></p> <p>Alternate Shutdown Panel 4C281 (and 3C281) is a Foxboro Spec 200 Nest Instrument Rack. It contains Voltage-to-Current and Current-to-Voltage Converters, power supplies and power distribution components. Vendor Manual V000299 was reviewed for any cautionary notes regarding interference from radio communications in the vicinity of the panel. No such cautions are included in the vendor manual. As such, the panel components are not considered to be susceptible to misoperation from radio transmission in the area.</p> <p>Further, a search did not reveal any CRs or work orders associated with inadvertent actuation or failure of 4C281 (or 3C281) panel components due to radio transmission in the vicinity of the panel. As such, PTN has no failures of the type.</p> <p>There was an incident at PTN when the main generator voltage regulator had inadvertently transferred to manual mode (dc control) of operation from automatic (which is the normal mode of operation) when some one keyed in a radio in the close proximity of the voltage regulator. As a corrective action it was decided to install cautionary signs against the radio usage in front of the voltage regulator. As a pro-active measure, other areas outside the control room where operators frequent were also posted with similar signs against the radio usage. The no radio usage sign at panel 4C281 is of the same vintage, and not as result of any specific incidence that caused misoperation due to a radio transmission.</p> <p>Based on the above, using a radio near panel 4C281 at power or during alternate shutdown it is not expected to have adverse consequence.</p>	Closed

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QUESTION #	INSPECTOR	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
138	O'DONOHUE	2/9/2004	Question	Laughlin	No <u>NRC REQUEST OR CONCERN</u> Regarding the operator training for manual actions in ONOP-016.10 (NPO) - is this classroom only? - does this include a walkdown? - is this tested? <u>UTILITY RESPONSE</u> Training for NLOs was most recently taught in Seg 5 of 2003 (Nov. & Dec.). LP 6900143 was used. ONOP-016.8 & ADM-016 were covered. Plant walkdowns of the fire suppression system & local manual actions associated with fire systems (Halon, Deluge, Pre-activation, etc.). Response to Fire Pumps Malfunction was included. The annual comprehensive written exam included questions on fire protection systems. Exercise Guide - 760210500 SPS-105 1C-1 Control Room Evac LP 6900320 LP 6900252 LP 6900261 - not all zones only 19, 20, 25, 26, 27, 61, 63, 72, 73, 84, 113 & 116	Closed
139	O'DONOHUE	2/9/2004	Question	Stamp/Barry	No <u>NRC REQUEST OR CONCERN</u> How often is the training on ONOP-105 and ONOP-16.10 & 16.8 required for operation? <u>UTILITY RESPONSE</u> ONOP-105 training is required biannually. ONOP-16.10 does not have a periodicity requirement but it has been taught several times in the past several years: 1999- Seg 7 2001- Seg 1 2002- Seg 3	Closed

Release

QUESTION #	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
140 PAYNE	2/9/2004	Question	LaDuca/Johnson	No <u>NRC REQUEST OR CONCERN</u> ONOP-16.10, FZ 67, Section 18.2 Why is the charging section path through MOV-*-350 recommended over LCV-*-115B, if pressurizer level conditions require immediate restoration of charging flow? <u>UTILITY RESPONSE</u> 0-ONOP-016.10, Fire Zone 67 Step 18.2, requires the NPS to determine if sufficient time is available to establish RWST makeup to charging prior to reaching 12% level in the pressurizer. If sufficient time is available, then RWST is aligned as the makeup source. If sufficient time is not available, then makeup is provided from the emergency boration flowpath. There is no documented basis for preferring emergency boration flowpath when immediate restoration of the charging flow path is required. Either of these sources provides an adequate suction for the charging pumps. However, it is considered that emergency boration is preferred since it facilitates boration control than using the RWST as the sole suction source. This is supported by the statement that the RWST flow path may be required in addition to emergency boration to provide charging for RCS volume control.	Submitted
141 FILLION	2/10/2004	Info Request	Thaker	No <u>NRC REQUEST OR CONCERN</u> Provide EWD for HCV-3/4-121 <u>UTILITY RESPONSE</u> The following drawings are attached: 5610-M-430-204, Revision 3 - Loop drawing for HCV-3/4-121 5613-E-25, Sheet 98A, Revision 0 - EWD for HCV-3-121 5614-E-25, Sheet 98A, Revision 1 - EWD for HCV-4-121.	Closed
142 O'DONOHUE	2/9/2004	Question	Thaker	No <u>NRC REQUEST OR CONCERN</u> What is the difference between using MOV-350 or the RWST flow path? The procedure provides guidance to use either at NPS discretion, what is the basis? <u>UTILITY RESPONSE</u> Closed to Question #140	Closed

Release

QUESTION #	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
143	2/10/2004	Question	Sweeney	<u>NRC REQUEST OR CONCERN</u> Identify cable types [IEEE 383 qualified or not] for cables in the following cable schemes: 3B0633 3B0639 3B0669 3V115B 3V303B 3IFCVS <u>UTILITY RESPONSE</u> SCHEME-FROM-TO-SUB- IEEE 383 3B0633-JB7520-MOV350-001- YES 3B0633-3B06-JB7520-001- NO 3B0633-3B06-MOV350-001- NO 3B0633-3B06-3C01-002- NO --- 3B0639-3B06-MOV716B-001- NO 3B0639-3B06-MOV716B-002- NO 3B0639-3B06-3C05-008- NO 3B0639-3B06-3QR51-010- NO 3B0639B-3B06-3C264-00A- YES 3B0639B-3B06-3C264-00B- YES 3B0639B-3B06-3C264-00C- YES 3B0639B-3C05-3C264-00D- YES --- 3B0669-3B06-LCV115C-001- NO 3B0669-3B06-LCV115C-002- NO 3B0669-3B06-TB3135-001- NO 3B0669-3B06-3C03-002- NO 3B0669-3B06-3QR47-003- NO 3B0669-3QR47-LCV115C-001- NO 3B0669B-CV115B-TB3135-00A- YES --- 3V115B-TB3701-3C264-00F- YES 3V115B-3C03-3C264-00H- YES 3V115B-3C03-3QR47-00G- YES --- 3V303B-3V303B-TB3145-001- NO 3V303B-SV303B-TB3145-001- NO	Closed

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QUESTION #	INSPECTION	RESPONDING	OPERABILITY	
INSPECTOR	DATE	INDIVIDUAL	CONCERN	STATUS
			3V303B-TB3145-T3C22-001-	NO
			3V303B-3C03-T3C22-005-	NO
			3IFCVS-FI122B-FT122-001-	NO
			3IFCVS-FM-3-113-FT-3-113-00A-	NO
			3IFCVS-FT110 -FM110-001-	NO
			3IFCVS-FT110 -FM110-003-	NO
			3IFCVS-T3I21-FT155A-001-	NO
			3IFCVS-T3I21-FT155B-001-	NO
			3IFCVS-T3I22-FT156A-001-	NO
			3IFCVS-T3I22-FT156B-002-	NO
			3IFCVS-T3I24-FT154A-001-	NO
			3IFCVS-T3I24-FT154B-001-	NO
			3IFCVS-T3I24-HCV137-001-	NO
			3IFCVS-3C01-HCV121-001-	NO
			3IFCVS-3C01-T3I24-001-	NO
			3IFCVS-3C01-3C06-001-	NO
			3IFCVS-3C01-3C06-002-	NO
			3IFCVS-3C01-3C06-003-	NO
			3IFCVS-3C01-3QR47-009-	NO
			3IFCVS-3C01-3QR47-010-	NO
			3IFCVS-3C01-3QR9-001-	NO
			3IFCVS-3C01-3QR9-002-	NO
			3IFCVS-3C01-3QR9-003-	NO
			3IFCVS-3C01-3QR9-004-	NO
			3IFCVS-3C01-3QR9-005-	NO
			3IFCVS-3C01-3QR9-006-	NO
			3IFCVS-3C01-3QR9-007-	NO
			3IFCVS-3C01-3QR9-008-	NO
			3IFCVS-3C03-FM110-002-	NO
			3IFCVS-3C03-HCV105-001-	NO
			3IFCVS-3C03-HCV110-001	NO
			3IFCVS-3C03-3QR10-001-	NO
			3IFCVS-3C03-3QR10-002-	NO
			3IFCVS-3C03-3QR10-003-	NO
			3IFCVS-3C03-3QR4-001-	NO
			3IFCVS-3C03-3QR8-001-	NO
			3IFCVS-3C03-3QR8-002-	NO
			3IFCVS-3C03-3QR9-002-	NO
			3IFCVS-3C03-3QR9-003-	NO

Release

QUESTION #	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
				3IFCVS-3C05-3QR19-005-	NO
				3IFCVS-3QR10-FT150-001-	NO
				3IFCVS-3QR10-T3I24-001-	NO
				3IFCVS-3QR10-T3I24-002-	NO
				3IFCVS-3QR4-FI122B-001-	NO
				3IFCVS-3QR8-T3I22-001-	NO
				3IFCVS-3QR8-T3I22-002-	NO
				3IFCVS-3QR9-FIT114-001-	NO
				3IFCVS-3QR9-FM-3-113-00B-	NO
				3IFCVS-3QR9-IP113A-001-	NO
				3IFCVS-3QR9-IP114A-001-	NO
				3IFCVS-3QR9-T3I21-001-	NO
				3IFCVS-3QR9-T3I21-002-	NO

QUESTION #	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
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144	2/10/2004	Question	Thaker	No	Closed
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O'DONOHUE

NRC REQUEST OR CONCERN

Is it assumed that no charging pump is in service for a fire in Zones 63, 67 & 106? Is Engineering assuming that the direction to trip a specific charging pump means secure all charging and operations would swap charging pumps and protect just that pump?

UTILITY RESPONSE

The following provides matrix of charging pumps [CP] availability in FZ 63 [Unit 3], 67 [Unit 4] and FZ 106 [Units 3 & 4] for the corresponding Units:



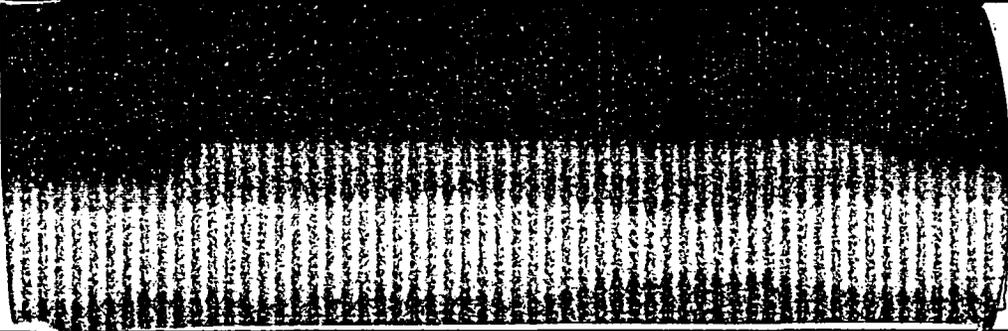
Ex 4

Other charging pumps in the above fire zones are not credited from the safe shutdown analysis view point since either the cables or the power supplies to these pumps could be adversely affected by the respective fires. However, these charging pumps can be used if available.

0-ONOP-016.10 supplements other plant procedures, which are also used in response to a fire. 0-ONOP-016.10 identifies components that may be affected by the fire and provides ways to mitigate the adverse effects to these components or provides for the use of alternate components that otherwise would not have been used. Fire areas where a potential for loss of suction to the charging pump exists, instructions are provided [based on the SSA analysis] to stop the protected charging pump that is assured available by the analysis.

It is recognized that the SSA imposes limits on the availability of components or systems, which is, to certain extent, in direct conflict with the normal approach to have as many components available as possible. Other ONOP and operators training also would prompt usage of other components.

The SSA and the 0-ONOP-016.10 do not specifically identify to stop all other charging pumps [other than the protected pump]. For some fire zones the power supply bus to a non-SSD required pump is lost or de-energized due to possible adverse fire effects that could cause spurious operation of multiple components and potential operator distraction. The design intent is not to create a loss of all charging. Operators training would guide them to

QUESTION # INSPECTOR	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
				<p>attempt to establish charging. It is Operations practice to start a standby pump before stopping an operating pump. Their success in operating the non-protected charging pump will depend on the extent of the fire damage to these charging pumps' circuits.</p> <p>The above is the general approach for the SSD fire zones. For the ASD fire zones where the control room is evacuated, Procedure 0-ONOP-105 is prescriptive and provides actions that would de-energize non-SSD power supply busses to avoid operator distraction from the unexpected operation of unprotected train equipment. Due to the nature of controls and circuits routed to the control room, spurious operation of many components would be expected. As such securing non-SSD train equipment is required.</p>	
145 FILLION	2/10/2004	Question	Sweeney	<p>No <u>NRC REQUEST OR CONCERN</u></p> <p>Identify types of wires used for internal wiring inside control boards in the control room [are these panel wires IEEE 383 qualified or not].</p> <p><u>UTILITY RESPONSE</u></p> <p>.IEEE Standard 383 was not published until 1974. This was well after the manufacturing date of the control boards in the control room. Therefore, the original internal wiring was not qualified to IEEE 383. It is identified as 14 AWG, 41 strand SIS type wire on the vendor drawings. Subsequent wire additions, including wire added today, is qualified to IEEE 383</p>	Closed
146 O'DONOHUE	2/10/2004	Info Request	Sweeney		Closed

EM

QUESTION #	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
147 INSPECTOR FILLION	2/10/2004	Question	Thaker / Barry	No <u>NRC REQUEST OR CONCERN</u> 0-ONOP-16.10 Step 14.3 for FZ 63 requires closure of LCV-115C, then open LCV-115B and start the protected Charging Pump 3A. The protected Charging Pump 3A is stopped by Step 2.0. Per OPs, an unprotected charging pump will be started when the protected Charging Pump 3A is stopped to maintain charging. When Step 14.3 is performed the running charging pump will lose suction when LCV-115C is closed first and then LCV-115B is opened. Should the step sequence be altered. <u>UTILITY RESPONSE</u> 0-ONOP-016.10 supplements other plant procedures, which are also used in response to a fire. 0-ONOP-016.10 identifies components that may be affected by the fire and provides ways to mitigate the adverse effects to these components or provides for the use of alternate components that otherwise would not have been used. Fire areas where a potential for loss of suction to the charging pump exists, instructions are provided [based on the SSA analysis] to stop the protected charging pump that is assured available by the analysis. It is recognized that the SSA imposes limits on the availability of components or systems, which is, to certain extent, in direct conflict with the normal approach to have as many components available as possible. Other ONOP and operators training also would prompt usage of other components. The SSA and the 0-ONOP-016.10 do not specifically identify to stop all other charging pumps [other than the protected pump]. The intent is not to create a loss of all charging. Operators training would guide them to attempt to establish charging. It is Operations practice to start a standby pump before stopping an operating pump. Their success in operating the non-protected charging pump will depend on the extent of the fire damage to these charging pumps circuits. The sequence of steps identified in 0-ONOP-016.10 are provided with focus on starting of the protected charging pump and not on all possible configurations of the non-credited charging pumps.	Closed

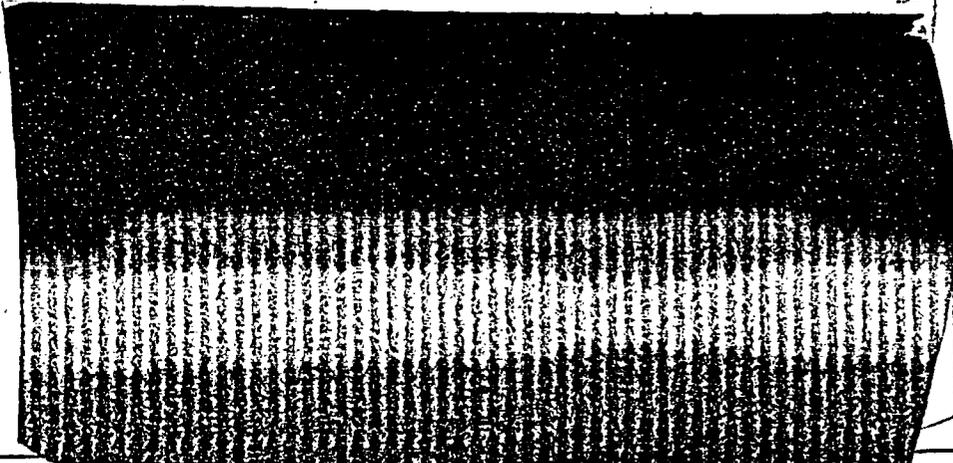
Release

QUESTION #	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
148 WISEMAN	2/10/2004	Question	Busch	No <u>NRC REQUEST OR CONCERN</u> a) What Model detectors are there in Fire Zone 067? b) Are the detectors equipped with adjustable sensitivity? <u>UTILITY RESPONSE</u> a) Pyrotonics Ionization Model DI-3 b) Yes	Closed

Release

QUESTION #	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
149 FILLION	2/10/2004	Question	Laduca / Thaker	No <u>NRC REQUEST OR CONCERN</u> 0-ONOP-16.10 Step 14.3.2 for Zone 63 requires opening of LCV-*-115B. Explain how the LCV will be opened manually since this is an air operated valve. If this valve is opened from the control room [assuming the valve circuits are functional at the time], and the protected Charging Pump is started for U/67 or T/63, the LCV could then spuriously close due to adverse fire effects. This would damage the protected charging pump. Explain how would this be prevented. <u>UTILITY RESPONSE</u> The safe shutdown analysis 5610-M-722 and 0-ONOP-16.10 provides multiple success paths for aligning charging pump suction to either an emergency boration flow path (through manually opening MOV-*-350) or RWST makeup (through manually opening LCV-*-115B or its bypass valve - 358). Another manual action in the same area (charging pump room) required manually opening LCV-*-115C. These paths are aligned prior to starting one of the protected charging pumps (one or more may be protected). The wording in the safe shutdown analysis for some fire zones was not specific enough regarding the manual action for opening LCV-*-115B. The intention was that it would be opened with a tool if available (hand loader); otherwise, manually open the bypass valve, or manually open the emergency boration valve. Since the wording was not specific enough the action may not have been transposed properly into the 0-ONOP-016.10 procedures. For example (excerpts noted below): 1. Fire Zone 63 of 0-ONOP-16.10 says in part: Open LCV-3-115B OR 3-358. 2. Fire Zone 70 of 0-ONOP-16.10 says in part: Locally open LCV-3-115B OR bypass the valve manually in the Charging pump room via 3-358. Fire Zone procedures written like Item 1 above may affect charging pump suction if LCV-*-115B is selected as the valve to open and is successfully opened remotely, then the adverse fire effects later spuriously fails the actuator cable, which causes the valve solenoid to vent, and close LCV-*-115B. LCV-3/4-115B are powered from Train 3B/4B DC power source.	Closed

QUESTION #	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
				<p>This specific sets of sequential events would require control circuits not adversely affected by the fire and the control power available when the action is performed. For some fire areas the Train B may not be the assured power source and therefore may not be available. The circuits then would have to be adversely affected or power is to be lost. These sequence of events of proper power train configuration, availability of power supply and availability of the control circuits to remotely open the valve whose control cables are in the fire zone are remote. However, if such circumstances or sequence of events did occur, then the charging pump suction may be unavailable. After 1 hour the procedure requires an emergency boration flowpath through MOV*-350. Upon a loss of charging flow the operator will re-establish a suction flow path, start the pump. If the pump is unavailable, operator will utilize another charging pump or utilize one of four high head safety injection pumps.</p> <p>Fire Zone procedures like Item 2 above required the operator to locally open LCV*-115B. If that is not feasible, the bypass valve can and would be opened manually. No potential loss of charging pump suction is expected for procedures written like item 2.</p> <p>Control cables for LCV-3-115C are routed in FZ 55, 63, 70 and the ASD fire areas. The procedural steps in 0-ONOP-016.10 for FZ 70 and in 0-ONOP-105 for ASD fire areas are properly written. Charging pumps are not credited in FZ 55.</p> <p>Control cables for LCV-4-115C are routed in FZ 45, 61, 67 and the ASD fire areas. The procedural steps in 0-ONOP-105 for ASD fire areas are properly written. Charging pumps are not credited in FZ 45.</p> <p>Because the wording is inconsistent between the procedures which may mislead the operator, Condition Report 04-0683 was initiated, and OTSC 04-0043 to 0-ONOP-016.10 was initiated for all fire zones where Procedure 0-ONOP-016.10 requires actions for LCV*-115B This is a conservative approach and provides consistent manual actions for all affected fire areas.</p>	

QUESTION #	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
150 PAYNE	2/9/2004	Question	Thaker	No <u>NRC REQUEST OR CONCERN</u> For a fire in Zone 63 what is the significance or basis for the actions in Steps 6.0 & 7.0 to be taken _____ SISA <u>UTILITY RESPONSE</u> FZ 63 [MCC 3B Room] Step 6.0 - If LOOP, isolate the close circuits by Normal / Isolate switch on the breaker and open breaker for PGP 3B  EX4 Step 7.0 - If LOOP, place breaker 30203 for Charging Pump 3B in open position with springs discharged.  EX4	Closed

Release

QUESTION # INSPECTOR	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
151 PAYNE	2/9/2004	Question	Thaker	No <u>NRC REQUEST OR CONCERN</u> For a fire in Zone 63, why assume a PORV opens or breaker 3AB01 will spuriously close? (See steps 5.0 & 6.0) <u>UTILITY RESPONSE</u> FZ 63 [MCC 3B Room] Step 5.0 requires closing of MOV-3-536 to mitigate possible spurious opening of PCV-3-455C. Control cables for PCV-3-455C [Cable Sub E and F] are in FZ 63. Step 6.0 isolates the close circuits by Normal / Isolate switch on the breaker and opens breaker for RCP 3B. RCP 3B control circuit cable 3AB01/3AB01 - 3B06/1, which is the RCP 3B start permissive from the RCP Lube Oil Pump 3B, is in FZ 63. The Lube Oil Pump 3B is powered from breaker 30679 at MCC 3B. The manual action prevents the RCP 3B from spuriously starting.	Closed
152 O'DONOHUE	2/9/2004	Question	Sweeney	No <u>NRC REQUEST OR CONCERN</u> Are the plastic covers we use to protect breakers seismic qualified? <u>UTILITY RESPONSE</u> The plastic covers used to protect the motor control center breakers have been seismically evaluated by Engineering.	Closed
153 O'DONOHUE	2/9/2004	Question	Delgado	No <u>NRC REQUEST OR CONCERN</u> In 3B SWGR Room There is a trail down the South wall from a tray above. What is in the tray? What is leaking down the wall? <u>UTILITY RESPONSE</u> The subject tray is to collect rain water leakage and was installed in 1993. (Ref: EVAL JPN-PTN-SECS-93-042, R/2). Stains on the wall is due to past rain water leakage in the room. Brown color is most probably the mixture of rain water with bituminous expansion joint.	Closed

Release

QUESTION #	INSPECTOR	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
154	WISEMAN	2/10/2004	Info Request	McDaniel	No <u>NRC REQUEST OR CONCERN</u> Provide the type of oil used in the H2 Seal Oil and Turbine Lube Oil Systems. Determine the flash point from the MSDS Sheets. Determine normal operating temperature for the Turbine Lube Oil System and H2 Seal Oil System. This question goes along with Question #76. <u>UTILITY RESPONSE</u> Type of oil used is Shell Turbo T 32 and/or Texaco Regal R&O 32. MSDS have been provided for both oils. The approximate operating temperature is 140 degrees. See attached sheets.	Closed
155	WISEMAN	2/10/2004	Question	Delgado	No <u>NRC REQUEST OR CONCERN</u> Drawing 5610-M-75 shows area drain heads routed under the switchgear rooms.(Units 3 and 4) Are there any unplugged openings from these drains in the switchgear rooms? <u>UTILITY RESPONSE</u> There are no un-plugged drains in the switchgear rooms or open connections to the sump. This was verified by walkdowns on 2/10/04 and 2/12/04. These drains were blocked to prevent back-flow of drain water during heavy rains. (See UFSAR Section SF.1.3.3 and Design Basis SL1 5610-000-DB-001, Section VIII, Pages 7 & 8)	Closed
156	WISEMAN	2/10/2004	Documentation	Busch	No <u>NRC REQUEST OR CONCERN</u> Provide qualification data for today's assigned firefighters. <u>UTILITY RESPONSE</u> Submitted	Closed
157	WISEMAN	2/10/2004	Documentation	Busch	No <u>NRC REQUEST OR CONCERN</u> Provide documentation on FPI 9459. <u>UTILITY RESPONSE</u> Submitted	Closed
158	WISEMAN	2/10/2004	Question	Bushatz	No <u>NRC REQUEST OR CONCERN</u> For FZ63 & FZ67, what are the practical limits (actually expected to do the work) for transient combustibles in these rooms? What is the basis for this answer? (ref: 0-ADM-016.1) <u>UTILITY RESPONSE</u> Closed to Question #168.	Closed

Release

QUESTION #	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
159 STAPLES	2/10/2004	Documentation	Thaker	No <u>NRC REQUEST OR CONCERN</u> Provide cable routing for NI-4-6649B-3. <u>UTILITY RESPONSE</u> Drawing 5614-J-804, Sheet 1B, Revision 1, provided under Question 71, shows ND/NI-4-6649B loop and cable block diagram. Attached are Pages 534 and 535 of the ECL that provide cable fire area routing for cable scheme number 4NFMSB. NI-4-6649B-1 and NI-4-6649B-2 are located in the control room. Cable 4NFMSB/4C01 - NY4 6649B/4 for NI-4-6649B-1 and -2 is electronically isolated from the balance of cables for cable scheme 4NFMSB by the signal processor NY-4-6649B. All cables under the cable scheme, except cable 4NFMSB/4C01 - NY4 6649B/4 are required for the operation of NI-4-6649B-3 and -4, both located at the ASP 4C264.	Closed

Release

QUESTION #	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
160 STAPLES	2/10/2004	Question	Barnes/Barry	No <u>NRC REQUEST OR CONCERN</u> Hot Standby to Cold shutdown equipment used for App R, Fire in FZ63? <u>UTILITY RESPONSE</u> The question was asked to provide assurance that the plant could safely achieve cold shutdown with a fire in the 3B MCC room (Fire Zone 063) within the guidance provided in existing procedures. Specifically, question #160 required assurance that after the plant achieved hot standby, that Operations would have sufficient equipment and guidance available to achieve cold shutdown. In the event of a fire in the Fire Zone 063, there are two methods of achieving cold shutdown. ES-0.1 checks to determine the status of the RCPs and directs cooldown via normal plant shutdown (GOP-103 and GOP-305) or through Natural Circulation (ES-0.2). These procedures were annotated in conjunction with 0-ONOP-016.10 to show the means by which cold shutdown would be achieved. Whether cold shutdown is achieved via normal shutdown or natural circulation, the required equipment is available or specific Operator actions are specified in 0-ONOP-016.10, with two exceptions. When RHR is placed in service, RHR suction from the RWST (MOV-862B) is required to be isolated, and Loop 3C RHR pump suction (MOV-750) is required to be opened. Both valves could potentially be impacted by a fire in Zone 063, with no specific guidance provided by ONOP-16.10. However, when instructed by OP-050 to re-position these valves, the Operator would be required by procedural compliance to locally operate these valves. These valves are equipped with handwheels and may be operated locally. The appropriate equipment and protection are in place to ensure the plant can achieve cold shutdown in the event of a fire in the 3B MCC room. Additional procedural guidance will be provided in ONOP-16.10 to identify MOV-750 and MOV-862B as potentially affected by a fire in Zone 063. Condition Report 04-0688 has been initiated to address this concern and to evaluate for extent of condition.	Submitted

Release

QUESTION #	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
161 FILLION	2/10/2004	Info Request	Thaker	No <u>NRC REQUEST OR CONCERN</u> Provide loop drawings for ASD pressurizer level and pressure instrumentation. <u>UTILITY RESPONSE</u> The following drawings are enclosed: 5614-J-806, Sheet 2B, Revision 0 5610-J-539P, Revision 4 5610-M-430-238, Sheet 1, Revision 3	Closed
162 STAPLES	2/11/2004	Question	Dunstan	No <u>NRC REQUEST OR CONCERN</u> Referencing CR 04-0580, what timelines are used and what is intended to be accomplished by this CR? <u>UTILITY RESPONSE</u> The timelines referred to in CR 04-0580 are included in Report PTN-BMSM-03-013 and were prepared and referenced in Evaluation PTN-ENG-SEMS-03-045 in support of preparation for the triennial inspection. During interface with Operations personnel, use of the timelines provided additional insight into the action sequence, operator demands and how some actions (and their timing) related to plant transient conditions and other operator and manual actions. This is considered particularly true for O-ONOP-105 where all operators leaving the Control Room have prescribed responsibilities. In this regard, there appears to be a potential opportunity for enhancement in the use of timelines for training.	Closed

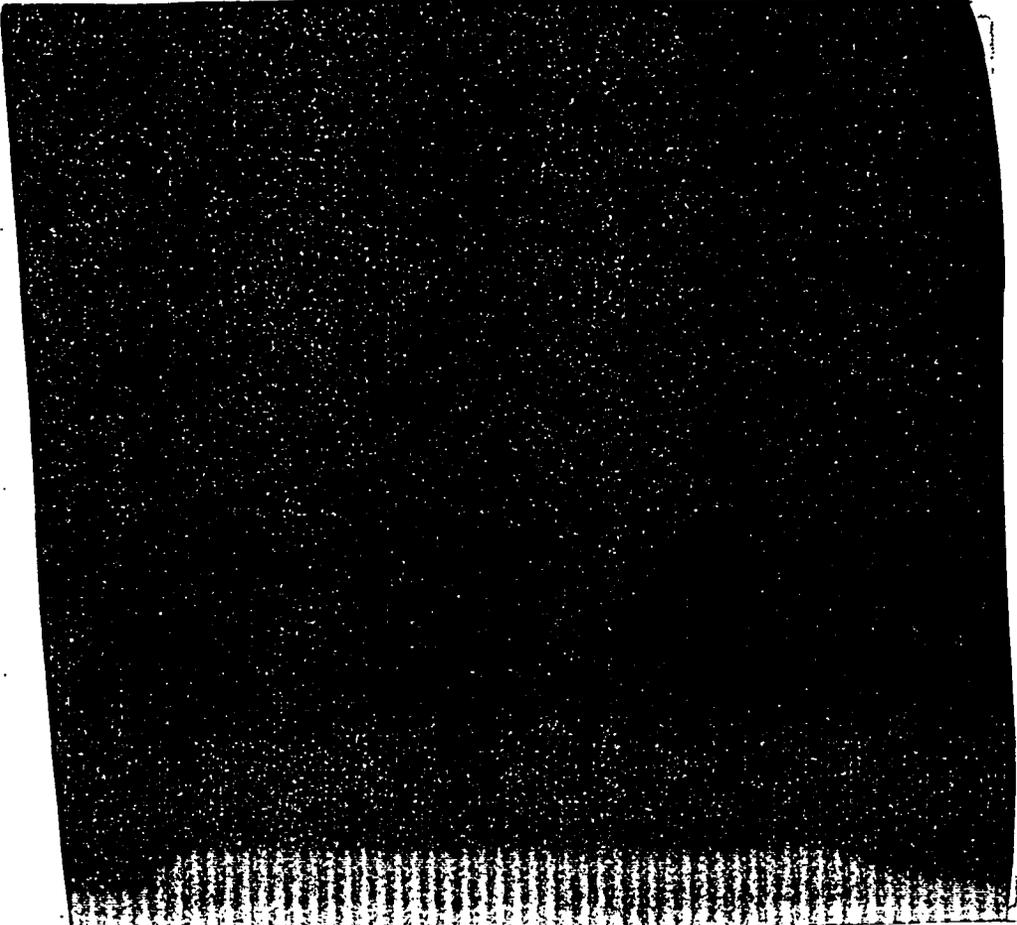
QUESTION #	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
163 STAPLES	2/11/2004	Info Request	Dunstan	No <u>NRC REQUEST OR CONCERN</u> Regarding CR 04-0292, what were the specific procedural steps identified? What is the basis for determining actions do not lead to an unrecoverable condition? <u>UTILITY RESPONSE</u> The procedural steps identified were for Fire Zone 76 and included the following comments: ? The procedure format does not reflect current operational practices and terminology. ? Step 1.1 may be deleted as it is redundant to the action prescribed in 1.2 regarding 3/4-ONOP-023.2. ? Better to combine 2.0 and 2.1 into one line. ? Need not specifically refer to actions in the Control Room (3.0) as it's understood unless otherwise indicated. ? In 4.1, change to "Verify Unit 4 reactor trip"; that is, the "OR trip" is unnecessary. As a general comment, it was noted that it may be beneficial to re-asses the overall philosophy of 0-ONOP-016.10 format and instructions to better suit rules using manual actions. The statement that none of the actions would result in an unrecoverable condition is based on the suggested format format and editorial comments would not change the action or sequence of actions already prescribed and did not identify a degraded condition with respect to License Conditions 3D.	Closed
164 STAPLES	2/11/2004	Documentation	Sweeney / Savine	No <u>NRC REQUEST OR CONCERN</u> Provide breaker coordination documents for breaker 45309 [for 4E243A] with respect to the incoming breaker 45301 to MCC 4L and feeder breaker 40111 [at LC 4A] to MCC 4L. <u>UTILITY RESPONSE</u> The attached calculation 18712-342-E-01, Revision 0, provides the coordination for the above breakers. It should be noted that breaker 45301 is a non-automatic breaker, and therefore, no coordination is required for this breaker.	Closed

Release

QUESTION # INSPECTOR	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
165 PAYNE	2/10/2004	Info Request	Hanek/Dunstan	No <u>NRC REQUEST OR CONCERN</u> Provide a list of the Condition Reports generated as a result of the FP Triennial Inspection. A copy of the CRs is also requested <u>UTILITY RESPONSE</u> CR 04-0369, CR 04-0385, CR 04-0476, CR 04-0477, CR 04-0610, 04-0683, 04-0686, 04-0687, 04-0688, 04-0700	Closed
166 O'DONOHUE	2/11/2004	Question	Stamp/Busch	No <u>NRC REQUEST OR CONCERN</u> How do the non-fire brigade operators respond when there is a fire in the plant? <u>UTILITY RESPONSE</u> Undocumented discussion.	Closed
167 PAYNE	2/11/2004	Info Request	Sweeney / Savine / Thaker	No <u>NRC REQUEST OR CONCERN</u> Request for drawings or pictures: 1) 5610-E-1 4B 4160 bkr w/designations 2) 3B MCC drawings or picture of bkr locations 3) RTB & Bypass breakers picture or drawing 4) 3B Load Center drawings or pictures 5) Unit 4 Alternate Shutdown Panel (see S.D.) <u>UTILITY RESPONSE</u> The following drawings are attached: 5613-E-3, Sheet 1, Revision 4 [4kV Switchgear 3A & 3B] 5614-E-3, Sheet 1, Revision 4 [4kV Switchgear 3A & 3B] 5613-E-5, Revision 10 [480V Load Centers 3A, 3B, 3C, 3D & 3H] 5614-E-5, Revision 9 [480V Load Centers 4A, 4B, 4C, 4D & 4H] 5613-E-10, Sheet 1, Revision 38 [Motor Control Centers 3A, NV3A, 3B, NV3B, 3C, NV3C] 5614-E-10, Sheet 1, Revision 39 [Motor Control Centers 4A, NV4A, 4B, NV4B, 4C, NV4C] SD 153 Figures 4A, 4B, 4C and 4D for Alternate Shutdown Panel 3C264 5610-T-D-12A, Sheet 1, Revision 10 5610-M-403-54, Revision 1	Closed

Release

QUESTION #	INSPECTION DATE	CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
168 WISEMAN	2/11/2004	Info Request	George	No <u>NRC REQUEST OR CONCERN</u> Identify the combustible material and quality used during breaker inspection/maintenance for FZ 63 and FZ 67. <u>UTILITY RESPONSE</u> Performed a review of the breaker inspection procedures applicable to FZ 63 and FZ 67. Attached a list of combustible materials that could be used for every breaker design.	Closed
169 FILLION	2/11/2004	Info Request	Thaker	No <u>NRC REQUEST OR CONCERN</u> Provide raceway layout drawings for MCC 3B room. <u>UTILITY RESPONSE</u> The following drawings are attached: 5610-E-130, Revision 2 5610-E-132, Sheet 1, Revision 10 5610-E-132, Sheet 2, Revision 0 5610-E-144, Revision 31	Closed
170 PAYNE	2/11/2004	Question	Dunstan	No <u>NRC REQUEST OR CONCERN</u> Per Attachment 7 of ONOP-105 the SNPO may be required to manipulate MOV*-862A, is there a dedicated ladder available? Is there a requirement for a ladder? <u>UTILITY RESPONSE</u> During cooldown, manual action is prescribed to close MOV-3/4-862A in order to isolate the RHR System from the RWST. The isolation function is redundant to MOV-3/4-862B, for which breaker lock-OFF and valve manual closure is also prescribed. One of the valves in each unit is readily accessible such that no ladder is required. Also, MOV-3/4-862A/B are provided with over-torque protection such that spurious actuation would not compromise its operability. Therefore, closure of one of the valves is not required and may be deleted. During investigation it was noted that the SSA is inconsistent in prescribing manual closure for only one valve on Unit 4 but for both valves on Unit 3. Accordingly, CR 04-0670 was initiated to reconcile the discrepancies.	Closed

QUESTION # INSPECTOR	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
171 O'DONOHUE	2/11/2004	Question	Barry/Dunstan		Submitted
172 PAYNE	2/11/2004	Info Request	Busch	No <u>NRC REQUEST OR CONCERN</u> Provide list of locations or preferably location on drawings of the Appendix R portable lantern boxes. <u>UTILITY RESPONSE</u> Provided.	Closed

Ex4

Release

QUESTION # INSPECTOR	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
173 O'DONOHUE	2/11/2004		Sweeney	No <u>NRC REQUEST OR CONCERN</u> Is there emergency lighting (Appd R) in the area of the RHR Hx Room where the SNPO will take actions to control FCV-605 and HCV-758? <u>UTILITY RESPONSE</u> Emergency Lights EL126-18 A/B will provide illumination in the area of HCV-3-758 and FCV-3-605 in Unit 3 RHR Hx Room. Emergency Lights EL125-18 A/B will provide illumination in the area of HCV-4-758 and FCV-4-605 in Unit 4 RHR Hx Room. References: Valve Locator, 0-ONOP-16.10 and 5610-E-219.	Working

QUESTION #	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
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174	2/12/2004	Info Request	LaDuca/Redmond	No	Submitted
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WISEMAN

NRC REQUEST OR CONCERN
 What is the FMF value for having only duct detection in Fire Zone 097?

UTILITY RESPONSE

The purpose is evaluation is to estimate the Fire Mitigation frequency (FMF) associated with the fire protection features provided in Fire Zone 97.

FMF = IF + FB + MS + AS + CC

- Where: IF = fire ignition frequency (log)
 FB = fire barrier
 MS = manual suppression/detection
 AS = automatic suppression/detection
 CC = dependencies/common cause contribution

From Table 5.1 of Appendix F,

AS = 0 (no automatic suppression)

MS = -0.25 (highly degraded due to the potential for delayed response since no fire detection provided)

FB = 0 (fire barrier not used in the FMF since we are applying the Single Room Term (SRT))

CC = 0 (no dependencies or common cause contribution)

IF = -2.1 (log 7.97-03- fire frequency from IPEEE)

IF derived from Crew For's Running deduct NOT Running

FMF = IF + MS + AS + CC,.....

IF = FIRE IGNITION FREQUENCY (LOG) = log,0.00797,-2.1

FB = FIRE BARRIER = N/A (SRT) = 0

MS = MANUAL SUPPRESSION/ DETECTION = -0.25

AS = AUTOMATIC SUPPRESSION/DETECTION = 0

CC = DEPENDENCIES/ COMMON CAUSE CONTRIBUTION = 0

QUESTION # INSPECTOR	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
				<p>***** ***** FMF=-2.35</p> <p>* Manual Suppression is shown as highly degraded due to lack of automatic detection.</p> <p>From Table 5.4, a FMF value of -2.3 equates to approximate frequency of 1 per of 102 to 103 years. From Table 5.5, this frequency range corresponds to an estimated Likelihood Rating of C for > 30 days exposure to the degraded condition. From Table 5.6, the Risk Significance Rating is Green for the U3 and U4 Mechanical Equipment Room. This Risk Significance Rating is based on the fact that the postulated fire-induced failures in Fire Zone 97 are predominately ventilation and process indication. PCV-4-455A and PCV-4-455B are potentially affected (spurious Pressurizer Spray); however, tripping the RCP's mitigates this condition. The steam supply to the AFW pump (MOV-3-1404) may be affected; however valve MOV-3-1403 is available. There are no cables associated with HPSI pumps and associated injection valves. Therefore, although Alternate Shutdown (ASD) is credited for Appendix R for this fire zone, multiple trains are available to mitigate a fire in this zone.</p>	
175 PAYNE	2/11/2004	Info Request	Guey	<p>No <u>NRC REQUEST OR CONCERN</u></p> <p>Provide a phase 2 SDP for small LOCA using Turkey Point Plant specific SDP Notebook worksheets</p> <p><u>UTILITY RESPONSE</u></p> <p>The fire ignition frequency for fire zones that may lead to RCP seal LOCA ranges from 1.0E-2/Yr to 1.0E-4/Yr. Probability of failure to provide manual suppression is approximately 0.1 to 0.5. The seal LOCA probability is approximately 0.2. The Small LOCA frequency thus ranges from 1.0E-3/Yr to 1.0E-5/Yr. Based on Table 1 of SDP, a bounding value for the IEL (Initiating Event Likelihood) is 4. The Phase II SDP assumes that at least one of HHSI pump and RHR is available; this is confirmed for fire zone 67. Attached Table indicates that the Phase II SDP would be GREEN..</p>	Closed
176 PAYNE	2/12/2004	Question	Thaker	<p><u>NRC REQUEST OR CONCERN</u></p> <p>In ONOP 16.10 for Fire Zones 63, 67 and 106, what is the basis for tripping a charging pump in ONOP 16.10?</p> <p><u>UTILITY RESPONSE</u></p>	Working

Release

QUESTION #	DATE	INSPECTION CATEGORY	RESPONDING INDIVIDUAL	OPERABILITY CONCERN	STATUS
177 PAYNE	2/12/2004	Question	Thaker Savine	<p><u>NRC REQUEST OR CONCERN</u></p> <p>At the time of preparing CR 03-1330-1 Attachment A, Item 24, did you realize that MOV-626 was missing from the ONOPs? If so, how was it addressed?</p> <p><u>UTILITY RESPONSE</u></p> <p>The review performed for Attachment A focused on the SSA, since that is the genesis document for the ONOPs. The ONOPs were consulted but there was no concerted review to assure that the SSA and ONOPs agreed. However, the findings were sufficient to warrant a wholesale review, the action for which is provided for in Evaluation PTN-ENG-SEMS-03-045, Section 5.0.</p>	Working