



Point Beach Nuclear Plant
6610 Nuclear Rd., Two Rivers, WI 54241

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NPL 97-0252

10 CFR 50.4
10 CFR 50 Appendix R

May 8, 1997

Document Control Desk
US NUCLEAR REGULATORY COMMISSION
Mail Station P1-137
Washington, DC 20555

Ladies/Gentlemen:

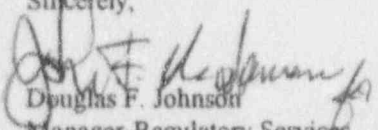
DOCKETS 50-266 AND 50-301
REQUEST FOR INFORMATION ON
THE APPENDIX R REBASELINING PROJECT
AND CORRECTIVE ACTIONS FOR EXISTING CONDITIONS
POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2

In our Emergency Notification System (ENS) report of April 14, 1997, we identified six (6) previously unreported plant conditions related to the Point Beach Appendix R safe shutdown analysis. We are presently evaluating the cause of these conditions and the adequacy of the existing compensatory measures and corrective actions. The results of this evaluation will be transmitted in a Licensee Event Report (LER) on or about May 15, 1997. Also in the last few days, we have identified two additional Appendix R issues that are subject to reporting in subsequent LERs. One of these issues (IN 92-18 valves) was reported through ENS on May 7, 1997.

In the interim, Mr. Dave Butler of the NRC Region III office has requested information about our planned corrective actions for these conditions; short-term compensatory measures and permanent corrective actions. Mr. Butler suggested that this information may be useful to the NRC Startup Assessment Team. We agree that communication of these corrective actions may be beneficial. Therefore, we are attaching a preliminary description of our corrective actions; however, the corrective actions proposed on the attachment are strictly preliminary in nature and have not had the benefit of a Manager's Supervisory Staff (MSS) review and are subject to change. In addition, we fully expect that the Appendix R Rebaselining Project discussed at our management meeting on April 24, 1997, will provide further information that may affect the approach to some of the proposed permanent corrective actions.

The attachment describes our proposed general approach to correcting the reported conditions. We do not consider these to be commitments at this time. Our commitments will be described in the LER and any supplements. Please contact us if you have any questions.

Sincerely,


Douglas F. Johnson
Manager-Regulatory Services
and Licensing

9705140291 970508
PDR ADOCK 05000266
F PDR

Attachment

cc: NRC Resident Inspector
NRC Regional Administrator
PSCW



Summary of
Point Beach Nuclear Plant
Appendix R Startup Items
As of May 8, 1997

NUTRK ID	Title / Description	Proposed Corrective Actions	Tentative Schedule
CR 96-553-1	<p><u>Re-Entry into Cable Spreading Room</u></p> <p>Entry into fire area (Cable Spreading Room) may be required to operate breakers before the fire can be assumed extinguished.</p>	<p>Short Term</p> <p>Verify / ensure operable detection and suppression in area. Continuous fire watch if either detection or suppression system is taken out of service.</p> <p>Restrict work activities and transient combustibles in the Cable Spreading Room to that which is essential for continued plant operations</p> <p>Maintain all cable trays covered per existing exemption request to eliminate exposure of cables and prevent any combustible pathway for a fire to start and spread in the room.</p> <p>Hourly fire watch in Cable Spreading Room to verify the above conditions are maintained to reduce the likelihood of any transient combustible fire exposure.</p> <p>Stage additional SCBA's at the entrance to the area for use in the event Operators must enter the room.</p> <p>Revise shutdown procedures to identify this potential problem and precautions Operators may need to enter room and operate equipment.</p> <p>Provide instructional meeting for Operators to explain the potential problems, conditions and solutions.</p> <p>Provide Operations Training on revised AOP procedure.</p> <p>Prepare a SO.59 to evaluate operating the plant under these interim conditions.</p> <p>Long Term</p> <p>Modify G05 circuits to ensure availability of this alternate safe shutdown method for a Cable Spreading room fire. This method has been previously approved for a fire in the 4kv Vital Swgr room and will allow shutdown completely independent of the Cable Spreading room.</p> <p>Revise Shutdown procedures to address the use of G05 for this fire and train operators on its use.</p>	<p>Short Term</p> <p>In place and completed prior to startup</p> <p>Long Term</p> <p>Modification in progress, schedule for completion being prepared.</p>

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NUTRK ID	Title / Description	Proposed Corrective Actions	Tentative Schedule
CR 94-328-4	<p><u>Unanalyzed Procedural Guidance for EDG Loading (G01/G02)</u></p> <p>A review of the Appendix R Safe Shutdown procedure AOP-10A, "Safe Shutdown - Local Control" indicated that a potentially unanalyzed process which required the EDG (G01 or G02) to be started with its output breaker closed and the minimum essential load breakers closed on the 480 V AC bus. There is no analysis to demonstrate the capability of the EDG to reach rated speed and flash its field with these loads already connected during the worst-case postulated fire in the plant.</p>	<p>Short Term Revise Safe Shutdown procedures to instruct Operators to use G03 or G04 to shutdown where this condition exists. The new G03 and G04 diesels have dc control power available for fires in the Control Room and Cable Spreading Room (See above for Cable Spreading Room concern)</p> <p>Provide instructional meeting for Operators to explain the potential problems, conditions and solutions.</p> <p>Provide Operator Training on revised safe shutdown procedures.</p> <p>Prepare a SO.59 to evaluate operating the plant under these interim conditions.</p> <p>Long Term Modify G05 circuits to ensure availability of this alternate safe shutdown method to address a Cable Spreading room fire. This method has been previously approved for a fire in the 4kv Vital Swgr room and will allow shutdown completely independent of the Cable Spreading room.</p> <p>Revise Shutdown procedures to address the use of G05 for this fire and train operators on its use.</p>	<p>Short Term In place and completed prior to startup</p> <p>Long Term Modification in progress, schedule for completion being prepared.</p>

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CR 96-136-1	<p><u><i>Inadequate Breaker Coordination Causes Instrument Loss</i></u></p> <p>During a review of electrical cable routing, a licensee engineer identified a 125 VDC power cable that should not have been routed through the North Zone of the AFW Pump Room. The cable supplies 125VDC panel D-28 from bus D-04. A fault on this cable, in combination with lack of selective breaker coordination on this 125 VDC panel, could result in a loss of 125 VDC bus D-04 and the yellow channel of instrument power. The loss of instrument power would disable instrumentation that is essential for achieving and maintaining a safe shutdown for Unit 2 until this potential short was cleared and the panel was repowered.</p>	<p><u>Short Term</u> Verify / ensure operable detection and suppression in area. Continuous fire watch if either detection or suppression system is taken out of service.</p> <p>Restrict work activities and transient combustibles in the AFW Pump Room to that which is essential for continued plant operations</p> <p>Hourly fire watch in AFW Pump Room to verify the above conditions are maintained to reduce the likelihood of any transient combustible fire exposure.</p> <p>Revise Fire Emergency Plans (FEPs) to provide guidance for Operations in the event of an AFW Room fire and information on potential problems and how to clear the short and restore plant instrumentation.</p> <p>Provide instructional meeting for Operators to explain the potential problems, conditions and solutions.</p> <p>Prepare a SOI to evaluate operating the plant under these interim conditions.</p> <p><u>Long Term</u> Considering modifications to protect circuits (fire wrap) or reroute cables</p>	<p><u>Short Term</u> In place and completed prior to startup</p> <p><u>Long Term</u> Feasibility and schedule for completion being considered</p>

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NUTRK ID	Title / Description	Proposed Corrective Actions	Tentative Schedule
CR 96-889-1	<p><u><i>Inadequate Coordination May Disable All Emergency Power</i></u></p> <p>As part of the Emergency Diesel Generator (EDG) Addition Project, the normal 125 VDC supplies to EDG G-02 were repowered from distribution panel D-31. Power cables for this normal power supply were routed through the North Zone of the AFW Pump Room. The DC supply cables from the other three EDGs are also routed through this zone, and due to the lack of selective breaker coordination on this 125 VDC panel, an Appendix R fire in the North Zone of the AFW Pump Room could result in the trip of the power to the remaining control power circuit to the emergency diesel generator routed outside this room. Disabling all these power supplies could prevent all four EDGs from starting and supplying their required Appendix R safe shutdown loads until the short is cleared and panel repowered.</p>	<p><u>Short Term</u></p> <p>Verify / ensure operable detection and suppression in area. Continuous fire watch if either detection or suppression system is taken out of service.</p> <p>Restrict work activities in the AFW Pump Room to that which is essential for continued plant operations</p> <p>Hourly fire watch in the AFW Pump Room to reduce the likelihood and severity of a postulated fire.</p> <p>Revise Fire Emergency Plans (FEPs) to provide guidance for AFW Room fire and identify this potential problem and precautions Operators may need to take to clear the short and operate equipment.</p> <p>Provide instructional meeting for Operators to explain the potential problems and conditions.</p> <p>Prepare a 50.59 to evaluate operating the plant under these interim conditions.</p> <p><u>Long Term</u></p> <p>Considering modifications to protect circuits (fire wrap) or reroute cables</p>	<p><u>Short Term</u></p> <p>In place and completed prior to startup</p> <p><u>Long Term</u></p> <p>Feasibility and schedule for completion being considered</p>
CR 92-372-4	<p><u><i>Lack of Ventilation Analysis for Safe Shutdown Equipment</i></u></p> <p>A review of the original Appendix R Safe Shutdown Analysis indicated that particular ventilation equipment was not listed on the Appendix R essential equipment list as equipment necessary to achieve safe shutdown. Accordingly, the original analyses did not demonstrate the effects of fires on electrical circuits of ventilation equipment, and the original analysis had no evaluation of safe shutdown equipment operability for the potential loss of room cooling. After performing ventilation calculations it was determined that supplemental ventilation would be necessary prior to reaching cold shutdown for Appendix R.</p>	<p><u>Short Term / Long Term</u></p> <p>Purchase portable fans / generators</p> <p>Proceduralize placement and operation of equipment.</p> <p>Administratively control and maintain equipment for Appendix R use.</p> <p>Prepare a 50.59 to evaluate operating the plant under these conditions.</p>	<p><u>Short Term / Long Term</u></p> <p>In place and completed prior to startup</p>

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NUTRK ID	Title / Description	Proposed Corrective Actions	Tentative Schedule
CR 96-959-1	<p><u>Inadequate Procedural Guidance for Bus Stripping</u></p> <p>A review of the Appendix R Safe Shutdown procedures indicated that Abnormal Operating Procedures (AOP-10A and AOP-10C) directed plant operators to proceed to the wrong DC power panel for isolating control power to 4 KV switchgear 2A05 and 480 V bus 2B03. Isolating this control power during a fire is necessary to prevent spurious breaker operation on the 2A05 and 2B03 buses.</p>	<p><u>Short Term / Long Term</u></p> <p>Revise AOP safe shutdown procedures to reflect change and identify proper dc power panel.</p> <p>Provide instructional meeting for Operators to explain the potential problems and conditions.</p> <p>Provide Operations Training on revised AOP procedure.</p> <p>Prepare a SO.59 to evaluate operating the plant under this condition.</p>	<p><u>Short Term / Long Term</u></p> <p>In place and completed prior to startup</p>
CR 96-1249-1 IR 96-018-12	<p><u>IN 92-18 - Hot Short on MOV's</u></p> <p>Concern that fire-induced hot shorts could bypass torque switch-limit, switch protection and mechanically damage safe shutdown valves required to be manually repositioned for safe shutdown.</p>	<p><u>Short term</u></p> <p>Identified Valves susceptible to this damage.</p> <p>Update Operations Notebook to identify susceptible valves.</p> <p>Review Appendix R shutdown paths and identify alternatives available</p> <p>Revise Control Room safe shutdown procedure to identify condition and consider feasibility of an immediate action to deenergize valve operators for a control room fire.</p> <p>Provide instructional meeting for Operators to explain the potential problems and conditions.</p> <p>Mark related breakers in the field that would require tripping.</p> <p>Provide Operations Training on revised AOP procedure.</p> <p>Prepare a SO.59 to evaluate operating the plant under these interim conditions.</p> <p><u>Long Term</u></p> <p>Circuit modifications are being considered as recommended in IN 92-18</p> <p>Re-gearing of valves if possible.</p>	<p><u>Short Term</u></p> <p>In place and completed prior to startup</p> <p><u>Long Term</u></p> <p>Feasibility, conceptual design and schedule for completion being considered at this time.</p>

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CR Just Issued 5/8/97	<p><u>Adequacy of Emergency Lighting for Operator Actions</u></p> <p>Appendix R shutdown includes operator actions in areas which may not be illuminated (i.e., SWPH, and 13.8 KV Swgr Bldg) and 8-hr battery powered lights not installed along outdoor access and egress routes (i.e., SWPH, 13.8 kv Swgr Bldg, DGB Building, G05 Bldg).</p>	<p><u>Short Term</u></p> <p>Update Operations Notebook to identify need for portable lights</p> <p>Stage and maintain Portable Lanterns and Flashlights accessible for Operator use</p> <p>Provide instructional meeting for Operators to explain the potential problems and conditions.</p> <p>Prepare a SO.59 to evaluate operating the plant under these interim conditions.</p> <p><u>Long Term</u></p> <p>Install 8-hr battery powered emergency lighting in SWPH and 13.8 kv Swgr Bldg</p> <p>Request Exemption for 8-hr battery powered lights outdoors and in the G05 Bldg which has emergency lighting equal to or better than 8-hr battery units</p>	<p><u>Short Term</u></p> <p>In place and completed prior to startup</p> <p><u>Long Term</u></p> <p>Modification and schedule for completion being prepared.</p>
CR 97-1343	<p><u>CCW Cross Connect Valve</u></p> <p>CCW Cross Connect valve failed following manual operation. This valve is currently listed for use in cold shutdown procedures for certain plant fire scenarios. Condition previously reported.</p>	<p><u>Short Term/Long Term</u></p> <p>Revise AOP shutdown procedures to use alternate flow paths in lieu of this stuck valve.</p> <p>Provide instructional meeting for Operators to explain the potential problems and conditions.</p> <p>Provide Operations Training on revised AOP procedure.</p> <p>Prepare a SO.59 to evaluate operating the plant under this condition.</p>	<p><u>Short Term/Long Term</u></p> <p>In place and completed prior to startup</p>