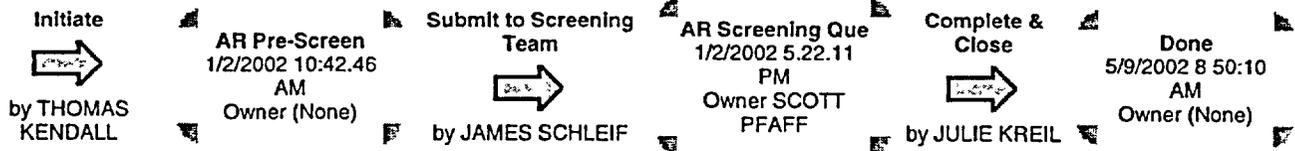


STATE CHANGE HISTORY



SECTION 1

Activity Request Id: CAP001763
 Activity Type: CAP Submit Date: 1/2/2002 10:42:46 AM

One Line Description: ISI scoping of AF-117, AF-4035, classification of AFW recirc lines.

Detailed Description: 1/2/2002 9:42AM - THOMAS KENDALL:
 During review of AFW system recirculation line design for continuing risk assessment, it was identified that a check valve (AF-117) in the common recirculation line is a source of a possible single active failure (failure to open) that could render all 4 pumps inoperable. A disc separation of manual isolation valve AF-1 could have similar effects (although this valve is not required to actively reposition, and is therefore not considered to be a failure contributor).

This concern will need to be reviewed in light of the final resolution for the recirculation lines from the pumps. If it is determined that minimum flow recirculation is a necessary design feature to maintain operability of the pump(s), then this valve will likely have to be removed and/or tested as a safety related valve.

Note that while relief valve AF-4035 is also in this common line, it may not provide protection to all running pumps if the common recirculation line downstream is blocked / isolated. This is due to the phenomenon of the higher head pumps (1 or more turbine driven pumps) shutting off flow from the lower head pumps. This aspect was described in full in NRC Bulletin IE 88-04 "Potential Safety-Related Pump Loss".

This AR is to identify a concern, and to track it's resolution. Discussion with PRA Engineering staff confirms that the aggregate risk of the common mode failure is acceptably low. This is a mechanistic issue that may result from reclassification of the line, and is not considered a risk significant issue at this time.

Initiator: KENDALL, THOMAS Initiator Department: EDT Engineering Design Thermal/Hydraulic Analysis PB 2

Date/Time of Discovery: 1/2/2002 10:33:47 AM Date/Time of Occurrence: 1/2/2002 10:33:47 AM

Identified By: Site-identified System: AF PB

Equipment # (1st): (None) Equipment Type (1st): (None)

Equipment # (2nd): (None) Equipment Type (2nd) : (None)

Equipment # (3rd): (None) Equipment Type (3rd) : (None)

Site/Unit: Point Beach - Common

Why did this occur?: 1/2/2002 9:42AM - THOMAS KENDALL:
 The common recirculation line has not historically been considered to have a Safety Related function.

Immediate Action Taken: 1/2/2002 9:42AM - THOMAS KENDALL:
 None

Recommendations: 1/2/2002 9:42AM - THOMAS KENDALL:
 Upon final resolution of design functions of the recirculation line(s), review IST documentation of AF-117 and AF-4035 to determine if further changes are needed

Handwritten signature: A/141

1/2/2002 4:22PM - JAMES SCHLEIF:

Conduct an engineering review to ensure the AFW recirculation line design is adequate. This review needs to include the system/component classification, single failure analysis, relief valve performance and capability in event of check valve failure and adequacy of check valve and relief valve maintenance and testing. Results of this evaluation will determine any additional corrective actions as stated in the initiators recommendation.

Notify Me During Eval?: Y SRO Review Required?: Y

SECTION 2

Operability Status: Operable **Compensatory Actions:** N

Basis for Operability: 1/2/2002 4:22PM - JAMES SCHLEIF:
 AF-117, AFW Recirculation Line Check Valve is a non-QA and non-Safety Related component. The AFW System however is safety related and relies on the recirculation flow under low AFW flow conditions to maintain pump cooling and operation. A search of CHAMPS history shows no work orders have been written against AF-117, AFW Recirculation Line Check Valve. Discussion with the Shift Manager also revealed no recollection of any previous problems with this valve. This recirculation line is also protected with a relief valve upstream of AF-117, AFW Recirculation Line Check Valve however, the capacity of the relief valve, AF-4035 is questioned based on the initiator's comments. Flow through AF-117, AFW Recirculation Line Check Valve is verified during each AFW pump quarterly test (four tests per quarter). Recent operator training and enhancements to operating procedures have heightened attention to the necessity to maintain adequate AFW pump flow/recirculation flow, or shutdown the AFW pumps to prevent damage to the AFW pumps. All AFW pumps have successfully completed all required testing within the current periodicity and are therefore operable.

Unplanned TSAC Entry: N **External Notification:** N

SECTION 3

Screened?: Y **Significance Level:** B

INPO OE Req'd?: N **Potential MRFF?:** N

QA/Nuclear Oversight?: N **Licensing Review?:** N

Good Catch/Well Doc'd?: NA

SECTION 4

Inappropriate Action: 9/5/2002 6:50:36 AM - KEVIN BENNETT:
 This is a legacy item. The site has decided to make the recirculation function of these pumps safety related. In order to ensure that flow is maintained in this line the internals of the check valve are being removed.

Process: N/A - Not Applicable **Activity:** N/A - Not Applicable

Human Error Type: N/A - Not Applicable **Human Perf Fail Mode:** N/A - Not Applicable

Equip Failure Mode: (None) **Process Fail Mode:** N/A - Not Applicable

Org/Mgt Failure Mode: N/A - Not Applicable **Group Causing Prob:** (None)

Hot Buttons: (None)

SECTION 5

CAP Admin: KEVIN BENNETT **Prescreener:** (None)


Project: Corrective Action

Process (CAP) 

ⓧ State: Done ⓧ Active/Inactive: Inactive
 ⓧ Submitter: THOMAS KENDALL ⓧ Owner: (None)
 
 AR Type: Parent ⓧ Last Modified Date: 9/5/2002 6:50:36 AM
 ⓧ Last Modifier: KEVIN BENNETT ⓧ Last State Change Date: 5/9/2002 8:50:10 AM
 
 ⓧ Last State Changer: JULIE KREIL  ⓧ Close Date: 5/9/2002 8:50.10 AM

NUTRK ID:

of Children: 0

References: MR 01-144
 MR 02-001
 NPM 2002-0228

Update: CLOSED TO COMPLETED ACTION.

Prescreen Comments:

Import Memo Field:

OPR Completed?: N

OLD_ACTION_NUM:

sub_tsid: 0 original_project_id: 32

original_issue_id: 001763

Site: Point Beach

Cartridge and Frame:

ATTACHMENTS AND PARENT/CHILD LINKS

 [Linked To CE000022](#)