

Introduction

Reason for Commitment Change

- **Management Challenge**
 - Design Change Package late issue
 - Planning & Scheduling not timely
 - Implementation Resources
- **Risk of implementing Design Change**
 - Risk of impact to SW supply to RBCU function without corresponding risk improvement from design change



Plant Safety in Current Configuration

VCSNS will remain safe:

- Water hammer condition exists only when SW aligned to RBCU's and LOOP
- Becomes significant only when SW aligned to RBCU's, w/LOOP, and w/LOCA or MSLB
 - PRA indicates very low risk (1.74E-07/yr)
 - Phase 1 actions in place
- **Real Life Experience**
 - No damage to piping or hangers



Schedule for Design Change Implementation

(Commitment change required)

- **Implementation by 5/2008 (Refueling 17)**
 - Extensive modification
 - Unit shutdown required
 - Next scheduled shutdown for refueling



Resolution of Technical Issues from NRC letter August 22, 2006

- VCSNS reviewed NRC ltr. dated 8/22/2006
- No additional explanation necessary
- VCSNS expects to respond in the next 60 days



Introduction

Purpose of Visit

- Discuss VCSNS commitments associated with Generic Letter (GL) 96-06.
 - Implement design changes by 10/06
 1. Delay opening 3107A/B
 2. Install vacuum relief valves
 3. Replace 3107A/B
- VCSNS wishes to alter this commitment

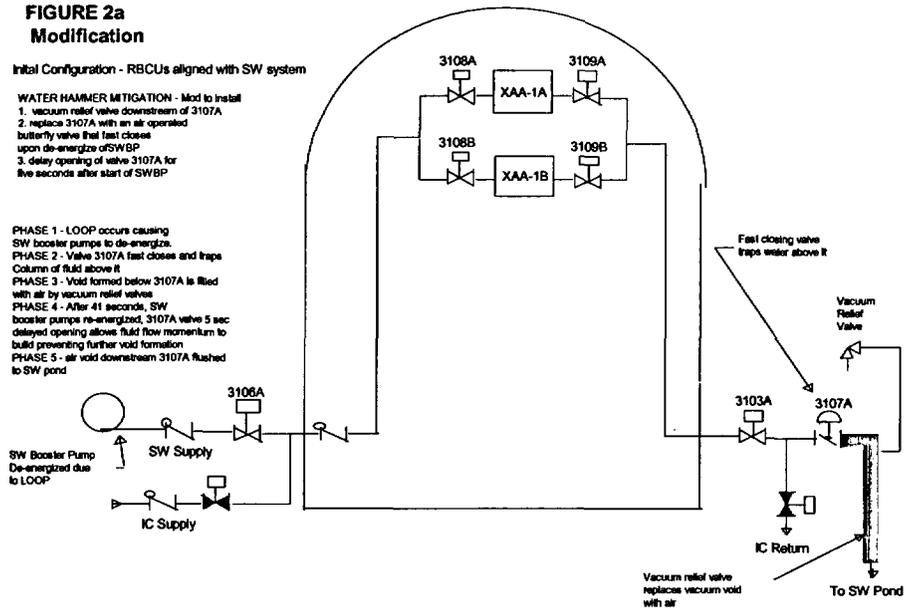


FIGURE 2a
Modification

Initial Configuration - RBCUs aligned with SW system

WATER HAMMER MITIGATION - Mod to Install
 1. vacuum relief valve downstream of 3107A
 2. replace 3107A with an air operated butterfly valve that fast closes upon de-energize of SWBP
 3. delay opening of valve 3107A for five seconds after start of SWBP

PHASE 1 - LOOP occurs causing SW booster pumps to de-energize.
 PHASE 2 - Valve 3107A fast closes and traps column of fluid above it.
 PHASE 3 - Void formed below 3107A is filled with air by vacuum relief valves.
 PHASE 4 - After 41 seconds, SW booster pumps re-energized, 3107A valve 5 sec delayed opening allows fluid flow momentum to build preventing further void formation.
 PHASE 5 - air void downstream 3107A flushed to SW pond.



V. C. Summer Nuclear Station Generic Letter 96-06 Discussion

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Chuck Barbier, Principle Design Engineer – Piping



Agenda

- Introduction
- Plant Safety in Current Configuration
- Schedule for Implementation of Modifications
- Resolution of Technical Issues
- Open discussion



NRC/VCSNS Open Discussion



FIGURE 2a

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