December 19, 1995

Duke Power Company
ATTN: Mr. J. W. Hampton
Vice President
Oconee Site
P. O. Box 1439
Seneca, SC 29679

SUBJECT: MEETING SUMMARY - OCONEE NUCLEAR STATION

Gentlemen:

This refers to the Management Meeting conducted in the NRC Region II office on November 1, 1995, to discuss the Oconee ECCW System Upgrade Modification Program. A list of attendees and a copy of your presentation handout are enclosed.

Your presentation was beneficial in that it provided the NRC staff with a good overview of your planned actions and schedule to effectively address outstanding ECCW issues. The staff believes that conceptually, the system upgrade should resolve NRC open items. As mutually agreed upon during the meeting Duke Power will formally submit to the NRC by the end of 1995, details of your approach and the relationship of installed CCW equipment to the Maintenance Rule. Related Technical Specifications will also be submitted in a timely manner.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosures will be placed in the NRC Public Document Room.

Should you have any questions concerning this letter, please contact us.

Sincerely,

ORIGINAL SIGNED BY
A.F. GIBSON

Albert F. Gibson, Director
Division of Reactor Safety

Docket Nos. 50-269, 50-270, 50-287
License Nos. DPR-38, DPR-47, DPR-55

Enclosures:
1. List of Attendees
2. Licensee Presentation Handout

cc w/encls: (See page 2)

IA3

IE11

(cc w/encls cont'd)
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cc w/encls cont'd: (See page 3)

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OFFICIAL RECORD COPY DOCUMENT NAME: G:\MEMO\DD\OCONEE.MTG

List of Attendees

NRC Attendees

E. Merschoff, Director, Division of Reactor Projects (DRP), RII
A. Gibson, Director, Division of Reactor Safety (DRS), RII
H. Berkow, Director, Project Directorate II-2, Office of Nuclear Reactor Regulation (NRR)
C. Casto, Branch Chief, DRS, RII
R. Crlenjak, Branch Chief, DRP, RII
D. Verrelli, Technical Assistant, DRS, RII
W. Rogers, Senior Reactor Analyst, RII
R. Moore, Reactor Inspector, DRS, RII
P. Harmon, Senior Resident Inspector - Oconee

Duke Power Company Attendees

M. Tuckman, Senior Vice President, Duke Power Company
J. Hampton, Vice President, Oconee Nuclear Station
J. Davis, Engineering Manager
G. Rothenberger, Operations Superintendent
E. Burchfield, Regulatory Compliance Manager
H. Aarling, Senior Engineer Mechanical Modifications
B. Busbey, Mechanical Systems Engineer
L. Azzarello, Mechanical Systems Engineer
R. Harris, Mechanical System Engineer
L. Wibre, Civil Engineer
W. Foster, Safety Assurance Manager

Enclosure 1

November 1, 1995 NRC Management Meeting on ECCW System Upgrade Modification

Agenda

- Introduction
- Background
- Modification Description
- Testing Program Plan
- Technical Specifications
- Conclusions

Introduction

- ECCW System Upgrade Modification has undergone some changes since February 1995
- Duke intends to meet existing ECCW System Upgrade Modification schedule
- ECCW System Upgrade Modification design effectively addresses outstanding ECCW issues

Background on ECCW System Upgrade

- ECCW System Upgrade should resolve NRC open items:
  - » URI 93-13-03 "ECCW System design and testing issues"
  - » IR 93-25 Finding #7 "HPSW not designed or maintained commensurate with its importance to safety"
  - » DEV 93-25-01 Part a "Inadequate GL 89-13 response on HPSW"
  - » VIO 93-25-03 Example A "Inadequate NPSH for LPSW Pumps"
  - » LER 94-04 "LPSW System Inoperability" corrective actions on HPSW issues
  - » VIO 94-31-08 (LPSW-53 testing example)

Background on ECCW System Upgrade

- Objectives of ECCW System Upgrade
  - » Eliminate dependence on non-seismic HPSW System
  - » Provide adequate NPSH for LPSW pumps under all conditions
  - » Upgrade SSCs needed for LPSW operability to QA-1

Background on ECCW System Upgrade

- In a 2/24/95 Duke/NRC meeting, Duke provided the NRC with a brief conceptual design for ECCW System Upgrade
- Conceptual design was to provide a QA-1 suction source to LPSW pumps using QA-1 CCW Pumps and auto restart circuitry
- Duke committed to begin implementation during the U3EOC16 outage in 4th quarter of 1996 with completion on all three units by end of 1997

ECCW System Upgrade Description

- ECCW System Upgrade will consist of :
  - » QA-1 (safety-related) seal/cooling water supply to CCW pumps
  - » Configuration changes to LPSW System
  - » QA-1 Vacuum system to maintain ECCW siphon to LPSW pump suction
  - » Reclassification of certain SSCs required to maintain the siphon to QA-1

ECCW System Upgrade Description

- QA-1 seal/cooling water supply to CCW pumps
  - » LPSW supply will replace non-seismic HPSW supply
  - » Helps maintain siphon by sealing pump shaft
  - » LPSW will supply sealing water to new QA-1 vacuum pumps
- FERC permit required for installation

ECCW System Upgrade Description

- Configuration changes to LPSW System
  - » Coordinate LPSW flow to LPI coolers with sump recirculation
  - » Upon sump recirculation, operators will isolate LPSW non-essential header and supply flow to LPI coolers
  - » Requires deletion of Tech Spec surveillance
  - » Provide minimum flow protection for LPSW pumps

ECCW System Upgrade Description

- QA-1 vacuum system to upgrade siphon
  - » Each unit will have two independent siphon paths available
  - » Integrity will be enhanced by a QA-1 Vacuum System for each siphon path
  - » Vacuum pumps will run continuously to maintain siphon readiness
  - » Vacuum pumps will auto restart after LOOP
- Manual restart of CCW pumps not required, but available

ECCW System Upgrade Description

- Reclassification of certain SSCs to QA-1
- Includes:
  - » CCW pump pressure boundary
  - » CCW piping and valves to suction of LPSW pumps

ECCW System Upgrade Description

- Alternatives Considered for ECCW System Upgrade:
  - » Auto-restart of CCW Pumps
  - » LPSW Booster Pumps at a new intake
  - » New QA Vacuum System to upgrade siphon

ECCW System Upgrade Summary

ECCW System Upgrade:

- Effectively addresses NRC issues
- Enhances level of plant safety
- Is less complex than pump restart option
- Will meet the committed schedule for modification completion

Present Surveillance Testing

- ECCW siphon flow test every outage
- Elevated water storage tank inventory test
- Integrated LPSW system flow testing

Testing Plan for Modification

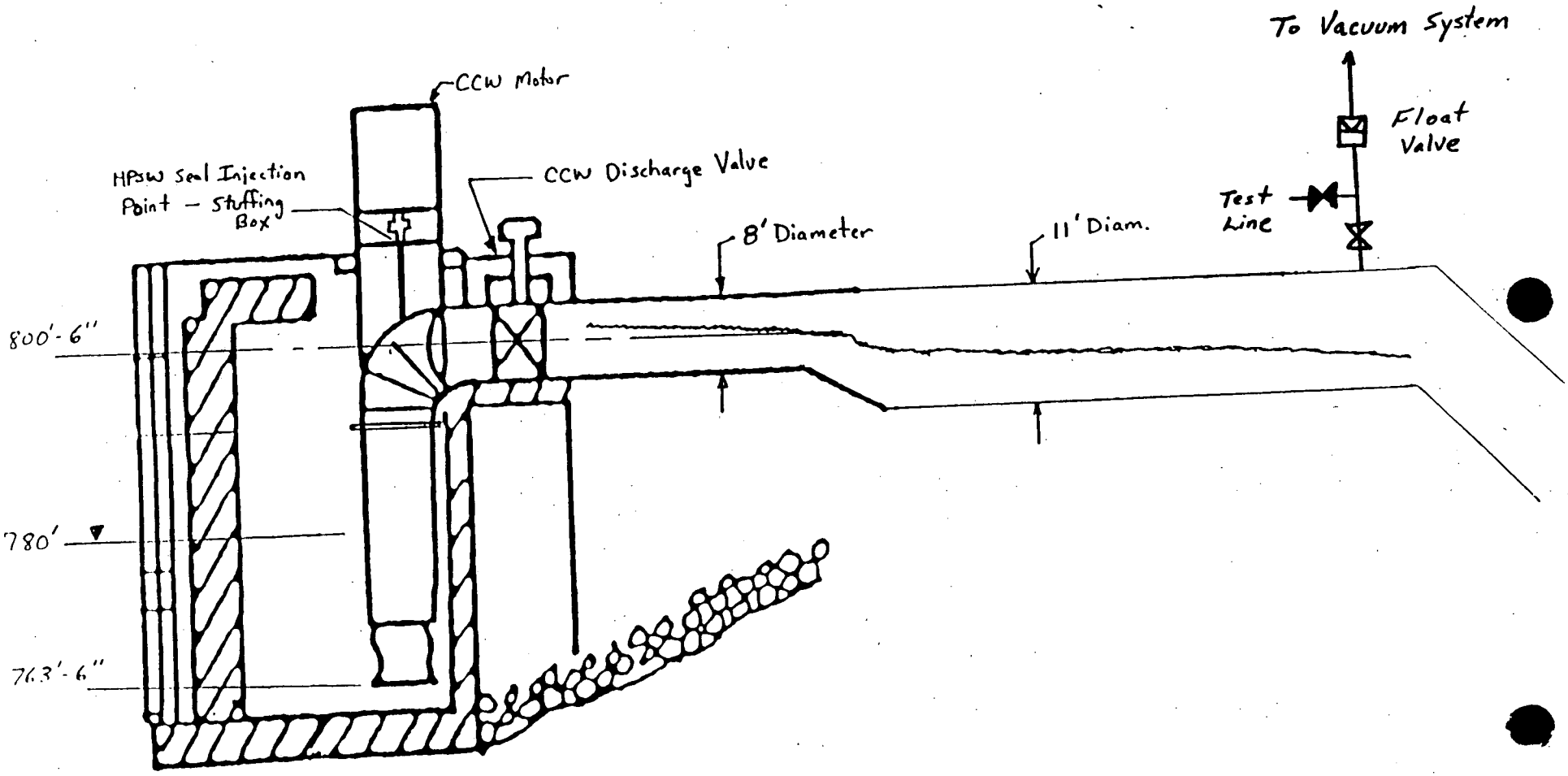
- Post - Modification Testing
- Surveillance Testing
- Refueling Outage Integrated Testing

Technical Specifications

- Tech Spec LCO and surveillances for ECCW siphon flow paths
  - » Submittal by end of 1996
  - » NRC approval by end of 1997
- Tech Spec change for LPSW-4 and LPSW-5
  - » Submittal by April 1996
  - » NRC approval by October 1996

Conclusions

- Duke is committed to resolving all ECCW issues
- Duke plans to:
  - » Submit Tech Spec change for LPSW-4, -5
  - » Submit Tech Spec change for ECCW siphon flow path
  - » Implement modification under 50.59 if possible
- Duke needs NRC:
  - » Concurrence with Duke's approach
  - » Agreement on closure of NRC open items addressed by modification
  - » Approval of Tech Spec change for LPSW-4, -5
  - » Approval of Tech Spec change for ECCW siphon flow path
- FERC permit approval could affect completion schedule


To Vacuum System
CCW Motor
Float Valve
HPSW Seal Injection Point – Stuffing Box
CCW Discharge Valve
Test Line
8' Diameter
11' Diam.
800'-6"
780'
763'-6"