UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

May 9, 1979

Docket No. 50-338

LICENSEE: Virginia Electric Power Company (VEPCO)

FACILITY: North Anna Power Station, Unit No. 1

SUBJECT: SUMMARY OF MEETING HELD ON MAY 8, 1979 TO DISCUSS THE AUXILIARY FEEDWATER SYSTEMS AND RELATED AREAS

On May 8, 1979 representatives of VEPCO met with the Regulatory Staff to discuss the auxiliary feedwater system and related station areas. The purpose of the meeting was to assemble information for an NRC report. The areas discussed are listed in enclosures 1 and 2. The attendees are listed in enclosure 3.

The meeting began at 8:00 am with the discussion of the material listed in enclosure 1. The meeting was reconvened after lunch to discuss the material in enclosure 2. This was followed by a review with the licensee of the information written as a result of the morning session. All questions in both enclosures were answered.

Marshall Grotenhuis, Project Manager
Operating Reactors Branch #1
Division of Operating Reactors

Enclosures:
As Stated

cc: w/enclosures
See attached list

2214 011

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Docket Files
NRC PDR
Local PDR
ORB1 Reading
NRR Reading
H. Denton
E. Case
V. Stello
D. Eisenhut
B. Grimes
R. Vollmer
A. Schwencer
D. Ziemann
P. Check
G. Lainas
D. Davis
B. Grimes
T. Ippolito
R. Reid
V. Noonan
G. Knighton
D. Brinkman
Project Manager (M. Grotenhuis/E. Reeves)
OELD
OI&E (3)
C. Parrish
ACRS (16)
NRC Participants
J. Buchanan
TERA
Licensee
Short Service List
A. Thadani
M. Taylor
D. Ross
O. Parr
A. Dromerick

Mr. Michael W. Maupin
Hunton and Williams
Post Office Box 1535
Richmond, Virginia 23213

Swem Library
College of William and Mary
Williamsburg, Virginia 23185

Donald J. Burke
U. S. Nuclear Regulatory Commission
Region II
Office of Inspection and Enforcement
101 Marietta Street, Suite 3100
Atlanta, Georgia 30303

POOR ORIGINAL

As part of its on-going review of the Three Mile Island Unit 2 accident, the staff finds that it needs additional information regarding the auxiliary feedwater systems (AFWS). This information as outlined below, is required to evaluate AFWS reliability for Combustion Engineering (CE) and Westinghouse (W) designed pressurized water reactors. The requested information is in addition to that requested in the IE Bulletins, and should be brought to the meeting scheduled with the staff on May 8 thru May 12, 1979.

Written system description (as built) including:
- List of Support Systems for Auxiliary Feed System Operation (Both Electric and Steam)
- Water Supplies for AFWS (primary and backup)

Current operating procedures and test and maintenance requirements including:
- All LCO's for AFWS, main FW system and related support systems.
- Listing of operator actions (local and/or control room) and timing requirements for such actions.
- Procedures for reinitiating main feedwater flow.

As Built P&IDs with symbol keys including condensate and steam side

Ledgible Equipment layouts drawings including:
- Isometrics, if available
- Identification of inhibits preventing accessibility to AFWS components and related electrical equipment

Relevant control systems description including:
- Schematic or logic control diagrams
- Listing of actuation signals/logic and control
  - MSIS logic for isolating AFWS, if installed
  - electric power dependences
  - All "readouts" available in control room for AFWS operation

AC & DC Power
- One line diagrams (normal and emergency power supplies)
- Divisional designation e.g., Train A, Train B, requirements on all AFWS components and support systems
- List of normal valve states and loss-of-actuation power failure position

Operating Experience, including
- Number of main feedwater interruptions per year experienced to date for each unit
- Number of demands on AFWS per year to date (test and actual) for each unit
- Summary of AFWS malfunctions, problems, failures

Provide Available reliability analyses

Steam Generator dry-out times (assuming loss of all feedwater flow, with 100% initial power, with Reactor trip, no line breaks)

System design bases including:
- Seismic and environmental qualification
- Code and Quality, QA

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Provide written responses to the following set of questions by 5/8/79

Describe backup systems available (to auxiliary feedwater) for providing feedwater to steam generators. Discuss actions and time required to make these systems available. Are procedures available? If so, provide.

Provide the following procedures:
- loss of offsite power
- loss of feedwater
- LOCA (small and large)
- Steam Line Break

Provide following information for PORV's:
- Number
- capacity
- setpoints (open and close)
- manufacturer and model
- indications of position
- record of periods isolated (isolation valve shut)
- challenges during life of plant (from plant records) including performance of valve, cause of challenge.
- experience of two-phase or subcooled discharge of PORVs and safety valves with description of valve performance

Provide indications of PORV isolation valve in the control room.

Provide the following information on ECCS:
- initiation setpoints
- system description
- pump performance characteristics (head curves)

Provide reactor protection system trip setpoints.

Provide information on charging pumps, how they relate to ECCS including:
- number
- flow vs. pressure
- power sources and backup
- water sources
- seismic qualification

List all challenges (and cause) to ECCS as indicated on plant records.

List and discuss all instances during which your plant has undergone natural circulation.

Describe all automatic and manual features which can stop the reactor coolant pumps.

ENCLOSURE 3

ATTENDEES

Name	Representing
M. Grotenhuis	DOR, ORB#1
David W. Speidell Jr.	VEPCO - Licensing
John Mosticone	VEPCO - North Anna
W. R. Cartwright	VEPCO - North Anna Sta Manager
Eugene S. Grecheck	VEPCO - Licensing
David L. Benson	VEPCO - Nuclear Operations
P. R. Matthews	DSS, ASB
A. Bennett	DSS, PSB
M. Cunningham	
O. Parr	DPM, LWR#3
A. R. Ungaro	DSS, PSB
S. Newberry	

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