

April 22, 1997

APPLICANT: Westinghouse Electric Corporation

FACILITY: AP600

SUBJECT: SUMMARY OF MEETING TO DISCUSS WESTINGHOUSE AP600 FIRE PROTECTION ANALYSIS

The subject meeting was held at the Nuclear Regulatory Commission (NRC) office in Rockville, Maryland, on April 7, 1997, between representatives of Westinghouse Electric Corporation (Westinghouse) and the NRC staff. The staff requested the meeting to provide Westinghouse feedback on the status of the review of standard safety analysis report Section 9.5.1 and 9A. Attachment 1 is a list of meeting participants.

Attachment 2 is the NRC meeting handout that lists the major issues currently identified and the staff's technical position development. The staff discussed the status of its concerns with Westinghouse. The staff also informed Westinghouse that an additional reviewer was assigned to assist the review. Issue 5 on the meeting handout was satisfactorily responded to by Westinghouse. Westinghouse explained that because the reactor coolant pumps were "canned," that they are water-cooled and do not require oil.

The staff suggested that bi-weekly meetings be held to facilitate discussion and expedite the resolution of open issues. The next meeting was tentatively scheduled for April 21, 1997, in Rockville, Maryland.

original signed by:

Diane T. Jackson, Project Manager
Standardization Project Directorate
Division of Reactor Program Management
Office of Nuclear Reactor Regulation

Docket No. 52-003

Attachment: As stated

NRC FILE CENTER COPY

cc w/attachment:
See next page

DISTRIBUTION:

Docket File

PUBLIC

TMartin

TKenyon

JSebrosky

ACRS (11)

SWest, 0-8 D1

GHolahan, 0-8 E23

PDST R/F

RZimmerman, 0-12 G18

MSlosson

WHuffman

JMoore, 0-15 B18

JHolmes, 0-8 D1

EConnell, 0-8 D1

BThomas, 0-8 D1

SCollins/FMiraglia, 0-12 G18

ATHadani, 0-12 G18

TQuay

DJackson

WDean, EDO

TMarsh, 0-8 D1

PMadden, 0-8 D1

DFO31

DOCUMENT NAME: A:SFP4 7.MIN

To receive a copy of this document, indicate in the box: "C" = Copy without attachment/enclosure "E" = Copy with attachment/enclosure "N" = No copy

OFFICE	PM:PDST:DRPM	SPLB:DSSA	D:PDST:DRPM			
NAME	DTJackson:sg	SWest	TRQuay			
DATE	04/22/97	04/21/97	4/22/97			

9704240131 970422
PDR ADOCK 05200003
PDR

OFFICIAL RECORD COPY

Westinghouse Electric Corporation

Docket No. 52-003

cc: Mr. Nicholas J. Liparulo, Manager
Nuclear Safety and Regulatory Analysis
Nuclear and Advanced Technology Division
Westinghouse Electric Corporation
P.O. Box 355
Pittsburgh, PA 15230

Mr. B. A. McIntyre
Advanced Plant Safety & Licensing
Westinghouse Electric Corporation
Energy Systems Business Unit
Box 355
Pittsburgh, PA 15230

Ms. Cindy L. Haag
Advanced Plant Safety & Licensing
Westinghouse Electric Corporation
Energy Systems Business Unit
Box 355
Pittsburgh, PA 15230

Mr. M. D. Beaumont
Nuclear and Advanced Technology Division
Westinghouse Electric Corporation
One Montrose Metro
11921 Rockville Pike
Suite 350
Rockville, MD 20852

Mr. Sterling Franks
U.S. Department of Energy
NE-50
19901 Germantown Road
Germantown, MD 20874

Mr. S. M. Modro
Nuclear Systems Analysis Technologies
Lockheed Idaho Technologies Company
Post Office Box 1625
Idaho Falls, ID 83415

Mr. Charles Thompson, Nuclear Engineer
AP600 Certification
NE-50
19901 Germantown Road
Germantown, MD 20874

Mr. Frank A. Ross
U.S. Department of Energy, NE-42
Office of LWR Safety and Technology
19901 Germantown Road
Germantown, MD 20874

Mr. Ronald Simard, Director
Advanced Reactor Program
Nuclear Energy Institute
1776 Eye Street, N.W.
Suite 300
Washington, DC 20006-3706

Ms. Lynn Connor
Doc-Search Associates
Post Office Box 34
Cabin John, MD 20818

Mr. James E. Quinn, Projects Manager
LMR and SBWR Programs
GE Nuclear Energy
175 Curtner Avenue, M/C 165
San Jose, CA 95125

Mr. Robert H. Buchholz
GE Nuclear Energy
175 Curtner Avenue, MC-781
San Jose, CA 95125

Barton Z. Cowan, Esq.
Eckert Seamans Cherin & Mellott
600 Grant Street 42nd Floor
Pittsburgh, PA 15219

Mr. Ed Rodwell, Manager
PWR Design Certification
Electric Power Research Institute
3412 Hillview Avenue
Palo Alto, CA 94303

WESTINGHOUSE/NRC AP600 MEETING

FIRE PROTECTION

APRIL 7, 1997

MEETING PARTICIPANTS

<u>NAME</u>	<u>ORGANIZATION</u>
ED CONNELL	NRR/DSSA/SPLB
JEFF HOLMES	NRR/DSSA/SPLB
DIANE JACKSON	NRR/DRPM/PDST
TAD MARSH	NRR/DSSA/SPLB
TED QUAY	NRR/DRPM/PDST
STEVE WEST	NRR/DSSA/SPLB
DON HUTCHINGS	WESTINGHOUSE
JIM WINTERS	WESTINGHOUSE

AP 600 Fire Protection Issues Identified Thus Far

1. Consideration of Fire as a Design Basis Event, without consideration of an independent single active component failure, consistent with other DBEs.
2. The passive safe shutdown capability is not a normal shutdown method (See GL 86-10, 5.1.2). The fire protection criteria for alternative/dedicated shutdown methods specified in Appendix R Section III.G.3 has not been met.
3. The consideration of hose stations as a "fixed fire suppression system" is incorrect (See GL 83-33).
4. Class II hose stations do not provide an effective hose stream. The use of the seismically designed standpipe for non-seismic fires does not meet the minimum performance criteria specified in NFPA 14.
- ✓ 5. The reactor coolant pumps are not provided with an oil collection system as required by Appendix R Section III.O.
6. Location of fire pumps in the turbine building. Availability of fire pumps following a turbine blade failure or a major lube oil fire in the turbine building.
7. Use of technically obsolete equivalent fire severity methodology for determining adequacy of fire barriers in non-safety related areas.
8. Equivalent fire rating of structural barriers/labyrinths.
9. Fire risk assessment using a modified FIVE methodology.
10. Main control room and remote shutdown area are not provided with 8-hour battery powered emergency lighting as required by Appendix R Section III.J.