



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

March 7, 1996

APPLICANT: Westinghouse Electric Corporation  
PROJECT: AP600  
SUBJECT: SUMMARY OF MEETING TO DISCUSS PROBABILISTIC RISK ASSESSMENT (PRA)  
FOR THE AP600 DESIGN

The Nuclear Regulatory Commission (NRC) staff and representatives of Westinghouse Electric Corporation held a meeting in the Westinghouse office in Monroeville, Pennsylvania, on February 1, 1996. The purpose of the meeting was to discuss the instrumentation and control portion of the AP600 PRA model. Attachment 1 is the list of the meeting attendees. Attachment 2 is the agenda for the meeting. The topics for the Agenda were covered in one day, therefore, the meeting was not extended into February 2, 1996.

Highlights of the discussion are summarized as follows:

Westinghouse presented an overview of the instrumentation and control system for the AP600 and discussed past presentations given to the NRC staff. During this presentation Westinghouse discussed how each portion of the system was modeled and analyzed in the PRA. The staff indicated that a simplified diagram of the instrumentation and control system showing the system and indicating how different portions of the system were modeled in the PRA is needed to help the staff in reviewing the PRA. The staff was concerned with the modeling of common cause failure, particularly in the software. Westinghouse indicated that, in some cases, common cause failure of the software was not modeled. The staff requested that the simplified diagram identify in which portions of the instrumentation and control system common cause failures were modeled and in which portions of the system common cause failures were not modeled. The staff stated that Westinghouse should clarify methodology, major assumptions and sources of data used in its instrumentation and control PRA models. Also, Westinghouse should provide justification for not modeling common cause failures where appropriate. Westinghouse agreed to provide this information in its response to a request for additional information (RAI) from the NRC.

The staff and Westinghouse then discussed the RAIs that were related to how the instrumentation and control system was modeled in the PRA. Each RAI was discussed in detail. In some cases Westinghouse had already provided a response, and in other cases the RAIs from the NRC had just recently been issued. The staff was interested in Westinghouse's response to an RAI related to draft safety evaluation report (DSER) Open Item 19.1.3.1-15 (software common cause failure). Westinghouse stated that the simplified diagram (and related information discussed above) would be included in the response to this

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RAI. The Instrumentation and Controls Branch of the NRC stated that Westinghouse's response to this item would determine whether or not a follow-on question to a previous related RAI (420.123) would be asked. The meeting concluded with the staff reviewing some of the instrumentation and control data used in the AP600 PRA.

original signed by:

Joseph M. Sebrosky, Project Manager  
Standardization Project Directorate  
Division of Reactor Program Management  
Office of Nuclear Reactor Regulation

Docket No. 52-003

Attachments: As stated

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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

Mr. John C. Butler  
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-42  
Washington, DC 20585

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  
U.S. Department of Energy  
NE-451  
Washington, DC 20585

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

DSA, Inc.  
Ms. Lynn Connor  
Suite 610  
3 Metro Center  
Bethesda, MD 20814

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

Mr. John E. Leatherman, Manager  
SBWR Design Certification  
GE Nuclear Energy, M/C 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 ATTENDEES

FEBRUARY 1, 1996

<u>NAME</u>	<u>ORGANIZATION</u>
CINDY HAAG	WESTINGHOUSE
JOHN WIESEMANN	WESTINGHOUSE
BRUCE MONTY (PART TIME)	WESTINGHOUSE
JIM FREELAND	WESTINGHOUSE
KEN DEUTSCH (PART TIME)	WESTINGHOUSE
RICHARD FAULKNER (PART TIME)	WESTINGHOUSE CONSULTANT
SELIM SANCAKTAR (PART TIME)	WESTINGHOUSE
NICK SALTOS	NRC/DSSA/SPSB
JOHN FLACK	NRC/DSSA/SPSB
HULBERT LI	NRC/DRCH/HICB
EVANGELOS MARINOS	NRC/DRCH/HICB
JOHN GALLAGHER	NRC/DRCH/HICB
JOE SEBROSKY	NRC/DRPM/PDST
SCOTT BECK	INEL

## AGENDA

### NRC/W PRA I&C Meeting February 1 and 2, 1996

Thurs., Feb. 1 8 am - 5 pm

- Opening Introductions / Confirmation of Meeting Objectives
- General Overview and Review of Previous W/NRC I&C Presentation
- Overview of I&C Data and Common Mode Calculations
- Overview of Modeling Methods and Assumptions
- Detailed Discussions
  - I&C data used in AP600 PRA (related to DSER OI 19.1.3.1-11)
  - Calculation of software common cause (19.1.3.1-14)
  - Calculation of hardware common cause (19.1.3.1-15)
  - Other I&C RAls

Fri., Feb. 2 8 am - noon

- Continuation of Thursday topics as needed.
- Close out of Meeting / Summaries.