

April 7, 2004

MEMORANDUM FOR: Patrick W. Baranowsky, Chief
Operating Experience Risk Analysis Branch
Division of Risk Analysis and Applications
Office of Nuclear Regulatory Research

FROM: Dale M. Rasmuson /RA/
Operating Experience Risk Analysis Branch
Division of Risk Analysis and Applications
Office of Nuclear Regulatory Research

SUBJECT: TRIP REPORT: WESTINGHOUSE OWNERS' GROUP FIRST
COMMON-CAUSE FAILURE WORKSHOP

I attended the common-cause failure (CCF) data workshop sponsored by the Westinghouse Owners' Group (WOG) on March 16-17, 2004. Florida Power and Light hosted the event at their offices in Juno Beach, Florida. Tom Wierman from the Idaho National Laboratory attended the workshop with me. Twelve utility representatives attended the workshop. All have the CCF Database and many of them are actively using it. The purposes of the workshop were to:

- discuss the review of the 2002 CCF events collected by the Idaho National Laboratory,
- to better understand the coding rules used to code the CCF events,
- better understand the basics of CCF analysis, and
- share experiences of using the CCF Database.

In May 2002, the WOG invited me to provide an overview of the NRC CCF activities. At the meeting they indicated a desire to participate in a quality assurance review of the CCF events collected by the Idaho National Laboratory. We sent the 2002 CCF events to the WOG for review. The workshop was organized to discuss the review findings. As the CCF events were discussed during the workshop, it was evident that the reviewers did not understand all the rules used to code the events.

We demonstrated the CCF Database and answered questions regarding the database and its use. Two industry participants made presentations about their use of the database.

Feedback regarding the database was very positive. The participants said that the database has been useful to them and helps them do a better CCF analysis. They provided some suggestions for improving it, which will be provided to the NRC in writing from the WOG. Some suggestions included added additional components to the database (e.g., component cooling water pumps), and adding some enhancements to the software (e.g., an interface so that the analyst can put his comments about each event into the database and have the software generate a report that can be made part of a plant-specific analysis).

The participants indicated that it was very helpful to have face-to-face discussions regarding the event coding and a demonstration of the software. They said that the discussions clarified the coding concepts and provided them with information needed to do a better review of the event coding.

In addition to attending the workshop, Tom Wierman and I spent time reviewing the status of JC 6546. This includes the CCF Database, the station blackout risk re-evaluation project, and the updates of the reliability studies. One item we discussed was how to automate the use of the SPAR models with SAPHIRE. Tom indicated that the AFW and HPI systems studies use fault trees that must be evaluated in SAPHIRE. He has automated the process of loading the data and running SAPHIRE. This can be done for the SPAR models.

The WOG would like to continue to participate in the quality assurance review of the CCF events. I feel that this will be advantageous to the NRC and industry as a protocol can be developed and industry reviewers gain a better understanding of the coding guidelines and process.

The participants indicated that it was very helpful to have face-to-face discussions regarding the event coding and a demonstration of the software. They said that the discussions clarified the coding concepts and provided them with information needed to do a better review of the event coding.

In addition to attending the workshop, Tom Wierman and I spent time reviewing the status of JC 6546. This includes the CCF Database, the station blackout risk re-evaluation project, and the updates of the reliability studies. One item we discussed was how to automate the use of the SPAR models with SAPHIRE. Tom indicated that the AFW and HPI systems studies use fault trees that must be evaluated in SAPHIRE. He has automated the process of loading the data and running SAPHIRE. This can be done for the SPAR models.

The WOG would like to continue to participate in the quality assurance review of the CCF events. I feel that this will be advantageous to the NRC and industry as a protocol can be developed and industry reviewers gain a better understanding of the coding guidelines and process.

Distribution:

JStrosnider/AThadani, RES
 CAder, RES
 MCunningham, RES
 MCheck, RES
 GShukla, NRR

DOCUMENT NAME: A:\TRIP REPORT-CCF WORKSHOP.WPD

To receive a copy of this document, indicate in the box: "C" = Copy w/encl "E" = Copy w/encl "N" = No copy

OFFICE	OERAB	C
NAME	DRasmuson	
DATE	4/7/04	

OFFICIAL RECORD COPY

OAR in ADAMS? (Y or N)	Y	Publicly Available? (Y or N)	Y
------------------------	---	------------------------------	---

Template Number: RES-006 Accession Number: ML040990175 RES File Code: 2C-3

ROUTING AND TRANSMITTAL SLIP	Date: 4/6/2004
-------------------------------------	----------------

TO: (Name, office symbol, room #, building, agency/post)	Initials	Date
1. D. Rasmuson - Concur/Signature - Fill in Y or N for OAR in ADAMS and Public Available.	DMR	4/7
2. Nancy - Distribute - Fill in Template No., Accession No., and Res File Code	NLL	4/7
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

	Action		File		Note and Return
	Approval		For Clearance		Per Conversation
	As Requested		For Correction		Prepare Reply
	Circulate		For Your Information		See Me
	Comment		Investigate	X	Concurrence/Signature
	Coordination		Justify		

REMARKS

TRIP REPORT: WESTINGHOUSE OWNERS' GROUP FIRST COMMON-CAUSE FAILURE WORKSHOP

FROM: (Name, org. symbol, Agency/Post)	Room # - Bldg.
	Phone #