

NOV 20 1981



MEMORANDUM FOR: Raymond F. Fraley, Executive Director, Advisory Committee on Reactor Safeguards

FROM: Harold R. Denton, Director, Office of Nuclear Reactor Regulation

SUBJECT: SEISMIC-INDUCED AND OTHER INTERACTIONS BETWEEN NON-SAFETY AND SAFETY SYSTEMS

In response to your memorandum to me on this subject, dated August 12, 1981, the following discussion summarizes the NRR program on adverse systems interactions in LWRs. Under a program developed in connection with TMI Action Plan Item II.C.3, our efforts over the last year were directed principally toward surveying available methods and developing regulatory guidance for performing comprehensive systems interaction analyses, and in reviewing limited systems interaction studies (which considered seismic initiators only) performed at the Diablo Canyon and the San Onofre facilities.

Currently, our systems interaction staff is involved in developing the interim guidance for use on some selected plants later this year, and in working out the final details of the systems interaction analysis to be performed on the Indian Point-3 facility. The Indian Point-3 licensee (PASNY) has proposed a systems interaction analysis program which goes significantly beyond anything which has been done to date, and which will address much more than just seismic initiators. Our staff has now completed its review of PASNY's draft proposal and comments on that proposed program were provided to PASNY at a meeting with the licensee on July 24, 1981. The revised program is expected to be available in early November 1981. As you know, we have requested a meeting with the appropriate ACRS subcommittee to discuss a revised PASNY systems interaction program which will address our review comments. We understand that the Committee has established a tentative schedule of January for the requested meeting.

In the longer term, our plan is to issue final guidance for the performance of systems interaction analyses based on our experience from the Indian Point-3 study and the analyses at selected plants. Enclosure I shows the major milestones in the program, and Enclosure 2 is a draft description of the options considered for implementing the interim guidance on selected LWRs. We look forward to further discussion of these matters with the Committee.

Original Signed by  
H. R. Denton

Harold R. Denton, Director  
Office of Nuclear Reactor Regulation

Attachment:  
Program Schedule/Status

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CF SUBJ CF

Distribution:

Central File  
RRAB RDG  
AD/T RDG(+)  
TEM RDG

EDO  
WDircks  
11/18/81

(RETYPE 10/20/81 -SEE PREVIOUS CONCURRENCES)

OFFICE	DST:RRAB	DST:RRAB	DST:AD/T	DST	NRR/PRAS	NRR	NRR
SURNAME	FCoffman	ATHadani	MErnst	TMurley	EGoodwin	ECASE	HDenton
DATE	10/20/81	10/20/81	10/20/81	10/23/81	10/30/81	11/2/81	11/18/81

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In the longer term, our plan is to issue final guidance for the performance of systems interaction analyses based on our experience from the Indian Point-3 study and the analyses at selected plants. Enclosure I shows the major milestones in the program, and Enclosure 2 is a draft description of the options considered for implementing the interim guidance on selected LWRs. We look forward to further discussion of these matters with the Committee at an early date.

Harold R. Denton, Director  
Office of Nuclear Reactor Regulation

Attachment:  
Program Schedule/Status

Distribution:

Central File  
RRAB RDG  
AD/T RDG  
TEM RDG

(RETYPE 10/19/81 - SEE PREVIOUS CONCURRENCES)

OFFICE ▶	DST:RRAB	DST:RRAB	DST:AD/T	DST:D	NRR/PPAS	NRR	NRR
SURNAME ▶	FCoffman	ATHadani	MErnst	TMurley	EGoodwin	ECase	HDenton
DATE ▶	10/ /81	10/ /81	10/ /81				

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Currently, our systems interaction staff is involved in developing the interim regulatory guidance for use in pilot studies to be initiated later this year, and in working out the final details of the systems interaction analysis to be performed on the Indian Point-3 facility. The Indian Point-3 licensee (PASNY) has proposed a systems interaction analysis program which goes significantly beyond anything which has been done to date, and which will address much more than just seismic initiators. Our staff has now completed its review of PASNY's draft proposal and comments on that proposed program were provided to PASNY at a meeting with the licensee on July 24, 1981. The revised program is expected to be available at the end of October 1981. As you know, we have requested a meeting with the appropriate ACRS subcommittee to discuss a revised PASNY systems interaction program which will address our review comments. We understand that the Committee has established a tentative schedule in mid-November for the requested meeting.

In the longer term, our plan is to issue final guidance for the performance of systems interaction analysis based on our experience from the Indian Point-3 study and the pilot reviews. We look forward to further discussion of these matters with the Committee at an early date.

Harold R. Denton, Director  
Office of Nuclear Reactor Regulation

Attachment:  
Program Schedule/Status

Distribution  
Central File  
RRAB RDG  
AD/T RDG  
TEM RDG

(RETYPE 9/14/81 - SEE PREVIOUS CONCURRENCES)

OFFICE	DST:RRAB	DST:RRAB	DST:AD/T	DST:D	NRR/PPAS	NRR	NRR
SURNAME	FCoffman:mf	ATHadani	MErnst	TMurley	EGoodwin	ECase	HDenton
DATE	9/ /81	9/ /81	9/ /81	9/ /81	9/ /81	9/14/81	9/ /81

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Currently, our systems interaction staff is involved in developing the interim regulatory guidance for use in pilot studies to be initiated later this year, and in working out the final details of the systems interaction analysis to be performed on the Indian Point-3 facility. The Indian Point-3 licensee (PASNY) has proposed a systems interaction analysis program which goes significantly beyond anything which has been done to date, and which will address much more than just seismic initiators. Our staff has now completed its review of PASNY's draft proposal and comments on that proposed program were provided to PASNY at a meeting with the licensee on July 24, 1981 (Meeting Summary attached). The revised program is expected to be available at the end of September 1981. As you know, we have requested a meeting with the appropriate ACRS subcommittee in early-to-mid October to discuss a revised PASNY systems interaction program which will address our review comments. We understand that the Committee will consider the schedule for the requested meeting at the September ACRS meeting.

In the longer term, our plan is to issue final guidance for the performance of systems interaction analysis based on our experience from the Indian Point-3 study and the pilot reviews. We look forward to further discussion of these matters with you at an early date.

Original Signed by  
H. R. Denton

Harold R. Denton, Director  
Office of Nuclear Reactor Regulation

Attachment:  
Meeting Summary

Distribution  
Central File  
RRAB Rdg. File  
AD/T Rdg.  
TEM Rdg. File

*EV*  
NRR/PPAS  
E Goodwin  
9/14/81

OFFICE	DST:PRAB	DST:RRAB	DST:AD/T	DST:	NRR	NRR	
SURNAME	FCoffman:ab	AThadani	MErnst	THurley	ECase	HRDenton	
DATE	8/16/81	8/27/81	8/3/81	8/3/81	9/1/81	9/1/81	

ATTACHMENT

TABLE  
STATUS OF SYSTEMS INTERACTION PROGRAM

<u>MILESTONE</u>	<u>STATUS</u>
Evaluation of Diablo Canyon	10/80 (NUREG-0675, Supp 11)
Survey of Methods	1/81 (NUREG/CR-1859, 1896, 1901)
Evaluation of San Onofre 2/3	5/81 (NUREG-0712, Supp 2)
Interim Guidance	12/81
Evaluation of Indian Point-3	3/82
Evaluation of Pilot Reviews	3/83
Final Guidance	10/83