



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

March 19, 1997

Mr. Kevin P. Donovan, Chairman  
BWR Owners' Group  
c/o Centerior Energy  
Perry Nuclear Power Plant, Mail Code A210  
10 Center Road  
Perry, OH 44081

SUBJECT: SUMMARY OF MARCH 6, 1997 TELECONFERENCES BETWEEN NRC AND BWR OWNERS' GROUP (BWROG) REGARDING THE TOPICAL REPORT NEDC-31858P REVISION 2, "BWROG REPORT FOR INCREASING MSIV LEAKAGE RATE LIMITS AND ELIMINATION OF LEAKAGE CONTROL SYSTEMS" (TAC NO. M87911)

Dear Mr. Donovan:

On March 6, 1997, the staff held two teleconferences regarding the proposed Topical Report NEDC-31858P, Revision 2, "BWROG Report for Increasing [Main Steam Isolation Valve] MSIV Leakage Rate Limits and Elimination of Leakage Control Systems (LCS)" (MSIV LCS Topical Report) with representatives of BWROG. The purpose of the telecon discussions was to address the staff's concerns on the inadequate response to the Request for Additional Information (RAI) submitted by BWROG, dated January 9, 1997, on the MSIV LCS Topical Report questions. The staff's concerns were first conveyed to the BWROG in an RAI dated March 29, 1995. BWROG responded to the RAI on February 19, 1996. Since the information provided in the response was not totally acceptable to the staff, a teleconference was held on May 9, 1996, between the staff and BWROG, to further clarify the staff's request. Based on the agreement made in the conference call, the BWROG subsequently provided its updated response on January 9, 1997. The particular issue involved the weakness in the earthquake experience data and the fact that, after repeated efforts, the staff is still having difficulties in obtaining the proper response from the BWROG on the earthquake experience data. Enclosure 1 contains the specific question, question 11, that the staff has repeatedly asked the BWROG regarding the earthquake experience data.

The first telecon was to Mr. Thomas Rausch, Vice Chairman of BWROG, to provide a management-level perspective on what the staff's concerns were. The staff concluded, as a result of the telecon, that the BWROG management gained a clear understanding of the insufficiencies of the proposed Topical Report and was made aware of the possible paths that NRR and/or the BWROG could take to proceed.

The second telecon was made to Mr. Tom Green of General Electric Nuclear Energy (GE) and Mr. Steven P. Harris of EQE International, consultant to BWROG, both representing BWROG, to discuss the specific technical problems related to the Topical Report on the earthquake experience data. During the technical discussion, the staff explained to the BWROG representatives step-by-step the earthquake site data for several sites and pointed out the missing information. Although the BWROG representatives expressed that the data was acceptable to them, they appeared to understand the reasons why the staff cannot evaluate the sites as good reference sites without the specifics, such

March 19, 1997

as distance from database facility to fault, distance from seismic instrument to fault, specific response spectra, equations for calculations they may have made, etc. The staff and the BWROG representatives jointly acknowledged that this information is probably not obtainable for some sites and, the BWROG may have to take these sites out of the proposed reference database contained in the Topical Report. The BWROG representatives agreed to take action and stated they would contact the staff to inform them of the steps that will be taken. The proposed steps may be, as discussed in the telecon, a meeting, an additional teleconference to go through all the reference sites to identify the deficiencies, or a "qualified" safety evaluation, which is likely to be of limited value. Enclosure 2 lists the names of the NRC staff who participated in the two teleconferences.

The staff concluded that the purpose of the teleconferences was well achieved. If you have any questions, please feel free to contact Tilda Liu at (301) 415-1413.

Sincerely,  
(Original signed by)  
John F. Stolz, Director  
Project Directorate I-2  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

- Enclosures: 1. Question 11  
2. NRC Staff Participants

cc w/encls: See next page

DISTRIBUTION

- Docket File
- PUBLIC
- PDI-2 Reading
- RZimmerman
- AThadani
- SVarga
- JZwolinski
- JStolz
- RWessman
- GBagchi
- KManoly
- RRothman
- ALee (O-7E23)
- JWilson
- TLiu
- OGC
- ACRS
- RIngram
- THarris (EMail SE, TLH3)

\*Previously Concurred

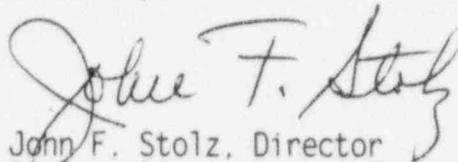
OFFICE	PDI-2/PM	PDI-2/LA	ECGB*	EMEB*	PDI-2/D
NAME	TLiu:rb <i>JL</i>	MO'Brien <i>MB</i>	GBagchi	RWessman	JStolz
DATE	3/18/97	3/18/97	03/13/97	03/14/97	3/19/97

March 19, 1997

as distance from database facility to fault, distance from seismic instrument to fault, specific response spectra, equations for calculations they may have made, etc. The staff and the BWROG representatives jointly acknowledged that this information is probably not obtainable for some sites and, the BWROG may have to take these sites out of the proposed reference database contained in the Topical Report. The BWROG representatives agreed to take action and stated they would contact the staff to inform them of the steps that will be taken. The proposed steps may be, as discussed in the telecon, a meeting, an additional teleconference to go through all the reference sites to identify the deficiencies, or a "qualified" safety evaluation, which is likely to be of limited value. Enclosure 2 lists the names of the NRC staff who participated in the two teleconferences.

The staff concluded that the purpose of the teleconferences was well achieved. If you have any questions, please feel free to contact Tilda Liu at (301) 415-1413.

Sincerely,



John F. Stolz, Director  
Project Directorate I-2  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Enclosures: 1. Question 11  
2. NRC Staff Participants

cc w/encls: See next page

cc:

Mr. Tom A. Green, GE Project Manager  
GE Nuclear Energy  
175 Curtner Avenue  
San Jose, CA 95125

C. D. Terry  
Vice President, Nuclear Engineering  
Niagara Mohawk Power Corporation  
Nine Mile Point-2  
P.O. Box 63  
Lycoming, NY 13093

D. B. Fetters  
PECO Energy  
Nuclear Group Headquarters  
MC 62C-3  
965 Chesterbrook Blvd.  
Wayne, PA 19087

L. A. England  
Entergy Operations Inc.  
P.O. Box 31995  
Jackson, MS 39286

K. K. Sedney  
GE Nuclear Energy  
175 Curtner Ave., M/C 182  
San Jose, CA 95125

Thomas J. Rausch  
Commonwealth Edison Company  
Nuclear Fuel Services  
1400 Opus Place, 4th Floor ETWIII  
Downers Grove, IL 60515

NRC Question 11

Table 3-1 of Appendix D to the Topical Report contains a list of about 110 earthquake-facility pairs, while Table 3-2 lists about 30 earthquake-facility pairs. Subsequent to publication of Revision 2 to the Report, some BWR plant applicants have submitted additional earthquake-facility pairs to support their site specific amendment reviews. Clarify which earthquake-facility pairs constitute the Earthquake Experience Database that is being relied on to demonstrate the adequacy of the structures, systems and components necessary to support the Report. For each of the earthquake-facility pairs in the experience database, provide the following:

- a. The name, location (latitude and longitude), and foundation geology (ie. rock, deep soil, shallow soil) of the facility.
- b. The name, date, time, epicenter (latitude and longitude), and magnitude of the earthquake and the closest distance from the facility to the earthquake rupture.
- c. The 5 percent of critical damping response spectra of the ground motion estimated at the facility from the earthquake.
- d. The method used to estimate the ground motion at the facility. If the ground motion is based on actual ground motion recordings, provide the location (latitude and longitude) and foundation geology of the recording station and its distance from the facility and its distance to the closest part of the fault rupture. If the estimation is based on a method other than an actual recording of the earthquake ground motion or if the recording station is not collocated with the facility, describe the method used to estimate the ground motion in detail and provide any ground motion attenuation equations which may have been used to obtain the estimate.

INFORMATION REQUESTED BUT NOT INCLUDED IN JANUARY 9, 1997 BWR OWNERS GROUP RESPONSE

No additional information was provided about the earthquake-facility pairs in Table 3-1 (Table 1 of the response)

Table 3 of the response contains 17 earthquake-facility pairs.

The latitude and longitude of only three facilities were provided.

The latitude and longitude of only three of earthquake epicenters were provided.

In no case was the closest distance from the facility to the earthquake rupture provided.

The only earthquake ground motion response spectra provided were the same six which were provided in the earlier report.

The latitudes and longitudes of the strong motion recording stations were not provided.

The distances from the strong ground motion recording stations to the closest part of the fault ruptures were not provided.

The details the method used to estimate the ground motion and the ground motion attenuation equations which may have been used to obtain the estimates for facilities where the estimation is based on a method other than an actual recording of the earthquake ground motion or if the recording station is not collocated with the facility were not provided.

TELECONFERENCES WITH BWROG  
REGARDING PROPOSED TOPICAL REPORT NEDC-31058P, REVISION 2  
"BWROG REPORT FOR INCREASING MSIV LEAKAGE RATE LIMITS AND ELIMINATION OF  
LEAKAGE CONTROL SYSTEMS"

MARCH 6, 1997

OFFICE OF NUCLEAR REACTOR REGULATION STAFF PARTICIPANTS

- First telecon: Management perspective discussion

Richard Wessman  
James Wilson  
Kamal Manoly

- Second telecon: Specific technical problems discussion

Richard Wessman  
Kamal Manoly  
James Wilson  
Robert Rothman  
Arnold Lee  
Tilda Liu