

11/9/04 RDB received  
du.

**From:** "Hill, Richard A. (GE Energy)" <Richard.Hill@gene.GE.com>  
**To:** "Bo Pham (E-mail)" <BMP@nrc.gov>  
**Date:** 11/8/04 5:56PM  
**Subject:** FW: BWROG RESPONSE TO REG GUIDE 1.200-ANS EXTERNAL HAZARDS ANS 58-21

Bo, we have sent a hard copy by snail mail but thought you could slip this into the hands of the right person earlier because the letter probably will need to be put in a holding pattern to be checked for terrible things that some bad person could send in the mail.

Another subject:

Based on our meeting the other week on the RITS initiative LTRs, you and I have an action item. I need to check to see what leniency I can get on BWROG rules to send draft reports to you and you were going to check on whether a draft report by e-mail had to go the PDR. Did I get these action items right?

g GE Energy

Rick Hill  
GE Energy  
Nuclear  
Technical Program Manager  
BWR Owners' Group

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General Electric Company  
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San Jose, CA 951252 USA

-----Original Message-----

**From:** Dunbar, Karen A. (GE Energy)  
**Sent:** Monday, November 08, 2004 2:49 PM  
**To:** Hill Richard (GE) (E-mail)  
**Subject:** FW: BWROG RESPONSE TO REG GUIDE 1.200-ANS EXTERNAL HAZARDS ANS 58-21

Will Bo Pham see that this gets to the Rules and Directive Branch? Do I need to send a hard copy?

Karen

-----Original Message-----

**From:** Dunbar, Karen A. (GE Energy)  
**Sent:** Monday, November 08, 2004 2:35 PM  
**To:** Pham Bo (NRC) (E-mail)  
**Cc:** Hill Richard (GE) (E-mail); Bradley Biff (NEI) (E-mail); Abney Tim (TVA) (E-mail); Baker RD (SNC) (E-mail); Brees Michael (FirstEnergy) (E-mail);

E-RIDS = ADM-03

Adm = A. Singh (AXS3)

Template = ADM-013

'Christianson Linda (NMC-Monticello)'; Coleman Doug (Energy Northwest) (E-mail); Conen Joseph (DECO BWROG Vice Chairman) (E-mail); 'Crowthers Michael (PPL)'; 'England Lesley (Entergy)'; Francisco Pete (Constellation-NMP) (E-mail); 'Gallagher Michael (Exelon)'; 'Gausman Jim (NPPD)'; Gerlits Dave (Entergy-Pilgrim) (E-mail); Gray Jack (Entergy NE) (E-mail); Green Donald (TVA) (E-mail); Hurst Thomas (GENE) (E-mail); Lentz Tom (FirstEnergy) (E-mail); 'Metell Michael (VY)'; Newkirk Bob (DTE Energy) (E-mail); Pechacek Joe (Entergy-FitzPatrick) (E-mail); 'Pfizenmaier Mark (PSEG)'; Putnam Kenneth (NMC BWROG Chairman) (E-mail); 'Schiffley Ted (Exelon)'; Sharp Scott (NMC) (E-mail); 'Simpson Karen (Exelon)'; Ward Keith (Progress Energy) (E-mail); Adelizzi Micahel (PPL) (E-mail); Browne Eric (Progress Energy) (E-mail); Carrier Tom (PSE&G) (E-mail); Christiansen Lance (NMC-DAEC) (E-mail); Czysz Frank (PPL) (E-mail); Fu James (Energy NW) (E-mail); Gao Yan (Constellation-NMP) (E-mail); Heck Paul (TVA) (E-mail); Hopkins Brad (NMC-DAEC) (E-mail); Hunt Thomas (Entergy/RB) (E-mail); Ingram Ed L (SNC) (E-mail); 'Kindred Gerry (FirstEnergy)'; Krueger Greg (ERIN) (E-mail); 'Krueger Greg (Exelon)'; LaBelle Danny (Progress Energy) (E-mail); 'Lai, John (PSEG)'; Lavelline Joe (DTE Energy) (E-mail); Ledesma, Rafael (GE Energy); 'Littleton Clement (Entergy-Pilgrim)'; 'Maher John (Entergy)'; 'McCamy Don (TVA)'; Page Earl (RBR) (E-mail); Palionis Mark Entergy-(VY) (E-mail); Phan Hanh (Energy Northwest) (E-mail); 'Ramirez Jorge (DTE Energy)'; Ramirez Jorge (Home address) (E-mail); Rao Deepak (Entergy) (E-mail); Salcedo George (CFE) (E-mail); Salcedo Jorge (CFE) (E-mail); 'Sicard Paul (Entergy)'; 'Smith Gary W (Entergy)'; 'Specter Herschel (RBR)'; 'Steinmetz John (Exelon)'; 'Sutton Kent (NPPD)'; Torres, David (GE Energy); Vezey Ed (GE) (E-mail); Visweswaran, Srinivasa (GE Energy); 'Wachowiak Richard (GE)'; 'Yeh Clement (Entergy NE-Fitz)'

Subject: BWROG RESPONSE TO REG GUIDE 1.200-ANS EXTERNAL HAZARDS ANS 58-21

TO: NRC Rules and Directives Branch

SUBJECT: Draft Appendix C To Regulatory Guide 1.200 Regarding The NRC Staff Position On ANS External Hazards PRA STANDARD ANS 58-21.

Karen for Rick Hill

Karen Dunbar  
 GE Energy  
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**Mail Envelope Properties** (418FF979.837 : 15 : 43063)

**Subject:** FW: BWROG RESPONSE TO REG GUIDE 1.200-ANS EXTERNAL  
HAZARDS ANS 58-21  
**Creation Date:** 11/8/04 5:55PM  
**From:** "Hill, Richard A. (GE Energy)" <Richard.Hill@gene.GE.com>  
**Created By:** Richard.Hill@gene.GE.com

**Recipients**

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**Post Office**

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**Route**

nrc.gov

Files	Size	Date & Time
MESSAGE	3906	11/08/04 05:55PM
TEXT.htm	6889	
2004-11-08 Draft App C Reg Guide 1.200 NRC Position-ANS External Hazards PRA Standard ANS 58-21.doc	31232	
Mime.822	55871	

**Options**

**Expiration Date:** None  
**Priority:** Standard  
**Reply Requested:** No  
**Return Notification:** None

**Concealed Subject:** No  
**Security:** Standard

# BWR OWNERS' GROUP

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NRC Project 691

BWROG-04032

November 8, 2004

Rules and Directives Branch  
Office of Administration  
US Nuclear Regulatory Commission  
Washington, DC 20555-0001

**SUBJECT: DRAFT APPENDIX C TO REGULATORY GUIDE 1.200 REGARDING  
THE NRC STAFF POSITION ON ANS EXTERNAL HAZARDS PRA  
STANDARD, ANS 58-21**

The BWR Owners' Group (BWROG) appreciates the opportunity to comment on the subject draft Regulatory Guide. These comments have been reviewed and approved by the participating members of the BWROG. The following are general comments regarding the subject draft Regulatory Guide. Detailed comments are contained in the attachment.

The draft Regulatory Guide appears to be essentially a conversion of the ANS External Hazards Standard, which attempts to clarify or eliminate requirements that are ambiguous, inadequate, or could cause difficulty in performing External Hazard PRA's.

There is, however, one area in the Standard, which is not specifically identified in the NRC's comments that should be addressed. ANS 58-21 states in Section 3.7.1.1 INTRODUCTION, last part of the first paragraph (page 37), which is essentially repeated in Section 3.7.1.3, HLR-HA-H, (page 49),

The PSHA analyst may have the option to use an existing study to form the basis for a site-specific assessment. For example, the Lawrence Livermore National Laboratory (LLNL) and EPRI regional hazard studies for east of the Rocky Mountains can be used to develop a site-specific PSHA for most of the Central and Eastern U.S (CEUS) sites after certain checks and updates are made.

The statement, "after certain checks and updates are made" is not sufficiently definitive to serve as a standard of guidance and should be amplified and clarified as to what constitutes acceptable checks and updates. It is recommended that the NRC clarify their intent for acceptability of these check and updates.

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November 8, 2004  
Page 2

If you have questions regarding these comments, please contact either Rick Hill (GE) (408) 925-5388 or Greg Krueger (Exelon) (610) 765-5973.

Respectfully yours,

A handwritten signature in black ink, appearing to read "Kenneth S. Putnam". The signature is fluid and cursive, with the first name "Kenneth" and last name "Putnam" clearly distinguishable.

Kenneth S. Putnam  
BWR Owners' Group Chairman

Attachment: Detailed Comments

cc : BWROG Primary Representatives  
Integrated Risk Informed Regulation Committee  
J. E. Conen, BWROG Vice Chairman  
T. G. Hurst, GE  
R. A. Hill, GE  
B. Bradley, NEI

**BWROG DETAILED COMMENTS ON  
DRAFT APPENDIX C TO REGULATORY GUIDE 1.200 REGARDING THE  
NRC STAFF POSITION ON ANS EXTERNAL HAZARDS PRA STANDARD,  
ANS 58-21**

The following comments are offered as further clarification and amplification to draft Regulatory Guide Appendix C:

1.3.4. (page 2) - The clarification as presented can imply a significant amount of work. A better description of what is expected is needed.

1.4 last par., (page 3) - The clarification states, "a peer review needs to verify it." It should be made clear this is not a requirement for an industry peer review.

In Section 2.2, (page 7), Screening analysis - The term "a significant" is deleted. It should be retained. This is in contrast to a moderate impact on a non-significant sequence.

In Section 2.2, (page 7), Success path - For the integrated model, the 72 hour mission should be defined for the Success Path.

3.3 (2nd par) – The BWROG disagrees with the NRC position. The standard should not get involved with staff qualification.

3.5.4 Note ANA-B3 (page 12) – The clarification, "Define the fragility curve for each failure mode" is not an appropriate additional requirement. A system can be out of service for many failure modes (FTS, FTR, plugging, clogging etc.).

3.6 (7th par)(page 13) - The clarification states, "a peer review needs to verify it." It is understood by the BWROG that this is not a requirement for an industry peer review as defined by the ASME PRA standard (ASME-RA-S-202). The text should be clarified.

3.7.1.2 (HLR-HA-G)(page 16) – In the New SR HA-G1a, delete the phrase, "if they are shown to be appropriate for the site." Their acceptability is a sufficient statement.

3.7.1.3 (HA-B1)(page 17) - The term "laboratory" should be deleted. All appropriate data should be considered.

3.7.1.3 (HA-G)(page 19) - See 3.7.1.2 (HLR-HA-G) comment above.

3.7.1.3 (Note HA-G1)(page 19) - The term "may be" inserted for clarification in place of "are considered" is more vague and open to interpretation. It is suggested that "may be" be delete.

3.7.2.3 (Note SA-A1)(page 20) - The FMEA language inserted by way of clarification is unnecessary. The PRA structure should be sufficient.