

From: [RILEY, Jim](#)
To: [Cook, Christopher](#); [Miller, Ed](#)
Cc: [Abisamra, Joe](#); [Andrew Garrett \(Andrew.Garrett@Duke-Energy.com\)](#); [Attarian, George](#); [Bell, Roderick](#); [bolognar@firstenergycorp.com](#); [Buman, Dan](#); [Colin Keller](#); [Dean Hubbard \(dmhubbard@duke-energy.com\)](#); ["Faller, Carl"](#); [Gambrill, David](#); [GASPER, JOSEPH K](#); [Giddens, John](#); [Glen D Ohlemacher \(ohlemacher@dteenergy.com\)](#); [Hackerott, Alan](#); [Heerman, John](#); [Horstman, William R](#); ["Huffman, Ken"](#); [HYDE, KEVIN C](#); [Jeff Brown \(jeffrey.brown@aps.com\)](#); [Jim Breunig \(james.breunig@cengllc.com\)](#); [Joe Bellini \(joe.bellini@amec.com\)](#); [John Lee \(John.Lee@dom.com\)](#); [LaBorde, Jamie](#); [Maddox Jim \(maddoxje@inpo.org\)](#); [Mannai, David J](#); [Maze, Scott](#); [Mike Annon \(annonm@dteenergy.com\)](#); [Miller, Andrew](#); [Murray, Mike](#); [Peters, Ken](#); [RILEY, Jim](#); [Rob Whelan \(robert.whelan@ge.com\)](#); [Robinson, Mike](#); [Rogers, James G](#); [Rudy Gil](#); [Scarola, Jim](#); [Selman, Penny](#); [Shumaker, Dennis](#); [Snyder, Kirk](#); [Stone, Jeff](#); [Taylor, Bob](#); [Terry Grebel \(tlg1@pge.com\)](#); [Thayer, Jay](#); [Vinod Aggarwal \(Vinod.aggarwal@exeloncorp.com\)](#); [Wrobel, George](#); [Yale, Bob](#)
Subject: Walkdown Guidance Changes
Date: Tuesday, May 15, 2012 9:04:10 AM
Attachments: [Variety of Site Conditions.doc](#)

Chris, Ed;

Per my discussion with Ed, I will send you the walkdown guidance tomorrow morning after the task force has worked on your comments. However, believing that the newest/most controversial issue we will deal with this week is the question on "variety of site conditions", I thought it would be worthwhile to send you a document containing only the changes I have made to the walkdown guidance on this topic. If you have the time, please review the attached and contact me with any thoughts on its content before tomorrow at noon. This will give us a jump start on tomorrow's meeting.

Thanks,

Jim Riley

Nuclear Energy Institute
1776 I St. N.W., Suite 400
Washington, DC 20006
www.nei.org

phone: (202) 739-8137
cell: (202) 439-2459
fax: (202) 533-0193



FOLLOW US ON



This electronic message transmission contains information from the Nuclear Energy Institute, Inc. The information is intended solely for the use of the addressee and its use by any other person is not authorized. If you are not the intended recipient, you have received this communication in error, and any review, use, disclosure, copying or distribution of the contents of this communication is strictly prohibited. If you have received this electronic transmission in error, please notify the sender immediately by telephone or by electronic mail and permanently delete the original message. IRS Circular 230 disclosure: To ensure compliance with requirements imposed by the IRS and other taxing authorities, we inform you that any tax advice contained in this communication (including any attachments) is

not intended or written to be used, and cannot be used, for the purpose of (i) avoiding penalties that may be imposed on any taxpayer or (ii) promoting, marketing or recommending to another party any transaction or matter addressed herein.

Sent through mail.messaging.microsoft.com

Walkdown Guidance Changes Addressing “Variety of Site Conditions”

Definitions: (applicable items)

3.15 **Variety of Site Conditions**

Enclosure 4 (Flooding Recommendation 2.3) of Reference 1 requires that the potential effect of flooding on the plant must consider a variety of site conditions. The site conditions considered should include those that might exist when a postulated flood could occur (for example, full power operations, startup, shutdown, and refueling). The Walkdown Report (Appendix D, items b and d) should clearly describe the flood protection licensing basis, including what plant conditions were assumed, and what plant structures, systems, components, and procedures could be used to mitigate an external flood if it occurred at any time. (Note that the Walkdown Report should include a description of existing plant capability, not an assessment of plant vulnerabilities to flooding that might exist under all susceptible plant configurations. The assessment of plant vulnerabilities to all susceptible plant configurations will be completed, if applicable, as part of an Integrated Assessment performed in response to Enclosure 2 of Reference 1)

Note that site conditions that are not part of the flooding CLB are not within the scope of the walkdowns as described in section 5.

3.16 **Flood Duration**

Enclosure 4 (Flooding Recommendation 2.3) of the referenced letter requires that the potential effect of flooding on the plant must consider the effects that could occur over the full duration of the flood. The flood duration is the length of time in which flood conditions exist at the site. For some hazards, flood conditions could persist for a significant amount of time. Extended inundation on or near the site could present concerns such as:

- Site and building access,
- Travel around the site,
- Equipment operating times, and
- Supplies of consumables

For the purposes of these walkdowns, the duration of the flood should be the time assumed in the CLB.

Walkdown Guidance Changes Addressing "Variety of Site Conditions"

Appendix D: Walkdown Report (sections applicable to the subject are in red)

- b. Describe protection and mitigation features that are considered in the licensing basis evaluation to protect against external ingress of water into SSCs important to safety.**
- Describe the flooding licensing basis including what plant conditions or Modes of operation were considered. This description should be consistent with the scope of the flooding walkdowns.
 - A general description is expected of the flood protection features that are credited in the CLB, such as incorporated, exterior and temporary barriers, time required for credited actions under flood conditions, active flood protection features, procedures, warnings credited for external floods, site drainage plan, etc.
 - Identify flood levels that trigger procedures and associated actions for providing flood protection and mitigation. Describe the associated actions.
- d. Discuss the effectiveness of flood protection systems and exterior, incorporated, and temporary flood barriers. Discuss how these systems and barriers were evaluated using the acceptance criteria developed as part of Requested Information Item 1.h.**
- a. The purpose of the 2.3 walkdowns is to verify the conformance with the CLB; the adequacy of the CLB will be addressed as part of the 2.1 flood reevaluations if an integrated assessment is required
 - b. The acceptance criteria for the walkdowns are described in section 6 of the guideline. This approach is consistent with requested information item 1.h of the 50.54(f) letter. Discuss how the plant implemented this approach.
 - c. This discussion should include an evaluation of the overall effectiveness of the plant's flood protection features as determined by the results of the walkdowns (the features are available, functional, and implementable). The CAP process will determine which of the walkdown observations are deficiencies and what actions were taken or planned to address them. Questions such as the following should be evaluated.
 - i. Is the barrier system functional?
 - ii. Are operator actions feasible?
 - d. Describe how other existing plant equipment, structures, and procedures might mitigate the effects of an external flood under varying plant conditions.
 - i. NUMARC 93-01, Rev 4A provides guidance on implementation of the maintenance rule. Section 11.4.3.2 of this document

Walkdown Guidance Changes Addressing “Variety of Site Conditions”

recommends an assessment of maintenance activities that expose SSCs to flood hazards in a manner that degrades their capability to perform key safety functions. Credit for this activity should be included in this discussion.

- ii. Note that the Walkdown Report should include a description of existing plant capability, not an assessment of plant vulnerabilities to flooding that might exist under all susceptible plant configurations. The assessment of plant vulnerabilities to all susceptible plant configurations will be completed, if applicable, as part of an Integrated Assessment performed in response to Enclosure 2 of Reference 1