

NUCLEAR REGULATORY COMMISSION

[NRC-2013-0098]

**Embedded Digital Devices in Safety-Related Systems, Systems Important to Safety, and
Items Relied on For Safety**

AGENCY: Nuclear Regulatory Commission.

ACTION: Draft regulatory issue summary; request for comment.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) is issuing for public comment Draft Regulatory Issue Summary (RIS) 2013-XX, “Embedded Digital Devices in Safety-Related Systems, Systems Important to Safety, and Items Relied on For Safety.” The NRC staff has developed the draft RIS to clarify the NRC’s technical position on existing regulatory requirements for the quality and reliability of basic components with embedded digital devices.

DATES: Submit comments by **[INSERT DATE 60 DAYS FROM DATE OF PUBLICATION]**. Comments received after this date will be considered, if it is practical to do so, but the NRC staff is able to ensure consideration only for comments received on or before this date.

ADDRESSES: You may submit comment by any of the following methods (unless this document describes a different method for submitting comments on a specific subject):

- **Federal Rulemaking Web site:** Go to <http://www.regulations.gov> and search for Docket ID **NRC-2013-0098**. Address questions about NRC dockets to Carol Gallagher; telephone: 301-492-3668; e-mail: Carol.Gallagher@nrc.gov. For technical questions, contact

the individual(s) listed in the FOR FURTHER INFORMATION CONTACT section of this document.

- **Mail comments to:** Cindy Bladey, Chief, Rules, Announcements, and Directives Branch (RADB), Office of Administration, Mail Stop: TWB-05-B01M, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

- **Fax comments to:** RADB at 301-492-3446.

For additional direction on accessing information and submitting comments, see “Accessing Information and Submitting Comments” in the SUPPLEMENTARY INFORMATION section of this document.

FOR FURTHER INFORMATION CONTACT: Mr. Eugene Eagle, Office of New Reactors, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; Telephone: 301-415-3706; e-mail: Eugene.Eagle@nrc.gov.

SUPPLEMENTARY INFORMATION:

I. Accessing Information and Submitting Comments

A. Accessing Information

Please refer to Docket ID **NRC-2013-0098** when contacting the NRC about the availability of information regarding this document. You may access information related to this document, which the NRC possesses and is publicly-available, by the following methods:

- **Federal Rulemaking Web site:** Go to <http://www.regulations.gov> and search for Docket ID **NRC-2013-0098**.

- **NRC's Agencywide Documents Access and Management System (ADAMS):**

You may access publicly available documents online in the NRC Library at

<http://www.nrc.gov/reading-rm/adams.html>. To begin the search, select "ADAMS Public Documents" and then select "Begin Web-based ADAMS Search." For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1-800-397-4209, 301-415-4737, or by e-mail to pdr.resource@nrc.gov. The draft RIS is available in ADAMS under Accession No. ML12248A065.

- **NRC's PDR:** You may examine and purchase copies of public documents at the NRC's PDR, Room O1-F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

B. Submitting Comments

Please include Docket ID **NRC-2013-0098** in the subject line of your comment submission, in order to ensure that the NRC is able to make your comment submission available to the public in this docket.

The NRC cautions you not to include identifying or contact information that you do not want to be publicly disclosed in your comment submission. The NRC posts all comment submissions at <http://www.regulations.gov> as well as entering the comment submissions into ADAMS. The NRC does not routinely edit comment submissions to remove identifying or contact information.

If you are requesting or aggregating comments from other persons for submission to the NRC, then you should inform those persons not to include identifying or contact information that they do not want to be publicly disclosed in their comment submission. Your request should state that the NRC does not routinely edit comment submissions to remove such information

before making the comment submissions available to the public or entering the comment submissions into ADAMS.

II. Background

The RIS discusses, and clarifies, the NRC's technical position on existing regulatory requirements for the quality and reliability of basic components with embedded digital devices. Further, the purpose is to also raise awareness that there may be potential safety issues from a postulated common cause failure (CCF) if an undetected software error should occur in embedded digital devices located in multiple trains of redundant safety equipment in nuclear facilities.

The NRC plans to hold a public meeting to discuss this RIS and the issues associated with embedded digital devices. All comments that are to receive consideration in the final RIS must still be submitted electronically or in writing as indicated below. Additional details regarding the meeting will be posted at least 10 days prior to the public meeting on NRC's Public Meeting Schedule Web site at <http://www.nrc.gov/public-involve/public-meetings/index.cfm>.

The NRC issues RISs to communicate with stakeholders on a broad range of matters. This may include communicating staff technical positions on matters that have not been communicated to, or, are not broadly understood by the nuclear industry.

Proposed Action

The NRC is requesting public comments on the draft RIS. The NRC plans to hold a public meeting in the near future to discuss Draft Regulatory Issue Summary (RIS) 2013-XX, “Embedded Digital Devices in Safety-Related Systems, Systems Important to Safety, and Items Relied on For Safety,” and to obtain feedback from members of the public. The meeting agenda will be posted at least 10 days prior to the public on the NRC’s Public Meeting Schedule Web site at <http://www.nrc.gov/public-involve/public-meetings/index.cfm>. Information regarding topics to be discussed, changes to the agenda, whether the meeting has been cancelled or rescheduled, and the time allotted for public comments can be obtained from the Public Meeting Schedule Web site.

Dated at Rockville, Maryland, this 8th day of May 2013.

For the Nuclear Regulatory Commission,

/RA/

Ian C. Jung, Chief
Instrumentation, Controls and Electronics
Engineering Branch 2
Division of Engineering
Office of New Reactor