

**NUCLEAR REGULATORY COMMISSION**

**[NRC-2010-0138]**

**Final Standard Review Plan,  
Branch Technical Position 7-19 on Guidance for Evaluation of Diversity and  
Defense-in-Depth in Digital Computer-Based Instrumentation and Control Systems**

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Notice of availability.

**SUMMARY:** The U.S. Nuclear Regulatory Commission (NRC or the Commission) staff is issuing Final Revision 6 to NUREG-0800, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants," Branch Technical Position (BTP) 7-19 on "Guidance for Evaluation of Diversity and Defense-in-Depth in Digital Computer-Based Instrumentation and Control Systems." This BTP is to be cited as the acceptance criteria for Diversity and Defense-in-Depth in Digital Computer-Based Instrumentation and Control Systems in the Standard Review Plan (SRP), Chapter 7, for those standard reactor designs that have not been certified prior to the date of this BTP. The purpose of this SRP update is to provide staff guidance for assessing combined license (COL) applicant compliance with the requirements.

**DATES:** The effective date of this SRP update is **[INSERT DATE: 30 DAYS AFTER PUBLICATION]**.

**ADDRESSES:** Please refer to Docket ID **NRC-2010-0138** 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 are publicly available by any of the following methods:

- **Federal Rulemaking Web site:** Go to <http://www.regulations.gov> and search for Docket ID **NRC-2010-0138**. Address questions about NRC dockets to Carol Gallagher; telephone: 301-492-3668; e-mail: [Carol.Gallagher@nrc.gov](mailto:Carol.Gallagher@nrc.gov).

- **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](mailto:pdr.resource@nrc.gov). The ADAMS accession number for each document referenced in this notice (if that document is available in ADAMS) is provided the first time that a document is referenced. The Final Revision 6 to NUREG-0800, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants," Branch Technical Position (BTP) 7-19 on "Guidance for Evaluation of Diversity and Defense-in-Depth in Digital Computer-Based Instrumentation and Control Systems" (*Package*) (ADAMS Accession No. ML110550767), Final Revision 6 to NUREG-0800, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants," Branch Technical Position (BTP) 7-19 on "Guidance for Evaluation of Diversity and Defense-in-Depth in Digital Computer-Based Instrumentation and Control Systems," (ADAMS Accession No. ML110550791), and Comment Response Document for BTP 7-19, (ADAMS Accession No. ML120830075).

- **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.

- The NRC posts its issued staff guidance on the NRC's external Web page (<http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr0800/>).

**FOR FURTHER INFORMATION CONTACT:** Mr. Ian C. Jung, Chief, Instrumentation, Controls and Electrical Engineering Branch 2, Division of Engineering, Office of New Reactors, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; telephone: 301-415-2969 or e-mail at [Ian.Jung@nrc.gov](mailto:Ian.Jung@nrc.gov).

#### **SUPPLEMENTARY INFORMATION:**

The NRC staff issues SRPs and BTPs to facilitate timely implementation of current staff guidance and to facilitate activities associated with the review of applications for design certifications and combined licenses by the Office of New Reactors. Additionally, the SRPs and BTPs are used by the Office of Nuclear Reactor Regulation staff in the review of applications for license amendments in currently operating nuclear power plants. The NRC staff will also incorporate the revised SRP section and BTP 7-19 into the next revision of Regulatory Guide 1.206 and any related guidance documents.

On March 19, 2010, the NRC staff issued the proposed Revision 6 of NUREG-0800, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants: LWR Edition," BTP 7-19 on "Guidance for Evaluation of Diversity and Defense-in-Depth in Digital Computer-Based Instrumentation and Control Systems" (ADAMS Accession No. ML093490771). The NRC staff considered comments received on the proposed revision to BTP 7-19 as well as recommendations from the ACRS, and incorporated the changes

suggested in the comments in this final issuance. The NRC staff responses to these comments can be found under ADAMS Accession No. ML120830075.

**BACKFITTING:**

This SRP update does not constitute backfitting as defined in Title 10 of the *Code of Federal Regulations* (10 CFR) 50.109, nor is it inconsistent with any of the issue finality provisions in 10 CFR Part 52. This SRP does not contain any new requirements for COL applicants or holders under Part 52, or for licensees of existing operating units licensed under Part 50. Rather, it contains additional guidance and clarification on compliance with 10 CFR 52.79(a)(31), which may be used by COL applicants in the preparation of their applications.

**CONGRESSIONAL REVIEW ACT:**

This SRP update is a rule as designated in the Congressional Review Act (5 U.S.C. 801-808). However, OMB has not found it to be a major rule as designated in the Congressional Review Act.

Dated at Rockville, Maryland, this 16<sup>th</sup> day of July 2012.

For the Nuclear Regulatory Commission.

**/RA/**

Amy E. Cubbage, Chief,  
Policy Branch,  
Division of Advanced Reactors and Rulemaking,  
Office of New Reactors.

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**ADAMS Accession Number: ML110550767(pkg) \*via e-mail**

**ADM-012**

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