

NUCLEAR REGULATORY COMMISSION

[NRC-2012-0247]

**Implementation of Regulatory Guide 1.221 on
Design-Basis Hurricane and Hurricane Missiles**

AGENCY: Nuclear Regulatory Commission.

ACTION: Interim staff guidance; issuance.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) staff is issuing its Final Interim Staff Guidance (ISG) DC/COL-ISG-024. The purpose of this ISG is to provide the staff guidance regarding the application of Regulatory Guide (RG) 1.221, "Design-Basis Hurricane and Hurricane Missiles for Nuclear Power Plants," in support of NRC reviews of early site permit (ESP), standard design certification (DC), and combined license (COL) applications being performed under the March 2007 version of NUREG-0800, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants: LWR Edition." This ISG applies to reviews of ESP, DC and COL applications where the resolution of the applicant's conformance with RG 1.221 has not already been achieved as of the effective date of this guidance.

DATES: The effective date of this COL-ISG is **[INSERT DATE 30 DAYS AFTER PUBLICATION]**.

ADDRESSES: Please refer to Docket ID **NRC-2012-0247** 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, using any of the following methods:

- **Federal Rulemaking Web site:** Go to <http://www.regulations.gov> and search for Docket ID **NRC-2012-0247**. 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.

- **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 Final ISG is under ADAMS Accession No. ML13015A693.

<ul style="list-style-type: none"> ADAMS Accession Number 	Document Title
ML13015A688	Interim Staff Guidance-024 on Implementation of Regulatory Guide 1.221 on Design-Basis Hurricane and Hurricane Missiles (Package)
ML13015A693	Interim Staff Guidance-024 on Implementation of Regulatory Guide 1.221 on Design-Basis Hurricane and Hurricane Missiles
ML13015A696	Comment Response Document - Interim Staff Guidance-024 on Implementation of Regulatory Guide 1.221 on Design-Basis Hurricane and Hurricane Missiles

- 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, MD 20852.

FOR FURTHER INFORMATION CONTACT: Mr. Joseph Colaccino, Office of New Reactors, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; telephone: 301-415-7102 or by e-mail at joseph.colaccino@nrc.gov

SUPPLEMENTAL INFORMATION:

The staff issues DC/COL-ISGs to facilitate staff activities associated with its review of ESP, DC, and COL applications. This ISG supplements the guidance contained in RG 1.206, Revision 0, "Combined License Applications for Nuclear Power Plants, (LWR Edition)" (ML070630003) In addition, this ISG supplements the guidance provided for staff review of ESP, DC, and COL applications contained in NUREG-0800, Standard Review Plan (SRP), dated March 2007 (ML070630003). On October 22, 2012 (77 FR 64564), the staff issued the

proposed DC/COL-ISG-024 “Interim Staff Guidance Implementation of Regulatory Guide 1.221 on Design-Basis Hurricane and Hurricane Missiles,” ADAMS Accession No. ML12132A508. The staff received questions and editorial comments from three commenters which were considered in the development of the final ISG-024. The questions, comments, and staff answers and resolutions of those questions and comments are contained in “ISG-024 Comment Resolution” which can be found in ADAMS under Accession No. ML13015A696.

The NRC posts all final ISGs on the NRC’s public Web page at <http://www.nrc.gov/reading-rm/doc-collections/isg/>, which is where the public may easily obtain access to ISG DC/COL-ISG-024.

BACKFITTING AND ISSUE FINALITY:

Issuance of this final ISG does not constitute backfitting as defined in Section 50.109 of Title 10 of the *Code of Federal Regulations* (10 CFR) (the Backfit Rule), and is not otherwise inconsistent with the issue finality provisions in 10 CFR Part 52, with respect to current and future applicants other than COL applicants referencing one of the four current final design certification rules. The NRC staff’s position is based upon the following considerations:

- The ISG positions do not constitute backfitting, inasmuch as the ISG is internal guidance directed at the NRC staff with respect to their regulatory responsibilities
- Backfitting and issue finality do not protect these current or future applicants

Issuance of this final ISG may be viewed as constituting backfitting as defined in 10 CFR 50.109 (the Backfit Rule) and may be considered to be inconsistent with the issue finality provisions in 10 CFR Part 52, with respect to current and future COL applicants referencing the ABWR design certification rule (10 CFR Part 52, Appendix A), or the AP1000 design certification rule (10 CFR Part 52, Appendix D). Backfitting and issue finality concerns are

limited to the ISG discussion of consideration of hurricane winds and hurricane missiles. The NRC staff has determined that the guidance in the ISG with respect to consideration of hurricane wind and hurricane missiles, when imposed on COL applicants referencing these two design certification rules, would be necessary to provide adequate protection to public health and safety with respect to hurricane winds and missiles. In addition, the imposition would correct an omission where two approved design certifications do not have site parameters for hurricane winds and hurricane missiles, which are needed to provide compliance with General Design Criterion (GDC) 2 and GDC 4 in 10 CFR Part 50, Appendix A. If a nuclear power plant using these certified designs is located at a site where the hurricane loads and/or the hurricane-generated missile spectra are not bounded by tornado loads and tornado missile spectra, then safety-related structures required to withstand hurricane loads and hurricane-generated missiles may not be adequate and therefore would be in non-compliance with GDC 2 and GDC 4, and would not provide adequate protection to public health and safety against hurricanes of credible intensity that might impact the site. Therefore, any future action to impose this ISG on current and future COL applicants referencing the ABWR design certification rule (10 CFR Part 52, Appendix A), or the AP1000 design certification rule (10 CFR Part 52, Appendix D) would meet the Backfit Rule and would be permitted under the issue finality provisions in 10 CFR 52.63(a).

CONGRESSIONAL REVIEW ACT:

This interim staff guidance is a rule as defined 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.

SUPPLEMENTARY INFORMATION: The agency posts its issued staff guidance in the agency external web page (<http://www.nrc.gov/reading-rm/doc-collections/isg/>).

Dated at Rockville, Maryland, this 14th day of May 2013.

For the Nuclear Regulatory Commission.

/RA/

Joseph Colaccino, Chief
Policy Branch
Division of Advanced Reactors and Rulemaking,
Office of New Reactors

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ADAMS Accession No.: ML13015A689 * via e-mail **ADM-012**

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