

Event Scale Report to the International Atomic Energy Agency (per NRC Management Directive 5.12), and there are unique or unusual aspects of the licensee's performance that warrant additional NRC oversight (e.g., a significant event, which requires an incident investigation team (IIT) or augmented inspection team (AIT)); or (3) *Performance Trend*—Licensee has multiple and/or repetitive significant program issues identified over more than one inspection, or inspection period, and the issues are supported by severity level I, II, or III violation, as described in the NRC Enforcement Policy (including equivalent violations dispositioned by Alternative Dispute Resolution). And, there are unique or unusual aspects of the licensee's performance that warrant additional NRC oversight (e.g., oversight panel formed for order implementation).

#### *Proposed Criteria for Determining Materials Licensees for the AARM*

The NRC is proposing the following revision to the existing criteria for determining materials licensees with significant performance issues: (1) *Strategic Plan*—Licensee has an event that results in the failure to meet a strategic outcome for safety and security in the NRC Strategic Plan (NUREG-1614); (2) *Significant Issue or Event*—Licensee has an issue or event that results in an abnormal occurrence report to Congress (per NRC Management Directive 8.1), or a severity level I or II violation, as described in the NRC Enforcement Policy (including equivalent violations dispositioned by Alternative Dispute Resolution), or a level 3 or higher International Nuclear Event Scale Report to the International Atomic Energy Agency (per NRC Management Directive 5.12), and there are unique or unusual aspects of the licensee's performance that warrant additional NRC oversight (e.g., a significant event, which requires an IIT or AIT); or (3) *Performance Trend*—Licensee has multiple and/or repetitive significant program issues identified over more than one inspection, or inspection period, and the issues are supported by severity level I, II, or III violation, as described in the NRC Enforcement Policy (including equivalent violations dispositioned by Alternative Dispute Resolution). And, there are unique or unusual aspects of the licensee's performance that warrant additional NRC oversight (e.g., oversight panel formed for order implementation); or (4) *Identified for Discussion at Previous AARM*—Licensee corrective actions did not address or were ineffective in correcting the underlying

issues that were previously discussed at the AARM.

You can find NRC's strategic plan (NUREG-1614) and the referenced management directives and enforcement policy on NRC's public document collections Web page at <http://www.nrc.gov/reading-rm/doc-collections/>.

Dated at Rockville, Maryland, this 25th day of August 2010.

For the Nuclear Regulatory Commission.

**Cynthia A. Carpenter,**

*Deputy Director, Office of Federal and State Materials and Environmental Management Programs.*

[FR Doc. 2010-22481 Filed 9-8-10; 8:45 am]

**BILLING CODE 7590-01-P**

## **NUCLEAR REGULATORY COMMISSION**

**[NRC-2010-0288]**

### **Draft Regulatory Guide, DG-1247, "Design-Basis Hurricane and Hurricane Missiles for Nuclear Power Plants" and Supporting Technical Basis Documents NUREG/CR 7004 and 7005**

DG-1247 is a proposed new regulatory guide. Issuance and Availability; Correction and Comment Period Extension:

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Notice of issuance; correction and comment period extension.

**SUMMARY:** On August 31, 2010 (75 FR 53352), the U.S. Nuclear Regulatory Commission (NRC) published a notice of issuance and availability of Draft Regulatory Guide (DG)—1247, "Design-Basis Hurricane and Hurricane Missiles for Nuclear Power Plants." This **Federal Register** Notice did not provide all the information regarding the supporting technical basis documents NUREG/CR 7004 and 7005. Due to this correction the comment period has been extended to November 5, 2010.

#### **FOR FURTHER INFORMATION CONTACT:**

Robert G. Carpenter, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, telephone (301) 251-7483, or e-mail [Robert.Carpenter@nrc.gov](mailto:Robert.Carpenter@nrc.gov).

#### **SUPPLEMENTARY INFORMATION:**

#### **I. Introduction**

The U.S. Nuclear Regulatory Commission (NRC) is issuing for public comment a draft guide in the agency's "Regulatory Guide" series and the supporting technical basis documents, NUREG/CR 7004 and 7005. This series

was developed to describe and make available to the public such information as methods that are acceptable to the NRC staff for implementing specific parts of the NRC's regulations, techniques that the staff uses in evaluating specific problems or postulated accidents, and data that the staff needs in its review of applications for permits and licenses.

The draft regulatory guide (DG), entitled, "Design-Basis Hurricane and Hurricane Missiles for Nuclear Power Plants," is temporarily identified by its task number, DG-1247, which should be mentioned in all related correspondence. DG-1247 is a proposed new regulatory guide.

This guide describes a method that the NRC staff considers acceptable to support reviews of applications that the agency expects to receive for new nuclear reactor construction permits or operating licenses under 10 CFR Part 50; design certifications under 10 CFR Part 52, "Early Site Permits; Standard Design Certifications; and Combined Licenses for Nuclear Power Plants" (Ref. 9); and combined licenses under 10 CFR Part 52 that do not reference a standard design. Specifically, this regulatory guide provides new guidance that the staff of the NRC considers acceptable for use in selecting the design-basis hurricane windspeeds and hurricane-generated missiles that a new nuclear power plant should be designed to withstand to prevent undue risk to the health and safety of the public. This guidance applies to the contiguous United States but does not address the determination of the design-basis hurricane and hurricane missiles for sites located along the Pacific coast or in Alaska, Hawaii, or Puerto Rico; the NRC will evaluate such determinations on a case-by-case basis. This guide also does not identify the specific structures, systems, and components that should be designed to withstand the effects of the design-basis hurricane or should be protected from hurricane-generated missiles and remain functional. Nor does this guide address other externally generated hazards, such as aviation crashes, nearby accidental explosions resulting in blast overpressure levels and explosion-borne debris and missiles, and turbine missiles. NUREG/CR 7004 is the technical basis for regulatory guidance on design-basis hurricane-borne missile speeds and NUREG/CR 7005 is the technical basis for regulatory guidance on design-basis hurricane wind speeds for new nuclear power plants.

## II. Further Information

Nuclear power plants must be designed so that they remain in a safe condition under extreme meteorological events, including those that could result in the most extreme wind events (tornadoes and hurricanes) that could reasonably be predicted to occur at the site. Initially, the NRC solely considered such conditions for tornadoes in Regulatory Guide (RG) 1.76, "Design-Basis Tornado for Nuclear Power Plants," issued April 1974. The design-basis tornado windspeeds were chosen so that the probability that a tornado exceeding the design basis would occur was on the order of  $10^{-7}$  per year per nuclear power plant. In March 2007, the NRC issued Revision 1 to RG 1.76, "Design-Basis Tornado and Tornado Missiles for Nuclear Power Plants." Revision 1 to RG 1.76 relied on the Enhanced Fujita Scale which was implemented by the National Weather Service in February 2007. The Enhanced Fujita Scale is a revised assessment relating tornado damage to windspeed which resulted in a decrease in design-basis tornado windspeed criteria in Revision 1 to RG 1.76.

Since design-basis tornado windspeeds were decreased as a result of the analysis performed to update RG 1.76, it was no longer clear that the revised tornado design-basis windspeeds would bound design-basis hurricane windspeeds in all areas of the United States. This prompted an investigation into extreme wind gusts during hurricanes and their relation to design-basis hurricane windspeeds. The NRC commissioned a report, NUREG/CR 7005, that considers peak-gust windspeeds and estimates maximum hurricane windspeeds for hurricanes that originate in the Atlantic and make landfall along the Atlantic and Gulf coasts of the contiguous United States. The NRC staff has determined that the design-basis hurricane windspeeds should correspond to the exceedance frequency of  $10^{-7}$  per year, calculated as a best estimate. This is the same exceedance frequency used to establish the design-basis tornado parameters in Revision 1 to RG 1.76. This exceedance frequency is also consistent with the Standard Review Plan (NUREG-0800) Section 2.2.3 (Evaluation of Potential Accidents) criterion for identifying design-basis events involving hazardous materials or activities on site and in the vicinity of a proposed site.

To ensure the safety of new nuclear power plants in the event of a hurricane strike, NRC regulations require that a nuclear power plant design consider the impact of hurricane-generated missiles,

in addition to the direct action of the hurricane wind. Hurricanes are capable of generating missiles from objects lying within the path of the hurricane wind and from debris of nearby damaged structures. To evaluate the resistance of barriers to penetration and gross failure, the hurricane missile velocities must also be defined. The NRC commissioned a report, NUREG/CR 7004, on design-basis hurricane-borne missile velocities. This report describes the method used to calculate velocities associated with several types of missiles considered for different hurricane windspeeds. The selected design-basis hurricane missile spectrum for nuclear power plants is the same as the design-basis tornado missile spectrum presented in RG 1.76. This spectrum includes (1) a massive high-kinetic-energy missile that deforms on impact (an automobile), (2) a rigid missile that tests penetration resistance (a pipe), and (3) a small rigid missile of a size sufficient to pass through any opening in protective barriers (a solid steel sphere).

The hurricane missile analyses presented in NUREG/CR 7004 are based on missile aerodynamic and initial condition assumptions that are similar to those used for the analyses of tornado-borne missile velocities adopted for Revision 1 to RG 1.76. However, the assumed hurricane wind field differs from the assumed tornado wind field in that the hurricane wind field does not change spatially during the missile's flight time but does vary with height above the ground. Because the size of the hurricane zone with the highest winds is large relative to the size of the missile trajectory, the hurricane missile is subjected to the highest windspeeds throughout its trajectory. In contrast, the tornado wind field is smaller, so the tornado missile is subject to the strongest winds only at the beginning of its flight. This results in the same missile having a higher maximum velocity in a hurricane wind field than in a tornado wind field with the same maximum (3-second gust) windspeed. For example, the massive high-kinetic-energy tornado missile (a 1810 kg (4000 lb) automobile) in RG 1.76 is assigned a velocity of 41 m/s (92 mph) in tornado intensity Region I which has a design-basis tornado windspeed of 103 m/s (230 mph). The same missile is assigned a velocity of 68 m/s (152 mph) in a hurricane wind field with the same design-basis windspeed of 103 m/s (230 mph). The 1810 kg automobile missile will have a kinetic energy of  $1.5 \times 10^6$  joules in the tornado wind field versus  $4.2 \times 10^6$  joules in the hurricane wind field.

The NRC staff would like to point out that the missile speed analyses for both the tornado and hurricane massive high-kinetic-energy missile (the 1810 kg automobile) assume the missile starts its motion with zero initial velocity from an elevation of 40 meters above ground. Forces tending to increase the elevation of the hurricane missile with respect to the ground level (e.g., updrafts) are assumed to be negligible. However, rooftop mechanical (e.g., HVAC) equipment that is kept in place only by gravity connections is a source of heavy deformable debris when displaced during extreme-wind events. Buildings not designed for the hurricane winds can also continue to break up during the buildup of hurricane winds. Failures progress from the exterior building elements inward to the structural members (e.g., trusses, masonry units, beams, and columns). According to Section 7.1.1 (Debris Potential at Safe Room Sites) of the Second Edition (August 2008) of FEMA 361 (Design and Construction Guidance for Community Safe Rooms), the literature on hurricanes as well as tornadoes contains numerous examples of large structural members that have been transported by winds for significant distances by the wind field when a portion of exterior sheathing remains connected and provides an aerodynamic sail area on which the wind can act. An automobile hurricane missile with an initial elevation of 40 meters above ground could be considered a surrogate for such equipment and structures which can be found throughout a nuclear power plant site.

Applications for new power plants will be expected to show that their applicable structures can independently withstand both the total design-basis tornado load and the total design-basis hurricane load as extreme environmental conditions. The staff plans to eventually revise the corresponding sections the Standard Review Plan to indicate that the design-basis hurricane windspeeds and hurricane-generated missiles specified in DG-1247 should be considered as loads to be sustained during extreme environmental conditions.

The NRC staff is soliciting comments on DG-1247 and NUREG/CR 7004 and 7005. Comments may be accompanied by relevant information or supporting data and should mention DG-1247 in the subject line. Comments submitted in writing or in electronic form will be made available to the public in their entirety through the NRC's Agencywide Documents Access and Management System (ADAMS).

**DATES:** The comment period closes on November 5, 2010.

**ADDRESSES:** You may submit comments by any one of the following methods. Please include Docket ID NRC-2010-0288 in the subject line of your comments. Comments submitted in writing or in electronic form will be posted on the NRC Web site and on the Federal rulemaking Web site [Regulations.gov](http://www.regulations.gov). Because your comments will not be edited to remove any identifying or contact information, the NRC cautions you against including any information in your submission that you do not want to be publicly disclosed.

The NRC requests that any party soliciting or aggregating comments received from other persons for submission to the NRC inform those persons that the NRC will not edit their comments to remove any identifying or contact information, and therefore, they should not include any information in their comments that they do not want publicly disclosed.

*Federal Rulemaking Web site:* Go to <http://www.regulations.gov> and search for documents filed under Docket ID NRC-2010-0288. Address questions about NRC dockets to Carol Gallagher 301-492-3668; e-mail [Carol.Gallagher@nrc.gov](mailto:Carol.Gallagher@nrc.gov).

*Mail comments to:* Cindy Bladey, Chief, Rules, Announcements and Directives Branch (RAD), Office of Administration, Mail Stop: TWB-05-B01M, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by fax to RAD at (301) 492-3446.

You can access publicly available documents related to this notice using the following methods:

*NRC's Public Document Room (PDR):* The public may examine and have copied for a fee publicly available documents at the NRC's PDR, Room O1 F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland.

*NRC's Agencywide Documents Access and Management System (ADAMS):* Publicly available documents created or received at the NRC are available electronically at the NRC's Electronic Reading Room at <http://www.nrc.gov/reading-rm/adams.html>. From this page, the public can gain entry into ADAMS, which provides text and image files of NRC's public documents. If you do not have access to ADAMS or if there are problems in accessing the documents located in ADAMS, contact the NRC's 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). DG-1247 is available electronically under ADAMS

Accession Number ML100480890. In addition, electronic copies of DG-1247 are available through the NRC's public Web site under Draft Regulatory Guides in the "Regulatory Guides" collection of the NRC's Electronic Reading Room at <http://www.nrc.gov/reading-rm/doc-collections/>. The regulatory analysis may be found in ADAMS under Accession No. ML102310249.

Regulatory guides are not copyrighted, and NRC approval is not required to reproduce them.

Dated at Rockville, Maryland, this 1st day of September 2010.

For the Nuclear Regulatory Commission.

**Harriet Karagiannis,**

*Acting Chief, Regulatory Guide Development Branch, Division of Engineering, Office of Nuclear Regulatory Research.*

[FR Doc. 2010-22490 Filed 9-8-10; 8:45 am]

**BILLING CODE 7590-01-P**

## NUCLEAR REGULATORY COMMISSION

**[Docket Nos. 50-275-LR and 50-323-LR; ASLBP No. 10-890-01-LR-BD01]**

### In the Matter of Pacific Gas & Electric Company (Diablo Canyon Nuclear Power Plant, Units 1 and 2); Notice of Hearing (Application for License Renewal)

September 1, 2010.

#### Atomic Safety and Licensing Board

Before Administrative Judges: Alex S.

Karlin, Chairman, Nicholas G.

Trikouros, Dr. Paul B. Abramson.

This proceeding concerns the November 23, 2009, application of Pacific Gas & Electric Company (PG&E) to renew Operating License Nos. DPR-80 and DPR-82 for the Diablo Canyon Nuclear Power Plant, Units 1 and 2, near San Luis Obispo, California. PG&E seeks to extend these licenses for an additional twenty years beyond the current expiration dates of November 2, 2024 and August 26, 2025.

On January 21, 2010, the Nuclear Regulatory Commission (NRC) published a notice of opportunity to request a hearing concerning the PG&E license renewal application. 75 FR 3493 (Jan. 21, 2010). On March 22, 2010, the San Luis Obispo Mothers for Peace (SLOMFP), a local public interest group, filed a request for hearing and asserted five contentions challenging various aspects of PG&E's application. On April 8, 2010, this Atomic Safety and Licensing Board was established to conduct this adjudication. See 75 FR 20,010 (Apr. 16, 2010). On May 26, 2010, the Board heard oral argument

from SLOMFP, PG&E, and the NRC Staff in San Luis Obispo, California, relating to the admissibility of the proposed contentions. On August 4, 2010, the Board issued a memorandum and order granting SLOMFP's request for a hearing and admitting four of its contentions. LBP-10-15, 72 NRC \_\_ (slip op.) (Aug. 4, 2010).

Pursuant to 10 CFR 2.105(e)(2), please take notice that the Atomic Safety and Licensing Board will conduct an evidentiary hearing on SLOMFP's challenge to PG&E's application to renew its licenses. The matters of fact and law to be considered at the hearing are the contentions that have been duly admitted. As of this time, the four admitted contentions are as follows:

*Contention EC-1:* PG&E's Severe Accident Mitigation Alternatives ("SAMA") analysis fails to satisfy 40 CFR 1502.22 because it fails to consider information regarding the Shoreline fault that is necessary for an understanding of seismic risks to the Diablo Canyon nuclear power plant. Further, that omission is not justified by PG&E because it has failed to demonstrate that the information is too costly to obtain. As a result of the foregoing failures, PG&E's SAMA analysis does not satisfy the requirements of the National Environmental Policy Act ("NEPA") for consideration of alternatives or NRC implementing regulation 10 CFR 51.53(c)(3)(ii)(L).

*Contention EC-2:* PG&E's Environmental Report is inadequate to satisfy NEPA because it does not address the airborne environmental impacts of a spent fuel pool accident caused by an earthquake adversely affecting DCNPP.<sup>1</sup>

*Contention EC-4:* The Environmental Report fails to satisfy the National Environmental Policy Act (NEPA) because it does not discuss the cost-effectiveness of measures to mitigate the environmental impacts of an attack on the Diablo Canyon reactor during the license renewal term.<sup>2</sup>

*Contention TC-1:* The applicant, Pacific Gas & Electric Company (PG&E), has failed to satisfy 10 CFR 54.29's requirement to demonstrate a reasonable assurance that it can and will "manage the effects of aging" in accordance with the current licensing basis. PG&E has failed to show how it will address and rectify an ongoing adverse trend with respect to recognition, understanding, and management of the Diablo Canyon Nuclear Power Plant's design/licensing basis which undermines PG&E's ability to demonstrate that it will adequately manage aging in accordance with this same licensing basis as required by 10 CFR 54.29.

<sup>1</sup> Although the Board has determined that Contention EC-2 otherwise meets the admissibility criteria of 10 CFR 2.309(f)(1), no evidentiary hearing will be held on this contention unless the Commission rules that SLOMFP's request for waiver of certain key regulations is warranted under 10 CFR 2.335. That waiver request is now pending before the Commission.

<sup>2</sup> Pursuant to 10 CFR 2.323(f)(1) the Board referred Contention EC-4 to the Commission.