[7590-01-P]

NUCLEAR REGULATORY COMMISSION

[NRC-2013-0089]

mPower™ Design-Specific Review Standard

AGENCY: Nuclear Regulatory Commission.

ACTION: Design-Specific Review Standard (DSRS) for the mPower™ Design; re-opening of comment period.

SUMMARY: On May 14, 2013, the U.S. Nuclear Regulatory Commission (NRC) published a request for public comment on the DSRS for the mPower™ design (mPower™ DSRS). The purpose of the mPower™ DSRS is to more fully integrate the use of risk insights into the review of a design certification (DC), an early site permit (ESP) or a combined license (COL) that incorporates the mPower™ design. The public comment period was originally scheduled to close on August 16, 2013. Generation mPower submitted a letter on August 8, 2013 (ADAMS Accession No. ML13224A163), requesting an extension of the public comment period until September 16, 2012, on specific sections of the mPower™ DSRS. The NRC has decided to re-open the public comment period on those specific sections of the mPower™ DSRS to allow more time for members of the public to assemble their comments on those sections.

DATES: The comment period has been re-opened and now closes on September 16, 2013. Comments received after this date will be considered, if it is practical to do so, but the Commission is able to ensure consideration only for comments received on or before this date.

ADDRESSES: You may submit comments 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-2013-0089**. Address questions about NRC dockets to Carol Gallagher; telephone: 301-287-3244; 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: 3WFN 06-44M, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

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: Yanely Malave, Office of New Reactors, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001; telephone: 301-415-1519 or e-mail: Yanely.Malave@nrc.gov.

SUPPLEMENTARY INFORMATION:

I. Accessing Information and Submitting Comments

A. Accessing Information

Please refer to Docket ID **NRC-2013-0089** when contacting the NRC about the availability of information regarding this document. You may access publicly-available information related to this action by the following methods:

- **Federal Rulemaking Web site:** Go to http://www.regulations.gov and search for Docket ID **NRC-2013-0089**.

- **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 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 and also in the table included in this notice. The DSRS sections are available in ADAMS under the corresponding accession number as describe in Section II, "Further Information," of this notice.

- **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-2013-0089** 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. Further Information

A. Background

In 2010, the Commission provided direction to the staff on the preparation for, and review of, small modular reactor (SMR) applications, with a near-term focus on integral pressurized water reactor (iPWR) designs. The Commission directed the staff to more fully integrate the use of risk insights into pre-application activities and the review of applications and, consistent with regulatory requirements and Commission policy statements, to align the review focus and resources to risk-significant structures, systems, and components and other aspects of the design that contribute most to safety in order to enhance the effectiveness and efficiency of the review process. The Commission directed the staff to develop a design-specific, risk-informed review plan for each SMR design to address pre-application and application review activities. An important part of this review plan is the DSRS. This DSRS for the mPower™ design is the result of the implementation of the Commission's direction.

B. DSRS for the mPower™ Design

As part of the mPower™ DSRS, the NRC's Office of New Reactors has issued the mPower™ Design-Specific Review Standard Scope and Safety Review Matrix (ADAMS Accession No. ML13088A252) to reflect the integration of risk insights into the review of applications submitted for the mPower™ DC and ESPs or COLs that incorporate the mPower™

design under part 52 of Title 10 of the *Code of Federal Regulations*. The mPower™ DSRS reflects current staff review methods and practices based on the integration of risk insights and, where appropriate, lessons learned from NRC reviews of DC and COL applications completed since the last revision of the Standard Review Plan.

C. Re-Opening of Comment Period

On May 14, 2013 (78 FR 28258), the NRC published a request for public comment on the mPower™ DSRS. The public comment period was originally scheduled to close on August 16, 2013. Generation mPower submitted a letter on August 8, 2013 (ADAMS Accession No. ML13224A163), requesting an extension of the public comment period until September 16, 2013, on specific sections of the mPower™ DSRS. The NRC has decided to re-open the public comment period on those specific sections of the mPower™ DSRS to allow more time for members of the public to assemble their comments on those sections. The NRC did not receive a request to extend the comment period on the additional sections in the May 14, 2013, request for public comment; and believes the original 90-day public comment period afforded for those sections is sufficient.

Specifically, we request comment on the sufficiency of the proposed technical content of the individual mPower™ DSRS sections, identified in the following table, that were revised or developed to incorporate design-specific review guidance based on features of the mPower™ reactor design.

Section	Design-Specific Review Standard Title	ADAMS No.
3.7.1	Seismic Design Parameters	ML13099A204
3.7.2	Seismic System Analysis	ML13099A205
3.7.3	Seismic Subsystem Analysis	ML13099A209
3.8.2	Steel Containment	ML13099A298
3.8.3	Concrete and Steel Internal Structures of Steel Containments	ML13099A312
3.8.4	Other Seismic Category I Structures	ML13099A316

3.8.5	Foundations	ML13099A319
15.0	Introduction—Transient and Accident Analyses	ML12275A026
15.0.2	Review of Transient and Accident Analysis Methods	ML12207A098
15.0.3	Design Basis Accident Radiological Consequence Analyses for Advanced Light Water Reactors	ML12257A226
15.1.5	Steam System Piping Failures Inside and Outside of Containment	ML12207A108
15.2.1 - 15.2.5	Loss of External Load; Turbine Trip; Loss of Condenser Vacuum; Closure of Main Steam Isolation Valve (BWR); and Steam Pressure Regulator Failure (Closed)	ML12319A584
15.2.6	Loss of Nonemergency AC Power to the Station Auxiliaries	ML12319A587
15.2.7	Loss of Normal Feedwater Flow	ML12250A248
15.2.8	Feedwater System Pipe Breaks Inside and Outside Containment (PWR)	ML12319A668
15.3.1 - 15.3.2	Loss of Forced Reactor Coolant Flow Including Trip of Pump Motor and Flow Controller Malfunctions	ML12319A585
15.3.3 - 15.3.4	Reactor Coolant Pump Rotor Seizure and Reactor Coolant Pump Shaft Break	ML12319A586
15.4.1	Uncontrolled Control Rod Assembly Withdrawal from a Subcritical or Low Power Startup Condition	ML12240A005
15.4.2	Uncontrolled Control Rod Assembly Withdrawal at Power	ML12242A102
15.4.10	Startup of an Inactive Pump or Pumps at an Incorrect Temperature, and Flow Controller Malfunction causing an Increase in Core Flow Rate	ML12261A399
15.5.1 - 15.5.2	Inadvertent Operation of ECCS and Reactor Coolant Inventory and Purification System (RCI) Malfunction that Increases Reactor Coolant Inventory	ML12319A575
15.6.1	Inadvertent Opening of a Pressurizer Safety Valve, or an Automatic Depressurization Valve	ML12250A318
15.6.5	Loss of Coolant Accidents Resulting From Spectrum of Postulated Piping Breaks Within the Reactor Coolant Pressure Boundary	ML12319A576
15.8	Anticipated Transients Without Scram	ML12319A577

Dated at Rockville, Maryland, this 20th day of August, 2013.

For the Nuclear Regulatory Commission.

/RA/

Yanely Malave, Project Manager,
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