

NUCLEAR REGULATORY COMMISSION

[NRC-2012-0016]

**Applications and Amendments to Facility Operating Licenses Involving Proposed
No Significant Hazards Considerations and Containing Sensitive Unclassified
Non-Safeguards Information**

AGENCY: Nuclear Regulatory Commission.

ACTION: License amendment request; opportunity for comments, request for hearing and petition for leave to intervene, and order.

DATES: Comments must be filed by **[INSERT DATE: 30 DAYS FROM DATE OF PUBLICATION OF THIS *FEDERAL REGISTER* NOTICE]**. A request for a hearing must be filed by **[INSERT DATE: 60 DAYS FROM DATE OF PUBLICATION]**. Any potential party as defined in Title 10 of the *Code of Federal Regulations* (10 CFR) 2.4, who believes access to Sensitive Unclassified Non-Safeguards Information (SUNSI) is necessary to respond to this notice must request document access by **[INSERT DATE: 10 DAYS FROM DATE OF PUBLICATION]**.

ADDRESSES: Please include Docket ID **NRC-2012-0016** in the subject line of your comments. For additional instructions on submitting comments and instructions on accessing documents related to this action, see "Submitting Comments and Accessing Information" in the **SUPPLEMENTARY INFORMATION** section of this document. You may submit comments by any one of the following methods:

- **Federal Rulemaking Web Site:** Go to <http://www.regulations.gov> and search for documents filed under Docket ID **NRC-2012-0016**. Address questions about NRC dockets to

Carol Gallagher, telephone: 301-492-3668; email: Carol.Gallagher@nrc.gov.

- **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.

SUPPLEMENTARY INFORMATION:

Submitting Comments and Accessing Information

Comments submitted in writing or in electronic form will be posted on the NRC Web site and on the Federal rulemaking Web site, <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.

You can access publicly available documents related to this document 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 20852.
- **NRC's Agencywide Documents Access and Management System (ADAMS):** Publicly available documents created or received at the NRC are available online in the NRC Library 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 the 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.

- **Federal Rulemaking Web Site:** Public comments and supporting materials related to this notice can be found at <http://www.regulations.gov> by searching on Docket ID **NRC-2012-0016**.

Background

Pursuant to Section 189a.(2) of the Atomic Energy Act of 1954, as amended (the Act), the U.S. Nuclear Regulatory Commission (the Commission or NRC staff) is publishing this notice. The Act requires the Commission publish notice of any amendments issued, or proposed to be issued and grants the Commission the authority to issue and make immediately effective any amendment to an operating license upon a determination by the Commission that such amendment involves no significant hazards consideration, notwithstanding the pendency before the Commission of a request for a hearing from any person.

This notice includes notices of amendments containing SUNSI.

**Notice of Consideration of Issuance of Amendments to
Facility Operating Licenses, Proposed No Significant Hazards
Consideration Determination, and Opportunity for a Hearing**

The Commission has made a proposed determination that the following amendment requests involve no significant hazards consideration. Under the Commission's regulations in 10 CFR 50.92, this means that operation of the facility in accordance with the proposed amendment would not (1) involve a significant increase in the probability or consequences of an accident previously evaluated; (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety. The basis for this proposed determination for each amendment request is shown below.

The Commission is seeking public comments on this proposed determination. Any comments received within 30 days after the date of publication of this notice will be considered in making any final determination.

Normally, the Commission will not issue the amendment until the expiration of 60 days after the date of publication of this notice. The Commission may issue the license amendment before expiration of the 60-day period provided that its final determination is that the amendment involves no significant hazards consideration. In addition, the Commission may issue the amendment prior to the expiration of the 30-day comment period should circumstances change during the 30-day comment period such that failure to act in a timely way would result, for example in derating or shutdown of the facility. Should the Commission take action prior to the expiration of either the comment period or the notice period, it will publish in the *Federal Register* a notice of issuance. Should the Commission make a final No Significant Hazards Consideration Determination, any hearing will take place after issuance. The Commission expects that the need to take this action will occur very infrequently.

Within 60 days after the date of publication of this notice, any person(s) whose interest may be affected by this action may file a request for a hearing and a petition to intervene with respect to issuance of the amendment to the subject facility operating license. Requests for a hearing and a petition for leave to intervene shall be filed in accordance with the Commission's "Rules of Practice for Domestic Licensing Proceedings" in 10 CFR part 2. Interested person(s) should consult a current copy of 10 CFR 2.309, which is available at the NRC's PDR, located at One White Flint North, Room O1-F21, 11555 Rockville Pike (first floor), Rockville, Maryland 20852. The NRC regulations are accessible electronically from the NRC Library on the NRC Web site at <http://www.nrc.gov/reading-rm/doc-collections/cfr/>. If a request for a hearing or petition for leave to intervene is filed within 60 days, the Commission or a presiding officer designated by the Commission or by the Chief Administrative Judge of the Atomic Safety and Licensing Board Panel, will rule on the request and/or petition; and the Secretary or the Chief Administrative Judge of the Atomic Safety and Licensing Board will issue a notice of a hearing or an appropriate order.

As required by 10 CFR 2.309, a petition for leave to intervene shall set forth with particularity the interest of the petitioner in the proceeding, and how that interest may be affected by the results of the proceeding. The petition should specifically explain the reasons why intervention should be permitted with particular reference to the following general requirements: (1) the name, address, and telephone number of the requestor or petitioner; (2) the nature of the requestor's/petitioner's right under the Act to be made a party to the proceeding; (3) the nature and extent of the requestor's/petitioner's property, financial, or other interest in the proceeding; and (4) the possible effect of any decision or order which may be entered in the proceeding on the requestor's/petitioner's interest. The petition must also set forth the specific contentions which the requestor/petitioner seeks to have litigated at the proceeding.

Each contention must consist of a specific statement of the issue of law or fact to be raised or controverted. In addition, the requestor/petitioner shall provide a brief explanation of the bases for the contention and a concise statement of the alleged facts or expert opinion which support the contention and on which the requestor/petitioner intends to rely in proving the contention at the hearing. The requestor/petitioner must also provide references to those specific sources and documents of which the petitioner is aware and on which the requestor/petitioner intends to rely to establish those facts or expert opinion. The petition must include sufficient information to show that a genuine dispute exists with the applicant on a material issue of law or fact. Contentions shall be limited to matters within the scope of the amendment under consideration. The contention must be one which, if proven, would entitle the requestor/petitioner to relief. A requestor/petitioner who fails to satisfy these requirements with respect to at least one contention will not be permitted to participate as a party.

Those permitted to intervene become parties to the proceeding, subject to any limitations in the order granting leave to intervene, and have the opportunity to participate fully in the conduct of the hearing.

If a hearing is requested, and the Commission has not made a final determination on the issue of no significant hazards consideration, the Commission will make a final determination on the issue of no significant hazards consideration. The final determination will serve to decide when the hearing is held. If the final determination is that the amendment request involves no significant hazards consideration, the Commission may issue the amendment and make it immediately effective, notwithstanding the request for a hearing. Any hearing held would take place after issuance of the amendment. If the final determination is that the amendment request involves a significant hazards consideration, then any hearing held would take place before the issuance of any amendment.

All documents filed in the NRC adjudicatory proceedings, including a request for hearing, a petition for leave to intervene, any motion or other document filed in the proceeding prior to the submission of a request for hearing or petition to intervene, and documents filed by interested governmental entities participating under 10 CFR 2.315(c), must be filed in accordance with the NRC E-Filing rule (72 FR 49139, August 28, 2007). The E-Filing process requires participants to submit and serve all adjudicatory documents over the internet, or in some cases to mail copies on electronic storage media. Participants may not submit paper copies of their filings unless they seek an exemption in accordance with the procedures described below.

To comply with the procedural requirements of E-Filing, at least 10 days prior to the filing deadline, the participant should contact the Office of the Secretary by e-mail at hearing.docket@nrc.gov, or by telephone at 301-415-1677, to request (1) a digital identification (ID) certificate, which allows the participant (or its counsel or representative) to digitally sign documents and access the E-Submittal server for any proceeding in which it is participating; and (2) advise the Secretary that the participant will be submitting a request or petition for hearing (even in instances in which the participant, or its counsel or representative, already holds an NRC-issued digital ID certificate). Based upon this information, the Secretary will establish an electronic docket for the hearing in this proceeding if the Secretary has not already established an electronic docket.

Information about applying for a digital ID certificate is available on the NRC's public Web site at <http://www.nrc.gov/site-help/e-submittals/apply-certificates.html>. System requirements for accessing the E-Submittal server are detailed in the NRC's "Guidance for Electronic Submission," which is available on the agency's public Web site at <http://www.nrc.gov/site-help/e-submittals.html>. Participants may attempt to use other software not listed on the Web site, but should note that the NRC's E-Filing system does not support

unlisted software, and the NRC Meta System Help Desk will not be able to offer assistance in using unlisted software.

If a participant is electronically submitting a document to the NRC in accordance with the E-Filing rule, the participant must file the document using the NRC's online, Web-based submission form. In order to serve documents through the Electronic Information Exchange System, users will be required to install a Web browser plug-in from the NRC Web site. Further information on the Web-based submission form, including the installation of the Web browser plug-in, is available on the NRC's public Web site at <http://www.nrc.gov/site-help/e-submittals.html>.

Once a participant has obtained a digital ID certificate and a docket has been created, the participant can then submit a request for hearing or petition for leave to intervene. Submissions should be in Portable Document Format (PDF) in accordance with the NRC guidance available on the NRC public Web site at <http://www.nrc.gov/site-help/e-submittals.html>. A filing is considered complete at the time the documents are submitted through the NRC's E-Filing system. To be timely, an electronic filing must be submitted to the E-Filing system no later than 11:59 p.m. Eastern Time on the due date. Upon receipt of a transmission, the E-Filing system time-stamps the document and sends the submitter an e-mail notice confirming receipt of the document. The E-Filing system also distributes an e-mail notice that provides access to the document to the NRC's Office of the General Counsel and any others who have advised the Office of the Secretary that they wish to participate in the proceeding, so that the filer need not serve the documents on those participants separately. Therefore, applicants and other participants (or their counsel or representative) must apply for and receive a digital ID certificate before a hearing request/petition to intervene is filed so that they can obtain access to the document via the E-Filing system.

A person filing electronically using the agency's adjudicatory E-Filing system may seek

assistance by contacting the NRC Meta System Help Desk through the “Contact Us” link located on the NRC Web site at <http://www.nrc.gov/site-help/e-submittals.html>, by e-mail at MSHD.Resource@nrc.gov, or by a toll-free call at 1-866-672-7640. The NRC Meta System Help Desk is available between 8 a.m. and 8 p.m., Eastern Time, Monday through Friday, excluding government holidays.

Participants who believe that they have a good cause for not submitting documents electronically must file an exemption request, in accordance with 10 CFR 2.302(g), with their initial paper filing requesting authorization to continue to submit documents in paper format. Such filings must be submitted by: (1) first class mail addressed to the Office of the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, Attention: Rulemaking and Adjudications Staff; or (2) courier, express mail, or expedited delivery service to the Office of the Secretary, Sixteenth Floor, One White Flint North, 11555 Rockville Pike, Rockville, Maryland, 20852, Attention: Rulemaking and Adjudications Staff. Participants filing a document in this manner are responsible for serving the document on all other participants. Filing is considered complete by first-class mail as of the time of deposit in the mail, or by courier, express mail, or expedited delivery service upon depositing the document with the provider of the service. A presiding officer, having granted an exemption request from using E-Filing, may require a participant or party to use E-Filing if the presiding officer subsequently determines that the reason for granting the exemption from use of E-Filing no longer exists.

Documents submitted in adjudicatory proceedings will appear in the NRC's electronic hearing docket, which is available to the public at <http://ehd1.nrc.gov/ehd/>, unless excluded pursuant to an order of the Commission, or the presiding officer. Participants are requested not to include personal privacy information, such as social security numbers, home addresses, or home phone numbers in their filings, unless an NRC regulation or other law requires submission

of such information. With respect to copyrighted works, except for limited excerpts that serve the purpose of the adjudicatory filings and would constitute a Fair Use application, participants are requested not to include copyrighted materials in their submission.

Petitions for leave to intervene must be filed no later than 60 days from **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]**. Non-timely filings will not be entertained absent a determination by the presiding officer that the petition or request should be granted or the contentions should be admitted, based on a balancing of the factors specified in 10 CFR 2.309(c)(1)(i)-(viii).

Entergy Operations, Inc., System Energy Resources, Inc., South Mississippi Electric Power Association, and Entergy Mississippi, Inc., Docket No. 50-416, Grand Gulf Nuclear Station, Unit 1, Claiborne County, Mississippi

Date of amendment request: October 28, 2011.

Description of amendment request: **This amendment request contains sensitive unclassified non-safeguards information (SUNSI).** The amendment would revise the Minimum Critical Power Ratio Safety Limit (MCPR SL) values for both two-loop and single-loop operation in Technical Specification (TS) 2.1.1.2 in accordance with the requirements set forth in GE Nuclear Energy topical report NEDC-33173P, "Applicability of GE Methods to Expanded Operating Domains," Revision 0, dated February 2006.

Basis for proposed no significant hazards consideration determination: As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

1. Does the proposed change involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No.

The Bases to TS 2.1.1.2 states that: "The MCPR SL ensures sufficient conservatism in the operating MCPR limit that, in the event of an AOO [Anticipated Operational Occurrence] from the limiting condition of operation, at least 99.9% of the fuel rods in the core would be expected to avoid boiling transition."

Certain limitations and conditions referenced in the NRC Safety Evaluation for GE Nuclear Energy, "Applicability of GE Methods to Expanded Operating Domains," NEDC-33173P, Revision 0, February 2006 are applicable for extended power uprate operation. The proposed change addresses the following limitation and condition stated in the NRC SE [safety evaluation] for NEDC-33173P:

For EPU [extended power uprate] operation, a 0.02 value shall be added to the cycle-specific SLMCPR value. This adder is applicable to SLO [single-loop operation], which is derived from the dual loop SLMCPR value.

Based on the application of Global Nuclear Fuels' NRC approved MCPR SL methodology, the conclusions of the Cycle 19 reload analyses indicate that the values for two-loop and single-loop MCPR SL should be increased to account for this 0.02 margin. The resulting values add additional margin to the MCPR SLs and continue to ensure the conservatism described in the Bases to TS 2.1.1.2.

The requested Technical Specification change does not involve any plant modifications or operational changes that could affect system reliability or performance or that could affect the probability of operator error. The requested change does not affect any postulated accident precursors, any accident mitigating systems, or introduce any new accident initiation mechanisms.

Therefore, the proposed change to increase the MCPR SLs does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the proposed change create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No.

The proposed change does not involve any new modes of operation, any changes to setpoints, or any plant modifications. The proposed change to the MCPR SLs accounts for the 0.02 adder specified in the NRC Safety Evaluation limitations and conditions associated with NEDC-33173P. Compliance with the criterion for incipient boiling transition continues to be ensured. The core operating limits will continue to be developed using NRC approved methods.

The proposed MCPR SLs do not result in the creation of any new precursors to an accident.

Therefore, the proposed change does not create the possibility of a new or different kind of accident from any previously evaluated.

3. Does the proposed change involve a significant reduction in a margin of safety?

Response: No.

The MCPR SLs have been evaluated in accordance with Global Nuclear Fuels NRC approved cycle-specific safety limit methodology to ensure that during normal operation and during AOOs at least 99.9% of the fuel rods in the core are not expected to experience transition boiling. The proposed revision to the MCPR SLs accounts for the 0.02 adder specified in the NRC Safety Evaluation limitations and conditions associated with NEDC-33173P, which results in additional margin above that specified in the TS Bases.

Therefore, the proposed change to the MCPR SLs does not involve a significant reduction in a margin of safety.

The NRC staff has reviewed the licensee's analysis and, based on this review, it appears that the three standards of 10 CFR 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the amendment request involves no significant hazards consideration.

Attorney for licensee: Joseph A. Aluise, Associate General Counsel - Nuclear, Entergy Services, Inc., 639 Loyola Avenue, New Orleans, Louisiana 70113.

NRC Branch Chief: Michael T. Markley.

Northern States Power Company - Minnesota, Docket Nos. 50-282 and 50-306, Prairie Island Nuclear Generating Plant, Units 1 and 2, Goodhue County, Minnesota

Date of amendment request: August 19, 2011.

Description of amendment request: **This amendment request contains sensitive unclassified non-safeguards information (SUNSI).** The amendments would revise Technical Specification (TS) 3.7.17, "Spent Fuel Pool Storage;" and TS 4.3.1, "[Fuel Storage] Criticality,"

to correct non-conservatism in the Spent Fuel Pool (SFP) criticality analysis-of-record, which have translated into non-conservative TS. Additionally, the amendments would revise the licensing basis to change the regulatory basis for the SFP criticality analysis from Title 10 of the *Code of Federal Regulations* (10 CFR) 70.24, to 10 CFR 50.68(b), and to change the evaluation methodology used for the SFP criticality analysis.

Basis for proposed no significant hazards consideration determination: As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

1. Does the proposed change involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No

The proposed amendments do not change or modify the fuel, fuel handling processes, fuel storage racks, number of fuel assemblies that may be stored in the spent fuel pool (SFP), decay heat generation rate, or the SFP cooling and cleanup system. The proposed amendment was evaluated for impact on the following previously-evaluated events and accidents: (1) fuel handling accident (FHA), (2) fuel assembly misloading, (3) seismically-induced movement of spent fuel storage racks, (4) loss of spent fuel pool cooling, and (5) spent fuel boron dilution.

Although implementation of the proposed amendment will require handling of fuel assemblies to achieve the new configurations, the probability of a FHA is not increased because the implementation of the proposed amendment will employ the same equipment and procedures to handle fuel assemblies that are currently used. Therefore, the proposed amendments do not increase the probability for occurrence of a FHA. In that the proposed amendment does not involve changes to the radiological source term of any fuel assembly, the amendment would not increase the radiological consequences of a FHA. With regard to the potential criticality consequences of a dropped assembly coming to rest adjacent to a storage rack or on top of a storage rack, the results are bounded by the fuel assembly misloading event which is analyzed to provide sufficient margin to criticality. The fuel configuration caused by a dropped assembly resting on top of loaded storage racks is inherently bounded by the assembly misloaded in the storage rack because the misloaded assembly is in closer proximity to other assemblies along its entire fuel length.

Operation in accordance with the proposed amendment will not change the probability of a fuel assembly misloading because fuel movement will continue to be controlled by approved fuel selection and fuel handling procedures. These

procedures continue to require identification of the initial and target locations for each fuel assembly and fuel assembly insert that is moved. The consequences of a fuel misloading event are not changed because the reactivity analysis demonstrates that the same subcriticality criteria and requirements continue to be met for the worst-case fuel misloading event.

Operation in accordance with the proposed amendment will not change the probability of occurrence of a seismic event, which is considered an Act of God. Also, the consequences of a seismic event are not changed because the proposed amendment involves no change to the types of material stored in SFP storage racks or their mass. In this manner, the forcing functions for seismic excitation and the resulting forces are not changed. Also, particular to criticality, the supporting criticality analysis takes no credit for gaps between rack modules so any seismically-induced movement of racks into a closer proximity would not result in an unanalyzed condition with consequences worse than those analyzed. In summary, the proposed amendment will not increase the probability or consequence of a seismic event.

Operation in accordance with the proposed amendment will not change the probability of a loss of spent fuel pool cooling because the change in fuel loading configurations has no bearing on the systems, structures, and components involved in initiating such an event. The proposed amendment does not change the heat load imposed by spent fuel assemblies nor does it change the flow paths in the spent fuel pool. Finally, a new criticality analysis of the limiting fuel loading configuration confirmed that the condition would remain subcritical at the resulting temperature value.

Therefore, the accident consequences are not increased for the proposed amendment.

Operation in accordance with the proposed amendment will not change the probability of a boron dilution event because the change in fuel loading configurations has no bearing on the systems, structures, and components involved in initiating or sustaining the intrusion of unborated water to the spent fuel pool. The consequences of a boron dilution event are unchanged because the proposed amendment has no bearing on the systems that operators would use to identify and terminate a dilution event. Also, implementation of the proposed amendment will not affect any of the other key parameters of the boron dilution analysis which includes SFP water inventory, volume of SFP contents, initial boron concentration requirement, and the sources of dilution water. Finally, a new criticality analysis of the limiting fuel loading configuration confirmed that the dilution event would be terminated at a soluble boron concentration value that ensured a subcritical condition.

Therefore, the proposed changes do not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Do the proposed changes create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No

The proposed amendments involve new SFP loading configurations for current and legacy fuel designs of the nuclear plant. The proposed amendments do not change or modify the fuel, fuel handling processes, fuel storage racks, number of fuel assemblies that may be stored in the pool, decay heat generation rate, or the spent fuel pool cooling and cleanup system. As such, the proposed changes introduce no new material interactions, man-machine interfaces, or processes that could create the potential for an accident of a new or different type. This determination is based on the review of the two significant SFP loading changes proposed by the amendment: (1) new storage arrays, and (2) use of Rod Cluster Control Assemblies (RCCAs) in one new proposed array.

Operation with the proposed fuel storage arrays will not create a new or different kind of accident because fuel movement will continue to be controlled by approved fuel handling procedures. These procedures continue to require identification of the initial and target locations for each fuel assembly that is moved. There are no changes in the criteria or design requirements pertaining to fuel storage safety, including subcriticality requirements, and analyses demonstrate that the proposed storage arrays meet these requirements and criteria with adequate margins. Thus, the proposed storage arrays cannot cause a new or different kind of accident.

Implementation of the proposed new storage array that credits an RCCA inserted into a center assembly does not create the potential for a new or different type of accident because the operation is controlled with procedural controls comparable to those used for fuel assembly placement in the SFP and because the inadvertent RCCA removal was explicitly evaluated in the revised criticality analysis. RCCAs are installed in spent fuel assemblies in accordance with approved procedures, and movement is controlled in accordance with approved fuel transfer logs that identify and then independently verify their placement. The inadvertent removal of an RCCA from an array has been evaluated with acceptable results. The effects are bounded by the fuel assembly misloading event.

Thus, the use of RCCAs in the proposed array does not create the possibility of a new or different kind of accident.

3. Do the proposed changes involve a significant reduction in a margin of safety?

Response: No

The proposed change was evaluated for its effect on current margins of safety as they relate to criticality. The margin of safety for subcriticality required by 10 CFR 50.68 (b)(4) is unchanged. The new criticality analysis confirms that operation in accordance with the proposed amendment continues to meet the required subcriticality margin. Also, revised loading restrictions in the proposed TS have actually reduced the soluble boron requirements for the limiting normal

configuration, thereby increasing the margin for the postulated boron dilution event.

Therefore, the proposed changes do not involve a significant reduction in the margin of safety.

The NRC staff has reviewed the licensee's analysis and, based on this review, it appears that the three standards of 10 CFR 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the amendment request involves no significant hazards consideration.

Attorney for licensee: Peter M. Glass, Assistant General Counsel, Xcel Energy Services, Inc., 414 Nicollet Mall, Minneapolis, MN 55401.

NRC Acting Branch Chief: Shawn A. Williams.

Southern California Edison Company, et al., Docket Nos. 50-361 and 50-362, San Onofre Nuclear Generating Station, Units 2 and 3, San Diego County, California

Date of amendment request: July 29, 2011. **This amendment request contains sensitive unclassified non-safeguards information (SUNSI).**

Description of amendment request: The amendments would revise a number of Technical Specification (TS) requirements, to allow the licensee to use the AREVA 16x16 reactor fuel on a permanent basis in San Onofre Nuclear Generating Station (SONGS), Units 2 and 3. These changes include revising TS 5.7.1.5, Core Operating Limits Report (COLR), to update the methodology reference list to support the core design with the new AREVA fuel; revising TS 4.2.1, Fuel Assemblies, to include the description of the new fuel cladding material (M5); revising TS 2.1.1.2, Reactor Core Safety Limits, to identify a fuel centerline melt safety limit for the AREVA fuel with corresponding adjustments made to account for the burnable absorber fuel

rods; and incorporating fuel burnup limits consistent with AREVA M5 clad fuel assemblies into the SONGS licensing basis.

Basis for proposed no significant hazards consideration determination: As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

1. Does the proposed change involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No.

The proposed changes do not involve a significant increase in the probability or consequences of an accident previously evaluated. The reactor fuel and the analyses associated with the fuel are not accident initiators. The response of the fuel to an accident is analyzed using conservative techniques and the results are compared to the approved acceptance criteria. These evaluation results will show that the fuel response to an accident is within approved acceptance criteria for both cores loaded with the new AREVA CE [Combustion Engineering]-HTP (High Thermal Performance) fuel and for cores loaded with both AREVA and Westinghouse design fuel. Therefore, the change in fuel design does not affect accident or transient initiation or consequences.

The proposed change to Technical Specification 2.1.1.2 (Reactor Core Safety Limits) does not require any physical change to any plant system, structure, or component. The change to establish the peak fuel centerline temperature is consistent with existing approved analysis methodology.

The proposed change to Technical Specification 4.2.1 (Fuel Assemblies) includes M5 [™] cladding. The change in cladding materials and fuel assembly design such as grids has been evaluated in this submittal and all acceptance criteria are met.

Topical Reports have been reviewed and approved by the NRC for use in determining core operating limits. The core operating limits to be developed using the new methodologies will be established in accordance with the applicable limitations as documented in the appropriate NRC Safety Evaluation reports. The proposed change to Technical Specification 5.7.1.5 (Core Operating Limits Report (COLR)) enables the use of appropriate methodologies to analyze accidents. The proposed methodologies will ensure that the plant continues to meet applicable design criteria and safety analysis acceptance criteria.

The proposed change to the list of NRC-approved methodologies listed in Technical Specification 5.7.1.5 has no impact on any plant configuration or system performance relied upon to mitigate the consequences of an accident. The proposed change will update the listing of NRC-approved methodologies to

allow analysis of both AREVA and Westinghouse fuel designs. Changes to the calculated core operating limits may only be made using NRC-approved methods, must be consistent with all applicable safety analysis limits and are controlled by the 10 CFR 50.59 process. The list of methodologies in Technical Specification 5.7.1.5 does not impact either the initiation of an accident or the mitigation of its consequences.

Therefore, the proposed amendment does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the proposed change create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No.

The proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

Use of AREVA CE-HTP fuel in SONGS reactor cores is consistent with the current plant design bases and does not adversely affect any fission product barrier, nor does it alter the safety function of safety systems, structures, or components, or their roles in accident prevention or mitigations. The operational characteristics of AREVA CE-HTP fuel are bounded by the safety analyses. The AREVA CE-HTP fuel design performs within fuel design limits and does not create the possibility of a new or different accident.

The proposed change to the Technical Specification 2.1.1.2 does not require any physical change to any plant system, structure, or component, nor does it require any change in safety analysis methods or results. The existing analyses remain unchanged and do not affect any accident initiators that would create a new accident.

The proposed change to Technical Specification 4.2.1 does not create any new accident initiators. For example, postulated pipe breaks and valve motions are unaffected by the fuel design. Possible impacts such as postulated CEA [control element assembly] motions are unaffected because the interface between the fuel assembly and the CEA has been designed to be unchanged.

The proposed change to the list of NRC-approved methodologies listed in Technical Specification 5.7.1.5 has no impact on any plant configuration or system performance. It updates the list of NRC-approved topical reports used to develop the core operating limits. There is no change to the parameters within which the plant is normally operated. The possibility of a new or different accident is not created.

Therefore, the proposed change does not create the possibility of a new or different kind of accident [from] any accident previously evaluated.

3. Does the proposed change involve a significant reduction in a margin of safety?

Response: No.

The proposed change does not involve a significant reduction in a margin of safety. The margin of safety as defined in the basis for any technical specification will not be reduced by the proposed change to the computer programs used for physics calculations for nuclear design analyses.

Use of AREVA CE-HTP fuel in SONGS reactor cores is consistent with the current plant design bases and does not adversely affect any fission product barrier, nor does it alter the safety function of safety systems, structures, or components, or their roles in accident prevention or mitigation. The operational characteristics of AREVA CE-HTP fuel in SONGS reactor cores are evaluated by the safety analyses and meet the safety analysis criteria. The AREVA CE-HTP fuel in SONGS reactor cores performs within fuel design limits. The proposed changes do not result in exceeding design basis limits. Therefore, all licensed safety margins are maintained.

The proposed change to Technical Specification 2.1.1.2 does not require any physical change to any plant system, structure, or component, nor does it require any change in safety analysis methods or results. Therefore, by changing the peak fuel centerline temperature adjustment for burnable poisons, the margin as established in the current licensing basis remains unchanged.

The proposed change to Technical Specification 4.2.1 has been evaluated in this submittal and all acceptance criteria are met.

The proposed change to the list of NRC-approved methodologies listed in Technical Specification 5.7.1.5 has no impact on any plant configuration or system performance. Topical Reports have been reviewed and approved by the NRC for use in determining core operating limits. The proposed methodologies will ensure that the plant continues to meet applicable design criteria and safety analysis acceptance criteria.

Therefore, the proposed change does not involve a significant reduction in a margin of safety.

The NRC staff has reviewed the licensee's analysis and, based on this review, it appears that the three standards of 10 CFR 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the amendment request involves no significant hazards consideration.

Attorney for licensee: Douglas K. Porter, Esquire, Southern California Edison Company, 2244 Walnut Grove Avenue, Rosemead, California 91770.

NRC Branch Chief: Michael T. Markley.

Union Electric Company, Docket No. 50-483, Callaway Plant, Unit 1, Callaway County, Missouri

Date of amendment request: August 29, 2011, as supplemented by letter dated November 9, 2011.

Description of amendment request: **This amendment request contains sensitive unclassified non-safeguards information (SUNSI) (security-related).** The amendment would permit the Union Electric Company (the licensee) to adopt a new fire protection licensing basis based on National Fire Protection Association (NFPA) Standard 805, "Performance-Based Standard for Fire Protection for Light Water Reactor Generating Plants (2001 Edition)," that complies with the requirements of Title 10 of the *Code of Federal Regulations* (10 CFR) 50.48(a) and (c) and the guidance in Revision 1 of Regulatory Guide 1.205, "Risk Informed Performance-Based Fire Protection for Existing Light-Water Nuclear Power Plants."

Basis for proposed no significant hazards consideration determination: As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

1. Does the transition to NFPA 805 involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No.

Operation of Callaway Plant in accordance with the proposed amendment does not increase the probability or consequences of accidents previously evaluated. Engineering analyses, which may include engineering evaluations, probabilistic safety assessments, and fire modeling calculations, have been performed to demonstrate that the performance-based requirements of NFPA 805 have been satisfied. The Final Safety Analysis Report (FSAR) documents the analyses of design basis accidents (DBA) at Callaway Plant. The proposed amendment does not affect accident initiators, nor does it alter design assumptions, conditions, or configurations of the facility that would increase the probability of accidents previously evaluated. Further, the changes to be made for fire hazard

protection and mitigation do not adversely affect the ability of structures, systems, or components (SSCs) to perform their design functions for accident mitigation, nor do they affect the postulated initiators or assumed failure modes for accidents described and evaluated in the FSAR. SSCs required to safely shutdown the reactor and to maintain it in a safe shutdown condition will remain capable of performing their design functions.

The purpose of the proposed amendment is to permit [the licensee] to adopt a new fire protection licensing basis which complies with the requirements of 10 CFR 50.48(a) and (c) and the guidance in Regulatory Guide 1.205. The NRC considers that NFPA 805 provides an acceptable methodology and performance criteria for licensees to identify fire protection requirements that are an acceptable alternative to the 10 CFR 50 Appendix R required fire protection features (69 FR 33536, June 16, 2004). Engineering analyses, which may include engineering evaluations, probabilistic safety assessments, and fire modeling calculations, have been performed to demonstrate that the performance-based requirements of NFPA 805 have been met.

NFPA 805 taken as a whole, provides an acceptable alternative for satisfying General Design Criterion 3 (GDC 3) of Appendix A to 10 CFR 50, meets the underlying intent of the NRC's existing fire protection regulations and guidance, and provides for defense-in-depth. The goals, performance objectives, and performance criteria specified in Chapter 1 of the standard ensure that, if there are any increases in core damage frequency (CDF) or risk, the increase will be small and consistent with the intent of the Commission's Safety Goal Policy.

Based on this, the implementation of the proposed amendment does not increase the probability of any accident previously evaluated. Equipment required to mitigate an accident remains capable of performing the assumed function(s). The proposed amendment will not affect the source term, containment isolation, or radiological release assumptions used in evaluating the radiological consequences of any accident previously evaluated. The applicable radiological dose criteria will continue to be met.

Therefore, the consequences of any accident previously evaluated are not increased with the implementation of the proposed amendment.

2. Does the transition to NFPA 805 create the possibility of a new or different kind of accident from any kind of accident previously evaluated?

Response: No.

Operation of Callaway Plant in accordance with the proposed amendment does not create the possibility of a new or different kind of accident from any accident previously evaluated. The proposed change does not alter the requirements or functions for systems required during accident conditions. Implementation of the new fire protection licensing basis which complies with the requirements of 10 CFR 50.48(a) and (c) and the guidance Regulatory Guide 1.205 will not result in new or different accidents.

The proposed amendment does not introduce new or different accident initiators, nor does it alter design assumptions, conditions, or configurations of the facility. The proposed amendment does not adversely affect the ability of SSCs to perform their design function. SSCs required to safely shutdown the reactor and maintain it in a safe shutdown condition remain capable of performing their design functions.

The purpose of the proposed amendment is to permit [the licensee] to adopt a new fire protection licensing basis which complies with the requirements of 10 CFR 50.48(a) and (c) and the guidance in Regulatory Guide 1.205. The NRC considers that NFPA 805 provides an acceptable methodology and appropriate performance criteria for licensees to identify fire protection systems and features that are an acceptable alternative to the 10 CFR 50, Appendix R required fire protection features (69 FR 33536, June 16, 2004).

The requirements of NFPA 805 address only fire protection and the impacts of fire on the plant that have previously been evaluated. Based on this, implementation of the proposed amendment would not create the possibility of a new or different kind of accident from any kind of accident previously evaluated. No new accident scenarios, transient precursors, failure mechanisms, or limiting single failures will be introduced as a result of this amendment. There will be no adverse effect or challenges imposed on any safety-related system as a result of this amendment.

Therefore, the possibility of a new or different kind of accident from any kind of accident previously evaluated is not created with the implementation of this amendment.

3. Does the transition to NFPA 805 involve a significant reduction in the margin of safety?

Response: No.

Operation of Callaway Plant in accordance with the proposed amendment does not involve a significant reduction in the margin of safety. The proposed amendment does not alter the manner in which safety limits, limiting safety system settings or limiting conditions for operation are determined. The safety analysis acceptance criteria are not affected by this change. The proposed amendment does not adversely affect existing plant safety margins or the reliability of equipment assumed to mitigate accidents in the FSAR. The proposed amendment does not adversely affect the ability of SSCs to perform their design function. SSCs required to safely shut down the reactor and to maintain it in a safe shutdown condition remain capable of performing their design functions.

The purpose of the proposed amendment is to permit [the licensee] to adopt a new fire protection licensing basis which complies with the requirements in 10 CFR 50.48(a) and (c) and the guidance in Regulatory Guide 1.205. The NRC

considers that NFPA 805 provides an acceptable methodology and performance criteria for licensees to identify fire protection systems and features that are an acceptable alternative to the 10 CFR 50 Appendix R required fire protection features (69 FR 33536, June 16, 2004). Engineering analyses, which may include engineering evaluations, probabilistic safety assessments, and fire modeling calculations, have been performed to demonstrate that the performance based requirements of NFPA 805 do not result in a significant reduction in the margin of safety.

The proposed changes are evaluated to ensure that risk and safety margins are kept within acceptable limits. Therefore, the transition to NFPA 805 does not involve a significant reduction in the margin of safety.

The requirements of NFPA 805 are structured to implement the NRC's mission to protect public health and safety, promote the common defense and security, and protect the environment. NFPA 805 is also consistent with the key principles for evaluating license basis changes, as described in Regulatory Guide 1.174, is consistent with the defense-in-depth philosophy, and maintains sufficient safety margins.

Based on the evaluations noted in items 1, 2 and 3 above [the licensee] has concluded that the proposed amendment presents no significant hazards consideration per the requirements set forth in 10 CFR 50.92(c), and, accordingly a finding of "no significant hazards consideration" is justified.

The NRC staff has reviewed the licensee's analysis and, based on this review, it appears that the three standards of 10 CFR 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the amendment request involves no significant hazards consideration.

Attorney for licensee: John O'Neill, Esq., Pillsbury Winthrop Shaw Pittman LLP, 2300 N Street, N.W., Washington, D.C. 20037.

NRC Branch Chief: Michael T. Markley.

**Order Imposing Procedures for Access to Sensitive Unclassified Non-Safeguards
Information for Contention Preparation.**

**Entergy Operations, Inc., System Energy Resources, Inc., South Mississippi Electric
Power Association, and Entergy Mississippi, Inc., Docket No. 50-416, Grand Gulf Nuclear
Station, Unit 1, Claiborne County, Mississippi**

**Northern States Power Company - Minnesota, Docket Nos. 50-282 and 50-306, Prairie
Island Nuclear Generating Plant, Units 1 and 2, Goodhue County, Minnesota**

**Southern California Edison Company, et al., Docket Nos. 50-361 and 50-362, San Onofre
Nuclear Generating Station, Units 2 and 3, San Diego County, California**

**Union Electric Company, Docket No. 50-483, Callaway Plant, Unit 1, Callaway County,
Missouri**

A. This Order contains instructions regarding how potential parties to this proceeding may request access to documents containing Sensitive Unclassified Non-Safeguards Information (SUNSI).

B. Within 10 days after publication of this notice of hearing and opportunity to petition for leave to intervene, any potential party who believes access to SUNSI is necessary to respond to this notice may request such access. A "potential party" is any person who intends to participate as a party by demonstrating standing and filing an admissible contention under 10 CFR 2.309. Requests for access to SUNSI submitted later than 10 days after publication will

not be considered absent a showing of good cause for the late filing, addressing why the request could not have been filed earlier.

C. The requestor shall submit a letter requesting permission to access SUNSI to the Office of the Secretary, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, Attention: Rulemakings and Adjudications Staff, and provide a copy to the Associate General Counsel for Hearings, Enforcement and Administration, Office of the General Counsel, Washington, DC 20555-0001. The expedited delivery or courier mail address for both offices is: U.S. Nuclear Regulatory Commission, 11555 Rockville Pike, Rockville, Maryland 20852. The e-mail address for the Office of the Secretary and the Office of the General Counsel are Hearing.Docket@nrc.gov and OGCmailcenter@nrc.gov, respectively.¹ The request must include the following information:

- (1) A description of the licensing action with a citation to this *Federal Register* notice;
- (2) The name and address of the potential party and a description of the potential party's particularized interest that could be harmed by the action identified in C.(1); and
- (3) The identity of the individual or entity requesting access to SUNSI and the requestor's basis for the need for the information in order to meaningfully participate in this adjudicatory proceeding. In particular, the request must explain why publicly-available versions of the information requested would not be sufficient to provide the basis and specificity for a proffered contention.

D. Based on an evaluation of the information submitted under paragraph C.(3) the NRC staff will determine within 10 days of receipt of the request whether:

¹ While a request for hearing or petition to intervene in this proceeding must comply with the filing requirements of the NRC's "E-Filing Rule," the initial request to access SUNSI under these procedures should be submitted as described in this paragraph.

(1) There is a reasonable basis to believe the petitioner is likely to establish standing to participate in this NRC proceeding; and

(2) The requestor has established a legitimate need for access to SUNSI.

E. If the NRC staff determines that the requestor satisfies both D.(1) and D.(2) above, the NRC staff will notify the requestor in writing that access to SUNSI has been granted. The written notification will contain instructions on how the requestor may obtain copies of the requested documents, and any other conditions that may apply to access to those documents. These conditions may include, but are not limited to, the signing of a Non-Disclosure Agreement or Affidavit, or Protective Order² setting forth terms and conditions to prevent the unauthorized or inadvertent disclosure of SUNSI by each individual who will be granted access to SUNSI.

F. Filing of Contentions. Any contentions in these proceedings that are based upon the information received as a result of the request made for SUNSI must be filed by the requestor no later than 25 days after the requestor is granted access to that information. However, if more than 25 days remain between the date the petitioner is granted access to the information and the deadline for filing all other contentions (as established in the notice of hearing or opportunity for hearing), the petitioner may file its SUNSI contentions by that later deadline.

G. Review of Denials of Access.

(1) If the request for access to SUNSI is denied by the NRC staff either after a determination on standing and need for access, or after a determination on trustworthiness and reliability, the NRC staff shall immediately notify the requestor in writing, briefly stating the reason or reasons for the denial.

² Any motion for Protective Order or draft Non-Disclosure Affidavit or Agreement for SUNSI must be filed with the presiding officer or the Chief Administrative Judge if the presiding officer has not yet been designated, within 30 days of the deadline for the receipt of the written access request.

(2) The requestor may challenge the NRC staff's adverse determination by filing a challenge within 5 days of receipt of that determination with: (a) the presiding officer designated in this proceeding; (b) if no presiding officer has been appointed, the Chief Administrative Judge, or if he or she is unavailable, another administrative judge, or an administrative law judge with jurisdiction pursuant to 10 CFR 2.318(a); or (c) if another officer has been designated to rule on information access issues, with that officer.

H. Review of Grants of Access. A party other than the requestor may challenge an NRC staff determination granting access to SUNSI whose release would harm that party's interest independent of the proceeding. Such a challenge must be filed with the Chief Administrative Judge within 5 days of the notification by the NRC staff of its grant of access.

If challenges to the NRC staff determinations are filed, these procedures give way to the normal process for litigating disputes concerning access to information. The availability of interlocutory review by the Commission of orders ruling on such NRC staff determinations (whether granting or denying access) is governed by 10 CFR 2.311.³

I. The Commission expects that the NRC staff and presiding officers (and any other reviewing officers) will consider and resolve requests for access to SUNSI, and motions for protective orders, in a timely fashion in order to minimize any unnecessary delays in identifying those petitioners who have standing and who have propounded contentions meeting the

³ Requestors should note that the filing requirements of the NRC's E-Filing Rule (72 FR 49139; August 28, 2007) apply to appeals of NRC staff determinations (because they must be served on a presiding officer or the Commission, as applicable), but not to the initial SUNSI request submitted to the NRC staff under these procedures.

specificity and basis requirements in 10 CFR part 2. Attachment 1 to this Order summarizes the general target schedule for processing and resolving requests under these procedures.

IT IS SO ORDERED.

Dated at Rockville, Maryland, this 2nd day of February, 2012.

For the Nuclear Regulatory Commission.

/RA/

Annette L. Vietti-Cook,
Secretary of the Commission.

ATTACHMENT 1--General Target Schedule for Processing and Resolving Requests for Access to Sensitive Unclassified Non-Safeguards Information in this Proceeding

Day	Event/Activity
0	Publication of <i>Federal Register</i> notice of hearing and opportunity to petition for leave to intervene, including order with instructions for access requests.
10	Deadline for submitting requests for access to Sensitive Unclassified Non-Safeguards Information (SUNSI) with information: supporting the standing of a potential party identified by name and address; describing the need for the information in order for the potential party to participate meaningfully in an adjudicatory proceeding.
60	Deadline for submitting petition for intervention containing: (i) Demonstration of standing; (ii) all contentions whose formulation does not require access to SUNSI (+25 Answers to petition for intervention; +7 requestor/petitioner reply).
20	Nuclear Regulatory Commission (NRC) staff informs the requestor of the staff's determination whether the request for access provides a reasonable basis to believe standing can be established and shows need for SUNSI. (NRC staff also informs any party to the proceeding whose interest independent of the proceeding would be harmed by the release of the information). If NRC staff makes the finding of need for SUNSI and likelihood of standing, NRC staff begins document processing (preparation of redactions or review of redacted documents).
25	If NRC staff finds no "need" or no likelihood of standing, the deadline for requestor/petitioner to file a motion seeking a ruling to reverse the NRC staff's denial of access; NRC staff files copy of access determination with the presiding officer (or Chief Administrative Judge or other designated officer, as appropriate). If NRC staff finds "need" for SUNSI, the deadline for any party to the proceeding whose interest independent of the proceeding would be harmed by the release of the information to file a motion seeking a ruling to reverse the NRC staff's grant of access.
30	Deadline for NRC staff reply to motions to reverse NRC staff determination(s).
40	(Receipt +30) If NRC staff finds standing and need for SUNSI, deadline for NRC staff to complete information processing and file motion for Protective Order and draft Non-Disclosure Affidavit. Deadline for applicant/licensee to file Non-Disclosure Agreement for SUNSI.

Day	Event/Activity
A	If access granted: Issuance of presiding officer or other designated officer decision on motion for protective order for access to sensitive information (including schedule for providing access and submission of contentions) or decision reversing a final adverse determination by the NRC staff.
A + 3	Deadline for filing executed Non-Disclosure Affidavits. Access provided to SUNSI consistent with decision issuing the protective order.
A + 28	Deadline for submission of contentions whose development depends upon access to SUNSI. However, if more than 25 days remain between the petitioner's receipt of (or access to) the information and the deadline for filing all other contentions (as established in the notice of hearing or opportunity for hearing), the petitioner may file its SUNSI contentions by that later deadline.
A + 53	(Contention receipt +25) Answers to contentions whose development depends upon access to SUNSI.
A + 60	(Answer receipt +7) Petitioner/Intervenor reply to answers.
>A + 60	Decision on contention admission.

