

NUCLEAR REGULATORY COMMISSION

[NRC-2016-0143]

**Applications and Amendments to Facility Operating Licenses and Combined Licenses  
Involving Proposed No Significant Hazards Considerations and Containing Sensitive  
Unclassified Non-Safeguards Information and Order Imposing Procedures for Access to  
Sensitive Unclassified Non-Safeguards Information**

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** License amendment request; notice of opportunity to comment, request a hearing, and petition for leave to intervene; order imposing procedures.

**SUMMARY:** The U.S. Nuclear Regulatory Commission (NRC) received and is considering approval of four amendment requests. The amendment requests are for the Shearon Harris Nuclear Power Plant, Unit 1; H. B. Robinson Steam Electric Plant, Unit No. 2; Palisades Nuclear Plant; and Hope Creek Generating Station. For each amendment request, the NRC proposes to determine that they involve no significant hazards consideration. Because each amendment request contains sensitive unclassified non-safeguards information (SUNSI), an order imposes procedures to obtain access to SUNSI for contention preparation.

**DATES:** Comments must be filed by **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE *FEDERAL REGISTER*]**. A request for a hearing must be filed by **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE *FEDERAL REGISTER*]**. Any potential party as defined in § 2.4 of title 10 of the *Code of Federal Regulations* (10 CFR),

who believes access to SUNSI is necessary to respond to this notice must request document access by **[INSERT DATE 10 DAYS AFTER DATE OF PUBLICATION IN THE *FEDERAL REGISTER*]**.

**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-2016-0143. Address questions about NRC dockets to Carol Gallagher; telephone: 301-415-3463; e-mail: [Carol.Gallagher@nrc.gov](mailto:Carol.Gallagher@nrc.gov). For technical questions, contact the individual listed in the FOR FURTHER INFORMATION CONTACT section of this document.
- **Mail comments to:** Cindy Bladey, Office of Administration, Mail Stop: OWFN-12-H08, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

For additional direction on obtaining information and submitting comments, see “Obtaining Information and Submitting Comments” in the SUPPLEMENTARY INFORMATION section of this document.

**FOR FURTHER INFORMATION CONTACT:** Lynn Ronewicz, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington DC 20555-0001; telephone: 301-415-1927, e-mail: [Lynn.Ronewicz@nrc.gov](mailto:Lynn.Ronewicz@nrc.gov).

## SUPPLEMENTARY INFORMATION:

### I. Obtaining Information and Submitting Comments

#### A. Obtaining Information

Please refer to the Docket ID NRC-2016-0143, facility name, unit number(s), plant docket number (e.g., 50-XXX), application date, and subject when contacting the NRC about the availability of information for this action. You may obtain publicly-available information related to this action by any of the following methods:

- **Federal Rulemaking Web Site:** Go to <http://www.regulations.gov> and search for Docket ID NRC-2016-0143.

- **NRC's Agencywide Documents Access and Management System (ADAMS):** You may obtain publicly-available documents online in the ADAMS Public Documents collection at <http://www.nrc.gov/reading-rm/adams.html>. To begin the search, select "[ADAMS Public Documents](#)" and then select "[Begin Web-based ADAMS Search](#)." For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1-800-397-4209, 301-415-4737, or by e-mail to [pdr.resource@nrc.gov](mailto:pdr.resource@nrc.gov). The ADAMS accession number for each document referenced (if it is available in ADAMS) is provided the first time that it is mentioned below.

- **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 the Docket ID NRC-2016-0143, facility name, unit number(s), plant docket number (e.g., 50-XXX), application date, and subject in your comment submission.

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 will post all comment submissions at <http://www.regulations.gov> as well as enter 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 into ADAMS.

## II. Background

Pursuant to Section 189a.(2) of the Atomic Energy Act of 1954, as amended (the Act), the NRC is publishing this notice. The Act requires the Commission to 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 or combined license, as applicable, 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.

**III. Notice of Consideration of Issuance of Amendments to Facility Operating Licenses and Combined 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, or (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 if 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. If the Commission takes action prior to the expiration of either the comment period or the notice period, it will publish a notice of issuance in the *Federal Register*. If the Commission makes 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.

#### **A. Opportunity to Request a Hearing and Petition for Leave to Intervene**

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 or combined license. Requests for a hearing and a petition for leave to intervene shall be filed in accordance with the Commission's "Agency Rules of Practice and Procedure" 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's regulations are accessible electronically from the NRC Library on the NRC's 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 to support its position on the issue. 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 with respect to resolution of that person's admitted contentions, including the opportunity to present evidence and to submit a cross-examination plan for cross-examination of witnesses, consistent with NRC regulations, policies and procedures.

Petitions for leave to intervene must be filed no later than 60 days from the date of publication of this notice. Requests for hearing, petitions for leave to intervene, and motions for leave to file new or amended contentions that are filed after the 60-day deadline will not be entertained absent a determination by the presiding officer that the filing demonstrates good cause by satisfying the three factors in 10 CFR 2.309(c)(1)(i)-(iii). 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 unless the Commission finds an imminent danger to the health or safety of the public, in which case it will issue an appropriate order or rule under 10 CFR part 2.

A State, local governmental body, Federally-recognized Indian Tribe, or agency thereof, may submit a petition to the Commission to participate as a party under 10 CFR 2.309(h)(1). The petition should state the nature and extent of the petitioner's interest in the proceeding. The petition should be submitted to the Commission by **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE *FEDERAL REGISTER*]**. The petition must be filed in accordance with the filing instructions in the "Electronic Submissions (E-Filing)" section of this



document, and should meet the requirements for petitions for leave to intervene set forth in this section, except that under § 2.309(h)(2) a State, local governmental body, or Federally-recognized Indian Tribe, or agency thereof, does not need to address the standing requirements in 10 CFR 2.309(d) if the facility is located within its boundaries. A State, local governmental body, Federally-recognized Indian Tribe, or agency thereof, may also have the opportunity to participate under 10 CFR 2.315(c).

If a hearing is granted, any person who does not wish, or is not qualified, to become a party to the proceeding may, in the discretion of the presiding officer, be permitted to make a limited appearance pursuant to the provisions of 10 CFR 2.315(a). A person making a limited appearance may make an oral or written statement of position on the issues, but may not otherwise participate in the proceeding. A limited appearance may be made at any session of the hearing or at any prehearing conference, subject to the limits and conditions as may be imposed by the presiding officer. Details regarding the opportunity to make a limited appearance will be provided by the presiding officer if such sessions are scheduled.

## **B. Electronic Submissions (E-Filing)**

All documents filed in 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's E-Filing rule (72 FR 49139; August 28, 2007, as amended at 77 FR 46562, August 3, 2012). 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](mailto: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/getting-started.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 Electronic Filing 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's 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 NRC guidance available on the NRC's 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 NRC's adjudicatory E-Filing system may seek assistance by contacting the NRC Electronic Filing Help Desk through the "Contact Us" link located on the NRC's public Web site at <http://www.nrc.gov/site-help/e-submittals.html>, by e-mail to [MSHD.Resource@nrc.gov](mailto:MSHD.Resource@nrc.gov), or by a toll-free call at 1-866-672-7640. The NRC Electronic Filing 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 stating why there is good cause for not filing electronically and 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. However, in some instances, a hearing request and petition to intervene will require including information on local residence in order to demonstrate a proximity assertion of interest in the proceeding. 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.

For further details with respect to this amendment action, see the application for amendment which is available for public inspection at the NRC's PDR, located at One White Flint North, Room O1-F21, 11555 Rockville Pike (first floor), Rockville, Maryland 20852. Publicly available documents created or received at the NRC are accessible electronically through ADAMS in the NRC Library at <http://www.nrc.gov/reading-rm/adams.html>. If you do not have access to ADAMS or if there are problems in accessing the documents located in ADAMS, contact the PDR's Reference staff at 1-800-397-4209, 301-415-4737, or by e-mail to [pdr.resource@nrc.gov](mailto:pdr.resource@nrc.gov).

Duke Energy Progress, Inc., Docket No. 50-400, Shearon Harris Nuclear Power Plant, Unit 1 (Harris), Wake and Chatham Counties, North Carolina

Duke Energy Progress, Inc., Docket No. 50-261, H. B. Robinson Steam Electric Plant, Unit No. 2 (Robinson), Darlington County, South Carolina

Date of amendment request: August 19, 2015, as supplemented by letter dated May 4, 2016.

Publicly-available versions are in ADAMS under Accession Nos. ML15236A044 and ML16125A420, respectively.

Description of amendment request: **This amendment request contains sensitive unclassified non-safeguards information (SUNSI).** The proposed amendment, as supplemented, requests plant-specific review and approval of the following reactor core design methodology reports: (1) DPC-NE-1008-P, Revision 0, "Nuclear Design Methodology Using CASMO-5/SIMULATE-3 for Westinghouse Reactors;" (2) DPC-NF-2010, Revision 3, "Nuclear Physics Methodology for Reload Design;" and (3) DPC-NE-2011-P, Revision 2, "Nuclear Design

Methodology Report for Core Operating Limits of Westinghouse Reactors.” The proposed amendment would also revise the Harris Technical Specification (TS) Section 6.1.9.6, “Core Operating Limits Report,” and the Robinson TS Section 5.6.5, “Core Operating Limits Report (COLR),” to include the reports. The supplement, dated May 4, 2016, added the latter two design methodology reports.

The license amendment request, dated August 19, 2015, was previously noticed in the *Federal Register* (81 FR 5492; February 2, 2016). This notice supersedes the August 19, 2015, notice in its entirety to include the expanded scope of both the amendment request and the no significant hazards consideration determination.

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 change requests review and approval of DPC-NE-1008-P, Revision 0, “Nuclear Design Methodology Using CASMO-5/SIMULATE-3 for Westinghouse Reactors,” to be applied to Shearon Harris Nuclear Power Plant (SHNPP) and H. B. Robinson Steam Electric Plant (HBRSEP). The CASMO-5 and SIMULATE-3 codes are not used in the operation of any plant equipment. The benchmark calculations performed confirm the accuracy of the codes and develop a methodology for calculating power distribution uncertainties for use in reload design calculations. The use of power distribution uncertainties in conjunction with predicted peaking factors ensures that thermal accident acceptance criteria are satisfied. The proposed use of this methodology does not affect the performance of any equipment used to mitigate the consequences of an analyzed accident. There is no impact on the source term or pathways assumed in accidents previously assumed. No analysis assumptions are violated and there are no adverse effects on the factors that contribute to offsite or onsite dose as the result of an accident.

The proposed change also requests review and approval of DPC NF-2010, Revision 3, "Nuclear Physics Methodology for Reload Design," and DPC-NE-2011-P, Revision 2, "Nuclear Design Methodology Report for Core Operating Limits of Westinghouse Reactors" to be applied to Shearon Harris Nuclear Power Plant (SHNPP) and H. B. Robinson Steam Electric Plant (HBRSEP). The proposed change supports the use of revised McGuire and Catawba reload design methodologies for performance of reload design analyses at Harris and Robinson Nuclear Plants. Implementation of the methodologies will occur following approval by the NRC. The proposed amendments will have no impact upon the probability of occurrence of any design basis accident, nor will they affect the performance of any plant equipment used to mitigate the consequences of an analyzed accident. There will be no significant impact on the source term or pathways assumed in accidents previously evaluated. No analysis assumptions will be violated and there will be no adverse effects on the factors that contribute to offsite or onsite dose as the result of an accident.

Therefore, the proposed changes do 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 requests review and approval of DPC-NE-1008-P, Revision 0, "Nuclear Design Methodology Using CASMO-5/SIMULATE-3 for Westinghouse Reactors," to be applied to Shearon Harris Nuclear Power Plant (SHNPP) and H. B. Robinson Steam Electric Plant (HBRSEP). It does not change any system functions or maintenance activities. The change does not involve physical alteration of the plant, that is, no new or different type of equipment will be installed. The software is not installed in any plant equipment, and therefore the software is incapable of initiating an equipment malfunction that would result in a new or different type of accident from any previously evaluated. The change does not alter assumptions made in the safety analyses but ensures that the core will operate within safe limits. This change does not create new failure modes or mechanisms which are not identifiable during testing, and no new accident precursors are generated.

The proposed change also requests review and approval of DPC NF-2010, Revision 3, "Nuclear Physics Methodology for Reload Design," and DPC-NE-2011-P, Revision 2, "Nuclear Design Methodology Report for Core Operating Limits of Westinghouse Reactors" to be applied to Shearon Harris Nuclear Power Plant (SHNPP) and H. B. Robinson Steam Electric Plant (HBRSEP). The proposed amendments do not change the methods used for normal plant operation, nor are the methods used to

respond to plant transients modified. Use of the DPC-NF-2010 and DPC-NE-2011-P methodologies does not result in a new or different type of accident from any previously evaluated. There are no changes to any system functions or maintenance activities. The change does not physically alter the plant, that is, no new or different type of equipment will be installed. This change does not create new failure modes or mechanisms which are not identifiable during testing, and no new accident precursors are generated.

Therefore, the proposed changes do 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.

Margin of safety is related to the confidence in the ability of the fission product barriers to perform their design functions during and following an accident. These barriers include the fuel cladding, the reactor coolant system, and the containment system. The proposed change requests review and approval of DPC-NE-1008-P, Revision 0, "Nuclear Design Methodology Using CASMO-5/SIMULATE-3 for Westinghouse Reactors," to be applied to Shearon Harris Nuclear Power Plant (SHNPP) and H. B. Robinson Steam Electric Plant (HBRSEP). As with the existing methodology, the qualification of the methods therein and the use of power distribution uncertainties ensure the acceptability of analytical limits under normal, transient, and accident conditions. The use of the proposed methodology revision once it has been approved by the NRC will ensure that all applicable design and safety limits are satisfied such that the fission product barriers will continue to perform their design functions.

The proposed change also requests review and approval of DPC NF-2010, Revision 3, "Nuclear Physics Methodology for Reload Design," and DPC-NE-2011-P, Revision 2, "Nuclear Design Methodology Report for Core Operating Limits of Westinghouse Reactors" to be applied to Shearon Harris Nuclear Power Plant (SHNPP) and H. B. Robinson Steam Electric Plant (HBRSEP). Application of the DPC NF-2010 and DPC-NE-2011-P methodologies will assure the acceptability of thermal limits assumed in the cycle reload safety analyses. As with the existing methodology, the Duke Energy methodology will continue to ensure (a) the acceptability of analytical limits under normal, transient, and accident conditions, and (b) that all applicable design and safety limits are satisfied such that the fission product barriers will continue to perform their design functions.



Therefore, the proposed changes do 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: Lara S. Nichols, Deputy General Counsel, Duke Energy Corporation, 550 South Tyron Street, Mail Code DEC45A, Charlotte, North Carolina 28202.

NRC Acting Branch Chief: Tracy J. Orf.

Entergy Nuclear Operations, Inc., Docket No. 50-255, Palisades Nuclear Plant (PNP), Van Buren County, Michigan

Date of amendment request: March 3, 2016, as supplemented by letter dated June 7, 2016.

Publicly-available versions are in ADAMS under Accession Nos. ML16075A103 and ML16159A230, respectively.

Description of amendment request: **This amendment request contains sensitive unclassified non-safeguards information (SUNSI).** The proposed amendment would revise the PNP Technical Specification (TS) Section 5.5.8, "Steam Generator (SG) Program," and Section 5.6.8, "Steam Generator Tube Inspection Report." Specifically, the licensee requested to implement an alternate repair criteria (ARC) that invokes a C - Star inspection length (C\*), on a permanent basis for the cold-leg side of the SGs' tubesheet and to clarify the intent and improve interpretation of the PNP TSs regarding the previously incorporated ARC for the hot-leg side of the SGs' tubesheet which was approved by Amendment No. 225 (ADAMS Accession No. ML071420216).

The license amendment request was noticed in the *Federal Register* on June 7, 2016 (81 FR 36604). The notice is being reissued in its entirety to include a revised description of the amendment request and associated changes to the no significant hazards consideration determination.

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 amendment involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No.

Previously evaluated accidents are initiated by the failure of plant structures, systems, or components. The proposed change alters the SG cold-leg repair criteria by limiting tube inspection length in the cold-leg tubesheet, to the safety significant section, C\* length, and, as such, does not have a detrimental impact on the integrity of any plant structure, system, or component that initiates an analyzed event. Therefore, the proposed change has no significant effect upon previously evaluated accident probabilities or consequences.

The proposed amendment to revise the PNP SG tube repair criteria in TS 5.5.8c, does not involve a significant increase in the probability of an accident previously evaluated. Alternate repair criteria are being proposed for the cold-leg side of the SGs that is consistent with the current alternate repair criteria for the hot-leg side of the SGs, in TS 5.5.8c.1. The proposed SG tube inspection length maintains the existing design limits of the SGs and therefore does not increase the probability or consequences of an accident involving a tube rupture or primary to secondary accident-induced leakage, as previously evaluated in the PNP Updated Final Safety Analysis Report (UFSAR). Also, the Nuclear Energy Institute (NEI) *Steam Generator Program Guidelines* (NEI 97-06) [(ADAMS Accession No. ML111310708)] performance criteria for structural integrity and accident-induced leakage, which are incorporated in PNP TS 5.5.8, would continue to be satisfied.

Implementing an alternate repair criteria would allow SG tubes with flaws below the C\* length to remain in service. The potential consequences to leaving these flawed tubes inservice are tube burst, tube pullout, and accident induced tube leakage. Tube burst is prevented for a tube with defects within the tubesheet region because of the constraint provided by the

tubesheet. Tube pullout could result from the axial forces induced by primary to secondary differential pressures that occur during the bounding event of the main steam line break. A joint industry test program report, WCAP-16208-P, *NDE Inspection Length for CE Steam Generator Tubesheet Region Explosive Expansions*, Revision 1, May 2005 [(Non-proprietary version at ADAMS Accession No. ML051520417)], has defined the non-degraded tube to tubesheet joint length (C\*) required to preclude tube pullout and maintain acceptable primary to secondary accident-induced leakage, conservatively assuming a 360 degree circumferential through wall crack exists immediately below this C\* length.

The PNP UFSAR Sections 14.14, *Steam Line Rupture Incident*, 14.15, *Steam Generator Tube Rupture with a Loss of Offsite Power*, and 14.16, *Control Rod Ejection*, primary coolant system leakage limit is 0.3 gallon per minute (gpm) (432 gallons per day) in the unaffected SG. For the tube rupture accident, this 0.3 gpm leakage is in addition to the break flow rate associated with the rupture of a single SG tube. The WCAP-16208-P report used a primary to secondary accident-induced leakage criteria value of 0.1 gpm to derive the C\* length. Use of 0.1 gpm ensures that the PNP TS limiting accident-induced leakage of 0.3 gpm is met.

For PNP, the derived C\* length for the cold-leg side of the SGs is 13.67 inches. Any degradation below the C\* length is shown by test results and analysis to meet the NEI 97-06 performance criteria, thereby precluding an increased probability of a tube rupture event, or an increase in the consequences of a steam line rupture incident or control rod ejection accident.

Therefore, the C\* lengths for the SG cold-legs provide assurance that the NEI 97-06 requirements for tube burst and leakage are met and that the conservatively derived maximum combined leakage from both tubesheet joints (hot and cold-legs) is less than 0.2 gpm at accident conditions. This combined leakage criterion of 0.2 gpm in the faulted loop retains margin against the PNP TS allowable accident-induced leakage of 0.3 gpm per SG.

In summary, the proposed changes to the PNP TS maintain existing design limits, meet the performance criteria of NEI 97-06 and Regulatory Guide 1.121, and the proposed [amendment] does not involve a significant increase in the probability or consequences of an accident previously evaluated in the UFSAR.

Therefore, operation of the facility in accordance with the proposed amendment would not involve a significant increase in the probability or consequences of an accident previously evaluated.

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

Response: No.

The proposed amendment provides for an alternate repair criteria that excludes the lower portion of the steam generator cold-leg tubes from inspection below a C\* length by implementing an alternate repair criteria. It does not affect the design of the SGs or their method of operation. It does not impact any other plant system or component. Plant operation will not be altered, and all safety functions will continue to perform as previously assumed in the accident analysis.

The proposed amendment does not introduce any new equipment, change existing equipment, create any new failure modes for existing equipment, nor introduce any new malfunctions resulting from tube degradation. SG tube integrity is shown to be maintained for all plant conditions upon implementation of the proposed alternate repair criteria for the SG cold-leg tubesheet region.

The proposed amendment does not create the possibility of a new or different kind of accident from any accident previously evaluated because SG tube leakage limits and structural integrity would continue to be maintained during all plant conditions upon implementation of the proposed alternate repair criteria to the PNP TSs. The alternate repair criteria does not introduce any new mechanisms that might result in a different kind of accident from those previously evaluated. Even with the limiting circumstances of a complete circumferential separation (360 degree through wall crack) of a tube below the C\* length, tube pullout is precluded and leakage is predicted to be maintained with the TS and accident analysis limits during all plant conditions.

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

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

Response: No.

The proposed change provides an alternate repair criteria for the SG cold-leg that invokes a C\* inspection length criteria. The proposed amendment does not involve a significant reduction in a margin of safety since design SG primary to secondary leakage limits have been analyzed to continue to be met. This will ensure that the SG cold-legs tubes continue to function as a primary coolant system boundary by maintaining their integrity. Tube integrity includes both structural and leakage integrity. The proposed cold-leg tubesheet inspection C\* depth, of 13.67 inches below the bottom of the cold-leg expansion transition or top of the cold-leg tubesheet, whichever is lower, would ensure tube integrity is maintained during normal and accident

conditions because any degradation below C\* is shown by test results and analyses to be acceptable.

Operation with potential tube degradation below the proposed C\* cold-leg inspection length within the tubesheet region of the SG tubing meets the recommendation of NEI 97-06 SG program guidelines. Additionally, the proposed changes also maintain the structural and accident-induced leakage integrity as required by NEI 97-06.

The total leakage from an undetected flaw population below the C\* inspection length for the cold-leg tubesheet under postulated accident conditions is accounted for, in order to assure it is within the bounds of the accident analysis.

Therefore, the proposed amendment 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: Jeanne Cho, Senior Counsel, Entergy Services, Inc., 440 Hamilton Ave., White Plains, New York 10601.

NRC Branch Chief: David J. Wrona.

PSEG Nuclear LLC, Docket No. 50-354, Hope Creek Generating Station (HCGS), Salem County, New Jersey

Date of amendment request: June 8, 2016. A publicly-available version is in ADAMS under Accession Nos. ML16181A193 and ML16181A194.

Description of amendment request: **This amendment request contains sensitive unclassified non-safeguards information (SUNSI).** The amendment would revise the Technical Specifications (TSs) to incorporate a revised Safety Limit Minimum Critical Power

Ratio (SLMCPR) for single recirculation loop (SLO) due to the cycle-specific analysis for the HCGS Cycle 21.

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 amendment involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No.

The required SLMCPRs for HCGS Cycle 21 are calculated using NRC-approved methodology. The SLMCPR values, contained in TS Section 2.1, Safety Limits, ensure at least 99.9% of all fuel rods in the core do not experience transition boiling during normal operation and analyzed transients, preserving fuel cladding integrity. The proposed change to the SLMCPR value for SLO ensures this criterion continues to be met, and therefore does not increase the probability or consequences of an accident previously evaluated. In addition, no plant hardware or operational changes are required with this proposed change.

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

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

Response: No.

The required SLMCPRs for HCGS Cycle 21 are calculated using NRC-approved methodology. The SLMCPR values, contained in TS Section 2.1, ensure at least 99.9% of all fuel rods in the core do not experience transition boiling during normal operation and analyzed transients. The proposed change to the SLMCPR value for SLO does not involve any plant hardware or operational changes and does not create any new precursors to an accident.

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

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

Response: No.

The required SLMCPRs for HCGS Cycle 21 are calculated using NRC-approved methodology. The SLMCPR values, contained in TS Section 2.1, ensure at least 99.9% of all fuel rods in the core do not experience transition boiling during normal operation and analyzed transients, preserving fuel cladding integrity. The revised SLMCPR value for SLO ensures this criterion continues to be met. In addition, the proposed change to the SLMCPR for SLO does not adversely affect the design basis function or performance of a structure, system, or component as described in the HCGS UFSAR [Updated Final Safety Analysis Report].

Therefore, the proposed amendment 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: Jeffrie J. Keenan, PSEG Nuclear LLC - N21, P.O. Box 236, Hancocks Bridge, New Jersey 08038.

NRC Branch Chief: Douglas A. Broaddus.

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

**Duke Energy Progress, Inc., Docket No. 50-400, Shearon Harris Nuclear Power Plant,  
Unit 1, Wake and Chatham Counties, North Carolina**

**Duke Energy Progress, Inc., Docket No. 50-261, H. B. Robinson Steam Electric Plant, Unit  
No. 2, Darlington County, South Carolina**

**Entergy Nuclear Operations, Inc., Docket No. 50-255, Palisades Nuclear Plant, Van Buren  
County, Michigan**

**PSEG Nuclear LLC, Docket No. 50-354, Hope Creek Generating Station, Salem County,  
New Jersey**

A. This Order contains instructions regarding how potential parties to this proceeding may request access to documents containing 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 of this notice 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 requester 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](mailto:Hearing.Docket@nrc.gov) and [OGCmailcenter@nrc.gov](mailto:OGCmailcenter@nrc.gov), respectively.<sup>1</sup> 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 requester'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) 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

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<sup>1</sup> 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.

or Affidavit, or Protective Order<sup>2</sup> 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 provided access to that information. However, if more than 25 days remain between the date the petitioner is provided 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. This provision does not extend the time for filing a request for a hearing and petition to intervene, which must comply with the requirements of 10 CFR 2.309.

G. Review of Denials of Access.

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

(2) The requester 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) an officer if that officer has been designated to rule on information access issues.

H. Review of Grants of Access. A party other than the requester may challenge an NRC staff determination granting access to SUNSI whose release would harm that party's

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<sup>2</sup> 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.

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.<sup>3</sup>

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 proposed contentions meeting the 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 18th day of July, 2016.

For the Nuclear Regulatory Commission.

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

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<sup>3</sup> Requesters should note that the filing requirements of the NRC's E-Filing Rule (72 FR 49139; August 28, 2007, as amended at 77 FR 46562, August 3, 2012) 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.

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

<b>Day</b>	<b>Event/Activity</b>
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; and (ii) all contentions whose formulation does not require access to SUNSI (+25 Answers to petition for intervention; +7 petitioner/requestor reply).
20	U.S. Nuclear Regulatory Commission (NRC) staff informs the requester 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 petitioner/requester 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.