

**NUCLEAR REGULATORY COMMISSION
SOUTHERN NUCLEAR OPERATING COMPANY**

DOCKET NO. 52-011

**NOTICE OF CONSIDERATION OF ISSUANCE OF AMENDMENT TO
EARLY SITE PERMIT, PROPOSED NO SIGNIFICANT HAZARDS
CONSIDERATION DETERMINATION, AND OPPORTUNITY FOR A HEARING
[NRC-2008-0252]**

AGENCY: Nuclear Regulatory Commission.

ACTION: Notice of license amendment request, opportunity to comment, and opportunity to request a hearing.

DATES: Submit comments by **[INSERT DATE 14 DAYS FROM DATE OF PUBLICATION]**.

Requests for a hearing or leave to intervene must be filed by **[INSERT DATE: 60 DAYS FROM DATE OF PUBLICATION.]**

FOR FURTHER INFORMATION CONTACT: Chandu Patel, Project Manager, AP1000 Projects Branch 1, Division of New Reactors Licensing, Office of New Reactors, U.S. Nuclear Regulatory Commission, Washington, DC 20555-001. Telephone: (301) 415-3025; fax number: (301) 415-6350; e-mail: Chandu.Patel@nrc.gov.

ADDRESSES: You may submit comments by any one of the following methods. Please include Docket ID **NRC-20XX-XXXX** in the subject line of your comments. Comments submitted in writing or in electronic form will be posted on the NRC website and on the Federal rulemaking website *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 may submit comments by any one of the following methods.

Federal Rulemaking Website: Go to <http://www.regulations.gov> and search for documents filed under Docket ID **NRC-20XX-XXXX**. Address questions about NRC dockets to Carol Gallagher 301-492-3668; e-mail Carol.Gallagher@nrc.gov.

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

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

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

NRC's Agencywide Documents Access and Management System (ADAMS): Publicly available documents created or received at the NRC are available electronically at the NRC's Electronic Reading Room at <http://www.nrc.gov/reading-rm/adams.html>. From this page, the public can gain entry into ADAMS, which provides text and image files of NRC's public documents. If you do not have access to ADAMS or if there are problems in accessing the documents located in ADAMS, contact the NRC's PDR reference staff at 1-800-397-4209, 301-415-4737, or by e-mail to pdr.resource@nrc.gov. The application dated April 20, 2010, as supplemented on April 23, 2010 and April 28, 2010 is available electronically under ADAMS Accession Numbers ML101120089 and ML101160531.

Federal Rulemaking Website: Public comments and supporting materials related to this notice can be found at <http://www.regulations.gov> by searching on Docket ID: **NRC-20XX-XXXX**.

SUPPLEMENTARY INFORMATION:

1. Introduction

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of an amendment to Early Site Permit (ESP) No-004, issued to Southern Nuclear Operating Company (SNC), for Vogtle Electric Generating Plant (VEGP) Units 3 and 4 site located in Burke County, Georgia.

The proposed amendment would change the Vogtle Electric Generating Plant Units 3 and 4 ESP site safety analysis report (SSAR) to allow the use and placement of Category 1 and 2 backfill from onsite borrow areas not specifically identified in the VEGP Units 3 and 4 SSAR. In accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) Section 52.39(e) changes to the ESP SSAR require prior Commission approval through an amendment to the ESP.

As discussed in the licensee's application dated April 20, 2010, SNC requested that the proposed amendment be processed by the NRC on an exigent basis in accordance with the provisions in 10 CFR 50.91(a)(6) because safety-related construction activities will be halted when available deposits of Category 1 and 2 backfill material is exhausted by May 23, 2010. SNC requested approval of the proposed amendment by May 14, 2010. SNC also stated that suspension of backfill operations prior to reaching the 180 feet msl elevation could have potential adverse effects on safety and the environment due to the potential for erosion and other environmental damage for delays in operations. In addition, SNC stated the following:

In addition, the inability to use backfill from the additional areas could cause a disruption in the construction schedule for the project. Vogtle 3 and 4 operations are supporting a staff of over 900 people. Any significant delays would require curtailing operations and reinitiating operations at a later time. There are significant economic costs associated with the schedule and staffing impacts.

On April 23, 2010, the licensee provided the following additional information regarding the exigent circumstances:

Once backfill activities have started, a protracted interruption in backfill activities could result in the following impacts to the construction project:

1. Backfill rework - The upper layers of compacted fill material would experience some erosive channeling, loss of fines, and possible contamination from materials washed down from the side slopes. These effects could be mitigated to some extent by protecting the surface with other materials, but significant rainfall events can result in flooding or failure of the surface water control features. Upon restart of backfill activities, it is expected that the fill to some depth (2-3 feet) would need to be removed and the surface reworked as deemed necessary, and new material brought in for compaction. Locally, repairs could be deeper than the top several feet.
2. Loss of available qualified fill - Any material removed as described above would likely be spoiled due to the hydraulic effects of erosion and sedimentation on the material's gradation, and possibly due to contamination from material from the side slopes. Also, any stockpiles of material will experience some loss of material during prolonged construction delays. For Vogtle, this adds to the Category 1 & 2 backfill shortage discussed during the NRC public meeting on April 6.
3. Backfill Efficiency - Backfill is a time-sensitive activity that is most efficiently accomplished without interruption. This is partly due to the impacts of delays discussed above, but also due to the lost opportunity to complete activities during periods of favorable weather. A single severe rain event can cause considerable delay and rework, and a series of well-timed storms can bring backfill activities to a standstill for weeks. Prolonged delays increase the exposure time for weather-caused delays and repairs.

It should be noted that such a delay was experienced during construction of Vogtle Units 1 and 2. A heavy storm in November 1979 resulted in some erosion of Seismic Category 1 backfill around and to a minor extent beneath the edges of the Seismic Category 1 buildings under construction at the time of the significant rain event. This resulted in the Nuclear Regulatory Commission stopping certain backfill work for about six months and for a short period stopping all construction work in the power block area while the impacts on the backfill were evaluated.

4. Environmental impacts - Delays in backfill activities will result in some of the permitted disturbed areas around the site remaining open longer than necessary.

SNC has permitted the construction site as a series of separately permitted disturbed areas with the intention of restoring and closing areas upon completion of the associated work. An extended delay in backfill will result in some areas remaining open longer than necessary. While the stormwater control features are designed to protect the environment, it is prudent to minimize the time these features are relied upon to control stormwater and the effects of erosion on the site and siltation on the local streams and the Savannah River.

Based on the above information the staff intends to process the amendment following the exigent notice provisions of 10 CFR 50.91(a)(6). Before issuance of the proposed license amendment, the Commission will have made findings required by the Atomic Energy Act of 1954, as amended (the Act) and the Commission's regulations.

Pursuant to 10 CFR 50.91(a)(6) for amendments to be granted under exigent circumstances, the NRC staff must also determine that the amendment request involves no significant hazards consideration. Under the Commission's regulations in 10 CFR 50.92, this means that continuation of construction activities at VEGP Units 3 and 4 site 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. 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 proposed SSAR change does not significantly increase the probability or consequences of an accident previously evaluated in the SSAR. An evaluation was performed to show that the proposed addition of borrow areas to the SSAR does not affect seismic analysis or hydrologic analysis. Category 1 and 2 backfill from areas on the VEGP site not specifically identified in the SSAR is from the same geological formations, and possesses the same properties as backfill obtained from the three areas originally identified in the SSAR. Additionally, the backfill material meets the requirements of SSAR Section 2.5.4.5.3 and will be excavated and placed following the requirements of SSAR Section 2.5.4.5.5. Based on the above, the use of qualified Category 1 and 2 backfill material from areas of the VEGP site not specifically

identified in the SSAR does not affect the Vogtle site-specific seismic analyses including the site response for the Ground Motion Response Spectra (GMRS) and the Vogtle site-specific SASSI seismic analyses of the Nuclear Island (NI). Because the backfill material from the additional onsite borrow areas is from the same geological deposit assumed in the analysis and meets the requirements of SSAR Section 2.5.4.5.3 and will be extracted and placed using the requirements of SSAR Section 2.5.4.5.5, the hydrological analysis will be unaffected. As such, the use of Category 1 and 2 backfill material from the VEGP site not specifically identified in the SSAR does not affect the accidental radiation release to groundwater evaluated in the SSAR. Therefore, the proposed SSAR change does not significantly increase 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 SSAR change does not create the possibility of a new or different kind of accident than any accident already evaluated in the SSAR. Category 1 and 2 backfill from areas on the VEGP site not specifically identified in the SSAR is from the same geological formations, and possesses the same properties as backfill obtained from the three areas originally identified in the SSAR, meets the requirements of SSAR Section 2.5.4.5.3 and will be excavated and placed following the requirements of SSAR Section 2.5.4.5.5. As the backfill material from additional onsite borrow locations will meet all of the criteria contained in the ESP, no new accident scenarios, failure mechanisms or limiting single failures are introduced as a result of the proposed changes. The changes have no adverse effects on any safety-related system and do not challenge the performance or integrity of any safety-related system. Therefore, all accident analyses criteria continue to be met and these changes do 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 SSAR change does not involve a reduction in a margin of safety. Category 1 and 2 backfill from areas on the VEGP site not specifically identified in the SSAR is from the same geological formation, possesses the same properties as backfill obtained from the three areas originally identified in the SSAR, meets the requirements of SSAR Section 2.5.4.5.3 and will be excavated and placed following the requirements of SSAR Section 2.5.4.5.5. All evaluations for the use of Category 1 and 2 materials from the VEGP site show that there is no effect on the SSAR's reported foundation bearing capacities, calculated settlements, GMRS, or Foundation Input Response Spectra (FIRS). The evaluations and analyses results demonstrate applicable acceptance criteria are met. Therefore, the proposed changes do not involve a 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.

The Commission is seeking public comments on this proposed determination. Any comments received within 14 days after the date of publication of this notice will be considered in making any final determination.

Before issuing the amendment, regardless of whether a hearing is requested, 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 one is requested. 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, any hearing held would take place before the issuance of any amendment.

II. Opportunity to Request a Hearing

Requirements for hearing requests and petitions for leave to intervene are found in 10 CFR 2.309, "Hearing requests, Petitions to Intervene, Requirements for Standing, and Contentions." Interested persons should consult 10 CFR Part 2, section 2.309, which is available at the NRC's Public Document Room (PDR), located at O1 F21, One White Flint North, 11555 Rockville Pike, Rockville, MD 20852 (or call the PDR at (800) 397-4209 or (301) 415-4737). NRC regulations are also accessible electronically from the NRC's Electronic Reading Room on the NRC Web site at <http://www.nrc.gov>.

III. Petitions for Leave to Intervene

Within 60 days of this notice, any person whose interest may be affected by this amendment and who wishes to participate as a party in the proceeding must file a written petition for leave to intervene. 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 must provide the name, address, and telephone number of the petitioner and specifically explain the reasons why intervention should be permitted with particular reference to the following factors: (1) The nature of the petitioner's right under the Act to be made a party to the proceeding; (2) the nature and extent of the petitioner's property, financial, or other interest in the proceeding; and (3) the possible effect of any order that may be entered in the proceeding on the petitioner's interest.

A petition for leave to intervene must also include a specification of the contentions that the petitioner seeks to have litigated in the hearing. For each contention, the petitioner must provide a specific statement of the issue of law or fact to be raised or controverted, as well as a brief explanation of the basis for the contention. Additionally, the petitioner must demonstrate that the issue raised by each contention is within the scope of the proceeding and is material to the findings the NRC must make to support the granting of a license amendment in response to the application. The petition must also include a concise statement of the alleged facts or expert opinions which support the position of the petitioner and on which the petitioner intends to rely at hearing, together with references to the specific sources and documents on which the petitioner intends to rely. Finally, the petition must provide sufficient information to show that a genuine dispute exists with the applicant on a material issue of law or fact, including references to specific portions of the application for amendment that the petitioner disputes and the supporting reasons for each dispute, or, if the petitioner believes that the application for amendment fails to contain information on a relevant matter as required by law, the identification

of each failure and the supporting reasons for the petitioner's belief.

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. The Licensing Board will set the time and place for any prehearing conferences and evidentiary hearings, and the appropriate notices will be provided.

Non-timely petitions for leave to intervene and contentions, amended petitions, and supplemental petitions will not be entertained absent a determination by the Commission, the Licensing Board or a Presiding Officer that the petition should be granted and/or the contentions should be admitted based upon a balancing of the factors specified in 10 CFR 2.309(c)(1)(i)-(viii).

A State, county, municipality, Federally-recognized Indian Tribe, or agencies thereof, may submit a petition to the Commission to participate as a party under 10 CFR 2.309(d)(2). The petition should be submitted to the Commission by **[INSERT DATE: 60 DAYS FROM THE DATE OF PUBLICATION OF THIS FEDERAL REGISTER NOTICE]**. The petition must be filed in accordance with the filing instructions in section IV of this document, and should meet the requirements for petitions for leave to intervene set forth in this section, except that State and Federally-recognized Indian tribes do not need to address the standing requirements in 10 CFR 2.309(d)(1) if the facility is located within its boundaries. The entities listed above could also seek to participate in a hearing as a nonparty pursuant to 10 CFR 2.315(c).

Any person who does not wish, or is not qualified, to become a party to this proceeding may request permission 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 such limits and conditions as may be imposed by the Licensing Board.

IV. 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 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 ten (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 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 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 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 EIE, 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 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 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 (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 NRC's electronic hearing docket which is available to the public at http://ehd.nrc.gov/EHD_Proceeding/home.asp, 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 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).

Dated at Rockville, Maryland this 30th day of April 2010.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

Chandu Patel, Project Manager
AP 1000 Projects Branch 1
Division of New Reactor Licensing
Office of New Reactors