

B. L. (Pete) Ivey
Vice President
Nuclear Development Support

**Southern Nuclear
Operating Company, Inc.**
42 Inverness Center
Post Office Box 1295
Birmingham, Alabama 35201

Tel 205.992.7619
Fax 205.992.5217



APR 23 2010

Docket Nos.: 52-011

ND-10-0829

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555-0001

Southern Nuclear Operating Company
Vogtle Electric Generating Plant Units 3 and 4
Early Site Permit Site Safety Analysis Report Amendment Request
Response to Request for Additional Information Concerning Exigent Circumstances

Ladies and Gentlemen:

By letter dated April 20, 2010, Southern Nuclear Operating Company (SNC) submitted a license amendment request to the U.S. Nuclear Regulatory Commission (NRC), in accordance with 10 CFR 50.90, to change the Vogtle Electric Generating Plant (VEGP) Units 3 and 4 Early Site Permit (ESP) Site Safety Analysis Report (SSAR). The requested change would allow the use of onsite backfill areas not specifically identified in the SSAR. SNC requested the license amendment request be processed on an exigent basis. During the NRC's detailed review of this amendment request, the NRC identified a need for additional information, involving the basis for requesting that the amendment request be processed on an exigent basis. This additional information need was conveyed to SNC in a teleconference between the NRC and SNC held on April 22, 2010. The additional information provided serves as supplemental information and does not change the scope of the requested amendment nor does it change the significant hazards consideration provided in the amendment request. Enclosure 1 to this letter provides SNC's response to this additional information need.

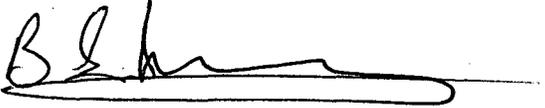
If you have any questions regarding this letter, please contact Mr. Brandon Waites at (205) 992-7024. Thank you.

D078
MRO

Mr. B. L. (Pete) Ivey states he is a Vice President of Southern Nuclear Operating Company, is authorized to execute this oath on behalf of Southern Nuclear Operating Company and to the best of his knowledge and belief, the facts set forth in this letter are true.

Respectfully submitted,

SOUTHERN NUCLEAR OPERATING COMPANY



B. L. (Pete) Ivey

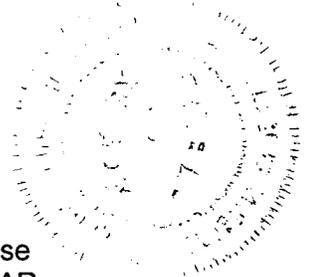
Sworn to and subscribed before me this 23rd day of April, 2010

Notary Public: Nancy Louise Henderson

My commission expires: _____
NOTARY PUBLIC STATE OF ALABAMA AT LARGE
MY COMMISSION EXPIRES: Mar 23, 2014
BONDED THRU NOTARY PUBLIC UNDERWRITERS

BLI/BJS/dmw

Enclosure 1: Response to NRC Request for Additional Information on the License Amendment Request to Change the VEGP Units 3 and 4 ESP SSAR Regarding Onsite Backfill Areas on an Exigent Basis



cc: Southern Nuclear Operating Company

Mr. J. H. Miller, III, President and CEO (w/o enclosure)
Mr. J. A. Miller, Executive Vice President, Nuclear Development (w/o enclosure)
Mr. J. T. Gasser, Executive Vice President, Nuclear Operations (w/o enclosure)
Mr. D. H. Jones, Site Vice President, Vogtle 3 & 4 (w/o enclosure)
Mr. T. E. Tynan, Vice President - Vogtle (w/o enclosure)
Mr. D. M. Lloyd, Vogtle 3 & 4 Project Support Director (w/o enclosure)
Mr. M. K. Smith, Technical Support Director (w/o enclosure)
Mr. C. R. Pierce, AP1000 Licensing Manager
Mr. M. J. Ajluni, Nuclear Licensing Manager
Mr. J. D. Williams, Vogtle 3 & 4 Site Support Manager
Mr. T.C. Moorner, Manager, Environmental Affairs, Chemistry and Radiological Services
Mr. J. T. Davis, Vogtle 3 & 4 Site Licensing Supervisor
Mr. B. W. Waites, Construction Licensing Project Engineer
Document Services RTYPE: AR01.1053
File AR.01.02.06

Nuclear Regulatory Commission

Mr. L. A. Reyes, Region II Administrator
Mr. F.M. Akstulewicz, Deputy Director Div. of Safety Systems & Risk Assess. (w/o encl.)
Mr. R. G. Joshi, Lead Project Manager of New Reactors
Ms. T. E. Simms, Project Manager of New Reactors
Mr. B. C. Anderson, Project Manager of New Reactors
Mr. M. M. Comar, Project Manager of New Reactors
Ms. S. Goetz, Project Manager of New Reactors
Mr. J. M. Sebrosky, Project Manager of New Reactors
Mr. D. C. Habib, Project Manager of New Reactors
Ms. D. L. McGovern, Project Manager of New Reactors
Ms. T. L. Spicher, Project Manager of New Reactors
Mr. C. P. Patel, Project Manager of New Reactors
Ms. M. A. Sutton, Environmental Project Manager
Mr. M. D. Notich, Environmental Project Manager
Mr. L. M. Cain, Senior Resident Inspector of VEGP 1 & 2
Mr. J. D. Fuller, Senior Resident Inspector of VEGP 3 & 4

Georgia Department of Natural Resources – Commissioner's Office

Mr. Chris Clark, Commissioner

Georgia Power Company

Mr. T. W. Yelverton, Nuclear Development Director
Ms. A. N. Faulk, Vogtle 3 & 4 Nuclear Regulatory Affairs Manager

Oglethorpe Power Corporation

Mr. M. W. Price, Executive Vice President and Chief Operating Officer
Mr. K. T. Haynes, Director of Contracts and Regulatory Oversight

Municipal Electric Authority of Georgia

Mr. S. M. Jackson, Vice President, Power Supply

Dalton Utilities

Mr. D. Cope, President and Chief Executive Officer

Bechtel Power Corporation

Mr. J. S. Prebula, Project Engineer (w/o enclosure)

Mr. R. W. Prunty, Licensing Engineer

Tetra Tech NUS, Inc.

Ms. K. K. Patterson, Project Manager

Shaw Stone & Webster, Inc.

Mr. C. A. Fonseca, Vogtle Project Manager (w/o enclosure)

Mr. J. M. Oddo, Licensing Manager

Mr. D. C. Shutt, Licensing Engineer

Westinghouse Electric Company, LLC

Mr. S. D. Rupprecht, Vice President of Regulatory Affairs & Strategy (w/o enclosure)

Mr. N. C. Boyter, Consortium Project Director Vogtle Units 3 & 4 (w/o enclosure)

Mr. S. A. Bradley, Vogtle Project Licensing Manager

Mr. M. A. Melton, Manager, Regulatory Interfaces

Mr. R. B. Sisk, Manager, AP1000 Licensing and Customer Interface

Mr. D. A. Lindgren, Principal Engineer, AP1000 Licensing and Customer Interface

NuStart Energy

Mr. R. J. Grumbir

Mr. P. S. Hastings

Mr. E. R. Grant

Mr. B. Hirmanpour

Mr. N. Haggerty

Ms. K. N. Slays

Other NuStart Energy Associates

Ms. M. C. Kray, NuStart

Mr. S. P. Frantz, Morgan Lewis

Mr. J. A. Bailey, TVA

Ms. A. L. Sterdis, TVA

Mr. J. P. Berger, EDF

Mr. M. W. Gettler, FP&L

Mr. P. Hinnenkamp, Entergy

Mr. G. D. Miller, PG&N

Mr. N. T. Simms, Duke Energy

Mr. G. A. Zinke, NuStart & Entergy

Mr. R. H. Kitchen, PGN

Ms. A. M. Monroe, SCE&G

Mr. T. Beville, DOE/PM

Southern Nuclear Operating Company

ND-10-0829

Enclosure 1

**Response to NRC Request for Additional Information
on the License Amendment Request to
Change the VEGP Units 3 and 4 ESP SSAR
Regarding Onsite Backfill Areas on an Exigent Basis**

NRC Question No. 1

The amendment request does not appear to identify the basis for the request for exigent circumstances related to safety and environmental considerations. Provide the rationale for requesting exigent circumstances as it relates to environmental and safety considerations.

SNC Response:

The response is included in Attachment 1.

Southern Nuclear Operating Company

ND-10-0829

Enclosure 1, Attachment 1

**Response to NRC Request for Additional Information
on the License Amendment Request to
Change the VEGP Units 3 and 4 ESP SSAR
Regarding Onsite Backfill Areas on an exigent basis
Impacts of Prolonged Delays on Safety-Related Backfill**

Impacts of Prolonged Delays on Safety-Related Backfill

The following discussion is specifically developed for the Vogtle 3&4 site but is generally relevant to major safety-related backfill activities for a nuclear power plant. The discussion below is relevant to backfill activities prior to the placement of structures on the backfill. Once structures are placed on the backfill, the impacts of delay can become more severe as backfill rework can involve the supported structure.

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.

It should be noted that the types of backfill repairs and rework activities discussed above can and would be accomplished in a manner that results in the final configuration meeting the design requirements.


James C. Pegues 4/22/10
GA License PE017419
April 22, 2010

