

May 20, 2010

Mr. Joseph A. (Buzz) Miller
Executive Vice President
Nuclear Development
Southern Nuclear Operating Company
P. O. Box 1295
Birmingham, AL 35201

SUBJECT: VOGTLE ELECTRIC GENERATING PLANT UNITS 3 AND 4 ADVANCED FINAL SAFETY EVALUATION REPORT WITH NO OPEN ITEMS FOR CHAPTER 10, "STEAM AND POWER CONVERSION SYSTEM"

Dear Mr. Miller:

By letter dated March 28, 2008, Southern Nuclear Operating Company (SNC) submitted its application to the U.S. Nuclear Regulatory Commission (NRC) requesting combined licenses (COLs) for two AP1000 advanced passive pressurized water reactors in accordance with the requirements of Title 10 of the *Code of Federal Regulations* (10 CFR) Part 52, "Licenses, Certifications, and Approvals for Nuclear Power Plants." The NRC formally docketed the application on May 30, 2008. These reactors are identified as Vogtle Electric Generating Plant (VEGP) Units 3 and 4 and would be located in Burke County, Georgia. The docket numbers established for VEGP Units 3 and 4 are 52-025 and 52-026, respectively. Subsequent to the original VEGP COL application, SNC updated and revised the application by letters dated May 22, 2009; September 23, 2009; October 2, 2009; and December 11, 2009.

Based on its review of SNC's application, the staff prepared the enclosed Advanced Final Safety Evaluation Report (AFSER) with no open items for Chapter 10, "Steam and Power Conversion System." Unless otherwise stated in the AFSER with no open items, the staff's review was based on revisions and updates made to the VEGP COL application through December 11, 2009. Issuance of this AFSER is an important milestone in the staff's review to determine whether SNC's application meets the Commission's regulations.

The staff concludes that the enclosed AFSER with no open items does not contain any information for which exemption from public disclosure has been sought or approved. However, the NRC will withhold the enclosed AFSER from public disclosure for ten calendar days from the date of this letter to allow SNC the opportunity to verify the staff's conclusion that the AFSER contains no such exempt information. If within that time, you do not request that all or portions of the AFSER be withheld from public disclosure in accordance with 10 CFR 2.390, "Public Inspections, Exemptions, Requests for Withholding," the enclosure will be made available for public inspection through the NRC's Public Document Room and the Publicly Available Records component of the NRC's Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the Public Electronic Reading Room section of the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

Should you have any questions, please contact Ms. Sujata Goetz, the project manager for the VEGP COL application at (301) 415-8004, sujata.goetz@nrc.gov or Mr. Ravindra Joshi, the lead project manager for the VEGP COL application at (301) 415-6191, ravindra.joshi@nrc.gov.

Sincerely,

/RA/

Jeffrey Cruz, Branch Chief
AP1000 Projects Branch (NWE 1)
Division of New Reactor Licensing
Office of New Reactors

Docket Nos. 52-025 and 52-026

Enclosure:
Safety Evaluation Report, Chapter 10

cc w/ encl: see next page

The staff concludes that the enclosed AFSER with no open items does not contain any information for which exemption from public disclosure has been sought or approved. However, the NRC will withhold the enclosed AFSER from public disclosure for ten calendar days from the date of this letter to allow SNC the opportunity to verify the staff's conclusion that the AFSER contains no such exempt information. If within that time, you do not request that all or portions of the AFSER be withheld from public disclosure in accordance with 10 CFR 2.390, "Public Inspections, Exemptions, Requests for Withholding," the enclosure will be made available for public inspection through the NRC's Public Document Room and the Publicly Available Records component of the NRC's Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the Public Electronic Reading Room section of the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

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Docket Nos. 52-025 and 52-026

Enclosure:
Safety Evaluation Report, Chapter 10

cc w/ encl: See next page

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NAME	PBlechman	SGoetz	AHodgdon	JCruz
DATE	04/15/10	03/04/10	04/02/10	05/20/2010

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COL - Vogtle Mailing List

(Revised 01/11/2010)

cc:

Attorney General
Law Department
132 Judicial Building
Atlanta, GA 30334

Mr. Jeffrey T. Gasser
Executive Vice President
Southern Nuclear Operating Company, Inc.
P.O. Box 1295
Birmingham, AL 35201-1295

Mr. M. Stanford Blanton
Esquire
Balch and Bingham, LLP
P.O. Box 306
Birmingham, AL 35201

O. C. Harper, IV
Vice President - Resources Planning and
Nuclear Development
Georgia Power Company
241 Ralph McGill Boulevard
Atlanta, GA 30308

Ms. Michele Boyd
Legislative Director
Energy Program
Public Citizens Critical Mass Energy
and Environmental Program
215 Pennsylvania Avenue, SE
Washington, DC 20003

Mr. Steven M. Jackson
Senior Engineer - Power Supply
Municipal Electric Authority of Georgia
1470 Riveredge Parkway, NW
Atlanta, GA 30328-4684

County Commissioner
Office of the County Commissioner
Burke County Commission
Waynesboro, GA 30830

David H. Jones
Site Vice President
Plant Vogtle - ATTN: Units 3 & 4
7825 River Road
Waynesboro, GA 30830

Mr. James Davis
ESP Project Engineer
Southern Nuclear Company
PO Box 1295, BIN B056
Birmingham, AL 35201

Mr. Reece McAlister
Executive Secretary
Georgia Public Service Commission
Atlanta, GA 30334

Director
Consumer's Utility
Counsel Division
Governor's Office of Consumer Affairs
2 Martin Luther King, Jr. Drive
Plaza Level East, Suite 356
Atlanta, GA 30334-4600

Mr. Thomas O. McCallum
Site Development Project Engineer
Southern Nuclear Operating Co., Inc.
PO Box 1295
Birmingham, AL 35201-1295

Mr. Arthur H. Domby, Esquire
Troutman Sanders
Nations Bank Plaza
600 Peachtree Street, NE
Suite 200
Atlanta, GA 30308-2216

Mr. James H. Miller
President & Chief Executive Officer
Southern Nuclear Operating Company, Inc.
P.O. Box 1295
Birmingham, AL 35201

COL- Vogtle Mailing List

Mr. Joseph (Buzz) Miller
Executive Vice President
Nuclear Development
P.O. Box 1295
Birmingham, AL 35201-1295

Mr. Wesley A. Sparkman
COL Project Engineer
Southern Nuclear Operating Co., Inc.
P.O. Box 1295
Birmingham, AL 35201-1295

Mr. Thomas Moorer
Environmental Project Manager
Southern Nuclear Operating Co., Inc.
PO Box 1295
Birmingham, AL 35201-1295

Gene Stilp
1550 Fishing Creek Valley Road
Harrisburg, PA 17112

Mr. Charles R. Pierce
Vogtle Deployment Licensing Manager
Southern Nuclear Operating Co., Inc.
PO Box 1295
Birmingham, AL 35201-1295

Mr. Robert E. Sweeney
IBEX ESI
4641 Montgomery Avenue
Suite 350
Bethesda, MD 20814

Mr. M. W. Price
Oglethorpe Power Corporation
2100 East Exchange Place
P.O. Box 1349
Tucker, GA

Resident Inspector
Vogtle Plant
8805 River Road
Waynesboro, GA 30830

Resident Manager
Oglethorpe Power Corporation
Alvin W. Vogtle Nuclear Plant
7821 River Road
Waynesboro, GA 30830

Mr. Jerry Smith
Commissioner
District 8
Augusta-Richmond County Commission
1332 Brown Road
Hephzibah, GA 30815

COL - Vogtle Mailing List

Email

APH@NEI.org (Adrian Heymer)
awc@nei.org (Anne W. Cottingham)
BrinkmCB@westinghouse.com (Charles Brinkman)
chris.maslak@ge.com (Chris Maslak)
crpierce@southernco.com (C.R. Pierce)
cwaltman@roe.com (C. Waltman)
david.hinds@ge.com (David Hinds)
david.lewis@pillsburylaw.com (David Lewis)
Derlinda.Bailey@chguernsey.com (Derinda Bailey)
erg-xl@cox.net (Eddie R. Grant)
james.beard@gene.ge.com (James Beard)
jgutierrez@morganlewis.com (Jay M. Gutierrez)
jim.riccio@wdc.greenpeace.org (James Riccio)
jim@ncwarn.org (Jim Warren)
JJNesrsta@cpsenergy.com (James J. Nesrsta)
John.O'Neill@pillsburylaw.com (John O'Neill)
Joseph_Hegner@dom.com (Joseph Hegner)
KSutton@morganlewis.com (Kathryn M. Sutton)
kwaugh@impact-net.org (Kenneth O. Waugh)
lchandler@morganlewis.com (Lawrence J. Chandler)
Marc.Brooks@dhs.gov (Marc Brooks)
maria.webb@pillsburylaw.com (Maria Webb)
mark.beaumont@wsms.com (Mark Beaumont)
Mark.Crisp@chguernsey.com (Mark Crisp)
matias.travieso-diaz@pillsburylaw.com (Matias Travieso-Diaz)
mcaston@southernco.com (Moanica Caston)
media@nei.org (Scott Peterson)
mike_moran@fpl.com (Mike Moran)
MSF@nei.org (Marvin Fertel)
nirsnet@nirs.org (Michael Mariotte)
Nuclaw@mindspring.com (Robert Temple)
patriciaL.campbell@ge.com (Patricia L. Campbell)
paul.gaukler@pillsburylaw.com (Paul Gaukler)
Paul@beyondnuclear.org (Paul Gunter)
pshastings@duke-energy.com (Peter Hastings)
RJB@NEI.org (Russell Bell)
sabinski@suddenlink.net (Steve A. Bennett)
sandra.sloan@areva.com (Sandra Sloan)
sfrantz@morganlewis.com (Stephen P. Frantz)
stephan.moen@ge.com (Stephan Moen)
steven.hucik@ge.com (Steven Hucik)
Tom.Bilik@nrc.gov (Thomas Bilik)
tomccall@southernco.com (Tom McCallum)
Vanessa.quinn@dhs.gov (Vanessa Quinn)
VictorB@bv.com (Bill Victor)
Wanda.K.Marshall@dom.com (Wanda K. Marshall)
whelmore@aol.com (Bill Elmore)