APPENDIX C

REFERENCES

American Concrete Institute (ACI)

— — — — , ACI-318, "Building Code Requirements for Structural Concrete,"

American National Standards Institute (ANSI)³²

— — — — , ANSI/ANS 2.8, "Determining Design Basis Flooding at Power Reactor Sites," 1992.

— — — — , ANSI N45.2.11, "Quality Assurance Program Requirements for Nuclear Facilities," 1977.

— — — — , ANSI N45.2.11, "Quality Assurance Requirements for the Design of Nuclear Power Plants," 1974.

American Society of Civil Engineers and Structural Engineering Institute (ASCE/SEI)³³

— — — — , ASCE/SEI 43-05, "Seismic Design Criteria for Structures, Systems, and Components in Nuclear Facilities and Commentary," 2005.

— — — — , ASCE/SEI 7-02, "Minimum Design Loads for Buildings and Other Structures," 2002.

American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE)³⁴

— — — — —, "2001 ASHRAE Handbook - Fundamentals," July 2001.

³² Copies of American National Standards (ANS) publications may be purchased from the American National Standards Institute (ANSI), 1819 L Street, NW, 6th Floor, Washington, DC 20036 [phone: (202) 293-8020)]. Purchase information is available through the ASCE Web site at http://webstore.ansi.org/ansidocstore/.

³³ Copies of ASCE publications may be purchased at <u>http://www.asce.org/asce.cfm</u>.

³⁴ Copies of ASHRAE publications may be purchased at <u>http://www.ashrae.org/publications/</u>

American Society of Mechanical Engineers (ASME)³⁵

— — — — ASME NQA-1-2004, "Quality Assurance Requirements for Nuclear Facility Applications," 2004.

— — — — ASME NQA-1-1994, "Quality Assurance Requirements for Nuclear Facility Applications," 1994.

American Society for Testing and Materials (ASTM)³⁶

— — — — ASTM D1577, "Standard Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort (56000 ft-lbf/ft² (2700 kN-m/m³)."

— — — — ASTM D1586-99, "Standard Test Method for Penetration Test and Split-Barrel Sampling of Soils," January 10, 1999.

— — — — ASTM D1587, "Standard Practice for Thin-Walled Rube Sampling of Soils for Geotechnical Purposes," 2000.

— — — — ASTM D2488, "Standard Practice for Description and Identification of Soils," 2000.

— — — — ASTM D4044, "Standard Test (Field Procedure) for Instantaneous Change in Head (slug) Tests for Determining Hydraulic Properties of Aquifer," 2002.

— — — — ASTM D4200, "Standard Practice for Preserving and Transporting Soil Samples."

— — — — ASTM D4220-95, "Standard Practices for Preserving and Transporting Soil Samples," January 1, 2000.

— — — — ASTM D4228, "Standard Test Methods for Crosshole Seismic Testing," 2000.

— — — — ASTM D5578, "Standard Test Method of Performing Electronic Friction Cone and Piezocone Penetration Testing of Soils," 2005.

— — — — ASTM D 6169, "Standard Guide for Selection of Soil and Rock Sampling Devices Used with Drill Rigs for Environmental Investigations," 2005.

³⁵ Copies of American Society of Mechanical Engineers publications may be purchased at Three Park Avenue, New York, NY 10016-5990; phone (212)591-8500; fax (212) 591-8501; <u>www.asme.org</u>.

³⁶ Copies of ASTM publications may be purchased at <u>http://www.astm.org/</u>

Defense Threat Reduction Agency

 — — — "Hazard Protection and Assessment Capability," HPAC software report, Consequence Assessment Branch (TDOC), April 2005, <u>http://www.dtra.mil/</u>.

Electric Power Research Institute (EPRI)³⁷

— — — — , NP-4726A, "Probabilistic Seismic Hazard Evaluation of Nuclear Power Plant Sites in the Central and Eastern United States," Volumes I through 10, EPRI, 1989.

— — — — , NP-4726, "Seismic Hazard Methodology for the Central and Eastern United States, Tectonic Interpretations," EPRI: Palo Alto, CA, 1986.

— — — — , NP-4726, "Probabilistic Seismic Hazard Evaluations at Nuclear Power Plant Sites in the Central and Eastern United States," EPRI: Palo Alto, CA, 1989–1991.

— — — — —, NP-6395-D, "Probabilistic Seismic Hazard Evaluations at Nuclear Plant Sites in the Central and Eastern United States: Resolution of the Charleston Earthquake Issue (2)," EPRI, 1989.

— — — — , NP-6452-D, "EQHAZARD Primer," Prepared by Risk engineering for Seismicity Owners Group and EPRI, 1989.

— — — — , TR-102293, "Guidelines for Determining Design Basis Ground Motions," Volumes 1-5, EPRI: Palo Alto, California, May 1993.

— — — —, TR-1009684, "CEUS Ground Motion Project Final Report," EPRI: Palo Alto, CA, <u>http://www.energiecacouna.ca/pdfs/rapport_seismicite.pdf</u>, 2004.

Johnston, A.C., 1994, "Seismotectonic interpretations and conclusions from the stable continental region seismicity database," in Schneider, J.F., ed., *The earthquakes of stable continental regions-v. 1, Assessment of large earthquake potential: Technical report to Electric Power Research Institute TR-102261-V1*, Palo Alto, California, p. 4-1-4-103, December 1994.

Johnston, A. C., et al., TR-102261-V1, "The Earthquakes of Stable Continental Regions: -Volume 1 - Assessment of Large Earthquake Potential," EPRI: Palo Alto, California, 1994.

Kanter, L.R., "Tectonic interpretation of Stable Continental Crust" in : *The Earthquakes of Stable Continental Regions*, prepared by Johnston, A.C.; Coppersmith, K.J.; Kanter, L.R.; Cornell, C.A., Electric Power Research Institute, pp. 2.1-2.98, 1994.

³⁷ Copies of EPRI standards and reports may be purchased from the Electric Power Research Institute (EPRI), 3420 Hillview Avenue, Palo Alto, California 94304, telephone (800) 313-3774; fax (925) 609-1310.

Federal Aviation Administration (FAA)

____, "tony.diana@faa.gov," AGS operations data via e-mail, December 19, 2006. (ADAMS Accession No. ML070990111).

____, "mark.ctr.lesko@faa.gov," Flight counts for each Thursday 2003 to 2006 for flights that flew a path along V185 when in vicinity of Vogtle, April 5, 2007. (ADAMS Accession No. ML070960422).

Federal Energy Regulatory Commission

— — — — —, FERC 0119-1, "Engineering Guidelines for the Evaluation of Hydropower Projects," Office of Hydropower Licensing, July 1987, http://www.ferc.gov/industries/hydropower.asp.

State of Georgia

Executive Order 08.25.04.01, issued August 25, 2004, http://www.gov.state.ga.us/ExOrders/.

Executive Order, 02.14.06.01, Georgia Emergency Operations Plan, signed February 14, 2006, <u>http://www.gov.state.ga.us/2006_exec_orders.shtml</u>.

Georgia Radiation Control Act, OCGA § 38-3-22.

Immunity from Liability, OCGA § 38-3-35.

Radiation Control Act, OCGA § 31-13-1-10.

Water Quality Control Act of 1974, OCGA § 12-5-47.

Air Quality Control Act, OCGA § 12-9-1.

Transportation of Hazardous Materials Act, OCGA § 46-11-1.

Emergency Operations Plan (GEOP).

Georgia Radiological Emergency Plan (REP) – Base Plan, Office of Homeland Security, May 2005.

Georgia Radiological Emergency Plan (REP) – Annex D, "Plant Vogtle," Office of Homeland Security, April 2005.

Burke County Emergency Plan

Burke County Emergency Management Radiological Plan

U.S. Department of Energy (DOE) Radiological Assistance Plan (RAP)

National Response Plan (NRP)

Federal Radiological Emergency Response Plan (FRERP)

Rutherford & Associates, Comprehensive Water Supply Management Plan prepared for Burke County and Municipalities: .Girard, Keysville, Midville, Sardis, Vidette, Waynesboro, Georgia, 2000.

Georgia Department of Natural Resources

Huddlestun, P.F. and J.H. Summerour. 1996. The Lithostratigraphic Framework of the Uppermost Cretaceous and Lower Tertiary of Eastern Burke County, Georgia. Bulletin 127. Georgia Department of Natural Resources, Atlanta, Georgia.

Summerour, J.H., E.A. Shapiro, J.A. Lineback, P.F. Huddlestun, and A.C. Hughes. 1994. An Investigation of Tritium in the Gordon and Other Aquifers in Burke County, Georgia. Information Circular 95. Georgia Department of Natural Resources, Atlanta, Georgia.

Summerour, J.H., E.A. Shapiro, and P.F. Huddlestun. 1998. An Investigation of Tritium in the Gordon and Other Aquifers in Burke County, Georgia; Phase II. Information Circular 102. Georgia Department of Natural Resources, Atlanta, Georgia.

Intergovernmental Panel on Climate Change (IPCC)

— — — — , Working Group I Report, "Climate Change 2007: The Physical Science Basis," <u>http://www.ipcc.ch/SPM2feb07.pdf</u>, 2007.

National Climatic Data Center (NCDC)

— — — — , Air Force Combat Climatology Center (AFCCC), "Engineering Weather Data, 2000 Interactive Edition, Version 1.0 (CD-ROM)."

— — — — , "Augusta, Georgia, Integrated Surface Hourly Observations," <u>http://www.ncdc.noaa.gov/oa/climate/climatedata.html#hourly</u>, October 2006.

— — — — , "Augusta, Georgia, 2004 Local Climatological Data, Annual Summary with Comparative Data," NCDC: Asheville, North Carolina, 2005.

— — — — , "Climatography of the United States No. 20 1971-2000," <u>http://www.ncdc.noaa.gov/oa/climate/normals/usnormalsprods.html</u>, October 2006.

— — — — , "Climatology of the United States, No. 81, 1971-2000, U.S. Monthly Climate

Normals," http://cdo.ncdc.noaa.gov/cgi-bin/climatenormals/climatenormals.pl, October 2006.

— — — — , "Cooperative Summary of the Day (SOD) - Daily Surface Data TD 3200/3210 combined," <u>http://cdo.ncdc.noaa.gov/pls/plclimprod/poemain.accessrouter?datasetabbv=SOD</u>, October 2006.

— — — — , "Locate Weather Observation Station Record," <u>http://www.ncdc.noaa.gov/oa/climate/stationlocator.html</u>, October 2006.

— — — — , "Storm Events for Georgia and South Carolina, Tornado Event Summaries," <u>http://www4.ncdc.noaa.gov/cgi-win/wwcgi.dll?wwEvent~Storms</u>, October 2006.

— — — — —, Storm Event Database, "Storm Events for Georgia, Query Results, Hail Event(s)."

— — — — , Reported in Burke County, "Georgia Between 01/01/1950 and 07/31/2006," <u>http://www4.ncdc.noaa.gov/cgi-win/wwcgi.dll?wwEvent~Storms</u>, October 2006.

National Inventory of Dams

Web Site: <u>http://crunch.tec.army.mil/nid/webpages/nid.cfm</u>, Last accessed May 21, 2007.

National Oceanic and Atmospheric Administration (NOAA)

— — — — , Coastal Services Center, "Historical Hurricane Tracks Storm Query, 1851 through 2004," <u>http://maps.csc.noaa.gov/hurricanes/index.htm</u>, October 2006.

— — — —, "The Climate Atlas of the United States," <u>http://gis.ncdc.noaa.gov/website/ims-</u> <u>climatls/index.html</u>, October 2006.

— — — —, Hurricane Research Division, "Frequently Asked Questions: What does "maximum sustained wind" mean? How does it relate to gusts in tropical cyclones?" <u>http://www.aoml.noaa.gov/hrd/tcfaq/D4.html</u>, October 2006.

— — — — —, Hydrometeorological Report No. 53, "Seasonal Variation of 10-Square-Mile Probable Maximum Precipitation Estimates. United States East of the 105th Meridian." NOAA: Washington, DC, April 1980.

National Severe Storms Laboratory (NSSL)

— — — — , "Severe Thunderstorm Climatology, Total Threat," August 29, 2003, <u>http://www.nssl.noaa.gov/hazard/totalthreat.html</u>, October 2006.

Nuclear Energy Institute (NEI) Technical Reports

— — — — , Technical Report NEI 99-01, "Methodology for Development of Emergency Action Levels," Revision 4, January 2003.

— — — — , Technical Report NEI 07-01, "Methodology for Development of Emergency Action Levels–Advanced Passive Light Water Reactors," Revision 0, February 28, 2007.

Occupational Safety And Health Administration (OSHA)

— — — — , 29 CFR [*Code of Federal Regulations*] Part 1926, "Safety and Health Regulations for Construction," 2000.

State of South Carolina

South Carolina Radiological Emergency Response Plan, June 2004.

South Carolina Emergency Operations Plan–Base Plan.

South Carolina Operational Radiological Emergency Response Plan.

South Carolina Technical Radiological Emergency Response Plan.

South Carolina Code of Regulations 58-1 and 58-101. Aiken County Plan

Barnwell County Plan

Allendale County Plan

South Carolina Department of Natural Resources

South Carolina Water Plan, Land, Water, and Conservation Division, 2nd Ed., January 2004.

South Carolina Department of Transportation

Chapman, M.C., and Talwani, P., "Seismic Hazard Mapping for Bridge and Highway Design in South Carolina," Report 2002.

Southern Nuclear Operating Company (Vogtle Electric Generating Plan (VEGP))

— — — — , RAI 2.4.1-1 Response, AR-06-2865, Enclosure Attachment 2, (2007a).

— — — — , Early Site Permit Application for Vogtle Electric Generating Plant. Part 2, Site Safety Analysis Report, Revision 2 (April 2007a).

— — — — , Early Site Permit Application for Vogtle Electric Generating Plant. Part 3, Environmental Report, Revision 2, Revision 2 (April 2007b).

— — — — —, Vogtle Early Site Permit Application, Response to Requests for Additional Information Letter No. 6 Involving Hydrology. AR-07-0639, Docket No. 52-011. Enclosures 1, 2 and 3. (April 16, 2007c).

— — — — , Vogtle Early Site Permit Application, NRC Safety Evaluation Report Open Items. AR-07-1773, Docket No. 52-011. Enclosures 1, 2, 3, 4 and 5. (October 15, 2007g).

— — — — , Vogtle Early Site Permit Application, Comments on Draft Environmental Impact Statement. AR-07-2216, Docket No. 52-011. Enclosures 1, and 3. (December 26, 2007f).

— — — — —, Early Site Permit Application for Vogtle Electric Generating Plant. Parts 1, 2, 3, 4 and 5, Safety Analysis Report, Environmental Report, Site Redress Plan and Emergency Plan, Revision 4, (March 2008a).

— — — — —, Early Site Permit Application for Vogtle Electric Generating Plant. Part 2, Site Safety Analysis Report Report, Supplement 4S-2 Additional Hydrology Information. AR-08-0952, Docket No. 52-011. Enclosures 1, 2 and 3, (June 2008b).

— — — — —, Vogtle Early Site Permit Application, Response to Requests for Additional Information Letter No. 11 Involving Groundwater. AR-08-1286, Docket No. 52-011. Enclosures 1, 2 and 3. (August 21, 2008c).

— — — — —, Vogtle Early Site Permit Application, Response to Requests for Additional Information Letter No. 11 Involving Vibratory Ground Motion and Limited Work Authorization. AR-08-1171, Docket No. 52-011. Enclosures 1, 2, 3, 4, and 5. (August 14, 2008d).

— — — — , Updated Final Safety Analysis Report, Vogtle Electric Generating Plant, Revision 11, May 2003.

— — — — —, "Evacuation Time Estimates for the Vogtle Electric Generating Plant," Innovative Emergency Management, Inc., Report, April 2006.

— — — — , Vogtle Electric Generating Plant Emergency Plan, Revision 42, Southern Nuclear Operating Company, January 2006.

— — — — —, Vogtle Electric Generating Plant Emergency Plan, Revision 43, Southern

Nuclear Operating Company, May 2006.

— — — — —, Vogtle Electric Generating Plant, Annual Radiological Environmental Operating Report for 2004, Southern Company.

Corporate Emergency Plan.

Emergency Communication Plan.

VEGP Security Plan.

VEGP Fire Protection Plan.

Vogtle Emergency Information Brochure.

2006 Plant Vogtle Emergency Information Calendar

Southeast Regional Climate Center (SERCC)

— — — — , "Period of Record Daily Climate Summaries for Georgia and South Carolina," <u>http://www.dnr.sc.gov/climate/sercc/climateinfo/historical/historical.html</u>, October 2006.

— — — — , "Period of Record Daily Climate Summary for Bamberg, SC," <u>http://cirrus.dnr.state.sc.us/cgi-bin/sercc/cliMAIN.pl?sc0448</u>, October 2006.

Vaisala

— — — — , "5-year Flash Density Map - U.S. (1996 - 2001)," http://www.oneac.com/download/files/lightningmap.pdf, October 2006.

U.S. Army Corps of Engineers (USACE)

— — — — , "HEC-RAS: River Analysis System," Computer Model, Version 4.0, Hydrologic Engineering Center, November 2006.

— — — — —, HEC-RAS, "HEC-RAS: River Analysis System," Computer Model, Version 3.1.3, Hydrologic Engineering Center, <u>http://www.hec.usace.army.mil/software/hec-</u> <u>ras/documents/userman/cvr_incvr_toc.pdf</u>, May 2005.

— — — — , Water Control Manual, Savannah River Basin: Hartwell, Richard B Russell, and J. Strom Thurmond Projects, Savannah District, 1996.

— — — — , Coastal Engineering Manual, Part II, EM 1110-2-1100, Change 2, July 2006.

— — — — —, Engineering and Design – Ice Engineering. EM 1110-2-1612. Department of the Army, Washington, DC, 2002.

— — — — —, Cold Regions Research and Engineering Laboratory, 2007a. Ice Jam Database. Georgia query performed on June 11, 2007. File: "Ice Jam Database Search -- Georgia.pdf".

— — — — —, Cold Regions Research and Engineering Laboratory, 2007b. Ice Jam Database. North Carolina query performed on June 11, 2007. File: "Ice Jam Database Search – North Carolina.pdf".

— — — — —, Cold Regions Research and Engineering Laboratory, 2007c. Ice Jam Database. South Carolina query performed on June 11, 2007. File: "Ice Jam Database Search – South Carolina.pdf".

— — — — —, Cold Regions Research and Engineering Laboratory, 2007d. Ice Jam Database. Georgia query result returned on June 11, 2007. File: "Ice Jam Database Search Result -- Georgia.pdf".

— — — — —, Cold Regions Research and Engineering Laboratory, 2007e. Ice Jam Database. Georgia query result returned on June 11, 2007. File: "Ice Jam Database Search Result – North Carolina.pdf".

— — — — —, Cold Regions Research and Engineering Laboratory, 2007f. Ice Jam Database. South Carolina query result returned on June 11, 2007. File: "Ice Jam Database Search – South Carolina.pdf".

— — — — , Draft Environmental Assessment Findings of No Significant Impact; Drought Contingency Plan Update, Savannah River Basin, Savannah District. (May 2006).

U.S. Atomic Energy Commission (AEC)

— — — — , "Technical Basis for Interim Regional Tornado Criteria," WASH-1300. May 1974.

U.S. Bureau of Reclamation

— — — — —, "Predication of Embankment Dam Breach Parameters: A literature Review and Needs Assessment," Dam Safety Office, Water Resources Research Laboratory, Department of Interior, July 1998.

U.S. Census Bureau

http://www:census.gov/population/cencount, September 2006.

U.S. Environmental Protection Agency (EPA)

— — — — , "Areal Locations of Hazardous Atmospheres," Office of Emergency Management, Washington D.C., February 2007.

— — — — , EPA 400-R-92-001, "Manual of Protective Action Guides and Protective Actions for Nuclear Incidents," May 1992.

— — — — , "Guideline for Determination of Good Engineering Practice Stack Height," June 1985.

U.S. Geological Survey (USGS)

Bollinger, G.A., Professional Paper 1028-B, "Reinterpretation of the intensity data for the 1886 Charleston, South Carolina, earthquake," in Rankin, D.W., ed., *Studies related to the Charleston, South Carolina, earthquake of 1886-A Preliminary Report*, Reston, VA, p. 17-32, 1977.

Bollinger, G.A., and Wheeler, R.L., Professional Paper 1355, "The Giles County, Virginia, seismic zone-Seismological results and geologic interpretations," Reston, VA, 85 p., 1988.

Bollinger, G. A., Survey Bulletin 2017, "Specification of Source Zones, Recurrence Rates, Focal Depths, and Maximum Magnitudes for Earthquakes Affecting the Savannah River Site in South Carolina," Reston, VA, 1992.

Cherry, G.S. and J.S. Clarke. 2007, "Simulation and Particle-Tracking Analysis of Selected Ground-Water Pumping Scenarios at Vogtle Electric Generation Plant, Burke County, Georgia." U.S. Geological Survey Open-File Report 2007-1363, 51 p., Web-only publication at "*http://pubs.usgs.gov/usgspubs/of/2007/1363*.

Cherry, G.S. 2006. "Simulation and Particle-Tracking Analysis of Ground-Water Flow near the Savannah River Site," Georgia and South Carolina, 2002, and for Selected Ground-Water Management Scenarios, 2002 and 2020. Scientific Investigations Report 2006-5195, [a web-only publication available at http://pubs.usgs.gov/sir/2006/5195/.

Clarke, J.S. and C.T. West. 1997. "Ground-Water Levels, Predevelopment Ground-Water Flow, and Stream-Aquifer Relations in the Vicinity of the Savannah River Site, Georgia and South Carolina." Water-Resources Investigations Report 97-4197, Denver, Colorado.

Clarke, J.S. and C.T. West. 1998. "Simulation of Ground-Water Flow and Stream-Aquifer Relations in the Vicinity of the Savannah River Site, Georgia and South Carolina, Predevelopment through 1992." Water-Resources Investigations Report 98-4062, Denver, Colorado. Crone, A.J. and R. L. Wheeler, Open-File Report 00-260, "Data for Quatemary Faults, Liquefaction Features, and Possible Tectonic Features in the Central and Eastern United States, East of the Rocky Mountain Front," Reston, Virginia, 2000.

Fanning, J.L. 2003. "Water Use in Georgia by County for 2000 and Water-Use Trends for 1980-2000," Georgia Geologic Survey Information Circular 106, 2003.

Frankel, A., Barnhard, T., Perkins, D., Leyendecker, E.V., Dickman, N., Hanson, S., and Hopper, M., Open-file report 96-532, "National seismic hazard maps: documentation," Reston, VA, 1996.

Frankel, A. D., Peterson, M.D., Mueller, C.S., Haller, K.M., Wheeler, R.L., Leyendecker, E.V., Wesson, R.L., Harmsen, D.C., Cramer, C.H., Perkins, D.M., and Rukstales, K.S., Open-File Report 02-420, "Documentation for the 2002 Update of the National Seismic Hazard Maps," Reston, VA, 2002.

Hamilton, R.M., Behrendt, J.C., and Ackermann, H.D., Professional Paper 1313, "Land multichannel seismic-reflection evidence for tectonic features near Charleston, South Carolina," in Gohn, G.S., ed., *Studies related to the Charleston, South Carolina, earthquake of 1886 - Tectonics and seismicity*, Reston, VA, p. I1 -I18, 1983.

McDowell, R.C., and Houser, B.B., misc. field studies map MF,-1538, "Map showing distribution of small-scale deformation structures in part of the upper coastal plain of South Carolina and adjacent Georgia, 1:250,000 scale," Reston, VA, 1983.

Obermeier, S.F., Pond, E.C., and Olson, S.M., Open-File Report 01-29, "Paleoliquefaction studies in continental settings: geologic and geotechnical factors in interpretations and back-analysis," Reston, VA, 53p, 2001.

Obermeier, S.F., Jacobson, R.B., Smoot, J.P., Weems, R.E., Gohn, G.S., Monroe, J.E., and Powars, D.S., Professional Paper 1504, "Earthquake-induced liquefaction features in the coastal setting of South Carolina and in the fluvial setting of the New Madrid seismic zone," Reston, VA, 44 p., 1 plate, 1990.

Prowell, D.C., O'Connor, B.J., and Rubin, M., Open-File Report 75-680, "Preliminary evidence for Holocene movement along the Belair fault zone near Augusta, Georgia," Reston, VA, 20 p, 1975.

Weems, R.E., Open-File Report 98-0374, "Newly recognized en echelon fall lines in the Piedmont and Blue Ridge provinces of North Carolina and Virginia, with a discussion of their possible ages and origins," Reston, VA, p. 52, 1998.

Weems, R.E., Lemon, E.M., Jr., and Nelson, M.S., Miscellaneous Investigations Series, "Geology of the Pringletown, Ridgeville, Summerville, and Summerville Northwest 7.5-minute quadrangles, Berkeley, Charleston, and Dorchester counties, South Carolina," Reston, VA, 1997. Wheeler, R.L., Open-File Report 2005-1336, "Known or suggested Quaternary tectonic faulting, Central and Eastern United States; new and updates assessments for 2005," Reston, VA, 2005.

U.S. Nuclear Regulatory Commission (NRC)³⁸

SECY-05-0197, "Review of Operational Programs in a Combined License Application and Generic Emergency Planning Inspections, Tests, Analyses, and Acceptance Criteria," October 28, 2005, (ADAMS Accession No. ML052770225).

Staff Requirements Memorandum (SRM) SECY-05-0197, "Review of Operational Programs in a Combined License Application and Generic Emergency Planning Inspections, Tests, Analyses, and Acceptance Criteria," February 22, 2006. (ADAMS Accession No. ML060530316).

Inspection Report

Inspection Report 05200011/2006001, "Southern Nuclear Operating Company, NRC Inspection of Applicant and Contractor Quality Assurance Activities Involved with Preparation of the Application for an Early Site Permit," (ADAMS Accession No. ML062830466).

NUREG-Series Reports³⁹

— — — —, NUREG-0654/FEMA-REP-1, Revision 1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants–Final Report," November 1980 (see also, March 2002 addenda).

— — — — , NUREG-0654/FEMA-REP-1, Supplement 2, "Criteria for Emergency Planning in an Early Site Permit Application–Draft Report for Comment," Revision 1, April 1996.

— — — — —, NUREG-0696, "Functional Criteria for Emergency Response Facilities," February 1981.

— — — — —, Supplement 1 to NUREG-0737, "Requirements for Emergency Response Capability," January 1983.

³⁸ Copies of NRC documents are also available for inspection or copying for a fee from the NRC's Public Document Room at 11555 Rockville Pike, Rockville, MD; the PDR's mailing address is US NRC PDR, Washington, DC 20555; telephone (301) 415-4737 or (800) 397-4209; fax (301) 415-3548; email PDR@nrc.gov.

³⁹ Copies of NUREG-series reports are available for inspection or copying for a fee from the NRC's Public Document Room at 11555 Rockville Pike, Rockville, MD; the PDR's mailing address is USNRC PDR, Washington, DC 20555; telephone (301) 415-4737 or (800) 397-4209; fax (301) 415-3548; email PDR@nrc.gov. Copies are also available at current rates from the U.S. Government Printing Office, P.O. Box 37082, Washington DC 20402-9328, telephone (202) 512-1800; or from the National Technical Information Service (NTIS) at 5285 Port Royal Road, Springfield, Virginia 22161, online at http://www.ntis.gov, by telephone at (800) 553-NTIS (6847) or (703) 605-6000, or by fax to (703) 605-6900.

— — — — —, NUREG-0800, "Standard Review Plan," Section 17.5, "Quality Assurance Program Description – Design Certification, Early Site Permit and New License Applicants," March 2007.

— — — — , NUREG-0800, "Standard Review Plan for Review of Safety Analysis Report for Nuclear Power Plants," March 2007.⁴⁰

— — — — , NUREG-0800, "Standard Review Plan for Review of Safety Analysis Report for Nuclear Power Plants," June 1996.

— — — — , NUREG-0917, "Nuclear Regulatory Commission Staff Computer Programs for Use with Meteorological Data," September 1981.

— — — — , NUREG-1488, "Revised Livermore Seismic Hazard Estimates for Sixty-nine Nuclear Power Plant Sites East of the Rocky Mountains," April 1994.

— — — — , NUREG-1835, "Safety Evaluation Report for an Early Site Permit (ESP) at the North Anna ESP Site," September 2005.

— — — — —, NUREG-1840, "Safety Evaluation Report of Early Site Permit Application in the Matter of System Energy Resources, Inc., a subsidiary of Entergy Corporation, for the Grand Gulf Early Site Permit Site," April 2006.

— — — — , NUREG-1844, "Safety Evaluation Report for an Early Site Permit (ESP) at the Exelon Generation Company, LLC (EGC) ESP Site," May 2006.

— — — — , NUREG/CR-0098, "Development of Criteria for Seismic Review of Selected Nuclear Power Plants," May 1978.

— — — — , NUREG-0570, "Toxic Vapor Concentrations in the Control Room Following a Postulated Accidental Release."

— — — — —, NUREG/CR-2858, "PAVAN: An Atmospheric Dispersion Program for Evaluating Design Basis Accidental Releases of Radioactive Materials from Nuclear Power Stations," November 1982.

— — — — , NUREG/CR-2919, "XOQDOQ Computer Program for the Meteorological Evaluation of Routine Effluent Releases at Nuclear Power Stations," September 1977.

Requests for single copies of Standard Review Plan sections, Branch Technical Positions, (NUREG-0800) (which may be reproduced) should be made to the U.S. Nuclear Regulatory Commission, Washington, DC 20555, Attention: Reproduction and Distribution Services Section, or by fax to (301) 415-2289; or by email to <u>DISTRIBUTION@nrc.gov</u>. Electronic copies of this section are available through the NRC's public Web site at <u>http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr0800/</u>, or in the NRC's Agencywide Documents Access and Management System, at <u>http://www.nrc.gov/reading-rm/adams.html</u>, under ADAMS Accession No. ML070550084.

— — — — —, NUREG/CR-4013, "LADTAP II - Technical Reference and User Guide," April 1986.

— — — — , NUREG/CR-4653, "Gaspar II - Technical Reference and User Guide," March 1986.

— — — — —, NUREG/CR-4461, Revision 2, "Tornado Climatology of the Contiguous United States," PNNL-15112, February 2007.

-----, NUREG/CR-5613, "Paleoliquefaction Features along the Atlantic Seaboard."

— — — — —, NUREG/CR-6372, "Recommendations for Probabilistic Seismic Hazard Analysis: Guidance and Use of Experts," April 1997.

— — — — —, NUREG/CR-6607, "Guidance for Performing Probabilitic Seismic Hazard Analysis for a Nuclear Plant Site: Example Application to the Southeastern United States," October 2002.

— — — — —, NUREG/CR-6769, "Technical Basis for Revision of Regulatory Guidance on Design Ground Motions: Development of Hazard- and Risk-Consistent Seismic Spectra for Two Sites," April 2002.

Draft Regulatory Guides

— — — — , DG-1143, "Design-Basis Tornado and Tornado Missiles for Nuclear Power Plants," January 2006.

— — — — , DG-1145, "Combined License Applications for Nuclear Power Plant (LWR Edition)," September 2006.

Regulatory Guides⁴¹

— — — — , RG 1.23, Proposed Revision 1, "Onsite Meteorological Programs," September 1980.

— — — — , RG 1.27, Revision 2, "Ultimate Heat Sink for Nuclear Power Plants," January

⁴¹ Regulatory Guides are available electronically through the Electronic Reading Room on the NRC's public Web site at <u>http://www.nrc.gov/reading-rm/doc-collections/reg-guides/</u>. Single copies of regulatory guides may also be obtained free of charge by writing the Reproduction and Distribution Services Section, ADM, USNRC, Washington, DC 20555-0001, or by fax to (301) 415-2289, or by email to <u>DISTRIBUTION@nrc.gov</u>. Copies are available for inspection or copying for a fee from the NRC's Public Document Room at 11555 Rockville Pike, Rockville, MD; the PDR's mailing address is USNRC PDR, Washington, DC 20555; telephone (301) 415-4737 or (800) 397-4209; fax (301) 415-3548; email <u>PDR@nrc.gov</u>. Copies are also available from the National Technical Information Service (NTIS) at 5285 Port Royal Road, Springfield, Virginia 22161, online at <u>http://www.ntis.gov</u>, by telephone at (800) 553-NTIS (6847) or (703) 605-6000, or by fax to (703) 605-6900.

1976.

— — — — —, RG 1.59, Revision 2, "Design Basis Floods for Nuclear Power Plants," August 1977.

— — — — , RG 1.60, Revision 1, "Design Response Spectra for Seismic Design of Nuclear Power Plants," December 1973.

— — — — , RG 1.70, "Standard Format and Content for Safety Analysis Reports for Nuclear Power Plants," November 1978.

— — — — —, RG 1.76, "Design-Basis Tornado and Tornado Missiles for Nuclear Power Plants."

— — — — , RG 1.78, Revision 1, "Evaluating the Habitability of a Nuclear Power Plant Control Room During a Postulated Hazardous Chemical Release," December 2001.

— — — — , RG 1.91, Revision 1, Evaluations of Explosions Postulated to Occur on Transportation Routes Near Nuclear Power Plants," February 1979.

— — — — , RG 1.101, Revision 4, "Emergency Planning and Preparedness for Nuclear Power Reactors," July 2003.

— — — — , RG 1.102, Revision 1, "Flood Protection for Nuclear Power Plants," September 1976.

— — — — —, RG 1.109, Revision 1, "Calculation of Annual Doses to Man from Routine Releases of Reactor Effluents for the Purpose of Evaluating Compliance with 10 CFR Part 50, Appendix I," October 1977.

— — — — , RG 1.111, Revision 1, "Methods for Estimating Atmospheric Transport and Dispersion of Gaseous Effluents in Routine Releases from Light-Water-Cooled Reactors," July 1977.

— — — — , RG 1.112, "Calculation of Releases of Radioactive Materials in Gaseous and Liquid Effluents from Light-Water-Cooled Power Reactors," May 1977.

— — — — , RG 1.113, Revision 1, "Estimating Aquatic Dispersions of Effluents from Accidental and Routine Reactor Releases for the Purpose of Implementing Appendix I," April 1977.

— — — — , RG 1.125, Revision 1, "Physical Models for Design and Operation of Hydraulic Structures and Systems for Nuclear Power Plants," October 1978.

— — — — , RG 1.132, "Site Investigations for Foundations of Nuclear Power Plants," October 2003.

— — — — —, RG 1.138, "Laboratory Investigations of Soils and Rocks for Engineering Analysis and Design of Nuclear Power Plants," April 1978.

— — — — , RG 1.145, Revision 1, "Atmospheric Dispersion Models for Potential Accident Consequence Assessments at Nuclear Power Plants," November 1982.

— — — — , RG 1.165, "Identification and Characterization of Seismic Sources and Determination Safe Shutdown Earthquake Ground Motion," March 1997.

— — — — , RG 1.183, "Alternative Radiological Source Terms for Evaluating Design Basis Accidents at Nuclear Power Reactors," July 2000.

— — — — , RG 1.198, "Procedures and Criteria for Assessing Seismic Soil Liquefaction at Nuclear Power Plant Sites," November 2003.

— — — —, RG 1.206, "Combined License Applications for Nuclear Power Plants (LWR Edition)," March 2007.

— — — — , RG 1.208, "A Performance-Based Approach to Define Site-Specific Earthquake Ground Motion," March 2007.

— — — — , RG 4.2, Revision 2, "Preparation of Environmental Reports for Nuclear Power Stations," September 2000.

— — — — , RG 4.4, "Reporting Procedure for Mathematical Models Selected to Predict Heated Effluent Dispersion in Natural Water Bodies," May 1974.

— — — — —, RG 4.7, Revision 2, "General Site Suitability Criteria for Nuclear Power Stations," April 1998.

Other NRC Documents

Letter from K. O'Donohue to J.A. "Buzz" Miller, "Site Visit to Vogtle To Observe Erection of a Mechanically Stabilized Earth (MSE) Demonstration Retaining Wall To Support Early Site Permit Limited Work Authorization, and Combined License Activities (Docket No. 52-011 For ESP and No. 52-025 and 52-026 for COLs)," August 14, 2008, ADAMS Accession No. ML082280539.

Letter from D.B. Matthews to W.E. Cummings, "Acceptance Review of the AP1000 Design Certification Amendment Application for Revision 16," January 18, 2008, ADAMS Accession No. ML073600743.

Letter from M.S. Lesser to J.A. "Buzz" Miller, "Site Visit to Vogtle To Observe Test Pad Activities To Support Early Site Permit, Limited Work Authorization, and Combined License Pre-Application Activities (Project No. 755)," January 11, 2008, ADAMS Accession No. ML080110651. "Liquid Radioactive Release Lessons Learned Task Force Final Report," September 1, 2006.

RIS⁴² 2004-07, "Release of Final Review Standard (RS)-002, 'Processing Applications for Early Site Permit'," May 19, 2004.

RIS 2005-02, "Clarifying the Process for Making Emergency Plan Changes," February 14, 2005.

"Approval of Change to Nuclear Management Company Quality Assurance Topical Report," September 2, 1005, ADAMS Accession No. ML052430024.

"Smart Application Template for Requesting Emergency Plan Changes Related to On-shift Staffing Levels and Augmentation Times," September 9, 2004, ADAMS Accession No. ML042530011.

"Edwin I. Hatch Nuclear Power Station, Units 1 and 2, Approval of Relief Request RR-27, Third-Year Interval Inservice Inspection Program (TAC Nos. MA6163 and MA6164)." March 20, 2000, ADAMS Accession No. ML003693241.

Memorandum from H.R. Denton to R.R. Maccary, "Site Analysis Branch Position - Winter Precipitation Loads," March 24, 1975.

Review Standard (RS)

-----, RS-002, "Processing Applications for Early Site Permits," May 3, 2004,

Westinghouse Electric Company LLC

APP-GW-GL-700, Revision 14, "AP1000 Design Control Document," Cover through Section 7, Instrument and Controls, Page 7.7-25, September 2004, ADAMS Accession No. ML050750282.

APP-GW-GL-700, Revision 16, "AP1000 Design Control Document," 2007, ADAMS Accession No. ML071580939

Westinghouse Savannah River Company (WSRC)

Cumbest, R.J., Stephenson, D.E., Wyatt, D.E., and Maryak, M., WSRC-TR-98-00346, Basement Surface Faulting and Topography for Savannah River Site and Vicinity," 1998.

Cumbest, R.J., Wyatt, D.E., Stephenson, D.E., and Maryak, M., WSRC-TR-2000-00310,

⁴² Regulatory Issue Summaries (RISs) are available electronically through the Public Electronic Reading Room on the NRC's public Web site at <u>http://www.nrc.gov/reading-rm/doc-collections/gen-comm/reg-issues/</u>. Copies are also available for inspection or copying for a fee from the NRC's Public Document Room at 11555 Rockville Pike, Rockville, MD; the PDR's mailing address: USNRC PDR, Washington, DC 20555; telephone (301) 415-4737 or (800) 397-4209; fax (301) 415-3548; email <u>PDR@nrc.gov</u>.

"Comparison of Cenozoic faulting at the Savannah River site to fault characteristics of the Atlantic Coast fault province: implications for fault capability," 2000.

Lee, R., "Investigations of Nonlinear Dynamic Properties at the Savannah River Site," *Report No. WSRC-TR-96-0062, Rev. 1*, Aiken, SC, 1996.

Lee, R.C., "Development of MFFF-Specific Vertical-to-Horizontal Seismic Spectral Ratios," Report No. WSRC-TR-2001-00342, Rev. 0, Westinghouse Savannah River Co., Aiken, SC, 2001.

Moos, D., and Zoback, M.D., WSRC-TR-2001-00499, "In situ stress measurements in the NPR Hole, Volume I - results and interpretations," Final Report submitted to Westinghouse Savannah River Company, DOE Contract No. DE-AC09-96SSR18500, 41 p., 1992.

Snipes, D.S., Fallaw, W.C., and Price Jr., V., "The Pen Branch fault: documentation of late Cretaceous and Tertiary faulting in the coastal plain of South Carolina (DRAFT)," Westinghouse Savannah River Company Draft Report, 44 p., January 8, 1989.

Stieve, A., Coruh, C., and Castain, J., WSRC-RP-94-013, "Confirmatory drilling project final report (U)," 298 p., 1994.

Individuals

Abrahamson, N.N., and W.J. Silva, "Empirical response spectral attentuation relations for shallow crustal earthquakes," Bull. Seism. Soc. Am., Empirical Repsonse Spectral Attenutation Relations for Shallow Crustal Earthquakes, Seismological Research Letters, v. 68, n. 1, 94-127, Jan/Feb 1997.

Amick, D., "Paleoliquefaction Investigations Along the Atlantic Seaboard with Emphasis on the Prehistoric earthquake Chronology of Coastal South Carolina," unpub. Ph.D. dissertation, University of South Carolina, selected pages, 1990.

Amick, D., and Gelinas, R., "The search for evidence of large prehistoric earthquakes along the Atlantic seaboard," Science, v. 251, p. 655-658, 1991.

Amick, D., Maurath, G., and Gelinas, R., 1990, "Characteristics of seismically induced liquefaction sites and features located in the vicinity of the 1886 Charleston, South Carolina earthquake," Seismological Research Letters, v. 61, p. 117-130, 1990.

Atkinson, G.M. and Boore, D.M. "Ground-Motion Relations for Eastern North America." *Bulletin of Seismological Society of America*. Vol. 85, No. 1, pp. 17-30. 1995.

T.J. Bander, "PAVAN: An Atmospheric Dispersion Program for Evaluating Design Basis Accidental Releases of Radioactive Materials from Nuclear Power Stations," NUREG/CR-2858, USNRC, November 1982. Bakun, W. H. and M. G. Hopper, "The 1811-1812 New Madrid, Missouri, and the 1886 Charleston, South Carolina Earthquakes," *Bulletin of the Seismological Society of America,* Vol. 94, No. 1, pp. 64-75, 2004.

Bartholomew, M.J., Brodie, B.M., Willoughby, R.H., Lewis, S.E., and Syms, F.H., "Mid-Tertiary paleoseismites: syndepositional features and section restoration used to indicate paleoseismicity, Atlantic coastal plain, South Carolina and Georgia," Geological Society of America Special Paper 359, pp. 63-74, 2002.

Behrendt, J.C., and Yuan, A., "The Helena Banks strike-slip(?) fault zone in the Charleston, South Carolina, earthquake area-Results from a marine, high-resolution, multichannel, seismicreflection survey," Geological Society of America Bulletin, v. 98, p. 591-601, 1987.

Berkman, E., "High resolution seismic survey - Pen Branch fault - Savannah River Site, South Carolina," Emerald Exploration Consultants, Inc. Report, Austin, TX, 89 p., 210 fig., 1991.

Chapman, M., Personal Communication, 2005.

Cramer, C.H., "A Seismic Hazard Uncertainty Analysis for the New Madrid Seismic Zone," Engineering Geology, v. 62, p. 251-266, 2001.

Dallmeyer, R.D., Wright, J.E., Secor, D.T., Jr., and Snoke, A.W., "Character of the Alleghenian Orogeny in the Southern Appalachians: Part II. Geochronological constraints on the tectonothermal evolutions of the Eastern Piedmont in South Carolina," Geological Society of America Bulletin. V. 97, pp. 1329-1344, 1986.

Grant, L.B. and Sieh, K., "Paleoseismic Evidence of Clustered Earthquakes on the San Andreas Fault in the Carrizo Plain, California," Journal of Geophysical Research, v. 99, n. B4, p. 6819-6841, 1994.

Hanson, K.L., Bullard, T.F., de Wit, M.W., and Stieve, A.L., "Applications of Quaternary stratigraphic, soil-geomorphic, and quantitative geomorphic analyses to the evaluation of tectonic activity and landscape evolution in the upper Coastal Plain, S.C.," Proceedings, 4th DOE Natural Phenomena Hazards Mitigation Conference, Atlanta, Georgia, v. 2, p. 672-681, 1993.

Henry, V.J., "Summary of results of a seismic survey of the Savannah River adjacent to the Savannah River Plant site, Burke County, Georgia," Georgia Geologic Survey Project Report 24, 22 p., 1995.

Hu, K., S.L. Glassman, and P. Talwani. "Magnitudes of prehistoric earthquakes in the South Carolina Coastal Plain from geotechnical data." *Seismological Research Letters.* 73:979–991, 2002.

Hu, K., Gassman, S.L., and Talwani, P., "In-situ properties of soils at paleoliquefaction sites in the South Carolina Coastal Plain," Seismological Research Letters, v 73, no 6, pp 964-978, 2002.

Johnston, A.C., Reinbold, D.J., and Brewer, S.I., "Seismotectonics of the southern Appalachians," Bulletin of the Seismological Society of America, v. 75, no. 1, p. 339-384, 1985.

Johnston. A. C. and S. C. Chiu, "A comparison of seismicity: The New Madrid and southern Appalachian seismic zones, 1982-1988," in Chiu, S.C., ed., CERI Quarterly Seismological Bulletin, January-March, v. X, no. 1, p.81-90, 1989.

King, E.R., and Zietz, I., "The New York-Alabama lineament: geophysical evidence for a major crustal break in the basement beneath the Appalachian basin," Geology, v. 6. p. 312-318, 1978.

Kramer, S. L., *Geotechnical Earthquake Engineering.* Prentice-Hall, Inc.: Upper Saddle River, NJ, 1996.

Maher, H.D., Jr., "Kinematic history of mylonitic rocks from the Augusta fault zone, South Carolina and Georgia," American Journal of Science, v. 287, p. 795-816, 1987.

Leon, E., "Effect of aging of sediments on paleoliquefaction evaluation in the South Carolina Coastal Plain," unpub., Ph.D. dissertation, University of South Carolina, 181p, 2003.

Leon, E., Gassman, S.L., and Talwani, P., "Effect of soil aging on assessing magnitudes and accelerations of prehistoric earthquakes," Earthquake Spectra, v 21, no 3, pp737-759, 2005.

Maher, H.D., Dallmeyer, R.D., Secor Jr., D.T., and Sacks, P.E., "40-Ar/39-Ar constraints on chronology of August fault zone movement and late Alleghanian extension, southern Appalachian piedmont, South Carolina and Georgia," American Journal of Science, v. 294, p. 428-448, 1994.

Marple, R. T. and P. Talwani, "Evidence for a Buried Fault System in the Coastal Plain of the Carolinas and Virginia - Implications for Neotectonics in the Southeastern United Sates," *Geological Society of America Bulletin, Vol.* 112, No. 2, pp. 200-220, February 2000.

Obermeier, S., personal communication, September 2, 2005.

Obermeier, S.F., "Using liquefaction-induced features for paleoseismic analysis," in McCalpin, J.P., ed., Paleoseismology: San Diego, Academic Press, p. 331-396, 1996.

Obermeier, S.F., Weems, R.E., Jacobson, R.B., and Gohn, G.S., "Liquefaction evidence for repeated Holocene earthquakes in the coastal region of South Carolina," in Jacob, K.H., and Turkstra, C.J., eds., Earthquake hazards and the design of constructed facilities in the eastern United States: Annals of the New York Academy of Sciences, v. 558, p. 183-195, 1989.

Prowell, D.C., and O'Connor, B.J., "Belair fault zone-Evidence of Tertiary fault displacement in eastern Georgia," Geology, v. 6, p. 681-684, 1978.

Ramsay and Huber, *The Techniques of Modern Structural Geology. Volume 2: Folds and Fractures*, Academic Press, London, 1987.

Savage, J.C., "Criticism of Some Forecasts of the National Earthquake Evaluation Council," Bulletin of the Seismological Society of America, v. 81, n. 3, p. 862-881, 1991.

Schumaker, R.C., "The New York-Alabama lineament: an early lapetian wrench fault?" American Association of Petroleum Geologists Bulletin, v. 84, no.4, p. 1393, 2000.

Sieh, K., Stuiver, M., and Brillinger, D., "A More Precise Chronology of Earthquakes Porduced by the San Andreas fault in Southern California," Journal of Geophysical Research, v. 94, n. B1, p. 603-623, 1989.

Snipes, D.S., Fallaw, W.C., Price Jr., V., and Cumbest, R.J., "The Pen Branch Fault: Documentation of late Cretaceous-Tertiary fdaulting in the Coastal Plain of South Carolina," Southeastern Geology, v. 33, no. 4, p. 195-218, 1993.

Soller, D.R., and Mills, H.H., "Surficial geology and geomorphology, in Horton Jr., J.W., and Zullo, V.A., The Geology of the Carolinas," Carolina Geological Society Fiftieth Anniversary Volume, University of Tennessee Press, Knoxville, pp. 290-308, 1991.

Stevenson, D., and Talwani, P., "2001-2002 Upper Three Runs sequence of earthquakes at the Savannah River site, South Carolina," Seismological Research Letters, v. 75, pp. 107-116, 2004.

Stieve, A., and Stephenson, D., 1995, "Geophysical evidence for post late Cretaceous reactivation of basement structures in the central Savannah River area," Southeastern Geology, v. 35, p. 1-20

Syms, F., "Birdwell elastic properties logs for SRS boreholes DRB-9, DRB-10, and DRB-11," per. comm., Savannah River Site, August 26, 2005.

Talwani, P., personal communication, September 8, 2005.

Talwani, P., Rawlins, J., and Stephenson, D.E., "The Savannah River plant, South Carolina earthquake of June 9, 1985 and its tectonic setting," Earthquake Notes, v. 56, pp. 101-106, 1985.

Talwani, P. and Schaeffer, W.T., "Recurrence Rates of Large Earthquakes in the South Carolina Coastal Plain Based on Paleoliquefaction Data," Journal of Geophysical Research, v. 106, no. B4, pp. 6621-6642, 2001.

Toro, G.R., "Probabilistic Models of Site Velocity Profiles for Generic and Site-Specific Ground-Motion Amplification Studies," Published as an appendix in Silva, W.J., N. Abrahamson, G. Toro, and C. Costantino (1997). "Description and validation of the stochastic ground motion model." Report submitted to Brookhaven National Laboratory, Associated Universities, Inc. Upton, New York 11973, Contract No. 770573, 1996. Tuttle, M.P. "The use of liquefaction features in paleoseismology: lessons learned in the New Madrid seismic zone, central United States," *Journal of Seismology*. 5:361–380, 2001.

Wheeler, R.L., "Sources of seismic hazard near the eastern Great Lakes," Geological Society of America Abstracts with Programs, v. 28, no. 3, p. 110, 1996.

Wheeler, R.L., and Johnston, A.C., "Geologic implications of earthquake source parameters in central and eastern North America," Seismological Research Letters, v. 63, no. 4, p. 491-514, 1992.

Other References

Corporate Authors and References

Bechtel Power Corporation, "Theoretical and User's Manual for SHAKE 2000,' prepared by N. Deng and F. Ostandan, San Francisco, CA., 2000.

Bechtel Power Corporation, "Field Review of geologic conditions near the Vogtle site relative to possible extension for the postulated 'Pen Branch fault' into Georgia," report prepared for Georgia Power Company, 195 p., September 15 1989.

Bechtel Power Corporation, "Seismic Analysis Report, Vogtle Nuclear Generating Plant Units 1 and 2," October 1984.

Bechtel Power Corporation - Geology group, "Geologic evaluation of trench exposure - Vogtle electric generating plant," 43 pp., 1984.

Bechtel Power Corporation, "Vogtle Electric Generating Plant, Studies of Postulated Millett Fault," October 1982.

Bowles, J.E., "Foundation Analysis and Design," Third Edition, Mc-Graw-Hill Book Company, New York, 1982

Bechtel Power Corporation - Bechtel 1974b, "Report on Foundation Investigations," Alvin W. Vogtle Nuclear Project, July 1974.

Constantino, Carl J., "Recommendation for Uncertainty Estimates in Shear Modulus Reduction and Hysteretic Damping Relationships," Department of Civil Engineering, City University of New York, 1997.

Davie, J.R., and Lewis, M.R., "Settlement of Two Tall Chimney Foundations," Proceedings, Second International Conference on Case Histories in Geotechnical Engineering, St. Louis, MO, June 1988. Geomatrix Consultants, Inc., "Preliminary Quaternary and Neotectonic Studies": Savannah River Site, South Carolina, prepared for Lawrence Livermore National Laboratory and Westinghouse Savannah River Company, February 1993.

Lindvall, S.C., and Hartleb, R.D., "Update of Charleston Seismic Source and Integration with EPRI Source Models," Bechtel Engineering Study Report 25144-006-V14-CY06-00006, revision 001, 2006.

Vogtle Electric Generating Plant, Annual Radiological Environmental Operating Report for 2004, Southern Company.

Individual Authors

Dean, C., "Will Warming Lead to a Rise in Hurricanes?" *The New York Times.* p. F01, May 2007.

Eilperin, J., "Scientists Disagree On Link Between Storms, Warming," *Washington Post*, p. A03, August 2006.

Huffines, G. and R. E. Orville, 1999, "Lightning ground flash density and thunderstorm duration in the continental United States: 1989-96." *J. Appl. Meteor*, **38**, 7, 1013-1019.

Kerr, R., "A Tempestuous Birth for Hurricane Climatology." *Science.* Vol 312, pp. 676-678, May 2006.

Mayne, P.W. "Critical State Soil Mechanics for Dummies," Civil & Environmental Engineering, Georgia Institute of Technology, Atlanta, GA, 2006.

Ohya, S., "In Situ P and S Wave Velocity Measurement," Proceeding of In Situ '86, ASCE, New York, NR, 1986.

Peck, R.B., Hanson, W.E., and Thorburn, T.H., "Foundation Engineering," Second Edition, John Wiley and Sons, Inc., New York, 1974.

Skempton, A.W., "Discussion of the Planning and Design of the New Hong Kong Airport," Proceedings of the Institution of Civil Engineers, Vol. 7, pp. 305-307, 1957.

Soubra, A.H., "Upper-Bound Solutions for Bearing Capacity of Foundations," Journal of Geotechnical and Geoenvironmental Engineering, Vol. 125 No. 1, ASCE Publications, Reston, CA, pp. 59-68.

Terzaghi, K., "Evaluation of Coefficients of Subgrade Reaction," Geotechnique, Volume 5, 1955.

Vesic, A.S., "Bearing Capacity of Shallow Foundation," Foundation Engineering Handbook, H.F. Winterkorn and H.Y. Fang, Editors, Van Nostrand Reinhold Company, New York, 1975.

Wang, J. X. L., and J. K. Angell, Air Stagnation Climatology for the United States (1948-1998), NOAA Air Resources Laboratory Atlas No. 1, Air Resources Laboratory, Environmental Research Laboratories, Office of Oceanic and Atmospheric Research, Silver Spring, MD, April 1999.

Witze, A., "Tempers Flare at Hurricane Meeting." Nature. Vol. 441, p. 11, May 2006.

Youd, T.L., Idriss, I.M., Andrus, R.D., Arango, I.,Castro, G., Christian, J.T., Dobry, R., Liam Finn, W.D., Harder, L.F., Hynes, Jr., M.E., Ishihara, K., Koester, J.P., Laio, S.S.C., Marcuson, III, W.F., Martin, G.R., Mitchell, J.K., Moriwaki, Y., Power, M.S., Robertson, P.K., Seed, R.B., Stokoe, II, K.H., "Liquefaction Resistance of Soils: Summary Report From the 1996 NCEER and 1998 NCEER/NSF Workshops on Evaluation of Liquefaction Resistance of Soils," Journal of Geotechnical and Geoenvironmental Engineering, 127 (10). Pp. 817-833, 2001.