

**UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION**

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)	Docket No. 52-011-ESP
)	
Southern Nuclear Operating Company)	ASLBP No. 07-850-01- ESP-BD01
)	
(Early Site Permit for Vogtle ESP Site))	February 6, 2009

**Southern Nuclear Operating Co., Docket No. 52-011-ESP
March 2009 Mandatory Hearing on Contested Issues
Hearing Exhibits**

Party Exh. #	Witness/ Panel	Description
NRC000001		NUREG - 1872, "Final Environmental Impact Statement for an Early Site Permit (ESP) at the Vogtle Electric Generating Plant" (August 2008) ¹

¹ In accordance with the Board's Order of December 15, 2008, Counsel for the Applicant, Staff and Joint Intervenors have agreed, subject to the approval of the Board; (1) that in order to limit duplication of exhibits, Exhibit NRC000001, the Final Environmental Impact Statement, will be offered into evidence at or before the commencement of Applicant's evidence, notwithstanding that it bears an NRC Staff exhibit number, and (2) that SNC000001, the Applicant's Environmental Report, will be admitted into evidence at the beginning of Applicant's evidence, separate from the admission of the testimony of Mr. Moorer, the sponsoring witness for the Environmental Report.

Environmental Contention – EC 1.2		
SNC000001	Thomas C. Moorer	Environmental Report for Southern Nuclear Operating Company's Vogtle Early Site Permit Application (Chapters 1; 2.1; 2.3; 2.4.2; 3.0-3.4; 4.2; 4.3.2; 5.2; 5.3; 9.4; 10.5)
SNC000002	Anthony R. Dodd/Matthew T. Montz	Anthony R. Dodd Curriculum Vitae
SNC000003	Anthony R. Dodd/Matthew T. Montz	Matthew T. Montz Curriculum Vitae
SNC000004	Anthony R. Dodd/Matthew T. Montz	Interim Report of Fish Impingement at the Plant Vogtle Electric Generating Plant (January 2009)
SNC000005	Anthony R. Dodd/Matthew T. Montz	Entrainment Assessment at the Plant Vogtle Electric Generating Plant (October 2008)
SNC000006	Anthony R. Dodd/Matthew T. Montz	Photo depicting impingement sampling apparatus/insert net as mounted in the screen wash pit
SNC000007	Anthony R. Dodd/Matthew T. Montz	Photo depicting entrainment sampling apparatus mounted at the edge of the intake canal
SNC000008	Anthony R. Dodd/Matthew T. Montz	Photo depicting individual conducting entrainment sampling via boat-mounted plankton net sampler on the Savannah River
SNC000009	Anthony R. Dodd/Matthew T. Montz	Photo depicting approach view of the canal and pump house

SNC000010	Anthony R. Dodd/Matthew T. Montz	Photo depicting view of the outer intake canal at the Savannah River
SNC000011	Anthony R. Dodd/Matthew T. Montz	Images from Thermal Study depicting river water temperature
SNC000012	Dr. Charles C. Coutant	Dr. Charles C. Coutant Curriculum Vitae
SNC000013	Dr. Charles C. Coutant	Literature References for EC 1.2 Testimony by Dr. Charles C. Coutant
SNC000014	Thomas C. Moorer	Thomas C. Moorer Curriculum Vitae
SNC000015	Thomas C. Moorer	List of references submitted in response to RAIs
SNC000016	Thomas C. Moorer	USGS Charts depicting recent flows of Savannah River
SNC000017	Thomas C. Moorer	U.S. Army Corps of Engineers Savannah River Drought Contingency Plan (March 1989)
SNC000018	Thomas C. Moorer	FONSI for Drought Contingency Plan Update (August 2006)
Environmental Contention - EC 1.3		
SNC000019	Dr. Charles C. Coutant	Literature Regarding the Shortnose Sturgeon
SNC000020	Dr. Charles C. Coutant	Literature Regarding the Robust Redhorse

SNC000021	Dr. Charles C. Coutant	Robust Redhorse Conservation Strategy Report (2003)
SNC000022	Dr. Charles C. Coutant	August 11, 2008 Letter from Mr. Roy E. Crabtree of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration to Mr. William Burton of the Nuclear Regulatory Commission regarding Biological Assessment for the Shortnose Sturgeon for the VEGP ESP
SNC000023	James W. Cuchens/ Christopher B. Lazenby	James W. Cuchens Curriculum Vitae
SNC000024	James W. Cuchens/ Christopher B. Lazenby	"Feasibility of Air-Cooled Condenser Cooling System for the Standardized AP1000 Nuclear Plant" (January 9, 2009) (the "Revised Report")
SNC000025	James W. Cuchens/ Christopher B. Lazenby	Christopher B. Lazenby Curriculum Vitae
SNC000026	James W. Cuchens/ Christopher B. Lazenby	Dry Cooling Presentation by James W. Cuchens
SNC000027	James W. Cuchens/ Christopher B. Lazenby	AP1000 Design Control Document Rev. 17 – Section 10.1
SNC000028	James W. Cuchens/ Christopher B. Lazenby	AP1000 Design Control Document Rev. 17 – Section 10.2

SNC000029	James W. Cuchens/ Christopher B. Lazenby	G.E. Steam Turbine Product Brochure
SNC000030	James W. Cuchens/ Christopher B. Lazenby	Overview of GE single-exhaust, dual-flow turbine designed for “Medium Fossil Applications”
SNC000031	James W. Cuchens/ Christopher B. Lazenby	Website Description of the Palo Verde Nuclear Power Plant cooling system
SNC000032	James W. Cuchens/ Christopher B. Lazenby	Overview of Kendal Power Station Overview of Majuba Power Station Overview of Matimba Power Station
SNC000033	James W. Cuchens/ Christopher B. Lazenby	Energy Information Administration Existing Generating Units in the United States by State, Company and Plant, 2006 (p. 188) - Description of the Midlothian Power Plant
SNC000034	James W. Cuchens/ Christopher B. Lazenby	“Emerging Issues and Needs in Power Plant Cooling Systems” by Wayne C. Micheletti and John M. Burns, P.E., presented at the 2002 National Energy Technology Laboratory (NETL) Electric Utilities and Water: Emerging Issues and R&D Needs Conference
SNC000035	James W. Cuchens/ Christopher B. Lazenby	Study by Michael Kjølgaard, (“June 2003: a year in review: ASHRAE design conditions vs. 2002 - weather report,” Engineered Systems, August 2003, FindArticles.com, 24 Jul. 2008

SNC000036	James W. Cuchens/ Christopher B. Lazenby	Cooling Technology Institute, "Why Every Air Cooled Steam Condensor Needs a Cooling Tower" (2003)
SNC000037	James W. Cuchens/ Christopher B. Lazenby	TM2-2 data set constructed by the National Renewable Energy Laboratory (NREL) in Golden, CO, as listed in BinMaker PLUS software published by InterEnergy Software Inc., ©1999
SNC000038	James W. Cuchens/ Christopher B. Lazenby	National Climatic Data Center, Normal Daily Maximum Temperature, Deg F
SNC000039	James W. Cuchens/ Christopher B. Lazenby	Gas Turbine Handbook (2007-2008)
SNC000040	Thomas C. Moor	Photo Depicting Aerial View of the Plant Vogtle Site with overlay of Dry Cooling Facilities
SNC000041	Thomas C. Moor	Georgia Department of Natural Resources - Wildlife Resources Division Protected Species List
SNC000042	Thomas C. Moor	Listing of Federal Endangered and Threatened Wildlife, 50 C.F.R. § 17.11(h) (Dec. 11, 2008)
Environmental Contention - EC 6.0		
SNC000043	Jeffrey L. Neubert, Benjamin B. Smith, Jr., Captain H. David Scott	Jeffrey L. Neubert Curriculum Vitae

SNC000044	Jeffrey L. Neubert, Benjamin B. Smith, Jr., Captain H. David Scott	Benjamin B. Smith, Jr. Curriculum Vitae
SNC000045	Jeffrey L. Neubert, Benjamin B. Smith, Jr., Captain H. David Scott	Captain H. David Scott Curriculum Vitae
SNC000046	Jeffrey L. Neubert, Benjamin B. Smith, Jr., Captain H. David Scott	Savannah River Survey; Southeastern Marine (2008)
SNC000047	Thomas C. Moorer	U.S. Army Corps of Engineers Final Environmental Impact Statement for the Savannah River Navigation Maintenance (September 1976)
SNC000048	Thomas C. Moorer	J. Strom Thurmond Dam and Lake Water Control Plan and Guide Curves
SNC000049	Thomas C. Moorer	December 15, 2008 E-mail from Matthew Montz to Tom Moorer
SNC000050	Thomas C. Moorer	NUREG - 1087, "Final Environmental Statement Related to the Operation of Vogtle Electric Generating Plant, Units 1 and 2" (March 1985) – Summary and Conclusions
SNC000051	Dr. Charles C. Coutant	"Analysis of Impacts of Navigation Channel Maintenance for Barge Delivery of Materials for Construction of Vogtle Units 3 and 4 on the Ecology of the Savannah River." Charles C. Coutant, Ph.D. (January 2, 2009)
Environmental Contention - EC 1.2 (Rebuttal)		
SNC000052	Anthony R. Dodd/Matthew T. Montz	Fisheries Techniques, Second Edition. 1996. Eds. B. Murphy and D. Willis. Fisheries Techniques. American Fisheries Society, Bethesda, MD

SNC000053	Anthony R. Dodd/Matthew T. Montz & Thomas C. Moorer	Daily Average Discharge - USGS 021973269 Savannah River near Waynesboro, Georgia
SNC000054	Thomas C. Moorer	Inflow Data (Comparison of Thurmond Dam releases with flows at Vogtle)
SNC000055	Thomas C. Moorer	EPA Fact Sheet
Environmental Contention – EC 1.3 (Rebuttal)		
SNC000056	James W. Cuchens	Overview of Bilibino Nuclear Power Plant
SNC000057	James W. Cuchens	Overview of Units Referenced in Exhibit JTI000038
SNC000058	Charles R. Pierce	CV of Charles R. Pierce
SNC000059	Charles R. Pierce	NRC Backgrounder: New Nuclear Plant Designs
SNC000060	Charles R. Pierce	Early Site Permits; Standard Design Certifications; and Combined Licenses for Nuclear Power Reactors, 54 Fed. Reg. 15372 (1989)
SNC000061	Charles R. Pierce	Statement of NRC Chairman, Lando Zech, Jr., to the US House of Representatives (1989)
SNC000062	Charles R. Pierce	Position Paper on Standardization, Nuclear Power Oversight Committee (1991)
SNC000063	Charles R. Pierce	Statement by NRC Chairman, Ivan Selin, to US Council for Energy Awareness (1991)
SNC000064	Charles R. Pierce	Conduct of New Reactor Licensing Proceedings; Final Policy Statement, 73 Fed. Reg. 20963 (2008)
SNC000065	Charles R. Pierce	AP1000 DCD, Section 10.4

Environmental Contention – EC 6.0 (Rebuttal)		
SNC000066	Dr. Charles C. Coutant	Freshwater Mussel Surveys of the Pee Dee River Basin in South Carolina
SNC000067	Dr. Charles C. Coutant	NOAA Screening Quick References Tables