Last Revised: March 2, 2009

Southern Nuclear Operating Co., Docket No. 52-011-ESP
March 2009 Evidentiary Hearing on Contested Environmental Issues
Revised Direct and Rebuttal Exhibits

Party Exh. #	Witness/ Panel	Description
Direct Exhibits		
NRC000001	ALL	NUREG-1872, Final Environmental Impact Statement for an Early Site Permit (ESP) at the Vogtle Electric Generating Plant Site, Volumes 1 & 2 (August 2008) combined with corrected Appendix F and the September 3, 2008 Errata. Volume 1 (ML082240145); Volume 2 (ML082240165); Appendix F (ML082260203); Errata (ML082550040)
NRC000003 (Replaces JTI0000001)	Young (EC 1.2 and 1.3)	Academy of Natural Sciences of Philadelphia (ANSP), 2003. 2001 Savannah River Biological Surveys for Westinghouse Savannah River Company. Report No. 03-08F, Patrick Center for Environmental Research, Philadelphia, Pennsylvania. (ML071310328) (Per the Board's instruction to avoid the submission of duplicate exhibits, Joint Intervenors will rely upon NRC000003 rather than JTI000001 from Joint Intervenors' Exhibits filed January 9, 2009.)
NRC000004 (Replaces JTI000002)	Young (EC 1.2 and 1.3)	Academy of Natural Sciences of Philadelphia (ANSP), 2005. 2003 Savannah River Biological Survey for Westinghouse Savannah River Company. Report No. F04-06, Patrick Center for Environmental Research, Philadelphia, Pennsylvania. (ML071310324) (Per the Board's instruction to avoid the submission of duplicate exhibits, Joint Intervenors will rely upon NRC000004 rather than JTI000002 from Joint Intervenors' Exhibits filed January 9,

		2009.)
JTIR00003	Young (EC 1.2)	Affidavit of Young in Support of Joint Intervenors' Answer to SNC's Motion for Summary Disposition of Environmental Contention 1.2 (Nov. 13, 2007). (Affidavit Attached To: ML073170721)
JTI000004	Young (EC 1.2 and 1.3)	Paller, M. H., Tucker, R. C., and W. M. Starkel. 1995. Statistical methods for detecting ichthyoplankton density patterns that influence entrainment mortality. WSRC-MS--95-0122. AC09-89SR18035. Westinghouse Savannah River Co., Aiken, SC (United States).
JTIR00005	Young (EC 6.0)	Declaration of Young in Support of Joint Intervenors' Motion to Admit New Contention (Sept. 22, 2008). (Declaration Attached To: ML082671201)
JTI000006	Young (EC 1.2 and 1.3)	Wiltz, J. W. 1983. Vogtle Electric Generating Plant, Savannah River larval fish study, Burke County, Georgia, from January through August 1974. Operating license stage environmental report, Technical document. (ML071710056)
JTI000007	Young (EC 1.2 and 1.3)	Nichols, M. C. 1983. Vogtle Electric Generating Plant, survey of the drifting macroinvertebrates of the Savannah River, Burke County, Georgia, from September 1980, through August 1981. Operating license stage environmental report, Technical document. (ML071710058)
JTI000008	Young (EC 1.2 and 1.3)	Bilkovic, D. M., J. E. Olney, and C. H. Hershner. 2002. Spawning of American shad (*Alosa sapidissima*) and striped bass (*Morone saxatilis*) in the Mattaponi and Pamunkey Rivers, Virginia. Fisheries Bulletin 100:632-640.
JTI000009	Young (EC 1.2 and 1.3)	Overton, A. S., and R. A. Rulifson. 2007. Evaluation of plankton surface pushnets and oblique tows for comparing the catch of diadromous larval fish. Fisheries Research 86:99-104.
JTI000010	Young	Perez-Ruzafa, A., C. Marcos, I. M. Perez-Ruzafa, E. Barcala, M. I. Hegazi, and J. Quispe.

	(EC 1.2 and 1.3)	Detecting changes resulting from human pressure in a naturally-quick-changing and heterogenous environment: Spatial and temporal scales of variability in coastal lagoons. Estuarine Coastal and Shelf Science 75:175-188.
JTI000011	Young (EC 1.2 and 1.3)	Stier, D. J., and J. H. Crance. 1985. Habitat suitability index models and instream flow suitability curves: American shad. U.S. Fish Wildl. Serv. Biol. Rep. 82 (10.88).
JTI000012	Young (EC 1.2 and 1.3)	Pardue, G. B. 1983. Habitat suitability index models: alewife and blueback herring. U.S. Dept. Int. Fish Wildl. Serv. FWS/OBS-82/10.58.
JTI000013	Young (EC 1.2 and 1.3)	Crance, J. H. 1986. Habitat suitability index models and instream flow suitability curves: shortnose sturgeon. U.S. Fish Wildl. Serv. Biol. Rep. 82 (10.129).
JTI000014	Young (EC 1.2 and 1.3)	Bain, M. B., and J. L. Bain. 1982. Habitat suitability index models: coastal stocks of striped bass. U.S. Fish and Wildlife Service, Office of Biological Services, Washington, D.C. FWS/OBS-82/10.1.
JTI000015	Young (EC 1.2 and 1.3)	Fay, C. W., R. J. Neves, and G. B. Pardue. 1983. Species profiles: Life histories and environmental requirements of coastal fishes and invertebrates (Mid-Atlantic) – striped bass. U.S. Fish and Wildlife, Division of Biological Services, FWSOBS-82/11.8. U.S. Army Corps of Engineers, TR EL-82-4.
JTI000016	Young (EC 1.2 and 1.3)	Vaughn, C. C, and C. M. Taylor. 1999. Impoundments and the decline of freshwater mussels: A case study of an extinction gradient. Conservation Biology 13 (4): 912-920.
JTI000017	Young	Ricciardi, A., and J. B. Rasmussen. 1999. Extinction rates of North American freshwater fauna.

	(EC 1.2, 1.3 and 6.0)	Conservation Biology 13 (5): 1220-1222.
JTI000018	Young (EC 1.2 and 1.3)	Cosgrove, P. J., and L. C. Hastie. 2001. Conservation of threatened freshwater pearl mussel populations: river management, mussel translocation and conflict resolution. Biological Conservation 99 (2): 183-190.
JTI000019	Young (EC 1.2 and 1.3)	Layzer, J. B., and E. M. Scott. 2006. Restoration and colonization of freshwater mussels and fish in a southeastern United States tailwater. River Research and Applications 22 (4): 475-491.
JTI000020	Young (EC 1.2 and 1.3)	Williams, J. D., M. L. Warren, K. S. Cummings, J. L. Harris, and R. J. Neves. 1993. Conservation status of freshwater mussels of the United States and Canada. Fisheries 18:6-22.
JTI000021	Sulkin (EC 1.2 and 1.3)	Sulkin Tables in Support of Sulkin Prefiled Direct Testimony (Jan. 9, 2009).
JTI000022	Sulkin (EC 1.2 and 1.3)	Excerpts from: NUREG 1437, Generic Environmental Impact Statement for License Renewal of Nuclear Plants, Supplement 34, Regarding Vogtle Electric Generating Plant, Units 1 and 2, Final Report (Dec. 2008). (Entire Document: ML083380325)
JTI000023	Young (EC 1.2 and 1.3)	Declaration of Young in Support of Joint Intervenors' Petition for Intervention (Dec. 11, 2006). (Declaration Attached To: ML063470165)
NRC000012 (Replaces JTI000024)	Young (EC 1.2 and 1.3)	Paller, M. H., Saul, B. M., and D. V. Osteen. 1986. Distribution and abundance of ichthyoplankton in the mid-reaches of the Savannah River and selected tributaries. DPST-86-798:ECS-SR-27. Environmental and Chemical Sciences, Inc., Aiken, SC. (ML071710043)

		(Per the Board's instruction to avoid the submission of duplicate exhibits, Joint Intervenors will rely upon NRC000012 rather than JTI000024 from Joint Intervenors' Exhibits filed January 9, 2009.)
JTI000025	Sulkin (EC 1.2 and 1.3)	Letter from SNC to U.S. Nuclear Regulatory Commission, Document Control Desk, enclosing SNC comments to the VEGP Draft Environmental Impact Statement (Dec. 26, 2007). (ML073620401)
JTI000026	Young (EC 6.0)	U.S. Department of Commerce, National Oceanic and Atmosphereic Administration, National Marine Fisheries Service. Final Recovery Plan for the Shortnose Sturgeon (Dec. 1998). (ML070170263)
JTI000027	Young (EC 6.0)	Duncan, W. W., Freeman, M. C., Jennings, C. A., and J. T. McLean. Considerations for flow alternatives that sustain Savannah River fish populations. http://ga.water.usgs.gov/pubs/other/gwrc2003/pdf/Duncan-GWRC2003.pdf.
NRC000025 (Replaces JTI000028)	Young (EC 6.0)	National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Atlantic Sturgeon Status Review Team. Status Review of Atlantic Sturgeon (Feb. 23, 2007). (ML082960581) (Per the Board's instruction to avoid the submission of duplicate exhibits, Joint Intervenors will rely upon NRC000025 rather than JTI000028 from Joint Intervenors' Exhibits filed January 9, 2009.)
JTI000029	Young (EC 6.0)	Bellas, J., Ekelund, R., Halldórsson, H. P., Berggren, M., and A. Granmo. 2007. Monitoring of organic compounds and trace metals during a dredging episode in the Göta Älv Estuary (SW Sweden) using caged mussels. Water Air Soil Pollution 181:265–279.
JTIR00030		Intentionally Omitted.

JTIR00031	Sulkin (EC 1.2)	Affidavit of Sulkin in Support of Joint Intervenors' Answer to SNC's Motion for Summary Disposition of Environmental Contention 1.2 (Nov. 9, 2007). (Affidavit Attached To: ML073170721)
JTI000032	Powers, Sulkin and Young (EC 1.3)	Excerpts from: NUREG 0099, Regulatory Guide 4.2, Rev. 2, Preparation of Environmental Reports for Nulcear Power Plants (July 1976). (Entire Document: ML003739519)
JTI000033	Powers (EC 1.3)	Powers, Bill. Peak and Annual Average Energy Efficiency Penalty of Optimized Air-Cooled Condenser on 515 MW Fossil Fuel-Fired Utility. Presented at: EPRI/CEC Cooling Strategies Conference, Sacramento, CA. June 1-2, 2005.
JTI000034	Powers (EC 1.3)	Cuchens, Jim and Lazenby, Chris. Feasibility of Air-Cooled Condenser Cooling System for the Standardized AP1000 Nuclear Plant. Southern Company Generation Engineering & Construction Services, Revision 3 (June 25, 2007). (ML072900667)
JTIR00035	Powers (EC 1.3)	Declaration of Powers in Support of Joint Intervenors Motion for Summary Disposition of EC 1.3 (Nov. 12, 2007). (Declaration Attached To: ML073170722)
JTI000036	Hayes (EC 6.0)	Excerpts from: NUREG 1555, Standard Review Plans for Environmental Reviews for Nuclear Power Plants (Oct. 1999).
JTI000037	Powers (EC 1.3)	Photograph of Dry-Cooled 1,650 MW Midlothian Energy and 4,000 MW Matimba.
JTIR00038	Powers (EC 1.3)	Balogh, A and Szabo, Z. The Advanced HELLER System, Technical Features & Characteristics. Presented at EPRI Conference on Advanced Cooling Strategies/Technologies, Sacramento, CA. June 2005.
JTIR00039		Intentionally Omitted.

JTI000040	Hayes (EC 6.0)	Smith, L., Jagoe, C., and Carl, F. Chlor-Alkali Plant Contributes to Mercury Contamination in the River. Proceedings of the 2007 Georgia Water Resources Conference, University of Georgia. March 27-29, 2008.
JTIR00041	Hayes (EC 6.0)	Declaration of Hayes in Support of Joint Intervenors' Motion to Admit New Contention (Sept. 21, 2008). (Declaration Attached To: ML082671201)
JTI000042	Young (EC 1.2, 1.3 and 6.0)	Curriculum Vitae of Shawn Young.
JTI000043	Sulkin (EC 1.2 and 1.3)	Curriculum Vitae of Barry Sulkin.
JTI000044	Powers (EC 1.3)	Curriculum Vitae of William Powers.
JTI000045	Hayes (EC 6.0)	Curriculum Vitae of Donald Hayes.

Rebuttal Exhibits

JTI000046	Young (EC 1.2)	Grabowski, T. B., and Isely, J.J. Effects of Flow Fluctuations on the Spawning Habitat of a Riverine Fish. Southeastern Naturalist 6:471-478 (2007).
JTI000047	Sulkin (EC 1.2)	U.S. Army Corps of Engineers, 2008 Thurmond Project Outflow Cubic Feet/Second.
JTI000048	Sulkin	U.S.G.S., Surface Water Annual Statistics for Georgia, Annual Mean Discharge at Waynesboro

	(EC 1.2)	Gage, 2005-2008.
JTIR00049	Powers (EC 1.3)	White, J. and Waddil, J. (Dominion Resources, Inc.). Thermal Issues and a Hybrid Cooling Technology in Siting North Anna Unit 3. PowerPoint presentation presented at the Second Thermal Ecology and Regulation Workshop (October 3, 2007).
JTIR00050	Powers (EC 1.3)	Excerpts From: NUREG-1811, Environmental Impact Statement for an Early Site Permit (ESP) at the North Anna ESP Site, Vol. 1, Final Report. (Entire Document: ML063470330)
JTI000051	Powers (EC 1.3)	Excerpts From: 26A6642AD, Rev. 4. "ESBWR Design Control Document", Tier 2, Chapter 1, Introduction and General Description of Plant, Sections 1.1-1.11. (Sept. 2007) (Entire Document: ML072900543)
JTI000052	Powers (EC 1.3)	Excerpts From: ESP No. ESP-003 for the North Anna ESP Site (Effective Until November 27, 2007). (Entire Document: ML073180440)