### UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

### ATOMIC SAFETY AND LICENSING BOARD PANEL

Before the Licensing Board:

G. Paul Bollwerk, III, Chairman Nicholas G. Trikouros Dr. James Jackson

In the Matter of

Docket No. 52-011-ESP

SOUTHERN NUCLEAR OPERATING CO.

(Early Site Permit for Vogtle ESP Site)

ASLBP No. 07-850-01-ESP-BD01 Originally Filed: January 9, 2009 Refiled: February 2, 2009

## <u>REVISED PREFILED DIRECT TESTIMONY OF BARRY W. SULKIN</u> <u>IN SUPPORT OF EC 1.3</u>

## Q1: Please state your name and address.

A1: My name is Barry W. Sulkin, and my address is 4443 Pecan Valley Road, Nashville,

Tennessee 37218.

## **Q2:** What is your current profession?

A2: I am an environmental consultant.

## Q3: What is your educational background?

A3: I received a Bachelor of Arts in Environmental Science in 1975 from the University of

Virginia, where I was awarded a Du Pont Scholarship. I received my Masters of Science in

Environmental Engineering in 1987 from Vanderbilt University, where I also attended on a full

scholarship. My areas of study at Vanderbilt included chemistry, biology, limnology, and hydrology of streams and lakes.

#### Q4: What is your professional background?

A4: In 1976, I joined the Staff of what is now called the Tennessee Department of Environment and Conservation as a Water Quality Specialist, and continued to work for this agency for almost 14 years. I worked in the Chattanooga, Knoxville, and Nashville field offices and the central office of what is now called the Division of Water Pollution Control. I received on the job training in addition to formal education, in areas such as stream assessment. My duties included inspections and enforcement coordination for the water pollution programs, as well as work with the drinking water, dam safety, underground storage tank, and solid/hazardous waste programs. I also conducted investigations regarding fish kills, spills, and general complaints, including problems involving stream alterations and relocations. I was also involved in developing, implementing, and enforcing the state's Aquatic Resource Alteration Permit program, as well as activities related to the Corps of Engineers 404 permit program and the state's 401 certification component.

In 1985, I became state-wide manager of the Enforcement and Compliance Section for the Division of Water Pollution Control. In this capacity, I was responsible for investigating and preparing enforcement cases, supervising the inspection programs and permit compliance monitoring, and conducting special projects and field studies including water quality and assimilative capacity and permit modeling. While in this position I took an educational leave to obtain my Masters of Science in Environmental Engineering in 1987 from Vanderbilt University.

2

I returned to my position as manager of the Enforcement and Compliance Section in 1987, where I remained until mid 1990.

Since 1990, I have engaged in a private consulting practice specializing in water quality problems and solutions, regulatory assistance, National Pollutant Discharge Elimination System permits, stream surveys, and various environmental investigations primarily related to water. I have worked for many clients in my private practice over the past 18 years where I have been required to interact with state and federal environmental agencies.

## Q5: Do you have a written summary of your education, employment, experience and background, and papers and presentations you have made over your career?

**A5:** My professional and educational experience is summarized in the curriculum vitae attached to this prefiled direct testimony as JTI000043.

# Q6: What materials have you reviewed and actions have you taken in preparation for your testimony?

**A6:** I have reviewed excerpts of the Final Environmental Impact Statement (the "FEIS") (filed as NRC000001), the permit application and related documents submitted in this matter.

## Q7: Have you given affidavits or declarations in support of or in connection with any of Joint Intervenors' contentions in this ESP proceeding?

**A7:** Yes, on November 12, 2007, I gave a declaration in support of Joint Intervenors' Response to SNC's Motion for Summary Disposition of EC 1.2, attached hereto as JTI000031.

#### Q8: What topics will be addressed in your testimony?

**A8:** I am testifying in support of Environmental Contention 1.3, which concerns whether dry cooling is a reasonable alternative to the proposed wet cooling system given its potential impacts on aquatic species.

#### **Q9:** Please summarize your conclusion.

**A9:** As I explain in my testimony in support of Environmental Contention 1.2, the FEIS's analysis of potential impacts is flawed and does not support a finding that impacts will be small. The discussion of alternative cooling systems is premised on the idea that alternative cooling systems need not be considered in detail because the FEIS had previously concluded that the impacts of the proposed cooling system would be small. Because there is no legitimate basis to find the impacts on aquatic species would be small, it is also illegitimate to eliminate dry cooling from further consideration.

In accordance with 28 U.S.C. § 1746, I state under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Executed on January 9, 2009.

Executed in Accord with 10 C.F.R. 2.304(d) Barry Wayne Sulkin 4443 Pecan Valley Rd. Nashville, Tennessee 37218 Phone: (615) 255-2079 Email: sulkin@hughes.net