From: "Louis Zeller" <bredl@skybest.com>
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Subject: Plant Vogtle Early Site Permit, Docket No. 52-011

December 28, 2007

Chief, Rulemaking, Directives, and Editing Branch

Division of Administrative Services

Office of Administration, Mailstop T-6D59

U.S. Nuclear Regulatory Commission

Washington, DC 20555-0001

Re: Draft NUREG-1872, August 2007, Environmental Impact Statement

Plant Vogtle Early Site Permit, Docket No. 52-011

FR 52586, Vol. 72 No. 178, 14 September 2007

Please find attached my comments on the proposed permit for Plant Vogtle.

Louis A. Zeller

Blue Ridge Environmental Defense League

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On behalf of the Blue Ridge Environmental Defense League, I write to provide additional comments on the proposed permit for Plant Vogtle. Please consider these remarks in addition to our written testimony and oral remarks delivered at the public hearing in Waynesboro.

The draft EIS fails to account for negative impacts on public health

The DEIS dismisses the mounting evidence of negative impacts on the health of people living around nuclear plants by citing a study done by the National Cancer Institute in 1990 entitled, "Cancer in Populations Living Near Nuclear Facilities." Attached to these remarks are a series of studies done since then which indicate that there are negative impacts on people living near nuclear power plants.

A study entitled *Health Risks of Adding New Reactors to the Vogtle Nuclear Plant* by Joseph Mangano, MPH found: 1) routine releases of airborne radioactive pollution from plant Vogtle, 2) large increases in radioactivity downstream from the plant, and 3) a 58.5% increase in cancer deaths in the eleven county area after the reactors began operation. The study centered on Georgia and South Carolina counties within a 40 mile radius of Vogtle. Adding two new reactors could potentially double the total.

The assessment of radiological releases to the public is fatally flawed

According to Southern's calculations which form the basis for the Commission's EIS, radiation emissions are within legal limits. Section 5.9.3.1 of the DEIS states that "Gaseous and liquid effluents from the VEGP site are below the Appendix I design objectives (Southern 2007a). The cumulative effects of both the current operating units and the two new units are also within Appendix I design objectives."

However, Southern Nuclear Operating Company has not done a sufficient evaluation of the major structures, systems, and components of the proposed facility that would affect the acceptability of the site and the estimation of radiological consequences (10 CFR § 50.34) (10 CFR § 52.17).

Reactors must by their design, construction and operation demonstrate an extremely low probability for the release of significant quantities of radioactive fission products. SNC has failed to perform adequate analyses of the design and performance of structures, systems, and components of the proposed facility which are necessary to limit the risk to public health and safety caused by normal operations and transient conditions during the life of the facility and to prevent accidents and mitigate the consequences of accidents.

According to 10 CFR § 20.1301, the NRC "may impose additional restrictions on the total quantity of radionuclides that a licensee may release in effluents in order to restrict the collective dose."

Federal regulations governing NRC site permit applications submitted after January 10, 1997 require that radiation dose be "acceptably low" at proposed nuclear power stations. 10 CFR 100.1 states:

> (c) Siting factors and criteria are important in assuring that radiological doses from normal operation and postulated accidents will be acceptably low, that natural phenomena and potential man-made hazards will be appropriately accounted for in the design of the plant, that site characteristics are such that adequate security measures to protect the plant can be developed, and that physical characteristics unique to the proposed site that could pose a significant impediment to the development of emergency plans are identified.

Further, federal site permit regulations state that nuclear reactor design, construction and operation are the principal factors in the determination of public health and safety. 10 CFR 100.1 states:

> (b) There exists a substantial base of knowledge regarding power reactor, design, construction, and operation. This base reflects that the primary factors that determine public health and safety are the reactor design, construction and operation.

SNC proposes to install two Westinghouse AP-1000 pressurized water reactors at the Vogtle plant site. However, no AP-1000 has ever been built.

> On September 13, 2004, the U.S. NRC granted a Final Design Approval (FDA) to Westinghouse for the AP1000 advanced reactor design. The approval is good for five years. The Westinghouse AP1000 standard plant design is the first Generation III+ reactor to receive FDA from the NRC.
>
> [http://www.ap1000.westinghousenuclear.com/A4.asp, downloaded 7 December 2006]

Westinghouse makes a further claim, "no demonstration plant is required." This is a remarkable assertion for a company seeking to build its "first Generation III+ reactor" in Burke County, Georgia. The consequence of this is that one cannot verify the impacts of the new reactor. This is a failure of omission which prevents the NRC, the petitioners, and the general public from properly assessing the impact of new reactors at Vogtle and ascertaining the accuracy of SNC's analyses.

SNC's short term and long term diffusion estimates outlined in the ESP Application Sections 2.7.5 and 2.7.6 utilize gaussian dispersion, straight-line models for the estimation of airborne radionuclide pollution impacts. These models are not sufficient to

predict actual impacts from an accident or other event causing the release of radioactive materials into the atmosphere.

> As shown in Figure 3.1-3, the EAB for VEGP Units 3 and 4 is entirely contained within the site property line. This is the same as the exclusion area for the existing VEGP units. For the purposes of determining χ/Qs and subsequent radiation dose analyses, an effective EAB, hereafter referred to as the Dose Calculation EAB, was developed for the proposed units. The AP1000 units will be located within the power block area, shown in Figure 3.1-3, which is the perimeter of a 775-ft-radius circle with the centroid at a point between the two AP1000 units. The Dose Calculation EAB is a circle that extends 1/2 mi beyond the power block area (i.e., a circle with a 3,415-ft radius with its centroid at the centroid of the power block circle). The Dose Calculation EAB is completely within the actual plant EAB and, thus, the χ/Qs and the subsequent radiation doses are conservatively higher. [Southern Nuclear operating Company, Environmental Report, Part 3, Revision 1, November 2006, page 2.7-24]

Simply, the computer models are not conservative because they assume unrealistic conditions. Newer, more sophisticated models have been developed since 1982 which would allow a better estimate and would comply with regulations.

By the submission of the application by SNC, the NRC must evaluate the ESP application for atmospheric dispersion characteristics to prove that radioactive air emissions from routine operations and accidents will not pose a health threat to the surrounding community. 10 CFR §100.21 states:

> (c) Site atmospheric dispersion characteristics must be evaluated and dispersion parameters established such that:
> (1) Radiological effluent release limits associated with normal operation from the type of facility proposed to be located at the site can be met for any individual located offsite; and
> (2) Radiological dose consequences of postulated accidents shall meet the criteria set forth in §50.34(a)(1) of this chapter for the type of facility proposed to be located at the site;

Here the site permit regulation which SNC must adhere to is predicated on the type of nuclear power unit. But since SNC has selected an experimental reactor, the power unit's characteristics are unverified. In order to evaluate the radiological dose consequences as stipulated in 10 CFR §100.21 (c)(2), the NRC must have the *preliminary safety analysis report* (PSAR) which would be submitted with SNC's application for a construction permit. As stipulated in 10 CFR §50.34(a)(1), the PSAR applicable to Vogtle would include:

> (ii) A description and safety assessment of the site and a safety assessment of the facility. It is expected that reactors will reflect through their design, construction and operation an extremely low probability for accidents that could result in the release of significant quantities of radioactive fission products.

SNC's ESP application for Vogtle contains no safety assessment of the proposed new reactor and, therefore, cannot demonstrate a low probability of accidental releases of fission products.

The ESP process itself encourages judgment which is inherently flawed. The Supreme Court addressed a similar two-step regulatory process in 1961 regarding the Atomic Energy Commission's permit for the Fermi reactor. Though the court approved the process, Justices William O. Douglas and Hugo Black dissented in writing: "When millions have been invested, the momentum is on the side of the applicant, not on the side of the public." Douglas and Black further criticized the Commission's approval of the reactor permit before resolution of safety issues as "a lighthearted approach to the most awesome, the most deadly, the most dangerous process ever created." [Power Reactor Development Company v. International Union of Electrical, Radio and Machine Workers, AFL-CIO et al, 367 US 396 (1961)] The Supreme Court Justices' dissent was prescient: Five years later an accident at the Fermi reactor caused an emergency shut-down, and by 1972 the reactor was shut down for good. The term "China Syndrome" was coined to describe what engineers feared following the partial melt-down at Fermi.

Radionuclide Emissions Data Indicates Harm to Public

The public record contains evidence that Vogtle has not and, therefore, will not meet the requirements under 10 CFR §100.21 (c)(1). Table 1.2.1-1 details the environmental impacts of Vogtle on the local environment. Cesium-137 and Cobalt-60 emit both beta and gamma radiation. Chronic exposure to fairly low-levels of beta radiation can cause cancer. Internal exposure to beta emitters via inhalation or ingestion can cause tissue damage and increase the risk of cancer. Gamma rays travel great distances and can penetrate most barriers. It is considered the primary hazard to the general population during most radiological emergencies.

Table 1.2.1-1. Environmental Levels of Radioactivity Near Vogtle

Type of Radioactivity		Annual Avg. 1987-1990	Annual Avg. 1991-2003	% Ch
Beta in Raw Drinking Water				
- Indicator[1]		2.583	3.540	+ 37.1%
- Control[2]	3.535	3.202		- 9.4%
Beta in Finished Drinking Water				
- Indicator[1]		2.205	2.597	+ 17.8%
- Control[2]	2.113	2.230		+ 5.6%
Beryllium-7 in Sediment				
- Indicator[3]		930.5	1297.8	+ 39.5%
- Control[4]	578.3	1229.8		+112.7%
Cobalt-60 in Sediment				
- Indicator[3]		51.33	138.3	+169.5%
- Control[4]	No detectable radioactivity reported			
Cesium-137 in Sediment				
- Indicator[3]		192.3	264.2	+ 37.4%
- Control[4]	137.8	112.5		- 18.3%

Beta expressed in picocuries per liter, others expressed in picocuries per kilogram dry.

[1]Beaufort/Jasper County Water Treatment Plant, Beaufort SC, 112 miles downriver, plus Cherokee Hill Water Treatment Plant, Port Wentworth SC, 122 miles downriver

[2]Augusta Water Treatment Plant, Augusta GA, 56 miles upriver
[3]Savannah River, 0.8 miles ENE of Vogtle plant
[4]Savannah River, 2.5 miles N of Vogtle plant

Source: Vogtle Electric Generating Plant Annual Radiological Environmental Operating Report for 2005, www.nrc.gov.
[Joseph Mangano, MPH MBA, *Preliminary Findings: Radioactive Contamination from the Vogtle Nuclear Plant and Cancer Risk for the Local Population*, Radiation and Public Health Project, 6 December 2006]

A confounding factor in the assessment of Vogtle's impact is the proximity of the nuclear power station to the Department of Energy's Savannah River Site. Vogtle and SRS emissions intermingle, making independent assessment challenging. The principal contractor at the Savannah River Site publishes annual reports which contain the following data.

Tritium Transport in Streams

Year	SRS emissions	Vogtle emissions	Total curies
2003	4010	1900	5910
2004	2430	1200	3630
2005	2620	1860	4480

[Westinghouse Savannah River Company Environmental Reports: 2003, 2004, 2005, WSRC-TR-2004-00015, WSRC-TR-2005-00005, WSRC-TR-2006-00007]

The discharge of Tritium (Hydrogen-3, or H-3) in the form of radioactive water pollutes the Savannah River all the way to the ocean. Downstream drinking water wells are contaminated. Does the pollution come from SRS or Vogtle? The answer is "yes." The next section details the radiation dose.

Evidence Reveals Radionuclide Contamination is Widespread

The Georgia Department of Natural Resources Environmental Protection Division ("EPD") publishes reports on its radiation monitoring program. The program tests samples of air, surface water, groundwater, rain, sediments, fish, soil, vegetation, milk and agricultural crops near facilities which are known to emit ionizing radiation and compares these data to background levels. Below are the EPD test results for Vogtle from 1995 to 2002 which indicate the nuclear power plant is the source of a variety of radionuclides which contaminate sediment, river water, fish and drinking water. The conclusions in column four are taken verbatim from the EPD report. Despite apparent attempts to minimize the impact of their own findings, the state's test results reveal striking elevations of harmful radionuclides in several media expressed in multiples above background level radiation (Bkg). The test results range from 2 times to 50 times above background level (2X to 50X Bkg). Elevated radiation levels are also expressed in picocuries per liter or picocuries per kilogram (pCi/L or pCi/Kg, respectively), depending on the sample type.

Georgia Environmental Radiation Surveillance Reports 1995 – 2002

Year	Sample type	Radionuclides	Conclusions

1995-1996	sediment	Co-60, Co-58	Traces of Co-60 in sediment were measured at several SRS outfalls and at Plant Vogtle, which indicate that the Co-60 originated from several facilities. Traces of Co-58 in sediment were also measured near the Vogtle outfall. No meadsureable impact to drinking water or fish was detected.
1997-1999	River water downstream	H-3	Elevated tritium (5X to 11X Bkg) was detected in river water downstream at US301 bridge. H-3 concentrations ranged from 1000 pCi/L (average) to 2100 pCi/L (maximum). Based on periodic effluent reports, ~90% of the H-3 is believed to be from SRS, with ~10% from Vogtle. Although elevated, all results were equivalent to less than 11% of the Drinking Waster Standard. Therefore, the H-3 did not pose a significant risk,
1997-1999	Drinking water	H-3	Elevated tritium (5X to 8X Bkg) was detected in downstream drinking water near Savannah, with concentrations ranging from 900 pCi/L (average) to 1700 pCi/L (maximum). Based on periodic effluent reports, ~90% of the H-3 is believed to be from SRS, with ~10% from Vogtle. Although elevated, all results were equivalent to less than 9% of the Drinking Waster Standard and, therefore, the H-3 did not pose a significant risk.
1997-1999	Sediment	Co-60 Cs-137	Traces of Co-60 (approximately 20X Bkg) in sediment were measured at the Vogtle outfall (and at several SRS outfalls as well), indicating that the Co-60 originated from SRS and Vogtle. Concentrations ranged from 100 to 300 pCi/Kg. Co-60 was also detected up to 100 miles downstream (from SRS and Vogtle). No measurable impact to drinking water or fish was detected. A trace of Cs-137 (approximately 2X Bkg) was detected at the Vogtle outfall. Concentrations ranged from 160 to 360 pCi/Kg. Relative to SRS's Cs-137 concentrations (20X to 50X Bkg), Vogtle's Cs-137 had no significant impact, and it could even be partially attributable to Cs-137 discharged by SRS upstream of Vogtle.
1997-1999	River water outfall	H-3	Elevated tritium (7X to 17X Bkg) in river water was detected below the Vogtle outfall. H-3 concentrations ranged from 1400 (average) to 3500 pCi/L. This is equivalent to 7%-18% of the reporting level, based on use as a drinking water supply (unlikely). A portion of the H-3 detected at Vogtle may have come from SRS, since 2 SRS outfalls are located upstream of Vogtle.
1997-1999	Drinking water	H-3	Elevated tritium (5X to 8X Bkg) was detected in downstream drinking water near Savannah, with concentrations ranging from 900 pCi/L (average) to 1700 pCi/L (maximum). Based on periodic effluent reports, ~90% of the H-3 is believed to be from SRS, with ~10% from Vogtle. Although elevated, all results were equivalent to less than 9% of the Drinking Waster Standard and, therefore, the H-3 did not pose a significant risk.
1997-1999	Fish	Cs-137 (from SRS)	Elevated concentrations of Cs-137 in fish filets (15X to 45X Bkg) were detected downstream of Vogtle. Most of the Cs-137 in fish near Vogtle is attributed to SRS operations, as Four Mile Creek (a contaminated SRS outfall) is located just downstream of Vogtle. Concentrations ranged from 230 (average) to 870 pCi/Kg, with the maximum equivalent to 9% of the reporting level of 10 mRem/Tr CEDE. The average risk of cancer from eating Cs-137 in fish downstream of

			Vogtle was 1-in-1,000,000 for 30-year exposure.
1997-1999	fish	H-3	Elevated concentrations of H-3 in fish filets (7X to 17X Bkg) were detected downstream of Vogtle. A significant portion of the H-3 may come from SRS (upstream and from FMC). Concentrations ranged from 1000 (average) to 2500 pCi/Kg, with the maximum equivalent to 0.04% of the reporting level of 10 mRem/Yr CEDE. The average risk of cancer from eating H-3 in fish adjacent to SRS was 1-in-100,000,000 for 30 year exposure.
2000-2002	River Water Outfall	Tritium (H-3)	Elevated tritium (up to **50X** Bkg) in river water was detected below the Vogtle outfall. H-3 concentrations averaged 2,200 pCi/l (11% of MCL), with the highest concentration (11,000 pCi/l) associated with a chemistry problem in one of the reactors. This required a temporary shutdown and system cleanup near the end of 2002.
2000-2002	River Water Downstream of SRS and VEGP at US301	Tritium (H-3)	Elevated tritium (up to **16X** Bkg) was detected in river water downstream of SRS and VEGP at the US-301 Bridge. H-3 concentrations averaged 1000 pCi/l (5% MCL), with a maximum of 3,300 pCi/l (16% MCL). Approximately 90% of the H-3 is from SRS, with around 10% from Vogtle, based on available effluent reports. H-3 did not pose a significant risk based on measured concentrations.
2000-2002	Drinking Water	Tritium (H-3)	Elevated concentrations of tritium (up to **11X** Bkg) were detected in downstream drinking water from the Savannah I&D Water Plant. Concentrations averaged 800 pCi/l (4% MCL), with a maximum of 2,300 pCi/l (11% MCL). As noted above, most (~ 90%) of this H-3 is from SRS. H-3 did not pose a significant risk based on measured concentrations.
2000-2002	Sediment	Cs-137	Elevated Cs-137 (approximately **2X** Bkg) was detected at Vogtle one time, but the average concentration was statistically indistinguishable from the control concentration.
2000-2002	Sediment	Co-60	Elevated concentrations of Co-60 in sediment were measured at SRS - Steel Creek (up to **14X** Bkg) and below Plant Vogtle (up to **15X** Bkg), suggesting that Co-60 originated from both SRS and Vogtle. Co-60 was also detected up to 100 miles downstream (up to **22X** Bkg). Co-60 was not detected in drinking water or fish samples, indicating negligible impact to human populations.
2000-2002	Fish	H-3 and Cs-137	Elevated concentrations of Cs-137 and H-3 were also detected in fish samples near Plant Vogtle, which is located adjacent to SRS and Four-Mile Creek. The majority of Cs-137 activity detected in Vogtle fish is likely to be SRSrelated, based on the upstream control samples. Vogtlerelated activity was equivalent to less than 3% of the aquatic-pathway reporting level. The 30-year radiological cancer morbidity risk for fish consumed from this area was estimated to be between 1 and 2 out-of 1,000,000.

[Environmental Radiation Surveillance Reports, 1995-1996, 1997-1999 and 2000-2002, published by the Georgia Department of Natural Resources Environmental Protection Division]

EIS Fails to Consider the High Ratio of Cancer in Burke County

The Plant Vogtle Environmental Report fails to adequately consider the impact two new nuclear reactors will have on the minority populations around the Plant Vogtle site already noted to suffer from higher-than-average cancer rates. One study conducted by the University of South Carolina has shown that there is a higher than average instance of

cervical cancer in black women, and a higher rate of esophageal cancer in black men, within a fifty mile radius of the Savannah River Site, which lies just across the River from Plant Vogtle. While the study noted that these types of cancers are not necessarily associated with exposure to radioactive materials, the impact of increased levels of hazardous and radioactive materials into the area, including into the Savannah River, on minority population already suffering from high rates of cancer should be assessed. [1997 Feb 3, Cancer Weekly, via NewsRx.com and NewsRx.net]

Recent studies of morbidity and mortality statistics compiled by the U.S. Centers for Disease Control and Prevention compare death rates before and after Plant Vogtle's two reactors went online. Vogtle Unit 1 began commercial operation in May 1987; Unit 2 in May 1989. Each pressurized water reactor has a maximum generating capacity of 1215 megawatts electric power (MWe).

One study compared cancer deaths from 1982-1990 with those occurring from 1991 to 2002. During that period, the death rate per 100,000 population from all cancers in Burke County rose 24.2 percent, while the death rate fell 1.4 percent for all of Georgia. [Study ties fatalities to nuclear power site, *The Augusta Chronicle*, July 30, 2005]

A second study examined deaths among infants younger than 1 year old in Burke County. The findings, which compared the 1985-87 period with 1988-90—before and after criticality, indicate a 70.1 percent increase in Burke County infant deaths. The death rate per 100,000 population went from 13.71 to 23.31, reflecting an increase from 16 to 28 deaths. During the same period, the statewide rate across Georgia went from 12.63 deaths per 100,000 population to 12.41 for a decrease of 1.7 percent. [Study ties fatalities to nuclear power site, *The Augusta Chronicle*, July 30, 2005]

These studies focused on cancer and infant death rates. Death rate may be a more sensitive indicator of negative health impacts because of the long latency period associated with most cancers. Radiation affects the human immune system leading to increased infant mortality from otherwise survivable infections. It also affects reproductive cells leading to more stillbirths.

Again, it is important to state that what is missing from the forgoing analysis is the actual human radiation exposure data for Burke County residents which would link known morbidity and mortality rates to known Vogtle emissions. The EPD's surveillance is unusual; most federal and state agencies determine regulatory compliance via indirect means: source terms, risk factors and computer predictions. Nevertheless, what is undeniable is that the rise in negative health impacts is found in proximity to and contemporaneously with Vogtle plant operations. In other words, if these negative health effects in Burke County are not caused by the radioactive emissions from Vogtle, then what is causing them?

Standards for Radionuclides in Drinking Water Fail to Protect Public Health

National Primary Drinking Water Regulations protect public health by limiting the levels of contaminants in public water supply systems; they are legally enforceable (40 CFR

§141.15). The EPA's Primary standard for radionuclides covers alpha and beta particles and Radium and Uranium as follows:

National Primary Drinking Water Regulations for Radionuclides

Contaminant	MCLG[1] (mg/L)[2]	MCL or TT[1] (mg/L)[2]	Potential Health Effects from Ingestion of Water	Sources of Contaminant in Drinking Water
Alpha particles	none[7] ---------- zero	15 picocuries per Liter (pCi/L)	Increased risk of cancer	Erosion of natural deposits of certain minerals that are radioactive and may emit a form of radiation known as alpha radiation
Beta particles and photon emitters	none[7] ---------- zero	4 millirems per year	Increased risk of cancer	Decay of natural and man-made deposits of certain minerals that are radioactive and may emit forms of radiation known as photons and beta radiation
Radium 226 and Radium 228 (combined)	none[7] ---------- zero	5 pCi/L	Increased risk of cancer	Erosion of natural deposits
Uranium	Zero	30 ug/L as of 12/08/03	Increased risk of cancer, kidney toxicity	Erosion of natural deposits

[1] Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to MCLGs as feasible using the best available treatment technology and taking cost into consideration. MCLs are enforceable standards. Maximum Contaminant Level Goal (MCLG) - The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety and are non-enforceable public health goals. Maximum Residual Disinfectant Level (MRDL) - The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants. Maximum Residual Disinfectant Level Goal (MRDLG) - The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants. Treatment Technique - A required process intended to reduce the level of a contaminant in drinking water.

[2] Units are in milligrams per liter (mg/L) unless otherwise noted. Milligrams per liter are equivalent to parts per million.

[7] MCLGs were not established before the 1986 Amendments to the Safe Drinking Water Act. Therefore, there is no MCLG for this contaminant.

[http://www.epa.gov/safewater/contaminants/index.html#rads, downloaded 6 December 2006]

Credible experts say that the existing national standards for radionuclides in drinking water are not protective of public health. As can be seen from the EPD tests, if the Colorado state standard for tritium of 500 pCi/L had been applied in Georgia or South

Carolina, the test result of 3500 pCi/L at the Vogtle outfall would have been over the limit by 600%.

> Nuclear power plants discharge a significant amount of tritium as part of their routine operations; sometimes more is discharged as a result of mishaps and incidents. The current drinking water standard for tritium of 20,000 picocuries per liter does not take non-cancer effects of tritium, such as miscarriages, into account. Given the particular properties and non-cancer risks of tritium (when it is organically bound or in the form of tritiated water), I am of the opinion that the Nuclear Regulatory Commission has not been vigilant enough in trying make reactor operators reduce their tritium discharges. It is noteworthy in this context that the surface water standard for tritium in the State of Colorado is 500 picocuries per liter, which is 40 times more stringent that the EPA drinking water standard. [Arjun Makhijani, Ph.D., *Statement on Tritium*, Institute for Energy and Environmental Research, 6 February 2006]

The Nuclear Regulatory Commission has the jurisdiction to require SNC to lower the dose of radioactive emissions at Vogtle (10 CFR § 20.1301) and meet a higher, truly protective emission standard.

Respectfully submitted,

Louis A. Zeller