

**UNITED STATES OF AMERICA
U.S. NUCLEAR REGULATORY COMMISSION
BEFORE THE SECRETARY**

In the Matter of:
SOUTHERN NUCLEAR OPERATING CO.
License Amendment Application for
Combined Licenses NPF-91 and NPF-92
Vogtle Electric Generating Plant Units 3 and 4
Docket Nos. 052-00025 and 052-00026;
NRC-2008-0252

December 7, 2015

**PETITION FOR LEAVE TO INTERVENE AND REQUEST FOR HEARING BY
THE BLUE RIDGE ENVIRONMENTAL DEFENSE LEAGUE AND ITS
CHAPTER CONCERNED CITIZENS OF SHELL BLUFF**

Introduction

Pursuant to 10 C.F.R. § 2.309(f) and a notice published by the Nuclear Regulatory Commission (õNRCö or õCommissionö) at 80 Fed. Reg. 60937 (October 8, 2015), the Blue Ridge Environmental Defense League and its chapter Concerned Citizens of Shell Bluff (õBREDLö) hereby petition for leave to intervene and request a hearing in the above-captioned matter. In brief, Southern Nuclear Operating Company (õSNOCö or õCompanyö) is seeking to amend its license to alter the construction standards for the Vogtle Electric Generating Plant Units 3 and 4 (õPlant Vogtleö). The changes would alter the reactor's critical internal structural components; BREDL opposes the granting of the license amendment. This petition sets forth our interests in this proceeding, the reasons this intervention should be granted, and specific contentions we seek to have addressed. As demonstrated below, Blue Ridge Environmental Defense League has representational standing, through its members, to make this request.

Description of the Proceeding

In 2012 Southern Nuclear Operating Company received its license to construct and operate two additional Westinghouse AP1000 reactor units. Vogtle Electric Generating Plant Units 3 and 4 are now under construction. The Company's license amendment request (LAR) dated September 18, 2015 proposes to revise Combined Operating License Appendix C and associated plant-specific Design Control Document Tier 1 Table 3.3-1, Definition of Wall Thicknesses for Nuclear Island Buildings, Turbine Building, and Annex Building. SNOC is requesting to alter concrete thickness tolerances for modules CA01, CA04 and CB65 for the reactor vessel, the steam generator compartments, the refueling canal and the reactor coolant drain tank room from the present ± 1 inch to a proposed $\pm 1-5/8$. There are four walls of the Containment Building Internal Structure that would be affected. Further, the company submitted a Preliminary Amendment Request, PAR-15-015, which would allow the change to proceed before a thorough review by the Commission can be completed.

Description of the Petitioners

Blue Ridge Environmental Defense League is a regional, community-based non-profit environmental organization working in Virginia, North Carolina, South Carolina, Tennessee, Alabama and Georgia. BREDL's founding principles are earth stewardship, environmental democracy, social justice, and community empowerment. BREDL encourages government agencies and citizens to take responsibility for conserving and protecting our natural resources and protecting public health. BREDL also functions as a watchdog of the environment, monitoring issues and holding government officials

accountable for their actions. BREDL is a league of community groups called "chapters." BREDL and its chapters are unitary, with a common incorporation, financial structure, board of directors and executive officer. BREDL chapter Concerned Citizens of Shell Bluff was founded March 6, 2010 to advocate for environmental justice in Georgia.

Standing

Under 10 CFR § 2.309(d), a request for hearing or petition for leave to intervene must address 1) name and address of petitioner, 2) the nature of the petitioner's right under the Atomic Energy Act to be made a party to the proceeding, 3) the nature and extent of the petitioner's property, financial, or other interest in the proceeding, and 4) the possible effect of any order that may be entered in the proceeding on the petitioner's interest.

Other standing requirements are found in NRC case law. See *Pacific Gas & Electric Co.* (Diablo Canyon Power Plant Independent Spent Fuel Storage Installation), LBP-02-23, 56 NRC 413, 426 (2002)¹

¹ In determining whether a petitioner has sufficient interest to intervene in a proceeding, the Commission has traditionally applied judicial concepts of standing. See *Metropolitan Edison Co.* (Three Mile Island Nuclear station, Unit 1), CLI-83-25, 18 NRC 327, 332 (1983) (citing *Portland General Electric Co.* (Pebble Springs Nuclear Plant, Units 1 and 2), CLI-76-27, 4 NRC 610 (1976)). Contemporaneous judicial standards for standing require a petitioner to demonstrate that (1) it has suffered or will suffer a distinct and palpable harm that constitutes injury-in-fact within the zone of interests arguably protected by the governing statutes (e.g., the Atomic Energy Act of 1954 (AEA), the National Environmental Policy Act of 1969 (NEPA)); (2) the injury can be fairly traced to the challenged action; and (3) the injury is likely to be redressed by a favorable decision. See *Carolina Power & Light Co.* (Shearon Harris Nuclear Power Plants), LBP-99-25, 50 NRC 25, 29 (1999). An organization that wishes to intervene in a proceeding may do so either in its own right by demonstrating harm to its organizational interests, or in a representational capacity by demonstrating harm to its members. See *Hydro Resources, Inc.* (2929 Coors Road, Suite 101, Albuquerque, NM 87120), LBP-98-9, 47 NRC 261, 271 (1998). To intervene in a representational capacity, an organization must show not only that at least one of its members would fulfill the standing requirements, but also that he or she has authorized the organization to represent his or her interests. See

Standing to participate in this proceeding is demonstrated by the declarations of the 63 members of the Blue Ridge Environmental Defense League and Concerned Citizens of Shell Bluff who have authorized Petitioners to represent their interests in this proceeding.

As demonstrated by the declarations filed, Petitionerø members live near Vogtle, i.e., within 50 miles. Thus, they have presumptive standing by virtue of their proximity to the two nuclear plants now under construction on the site. *Diablo Canyon*, 56 NRC at 426-427, citing *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), LBP-01-6, 53 NRC 138, 146, *aff'd*, CLI-01-17, 54 NRC 3 (2001). In *Diablo Canyon*, the Licensing Board noted that petitioners who live within 50 miles of a proposed nuclear power plant are presumed to have standing in reactor construction permit and operating license cases, because there is an õbvious potential for offsite consequencesö within that distance. *Id.* Here, Southern Nuclear Operating Company has been granted a construction and operating license, a COL, for Vogtle nuclear reactor Unit 3 and Unit 4, and seeks to amend said license. Thus, the same standing concepts apply.

Further, *locus standi* is based on three requirements: injury, causation and redressability. Petitioners hereby request to be made a party to the proceeding because (1) Construction and operation of additional nuclear reactors at Vogtle would present a tangible and particular harm to the health and well-being of our members living within 50 miles of the site, (2) The NRC has initiated proceedings for a license amendment, the granting of which would directly affect our members, and (3) The Commission is the sole

Private Fuel Storage, L.L.C. (Independent Fuel Storage Installation), LBP-98-7, 47 NRC 142, 168, *aff'd on other grounds*, CLI-98-13, 48 NRC 26 (1998).

agency with the power to approve or deny the modification of a license to construct and operate a commercial nuclear power plant.

The Petitioners' members seek to protect their health and lives by opposing the license amendment requested by SNOG.

Overview of the Contentions to be Raised in this Petition

Based on our review, the license amendment request has not been fully evaluated by the NRC and is not justified by the information presented by the Company.

An intervenor can establish a sufficient basis for a contention by referring to a source and drawing an assertion from that reference. Commonwealth Edison Co. (Braidwood Nuclear Power Station, Units 1 & 2), LBP-85-20, 21 NRC 1732, 1740 (1985), *rev'd* and remanded on other grounds, CLI-86-8, 23 NRC 241 (1986), citing Houston Lighting and Power Co. (Allens Creek Nuclear Generating Station, Unit 1), ALAB-590, 11 NRC 542, 548-49 (1980). See Public Service Co. of New Hampshire (Seabrook Station, Units 1 & 2), LBP-89-4, 29 NRC 62, 69-70 (1989), *aff'd*, ALAB-918, 29 NRC 473 (1989), remanded on other grounds, *Massachusetts v. NRC*, 924 F.2d 311 (D.C. Cir. 1991), appeal dismissed as moot, ALAB-946, 33 NRC 245 (1991); see also Georgia Power Co. (Vogtle Electric Generating Plant, Units 1 & 2), LBP-93-21, 38 NRC 143, 146 (1993).

A licensee generally bears the ultimate burden of proof. Metropolitan Edison Co. (Three Mile Island Nuclear Station, Unit 1), ALAB-697, 16 NRC 1265, 1271 (1982), citing 10 C.F.R. § 2.325 (formerly § 2.732).

Petitioners hereby seek to ensure that the requested license amendment is not issued by the U.S. Nuclear Regulatory Commission. SNOC has not demonstrated full compliance with the Atomic Energy Act and implementing regulations.

Contention ONE: License Amendment Request Fails to Meet Industry Standards

A. The License Amendment Request fails to conform to certain construction industry standards required for nuclear power plants.

B. The fundamental construction standards for the Westinghouse AP1000 nuclear power plants under construction at Plant Vogtle are based on conformance with industry codes developed by the American Concrete Institute. These standards are specific to nuclear power plants. For Plant Vogtle, the codes listed in UFSAR Subsection 3.8.3.2 detail the requirements for reactor containment internal structures. UFSAR Subsection 3.8.3.6.1 requires that the tolerances for fabrication, assembly, and installation of structural modules CA04, CA01, and CB65 conform to the requirements of ACI-117, and UFSAR Subsection 3.8.4.4.1 requires that the procedures conform with ACI 349-01. For the three modules, the concrete thickness tolerances listed in COL Appendix C Table 3.3-1 do not meet ACI 349-01 and ACI 117. Moreover, when there are proposed changes in the UFSAR technical basis that are not directly related to the approved license amendment, prior to implementation these factors are subject to review under 10 CFR 50.59.

C. Under 10 CFR 50.59(c)(2) A licensee must get license amendment approval from the Commission pursuant to § 50.90 prior to implementing a proposed change if the change would, inter alia, cause a fission product barrier listed in the FSAR to be

exceeded or altered; or depart from a method of evaluation described in the FSAR used to establish design or safety factors.

D. The requested changes would increase wall thickness tolerance from plus or minus 1 inch to plus or minus 1-5/8 inches. Plus or minus 5/8 inch is in actuality 5/8 plus 5/8, or an extra 1-1/4 inches over the current 2 inch tolerance spread (± 1 inch), or 3-1/4 inches. In their license amendment request, Southern Company reported minimum margins of about 50% for vertical reinforcement, horizontal reinforcement, and shear. But they do not specify what the margins were with the original tolerances. Hence, one cannot gauge the significance of the proposed new tolerances to the previously accepted margins. For example, if the original 1 inch tolerance band yielded minimum margins of about 52%, the proposed change reduces the margin a small amount; if the original tolerance band yielded margins of about 250%, the proposed change would reduce the margins by a considerable amount.

Further, in its License Amendment Request, SNOC admits the tolerances do not meet industry standards: American Concrete Institute requirements ACI 349 and ACI 117.² ACI 349 is "Code Requirements for Nuclear Safety Related Concrete Structures." ACI 117 is "Specifications for Tolerances for Concrete Construction and Materials." In 2010, the Nuclear Energy Standards Coordination Collaborative identified the following needs, specific to ACI 349:³

Gaps and conflicts in design requirements exist in some of the cited DOE standards and NRC standards or guidelines particularly as they relate to Design Basis Environmental Loads.

² Southern Nuclear operating Company ND-15-1915, PAR-15-015: CA04 Structural Module ITAAC Dimensions Change, Enclosure 1 at 3 (October 22, 2015)

³ Nuclear Energy Standards Coordination Collaborative Concrete Task Group Presentation to NESCC, November 22, 2010, "Concrete Codes and Standards for Nuclear Power Plants (CTG)"

The recommendation is that ACI 349, DOE and NRC coordinate and incorporate the Design Basis Accident such as high energy component or system failure (i.e. rotating equipment rupture, pipe break, tank failure causing interior building flooding, heavy load drop, etc.) and consider them as Design Basis Events as a function of Safety Classification of Structures, Systems and Components.

In 2011, NESCC issued a final report on radiation impacts⁴ internal attack⁴ on concrete durability which stated:

Internal attack...can cause destruction in short time scales regardless of element thickness. Therefore, the design should consider alkali silica reaction (ASR) cracking by either characterizing the aggregates or by addition of additives (SCM for instance), internal sulfate attack, DEF (delayed ettringite formation), etc... To ensure durability and avoid internal attack, the selection of concrete constituents is an essential part. Developing better mineralogical characterization of aggregates will help to avoid ASR, which can cause important degradation decades after construction is completed.

The report adds that accurate measurement, inspection on the nuclear plant construction site and proper test standards are essential.

E. The company's perceived need for the proposed change was identified after the fact; i.e., inspectors identified out of compliance work during an inspection of ongoing construction. The Company admits:⁵

“The need for this proposed change was identified during a survey performed of installed modules where it was identified that the tolerance specified in COL Appendix C was not met in a portion of one wall and there were possible inconsistencies with the underlying design construction tolerances.”

⁴ Nuclear Energy Standards Coordination Collaborative, Final Report of the Concrete Task Group: “Concrete Codes and Standards for Nuclear Power Plants: Recommendations for Future Development,” June 2011, available at:

http://www.ansi.org/standards_activities/standards_boards_panels/nesc/overview.aspx

⁵ Southern Nuclear operating Company ND-15-1742, LAR-15-015: CA04 Structural Module ITAAC Dimensions Change, Enclosure 1 at 3 (September 18, 2015)

Contention TWO: License Amendment Request Does Not Meet ALARA

A. The License Amendment Request does not demonstrate that it meets standards for nuclear plant worker radiation exposure limits.

B. The NRC's review of an applicant's request for license amendment must determine that the plant workers exposure to radiation is as low as reasonably achievable, abbreviated as ALARA.

C. The federal standard for ALARA, which applies to the Company's LAR, is 10 CFR § 20.1201, "Occupational dose limits for adults," which states: "The licensee shall control the occupational dose to individual adults...to the following dose limits."

D. One of the walls affected by the LAR and listed in the UFSAR would be the "Shield Wall between Reactor Vessel Cavity and RCDT Room."⁶ The nominal thickness of this concrete wall is 36 inches (36.00). Under the present tolerances, this wall could be 35 inches thick or 37 inches thick. Increasing the tolerances to the level in the LAR would mean the wall could be 34-3/8 inches or 37-5/8 inches thick. The 3-1/4 inch spread is 9% of the nominal wall thickness of 36 inches. This wall is identified in the UFSAR as an "Applicable Radiation Shielding Wall." The three other walls under the LAR are thicker but also Applicable Radiation Shielding Walls. See UFSAR Table 3.3-1. Thickness affects the radiation shielding ability of a concrete wall.

E. The applicant, Southern Nuclear Operating Company, seeks both a license amendment for approval of the altered concrete construction tolerances of structures within the nuclear island. In addition, the Company requested a preliminary amendment to allow construction work to proceed by November 12, 2015, well before the close of

⁶ Vogtle Electric Generating Plant (VEGP) Units 3 and 4 Updated Final Safety Analysis Report, Tier 1, Revision 2, (560 pages), (5/15/2014) ML14183B430

the 60-day period for intervention. Even if the LAR were to be acceptable, which BREDL disputes, the need for adequate review by the Commission and worker safety are higher priorities than the Company's construction schedule.

Contention THREE: Disproportionate Impact on Shell Bluff Residents

A. Approval of the License Amendment Request by the NRC would put residents of the surrounding community at greater risk from ionizing radiation exposure.

B. The Nuclear Regulatory Commission has side-stepped Executive Order 12898 and ignored president Obama's Memorandum of Understanding. The NRC has not fulfilled the commitment made by Chairman Ivan Selin that NRC would carry out Executive Order 12898.⁷ The attached declaration of Rev. Charles Utley confirms the need for NRC to implement Executive Order 12898.

C. As a federal agency, the Nuclear Regulatory Commission must comply with the environmental justice requirements of Executive Order 12898.

D. The NRC must take steps to avoid disproportionate, adverse environmental impacts on low income and minority populations and impacts on important religious, subsistence, or social practices. A nuclear power siting study was published which suggests that there is a "reactor-related environmental injustice" at Plant Vogtle. *See attached* Rev. Utley declaration. Unless and until the NRC fully implements Executive Order 12898, environmental injustice will continue at Plant Vogtle and elsewhere.

E. The Blue Ridge Environmental Defense League has placed this issue before the Commission previously. However, we have had no response from the Commission or the Atomic Safety and Licensing Board.

⁷ Letter to President Clinton from NRC Chairman Ivan Selin, March 31, 1994

Conclusion

The granting of the Company's License Amendment Request would not comply with UFSAR technical bases at Plant Vogtle. The American Concrete Institute standards for nuclear power plants should be adhered to. The standards are in need of strengthening; further departures from ACI-349 and other standards should not be approved by the Nuclear Regulatory Commission. Finally, the entire license amendment is being rushed. Southern Company has filed a preliminary amendment request which would allow the preemptory alteration of the license before a full public review as permitted by federal regulations. We oppose the granting of the Preliminary Amendment Request PAR-15-015 and the License Amendment. Our principal interests are the health and safety of our members living near the plant and the general public. For the foregoing reasons, the contentions are admissible and should be admitted for a hearing.

Respectfully submitted

A handwritten signature in black ink that reads "Louis A. Zeller". The signature is written in a cursive style and is followed by a horizontal line.

Louis A. Zeller, Executive Director
Blue Ridge Environmental Defense League

Blue Ridge Environmental Defense League

www.BREDL.org 3417 Sutton Place Augusta, Georgia 30906 Phone: (706) 772-5558 E-mail: cutley@paine.edu

Declaration of Rev. Charles N. Utley Regarding Environmental Justice Issues at Plant Vogtle Electric Generating Plant

I, Charles N. Utley, make the following declarations:

Brief Statement of Professional Qualifications

I served on the National Environmental Justice Advisory Council to write Executive Order No. 12898: "Federal Actions to Address Environmental Justice in Minority Populations and Low-income populations."

I was invited to address President Obama's Blue Ribbon Commission on America's Nuclear Future regarding Environmental Perspectives at their meeting on January 7, 2011.

I introduced and developed the EPA Brownfields Inclusive Program for the City of Augusta, Georgia, Richmond County, and serve as chair of the CSRA Brownfields Commission.

I serve as a lecturer for the Environmental Justice Program at Paine College, Augusta, GA

Environmental Justice

Environmental Justice means seeking to avoid disproportionate adverse environmental impacts on low income populations and minority communities.

The stated purpose of the Obama Administration's August 4, 2011 Memorandum of Understanding is "To declare the continued importance of identifying and addressing environmental justice considerations in agency programs, policies, and activities as provided in President Clinton's Executive Order 12898, including as to agencies not already covered by the Order."⁸

The August 4th Memorandum of Understanding advances federal agency responsibilities first outlined in the 1994 Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations." The Executive Order makes environmental justice integral to the mission of each agency. The MOU broadens the reach of the Interagency Working Group on Environmental Justice, including federal agencies not part of the 1994 Executive Order and providing for the

⁸ "Memorandum of Understanding on Environmental Justice and Executive Order 12898," August 4, 2011

addition of more. The MOU strengthens environmental justice efforts under the National Environmental Policy Act and Title VI of the Civil Rights Act of 1964. At present, the White House Council on Environmental Quality, the General Services Administration, the Small Business Administration and thirteen cabinet departments⁹ have signed the MOU.

NRC Fails to Fulfill its Commitment to Environmental Justice

The Nuclear Regulatory Commission has side-stepped Clinton's Executive Order and ignored Obama's Memorandum of Understanding. The NRC has not fulfilled the commitment made by Chairman Ivan Selin that NRC would carry out Executive Order 12898.¹⁰ In 1997 Office of Nuclear Material Safety and Safeguards and the Office of Nuclear Reactor Regulation did develop their own environmental justice guidance, NUREG-1748 and LIC-203,¹¹ but the NRC has failed to properly address environmental justice in licensing decisions made since the Executive Order. Public interest group comments submitted to the NRC accurately described the agency's failure.

The NRC's Draft Policy Statement on the Treatment of Environmental Justice Matters in NRC Regulatory and Licensing Actions is virtually devoid of affirmative policies for considering environmental justice issues in the NEPA decision-making process. Instead, it is a catalogue of the ways in which the NRC does *not* plan to consider environmental justice issues. Moreover, the NRC's rationale for refusing to consider discrimination in the NEPA decision-making is not supportable.¹²

The NRC has subverted the Executive Order by downplaying its purpose and scope. In 2003, in an attempt to dispose of the thorny EJ issues raised by its licensing actions,¹³ the

NRC published the following statement:

The E.O. simply serves as a reminder to agencies to become aware of the various demographic and economic circumstances of local communities as part of any socioeconomic analysis that might be required by NEPA.¹⁴

⁹ Department of Health and Human Services; Department of Justice; Department of Agriculture; Department of Commerce; Department of Defense; Department of Education; Department of Energy; Department of Homeland Security; Department of Housing and Urban Development; Department of Interior; Department of Labor; Department of Transportation; Department of Veterans Affairs

¹⁰ Letter to President Clinton from NRC Chairman Ivan Selin, March 31, 1994

¹¹ See NUREG-1748, "Environmental Review Guidance for Licensing Actions Associated with NMSS Programs," August 22, 2003 (ADAMS Accession No. ML032450279) and NRR Office Instruction, LIC-203, Procedural Guidance for Preparing Environmental Assessments and Considering Environmental Issues (June 21, 2001) (ADAMS Accession No. ML011710073)

¹² Comments by Nuclear Information and Resource Service on US Nuclear Regulatory Commission's Draft Policy Statement on the Treatment of Environmental Justice Matters in NRC Regulatory and Licensing Actions, Diane Curran, Esq., and Michael Marriotte, Executive Director, February 3, 2004, <http://www.nirs.org/ejustice/nrc/commentsonejpolicy2304.htm>

¹³ See Louisiana Energy Services (Claiborne Enrichment Center), CLI69863, 47 NRC 77 (1998) and PFS (Independent Spent Fuel Storage Installation), CLI602620, 56 NRC 147, 153655 (2002)

¹⁴ Federal Register /Vol. 68, No. 214 /Wednesday, November 5, 2003 /Notices, page 62643

However, the President's Executive Order was not simply a reminder. It was not a proclamation. Executive Orders are policy directives that implement or interpret a federal statute, a constitutional provision, or a treaty. The power to issue them comes from the U.S. Constitution.

Executive Order 12898 states:

To the greatest extent practicable and permitted by law, and consistent with the principles set forth in the report on the National Performance Review, each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States.¹⁵

According to Dr. Robert Bullard, the Order was put to the test in rural Louisiana. Citizens Against Nuclear Trash charged NRC and Louisiana Energy Services with environmental racism because of their selection of a site for a uranium enrichment plant. In 1997 the Atomic Safety and Licensing Board concluded that "Racial bias played a role in the selection process." The judges chastised NRC staff for failing to address the provisions of Executive Order 12898; the decision was upheld on appeal.¹⁶

The NRC must take steps to avoid disproportionate, adverse environmental impacts on low income and minority populations and impacts on important religious, subsistence, or social practices. Further, the NRC should sign the MOU, an important aspect of which is procedures to help overburdened communities more efficiently and effectively engage federal agencies in decision making.

Environmental Injustice Plagues Plant Vogtle

Shell Bluff is one example of where the NRC has failed to fully implement Executive Order 12898 to protect Minority Populations and Low-Income Populations from being exposed in a disproportionate way. This constant plague and threat to health and safety must not continue.

In 2009, a nuclear power siting study was published which suggests that there is a "reactor-related environmental injustice" at Plant Vogtle. The study found:

The mining, fuel enrichment-fabrication, and waste-management stages of the US commercial nuclear fuel cycle have been documented as involving environmental injustices affecting, respectively, indigenous uranium miners, nuclear workers, and minorities and poor people living near radioactive-waste storage facilities. After surveying these three environmental-injustice problems, the article asks whether US

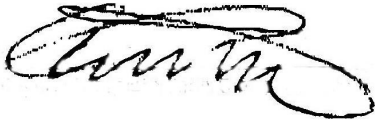
¹⁵ Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-income Populations, February 11, 1994

¹⁶ "Environmental Justice: Grassroots Activism and its Impact on Public Policy Decision Making," Bullard and Johnson, *Journal of Social Issues*, Vol. 56, No. 3 (2000) pp.555-578.

nuclear-reactor siting also involves environmental injustice. For instance, because high percentages of minorities and poor people live near the proposed Vogtle reactors in Georgia, would siting new reactors at the Vogtle facility involve environmental injustice? If so, would this case be an isolated instance of environmental injustice, or is the apparent Georgia inequity generally representative of environmental injustice associated with nuclear-reactor siting throughout the US? Providing a preliminary answer to these questions, the article uses census data, paired t-tests, and z-tests to compare each state's percentages of minorities and poor people to the percentages living in zip codes and census tracts having commercial reactors. Although further studies are needed to fully evaluate apparent environmental injustices, preliminary results indicate that, while reactor-siting-related environmental injustice is not obvious at the census-tract level (perhaps because census tracts are designed to be demographically homogenous), zipcode-scale data suggest reactor-related environmental injustice may threaten poor people ($p < 0.001$), at least in the southeastern United States.¹⁷

The Nuclear Regulatory Commission apparently disregarded this new information because its summary conclusions about Plant Vogtle are wrong.¹⁸ Unless and until the NRC fully implements Executive Order 12898, environmental injustice will continue at Plant Vogtle and elsewhere.

Respectfully,



Rev. Charles N. Utley
Environmental Justice Campaign Director
Blue Ridge Environmental Defense League

¹⁷ *Environmental Injustice in Siting Nuclear Plants*, Mary Alldred and Kristin Shrader-Frechette, ENVIRONMENTAL JUSTICE, Volume 2, Number 2, 2009 © Mary Ann Liebert, Inc. DOI: 10.1089/env.2008.0544

¹⁸ NUREG-1947, Section 5.7 Environmental Justice, March 2011

Resume of Charles N. Utley

Personal Data

Ordained Ministry of the Gospel March 1998

Military Service

1966-1968 US Army, Sergeant (E-5), Viet Nam Campaign Medal, Viet Nam Service Medal

Education

1966 T. W. Josey High School, Augusta, Georgia
 1973 BA, Paine College, Augusta, Georgia
 1983 M.Ed. South Carolina State University, Orangeburg, SC

Employment

1986-present: Guidance Department at Spirit Creek Middle School
 2002-present: Community organizer and Environmental Justice Campaign Coordinator for the Blue Ridge Environmental Defense League

Community Involvement

1980-2005 President of Hyde and Aragon Park Improvement Committee, Inc.
 In January 1999 I was given the prestigious task of writing the community's Brownfield Pilot Project. With God's help Hyde Park and the City of Augusta received a Two Hundred Thousand-Dollar (\$200,000) Brownfield Redevelopment Pilot Grant. This grant was given to only 52 cities in the United States and the only one given that was written by a community in the year 2000.

President, Augusta Mayor's Brownfield Commission

Membership with other Organizations

I have worked with several organizations, agencies and communities throughout the United States, striving to help my community and others that are faced with the disproportionate, unjustified, despicable conditions of our communities, including:

- Richmond County Neighborhood Alliance Association, Augusta, Georgia
- Southern Organizing Committee for Economic and Social Justice, Atlanta, Georgia
- National Environmental Justice Advisory Council to write Executive Order 12898 of the Environmental Justice Act that was signed by President Clinton
- Advisory Board Member for Agency for Toxic Substances and Disease Registry
- Board of Health's Health Monitoring Program, Augusta-Richmond County, Georgia
- Citizens for Environmental Justice, Savannah Georgia

**UNITED STATES OF AMERICA
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BEFORE THE SECRETARY

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Vogtle Electric Generating Plant
Units 3 and 4
License Amendment Application
Docket Nos. 052-00025 and 052-00026;
NRC-2008-0252

CERTIFICATE OF SERVICE

I hereby certify that the
**PETITION FOR LEAVE TO INTERVENE AND REQUEST FOR HEARING BY
THE BLUE RIDGE ENVIRONMENTAL DEFENSE LEAGUE AND ITS
CHAPTER CONCERNED CITIZENS OF SHELL BLUFF**
has been filed through the Electronic Information Exchange system
this 7th day of December, 2015.



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