

# Blue Ridge Environmental Defense League

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October 18, 2010

Gregory B. Jaczko, Chairman  
U.S. Nuclear Regulatory Commission  
Mail Stop O-16G4  
Washington, DC 20555-0001

**Re: A request to overturn withholding of information from public disclosure and a call for a special investigation**

Chairman Jaczko:

On behalf of the Blue Ridge Environmental Defense League, I write to request a special investigation of recent activities of the Nuclear Regulatory Commission's Office of New Reactors regarding the Westinghouse Electric Company's AP1000 nuclear power reactor.

As you know, on September 29, 2010 the Division of New Reactors approved three related requests to withhold information from public disclosure.<sup>1</sup> These actions center on withholding information on the AP1000 nuclear reactor's containment shield building. We believe these requests are improper, contrary to the interests of public health and safety and, coming at this time, an attempt to circumvent scrutiny by the affected public.

As you may also know, on June 25, 2010 Arnold Gundersen<sup>2</sup> briefed the Advisory Committee on Reactor Safeguards about serious design flaws in the AP1000 shield building, the steel and concrete structures which are supposed to contain radiation in the event of an accident. The ACRS determined that the issue would need to be addressed in both generic and site-specific proceedings; that is, during both overall design certification and individual license applications. On August 12, 2010 we filed a new contention in our Plant Vogtle license intervention based on this information.

Southern Nuclear Operating Company's Plant Vogtle is the reference site for the AP1000 combined license application, Docket Nos. 52-025 and 52-026. Georgia Women's Action for New Directions, the Center for a Sustainable Coast and the Blue Ridge Environmental Defense League are co-intervenors in the license application proceeding. The Atomic Safety and Licensing Board has ordered that a preliminary hearing be held tomorrow, October 19<sup>th</sup>, to hear arguments from the parties regarding the flaws in the AP1000, the very flaws identified by the ACRS as having an impact on the combined license application.

The AP1000 is a novel design. To reduce expensive plumbing, pumps and other hardware, Westinghouse relies on so-called passive safety systems; however, the passive design feature is the source of a fundamental weakness which we have brought before the Atomic Safety and

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<sup>1</sup> ADAMS Accession Nos. ML102660263, ML102670260 and ML102660378

<sup>2</sup> Arnold Gundersen is the Chief Engineer with Fairewinds Associates, Inc., specializing in nuclear safety, engineering, and reliability issues. Gundersen is a nuclear engineer with more than 38 years of experience in nuclear power plant operation, management and design.

Licensing Board. Unlike other pressurized water reactors, Westinghouse proposes to use a freestanding steel containment.<sup>3</sup> The problem is that the ventilation system allows the free flow of air, allowing radiation to escape in the event of a reactor core breach or loss-of-coolant-accident. Gundersen stated the danger bluntly:

The unique AP1000 containment design allows it to develop a preexisting condition that could lead to a reduction in its wall thickness that would result in a rapid release of radiation. This scenario is likely and is not anticipated in the current design basis AP1000 analysis nor in the SAMDA analysis.

Gundersen goes on to say that corrosion, cracking and leakage in nuclear reactor containment structures are more serious than anticipated by the NRC. The high-moisture environment in the AP1000 makes it more susceptible to corrosion in inaccessible locations than older plants. An accident releasing radioactive gases from the AP1000 reactor vessel would not be kept inside the containment structure because there is an annular gap between the steel containment and the concrete building. This gap is designed to siphon air up and release it through the top of the building.

In June, the Chairman of the ACRS, Harold B. Ray, said that specific issues relating to accessibility, inspections and maintenance of the containment should be addressed not in the pending generic review of the AP1000 design by the ACRS, but within individual combined operating license proceedings.

Mr. Chairman, how could the Nuclear Regulatory Commission grant the request to withhold information from the public which is directly related to the ongoing determination of safety measures at Plant Vogtle? Even if such withheld information were deemed proprietary, which we dispute, the withholding must not impair procedural rights.<sup>4</sup>

Further, under 10 CFR § 2.390, the Commission may deny a request for withholding of information from the public. The relevant regulation states:<sup>5</sup>

The procedures in this section must be followed by anyone submitting a document to the NRC who seeks to have the document, or a portion of it, withheld from public disclosure because it contains trade secrets, privileged, or confidential commercial or financial information.

If the Commission determines, under paragraph (b)(4) of this section, that the record or document contains trade secrets or privileged or confidential commercial or financial information, the Commission will then determine whether the right of the public to be fully apprised as to the bases for and effects of the proposed action outweighs the demonstrated concern for protection of a competitive position, and whether the information should be withheld from public disclosure under this paragraph. If the

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<sup>3</sup> A nuclear reactor containment building is the final barrier to radioactive release, and must be reliable in the event of failure of the reactor vessel and the coolant system.

<sup>4</sup> 42 USC 2231, Atomic Energy Act, Chapter 16, Sec.181

<sup>5</sup> 10 CFR § 2.390(b)(5) Public inspections, exemptions, requests for withholding

record or document for which withholding is sought is deemed by the Commission to be irrelevant or unnecessary to the performance of its functions, it will be returned to the applicant. (emphasis added)

The purpose of the requests by Westinghouse is to withhold information on steel welding inspections and benchmarking, analysis, testing, design and audits of the reactor containment shield building. Shield building maintenance and inspection issues are central to our intervention. The withheld AP1000 information is relevant and necessary for the intervenors in the ongoing Plant Vogtle licensing proceeding now before the Atomic Safety and Licensing Board. Withholding relevant and material information in this matter is improper and outrageous. The Commission should rescind and deny these requests.

In a related matter, we are troubled by the recent report by a pro-nuclear blogger in which the writer says he communicated with NRC staff assigned to the AP1000 shield building evaluation.<sup>6</sup> According to the report, the NRC staff disagrees with Mr. Gundersen's assessment of containment liner corrosion and has already concluded that there are no "show stopping issues." If the NRC staff is biased, that is, if they chose sides in July before fully analyzing Gundersen's AP1000 research paper, how can we be assured of getting a fair hearing?

Finally, if the NRC's response to technical problems is a cloak of secrecy, how can the residents of Shell Bluff, Georgia and indeed the United States have any confidence in the next generation of nuclear power? Thank you for your consideration of our request.

Respectfully,

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

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<sup>6</sup> Comments to Scientific American article, Rod Adams, 7/30/10