

Blue Ridge Environmental Defense League

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October 31, 2011

Cindy Bladey, Chief
Rules, Announcements, and Directives Branch (RADB)
Office of Administration
Mail Stop: TWB6056B01M,
U.S. Nuclear Regulatory Commission,
Washington, DC 2055560001.

**RE: Docket ID NRC-2011-0201—NRC Generic Letter 2011-XX:
Seismic Risk Evaluations for Operating Reactors**

Dear Ms. Bladey:

On behalf of the Blue Ridge Environmental Defense League, I submit the following comments.

On September 1, 2011 the U.S. Nuclear Regulatory Commission published in the Federal Register a Generic Letter addressing nuclear power plants' seismic risks and other factors. The purpose of the letter was to request information on possible regulatory action. The NRC's Generic Issues Program, which developed GI-199, addresses important safety and security questions which apply to all or most plants.

What is clear from reading the many documents referenced in the generic letter is that the NRC is assiduously shuffling paper instead of taking action. It is remarkable to find whole paragraphs in the most recent federal register notice copied verbatim from guidance written a decade or more ago. The glacial pace of the NRC's safety and security procedures appears to be wholly unresponsive to reality, which threatens to undermine both the agency's authority and the safety of the plants it licenses. During the last three years we have seen both nuclear and financial meltdowns. Heedless of events, the NRC continues to gamble with sub-prime safety codes and horizontal acceleration default swaps.

For example, a decade ago the NRC developed a generic guidance document on seismicity, fires, winds, floods and other factors: "Perspectives Gained from the Individual Plant Examination of External Events (IPEEE) Program," NUREG-1742.¹ The report stated:

Almost all licensees reported in their IPEEE submittals that no plant vulnerabilities were identified with respect to seismic risk (the use of the term "vulnerability" varied widely among the IPEEE submittals). However, most licensees did report at least some seismic "anomalies," "outliers," and/or other concerns. In the few submittals which identified a seismic vulnerability, the

¹ ADAMS Accession Nos. ML021270070 and ML021270674

concerns were comparable to concerns identified as outliers or anomalies in other submittals.²

Today, the NRC seeks input based on the following assessment:

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What progress has been made in ten years? The Generic Letter states:

Seventy percent of the plants proposed improvements as a result of their seismic IPEEE analyses. In several responses, neither the IPEEE analyses nor subsequent assessments documented the potential safety impacts of these improvements, and in most cases, plants have not reported completion of these improvements to the NRC. (*emphasis added*)

Meanwhile, the NRC has undertaken the largest expansion of the commercial nuclear power program in 30 years, with applications for early site permits (ESPs) and combined license applications (COLs) for new reactors based on existing seismic regulations. But the NRC staff relies upon the license applicants and industry trade groups for its information on seismic factors. For example, in its license application to build a third reactor at North Anna, Dominion-Virginia Power provided evidence that earth movements could exceed the regulatory requirements. Dominion requested an exemption citing *special circumstances* which "outweigh any decrease in safety that may result from the reduction in standardization caused by the exemption."⁴ The special circumstances included cost factors. The company merely cited Nuclear Regulatory Commission regulations to get its exemption approved. The results are greater risk to public health and safety, and not only at North Anna. The Generic Letter continues this case-by-case example in a generic fashion, stating:

These reviews identified higher seismic hazard estimates than previously assumed that may result in the increased likelihood of exceeding the safe-shutdown earthquake (SSE) at operating facilities in the [Central and Eastern United States]. The staff determined that based on the evaluations of the IPEEE program, seismic designs of operating plants in the CEUS do not pose an imminent safety concern.⁵

² NUREG-1742, Volume 1, page xxi, September 2001

³ Vol. 76, Federal Register 54508, September 1, 2011

⁴ Dominion's legal brief to Atomic Safety and Licensing Board, In the Matter of North Anna Power Station Unit 3, October 28, 2010.

⁵ Vol. 76, Federal Register 54508, September 1, 2011

For GI-199, the NRC staff based its risk analysis on seismic core damage frequency no greater than one-in-ten thousand years. However, the NRC staff have not tied this assessment to the particular structures, systems and components at risk from seismic damage and failure. Moreover, the Generic Letter merely requests information; it contemplates neither recommendations for design changes in proposed nuclear power plants nor back-fit requirements for existing plants. The letter appears to have an allergic response to direction, suggestion, or any changes whatsoever. In fact, the Generic Letter closes with "No mandated backfit is intended by issuance of this GL." Any action which results would be issued as "guidance." However, regulatory guides such as Regulatory Guide 1.29 on designation of structures, systems and components of nuclear power plants to be designed to withstand earthquake effects are not substitutes for regulations, and compliance with them is not required.

GI-199 concludes that seismic hazard estimates have increased; however, it also concludes that there is no immediate safety concern and "assessment" should continue. The result is further paper shuffling; perhaps guidance in lieu of regulation. A decade of study preceded this point, there is certainly new information coming to light in the wake of the earthquakes in Japan and Virginia, but there is no reason whatsoever for further delay of meaningful safety regulations for new reactors and back-fits of existing plants.

Thank you for the opportunity to present these remarks. Please add me to the contact list for further actions on this matter.

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