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**Before the United States Nuclear Regulatory Commission  
Statement of Paul Gunter, Reactor Oversight Project, Beyond Nuclear**

**“Leak First, Fix Later” Impacts on Decommissioning Fund Shortfalls  
February 23, 2010**

Mr. Chairman, Commissioners, thank you for this opportunity to address the Commission on the issue of decommissioning funding.

Peter Shumlin, President Pro Tem of the Vermont State Senate recently made some relevant remarks to this briefing in an announcement that the State legislature will vote this week on whether or not to allow Entergy’s Vermont Yankee to operate beyond its current 40-year license which terminates on March 12, 2012.

He is quoted to say “Vermont Yankee has been further marred by Entergy’s attempt to create a debt ridden spin off corporation to take ownership of the plant. The cleanup fund is already more than half a billion dollars short and Vermonters cannot afford a corporation that may shift that cost to ratepayers.”

Monthly decommissioning funding disclosures to the State of Vermont made Vermont Yankee the nuclear industry’s bellwether for the steep decline industry-wide in decommissioning funds. This practice should be required of each nuclear power plant and provided to State and Federal regulators. Vermont Yankee may now become the bellwether for an industry also misrepresenting facts significantly affecting accurate estimates for “minimum” decommissioning funds,

namely the presence and condition of an uninspected miles-long tangle of corroding buried pipes that run under every nuclear site in this country carrying radioactive effluent amidst protected groundwater resources.

Senator Shumlin's remarks exemplify an emerging public mistrust exacerbated by an operator's false statements made under oath to State officials with regard to tritium leaks into groundwater and underground radioactive contamination that has now moved offsite at least as far as the Connecticut River. In fact, the public confidence and trust is more broadly eroded in industry's commitment to decommissioning with each additional uncontrolled and unmonitored radioactive release at a still growing number of reactor sites in the US.

As we know, tritium is a tracker isotope for a larger host of slower moving radionuclides that can escape through these same uncontrolled and unmonitored radioactive effluent release paths.

I am reminded of an early Yankee Atomic Corporation promotion that I saw for the decommissioning of the Yankee Rowe nuclear power plant in Western Massachusetts. It was an artist's rendition of the decommissioning of Yankee Rowe featuring "before" and "after" pictures. The "before" image pictured the small 167 megawatt reactor sitting on the banks of the Deerfield River. The "after" rendition had air-brushed out the atomic power plant's image leaving a now bucolic countryside picture. However, the artist had mistakenly left the reactor's reflection in the river. Yankee Atomic Corporation eventually corrected the graphic mistake. But I believe this little story and Senator Shumlin's remarks are poignant for our dialogue today. They point to the increasing uncertainty and mistrust with regard to nuclear power industry's accountability for the protection of natural resources and the adequacy of funding for decommissioning operations in light of uncontrolled and unmonitored radioactive leaks. Uncontrolled and unmonitored leaks significantly escalate the unreliability of "minimum" decommissioning cost estimates and therefore the availability of

maintained funds for cleanup of the sites and protected resources that flow beyond company property lines.

Two examples illustrate this concern.

The decommissioning costs for the Yankee Rowe atomic power plant escalated from an initial estimate of \$120 million to \$750 million dollars---in large part the result of the spread of ground water contamination, some readings of elevated tritium in the aquifer system as deep as 300 feet. Because of the company's inadequate decommissioning funds, true to Senator Shumlin's concern for Vermonters, the bulk of the cost was passed onto Yankee Atomic ratepayers.

Connecticut Yankee had set aside \$410 million in its fund for a decommissioning that ultimately tallied up to a cost of \$1.2 billion due in no small part to strontium-90 contamination travelling along with a radioactive tritium plume into the surrounding water table. The extent of the contamination was only discovered well after the decommissioning process began. Again, the decommissioning fund shortfall and mitigation cost overrun was passed onto Connecticut ratepayers.

Uncontrolled radioactive releases have raised the issue of how current methods for establishing meaningful "minimum" decommissioning cost target estimates are fundamentally flawed and misleading with a formulaic one-size fits all approach that does not take into account the potential for significant---even catastrophic---groundwater contamination from uncontrolled and unmonitored radioactive leaks.

This formulaic and generic flaw raises the public concern that a reactor's parent company or its subsidiary Limited Liability Corporation could someday declare bankruptcy and leave extensive and costly cleanup operations of contaminated soil and water as well as the indefinite or permanent on-site storage of irradiated nuclear fuel to a State and its ratepayers. As Senator Shumlin further pointed out

the establishment of shell corporations are recognized as financial liability fire walls for parent corporations and foster further public concern for the adequacy of environmental protection supposedly afforded through current decommissioning funding mechanisms.

Furthermore, inadequate funding compounded by the added and uncertain cost from extensive soil and water contamination can in of itself cause a delay in the completion of an environmental cleanup for decades leaving long-lived radioactive toxins to infiltrate deeper and contaminate underground aquifers as well as surface water rivers and lakes in proximity and downstream of the site.

The issue before the Commission regards how these gaps in decommissioning funds will be closed to protect public health and safety and maintain environmental quality. However, the one element missing from the equation is how the costs from these recurring uncontrolled and unmonitored radioactive releases around the country are to be captured and incorporated in the impact on already significant financial gaps and shortfalls in decommissioning funds.

Beyond Nuclear concurs with Senator Shumlin, as well as Fairwinds Associates in Burlington, Vermont and other public interest advocates that these untallied costs should not be the financial burden of the ratepayers and of the States. Having significantly profited from plant operations, the parent companies should be more tightly regulated and held accountable to absorb these costs as part of the thorough completion of decommissioning and site clean-up operations.

In fact, uncontrolled and unmonitored releases from reactor effluent discharge pathways are in violation of 10 CFR 50 Appendix A General Design Criterion 60 Control of Radioactive Effluent Pathways and Design Criterion 64 Monitoring of Radioactive Effluent Pathways. Given that uncontrolled radioactive releases are in evidence as significantly increasing decommissioning costs and widening an already significant gap in decommissioning fund shortfalls, we contend that

stronger regulatory action is warranted. In our view, it is reasonable for the Nuclear Regulatory Commission to take enforcement action against violators of their license conditions at minimum by imposing on the licensee the loss of options for decommissioning finance methods as designated in Draft Guidance-1229. The loss of design control and monitoring of radioactive effluent pathways would result in a licensee being required to establish and maintain in a prepaid segregated fund 100% of an independently assessed final decommissioning cost. Factors for making additional future adjustments in decommissioning cost estimates would include a periodic independent review and reassessment of costs associated with each disclosure of uncontrolled and unmonitored releases from a reactor's radioactive effluent pathway.

Similarly, the advent of Limited Liability Corporations (LLC) formed as the result of the growing consolidation of nuclear ownership has created the very real risk of shifting decommissioning cost shortfalls to the public from the parent corporations, whose LLC's only asset may be an individual reactor site. We contend that LLCs shall be required to similarly establish prepaid segregated decommissioning funds with 100% of an independently assessed decommissioning cost.

I thank you for your time.