



March 16, 2016

Rulemaking Comments
Nuclear Regulatory Commission
Washington, D.C. 20555

Re: Docket ID NRC-2015-0070

Dear Commission:

Founded in 1968, the Association to Preserve Cape Cod (APCC) is the largest regional non-profit environmental organization on Cape Cod. Representing more than 5,000 members, APCC's mission is to promote policies and programs that foster the preservation of the Cape's natural resources. APCC focuses its efforts on the protection of groundwater, surface water, and wetland resources, preservation of open space, the promotion of responsible, planned growth and the achievement of an environmental ethic. In 2014 APCC completed an environmental analysis of the existing and potential impacts of the Pilgrim Nuclear Power Station on our region. As a result of our report, APCC concluded that decommissioning Pilgrim is in both the regional and public interest. We are committed to a safe and environmentally sound plant decommissioning.

The fundamental question surrounding all industrial shutdowns is who pays for the decommissioning. This question also requires us to consider who should not pay and how to ensure that the risk of loss going forward is not inadvertently transferred to those who should not pay, in an economic climate that rewards/promotes limited liability and facilitates corporate bankruptcy. The questions posed in the advanced notice of proposed rulemaking leads APCC to believe that not much thought has been given to this fundamental question. Indeed, it appears that the Nuclear Regulatory Commission is attempting to streamline the decommissioning process without a careful analysis of costs and risks. We believe that far more consideration must be given to how to protect taxpayers from underwriting nuclear power plant decommissioning. Considering that the federal government has been unable to develop a safe and cost effective nuclear waste management system, the exposure to risk of an accident and harm to the environment will be extended for decades if not centuries after a nuclear power station ceases operating. Those who have profited from operation of the power stations must ensure that the resources are ever present and available to deal with the challenges that are either underestimated or not even anticipated at this time. The lessons of 9/11 and Fukushima are that we need to plan for the occurrence of catastrophic events and that "sound" engineering is not a guarantee of safety.

The inadequacies of the decommissioning trust fund are well documented. Most notably the 2012 General Accounting Office report (GAO 12-258) identified a host of poor assumptions and lax oversight of the decommissioning trust funds. The General Accounting Office noted that

“NRC’s formula may not reliably estimate adequate decommissioning costs” and “NRC has not reviewed licensees’ compliance with the investment standards the agency has set for decommissioning trust funds” as well as the overall inability by NRC to verify information submitted or review procedures. From an environmental perspective, NRC’s assertion that “[a]ctivities that go beyond the scope of decommissioning as defined in § 50.2 such as waste generated during operations or demolition costs for greenfield restoration, are not appropriate costs for inclusion in the decommissioning cost estimate” is absurd and poses a significant public safety and environmental risk. ANPR II G. As pointed out by the General Accounting Office, the funds are based upon more than 30-year old assumptions and were established before 9/11 and Fukushima. Stored radioactive material is just as susceptible to release from terrorist activities and natural disasters as from operating nuclear power stations.

APCC is greatly concerned that the Nuclear Regulatory Commission has not carefully examined its own inefficiencies and deficiencies in promulgating the advanced notice. “Significant regulations for the decommissioning of nuclear power reactors were not included in NRC rules promulgated before 1988.” ANPR II A. The rules established after 1988 were laden with “ambiguities” and lacked any meaningful public engagement. ANPR II A. Despite heavy NRC staff engagement in dealing with decommissioning, 9/11 caused the agency to abandon decommissioning efforts, including properly assessing the risk of a zirconium fire at a decommissioned plant. ANPR II A. The Nuclear Regulatory Agency totally abandoned effective decommissioning planning for over a decade while additional threats and design deficiencies were uncovered. ANPR II A. For instance, the Pilgrim plant seismic risk was determined to have been greatly underestimated, and in the wake of Fukushima, the risk of a northwest Atlantic tsunami was also found to have been underestimated. Both of those risks have potential to cause a release of stored nuclear materials. Based upon faulty thinking, “the NRC staff stated that no additional permanent reactor shut downs were anticipated in the foreseeable future and that no immediate need existed to proceed with regulatory improvement work.” ANPR II A. However, “[s]ince 2013, five power reactors have permanently shut down, defueled and are transforming to decommissioning.” ANPR II A.

A second major APCC concern is that the Nuclear Regulatory Commission appears to be doubling down on the premise that all nuclear power plants are the same and that one set of rules and regulations should suffice for a broad range of design and siting scenarios. We know that coastal nuclear reactors like Pilgrim have a unique set of risks and hazards that include tsunamis, hurricanes, powerful coastal storms (nor’easters), storm surges, erosion, sand movement and sea level rise. Moreover, the risk of a seismic event impacting Pilgrim was greatly underestimated both in the original design and subsequent licensing of Pilgrim. All of these challenges will confront a decommissioned Pilgrim on a perpetual basis. From a security standpoint the ocean provides access and means of trespass that are more complex than terrestrial trespass. Lastly, not all plants were designed and operated with the same level of diligence and care. The advance notice seems to overlook the fact that some plants such as Pilgrim have a lengthy history of operating in a degraded quadrant and such operation is likely to be indicative of hidden defects that might not be determined at shutdown, e.g. improper disposal of hazardous non-nuclear waste. Of course as noted, the Nuclear Regulatory Commission has myopically avoided dealing

with non-nuclear risks associated with a plant's shutdown. This shortsightedness must be corrected in any regulations adopted.

Insurance is based upon a combination of the probability of an event, frequency of an event and the potential loss. Under the Price Anderson Act, the U.S. taxpayers are the ultimate insurer and the Nuclear Regulatory Commission must do everything within its authority to avoid and minimize the inevitability of an adverse event. Nuclear power plant accidents (liability) have been identified as having a very low probability of occurring but with a high potential loss. Overlooked is the actual frequency of one-in-a-million year occurrences as well as the common occurrence of low level leaks. The 60-plus year history of the nuclear power industry has shown that these estimates are erroneous and that actual loss has a much higher probability of occurring, potential losses are greater and the frequency of low level incidents is greater. Three Mile Island, Fukushima and Chernobyl are just some of the lexicon associated with the industry's one-in-a-million-year event. Another example is Pilgrim's well-documented tritium leak. Quantifying the harm from this tritium leak, which has been dispersed into Cape Cod Bay, is difficult if not impossible at this time. "The NRC recently identified several instances of unintended tritium releases, and all available information shows no threat to the public. Nonetheless, the NRC is reviewing these incidents to ensure nuclear plant operators have taken appropriate action to determine what, if any, changes are needed to the agency's rules and regulations." NRC "Groundwater Contamination (Tritium) at Nuclear Power Plants" webpage. Since Cape Cod Bay seafood plays an important role in the nation's food supply, it is possible that there might be future claims from those harmed by hazards in the food supply directly related to tritium. At a minimum, a tritium trust fund should be included in the insurance requirements for decommissioning. Insurance protection must be maximized and prolonged well passed decommissioning. "[T]he need for onsite insurance at a decommissioning reactor to stabilize accident conditions or decontaminate the site following an accident should be significantly lower compared to the need for insurance at an operating reactor" is a foolhardy notion. ANPR II I. As noted, because the waste being stored is at significant risk for release from numerous types of natural events and from terrorist threats, risk of loss is not significantly reduced. However, even if true, the insurance marketplace should adjust to reduce costs significantly. The Nuclear Regulatory Commission should not be in the insurance forgiveness business.

Ultimately the Nuclear Regulatory Commission must define a safe and successful decommissioning. The questions posed in the advanced notice of proposed rulemaking leads APCC to believe that the Commission does not have a clear picture of what a decommissioned plant is and who is responsible at all junctures of the process. At a minimum the Commission must define a decommissioned plant as well as the role and responsibilities to successfully decommission and maintain a decommissioned plant. This includes independent oversight that all safety systems are functioning as designed. The public recently learned that a fire safety procedure was absent from Pilgrim for over a year and the associated logs and records were falsified. The advanced notice from the Nuclear Regulatory Commission seems to imply that less diligence and oversight will be required. APCC believes that more independent oversight and especially spot unannounced inspections are essential for public safety and protection from economic and environmental loss.

Finally, from an ethical perspective, decommissioning regulations potentially pose significant burdens on the pocketbooks of the nuclear industry. Alternatively, such regulations can be crafted to allow minimal burden. These are the kind of decisions that challenge and tempt government officials – employment offers, upgrades at conferences, vacation deals etc. are not foreign to these important regulatory processes. Telephone calls from former colleagues can outwardly appear innocent but have the intent of influence and intelligence gathering. The Inspector General must play a proactive role in this regulatory process to ensure that the developed regulations are fair and protect the public, including protecting the taxpayer from inheriting the tab.

Thank you for the opportunity to comment on this important and overdue process.

Sincerely,

A handwritten signature in blue ink, consisting of a stylized 'E' followed by a long horizontal stroke that curves upwards at the end.

Edward J. DeWitt
Executive Director