Testimony of Brian Rayback

In Opposition to L.D. 2027, An Act to Clarify the Property Tax Exemption for Air Pollution Control Facilities

February 6, 2024

Senator Grohoski, Representative Perry, and honorable members of the Joint Standing Committee on Taxation, my name is Brian Rayback. I am a resident of Cape Elizabeth and am a lawyer with Pierce Atwood. On behalf of Maine Yankee Atomic Power Company, I am here to testify in respectful opposition to L.D. 2027, An Act to Clarify the Property Tax Exemption for Air Pollution Control Facilities.

The purpose of my testimony is to provide some context for the bill that is before you by explaining how the Maine Department of Environmental Protection ("Maine DEP") has applied the pollution control facility statute as currently written to Maine Yankee.

Maine DEP, operating through its Board of Environmental Protection, has twice certified that Maine Yankee operates an air pollution control facility, known as the Independent Spent Fuel Storage Facility ("ISFSI"), to prevent the release into the atmosphere an air pollutant known as radionuclides. Radionuclides, which are unstable atoms that spontaneously emit radiation and can exist as a solid, liquid or gas, are emitted from the nuclear waste that is left over from the operation of the former nuclear power plant at Maine Yankee's site. When emitted into the air, radionuclides can be ingested or inhaled into the human body, exposing people to dangerous levels of radiation for long periods of time. Radionuclides that are released into the environment are especially problematic because they can travel on air currents for many miles to locations where the radiation they emit cannot be shielded.

Because of the danger radionuclides pose, they are classified under the federal Clean Air Act and Maine's air regulations as hazardous air pollutants. *See* 40 C.F.R. § 61.01(a) (designating radionuclides as a hazardous air pollutant); 06-096 CMR 137 § 1(F) & App. A (requiring reporting of emissions of hazardous air pollutants, including radionuclides).

The first time the Maine DEP found the ISFSI is a pollution control facility was in 2001 under a statute that exempts air pollution control facilities from sales and use tax, 36 M.R.S. § 1760(30). The second time was in October 2023 under 36 M.R.S. §§ 655(1)(N) and 656(1)(E)(2), which exempt air pollution control facilities from property tax. Although different statutes, the language of the two exemptions are nearly identical and the Maine courts apply them in the same way. *See International Paper v. BEP*, 1999 ME 135, ¶ 15, n.3 (the "standards and procedures are the same"). The proposed bill, L.D. 2027, is intended to change the result of the second of these decisions so that the same facility that is an air pollution control facility for sales and use tax would no longer be an air pollution control facility for property tax.

By statute, "air pollution control facilities," certified as such by the Commissioner of Environmental Protection, and "all parts and accessories thereof" are exempt from both personal and real estate property tax. 36 M.R.S. §§ 655(1)(N) (personal property) & 656(E)(2) (real estate). The Legislature defined an air pollution control facility for this purpose as "any appliance, equipment,

machinery, installation or structures installed, acquired or placed in operation primarily for the purpose of reducing, controlling, eliminating or disposing of industrial air pollutants." 36 M.R.S. § 656(E)(2)(a). Although the Legislature has not defined the scope of "all parts and accessories," the Department has long interpreted that language to include "all associated piping, electrical, concrete, insulation and structural installations necessary for the construction and operation" of a pollution control facility.

Thus, the exemption applies to all facilities whose primary purpose is air pollution control, regardless of how or what type of air pollutants they control. In interpreting this statutory requirement, the Maine Supreme Judicial Court has stated that the primary purpose test "connotes a basic, fundamental or principal purpose as opposed to one which is secondary or merely incidental." *Statler Industries Inc. v. BEP*, 333 A.2d 703, 706 (Me. 1975).

Notably, the Maine DEP does not determine the value of the tax exemption. Rather, its only task under the statute is a technical one, which is to decide if the equipment in question controls air pollutants. The value of the exemption is left to the local tax assessor to determine.

From 1972 until 1997, Maine Yankee operated a 900-megawatt nuclear power plant in Wiscasset. The plant was shut down in 1997. From 1997 through 2005, Maine Yankee "decommissioned" the Wiscasset site, which involved removing the nuclear reactor and other plant structures and restoring the property to stringent clean-up standards. Maine Yankee now operates the ISFSI at the same site, which safely stores nuclear waste in accordance with a license from the U.S. Nuclear Regulatory Commission ("NRC").

The ISFSI was constructed to store on a temporary basis nuclear waste generated at the Maine Yankee plant when it was generating electricity. Under a contract that the U.S. Department of Energy ("DOE") signed with all nuclear plant owners, as well as the Nuclear Waste Policy Act, the DOE was to have taken title to the waste and disposed of it off-site. That has not occurred, in part because DOE does not have an operating disposal facility at this time. In the meanwhile, Maine Yankee is required to store the spent nuclear fuel and other nuclear waste from the decommissioned power plant in accordance with its license and regulations from the NRC.

The ISFSI is an approximately 11-acre open-air facility with an adjacent security and operations building. The facility contains 64 Transportable Storage Canisters ("TSCs"), which are large cylinders made of stainless steel, that contain nuclear waste removed from Maine Yankee's spent fuel pool during decommissioning. The nuclear waste at Maine Yankee's ISFSI is composed mostly of spent nuclear fuel rods and also includes additional waste from the decommissioning process, known as Greater than Class C Waste.

Maine Yankee's nuclear waste was first loaded into each TSC while under water in the spent fuel pool. Once loaded with nuclear waste, the TSC lid was placed on top and welded to the shell. The TSC was then drained of water and backfilled with inert gas. Each TSC is housed inside a massive concrete and steel cask known as a Vertical Concrete Cask ("VCC"). Each VCC sits on an engineered concrete pad at the Maine Yankee site.

The TSCs, VCCs, and concrete pads form an integrated system that is primarily designed, constructed, and operated to prevent the emission of radionuclides from nuclear waste into the atmosphere.

First, each of the TSCs, VCCs, and concrete pads are highly engineered to ensure radionuclides are confined during both normal and accident conditions. The TSCs' air-tight design is intended to prevent radionuclides from escaping from each TSC. The TSCs are engineered not to have any openings from which radionuclides can escape and the inert gas in each TSC helps ensure that radionuclides do not leak from the nuclear waste by preventing degradation of the cladding that contains the nuclear waste. Furthermore, the TSCs and VCCs are designed to withstand physical impacts from explosions and natural disasters. Likewise, the concrete pads are engineered to ensure that each VCC stays safely upright in a variety of conditions, including tornados, earthquakes, and hurricanes.

Second, the TSCs and VCCs work together to remove decay heat – heat that is generated from radiation emitted by nuclear waste that is absorbed inside the TSCs – to prevent the nuclear waste from overheating. Brackets in each TSC are designed to transfer heat from the nuclear waste to the TSC shell. Once heat is transferred to the TSC shell it is then dispersed through the VCC's natural convection cooling system. Each VCC is designed with inlet port penetrations at the bottom of the VCC, outlet port penetrations at the top of the VCC, and an annular gap between the VCC and the TSC. When the TSC shell becomes hot with decay heat, it warms the air in the annular gap causing the air to rise and exit through the outlet port penetrations. Meanwhile, cool air enters the annular gap through the inlet port penetrations thereby cooling the TSC and the nuclear waste.

Finally, the TSCs and VCCs prevent the waste from achieving criticality, which is an uncontrolled nuclear reaction. The orientation of the nuclear waste and the presence of neutron absorber materials in each TSC function to prevent criticality. Similarly, the spacing and orientation of the VCCs prevents the nuclear waste from reaching criticality.

The TSCs, VCCs, and concrete pads also provide radiation shielding. Additionally, the TSCs are designed to transport the nuclear waste, to a final depository site, when that occurs. These functions are secondary to the confinement function.

Although we might commonly think of the air pollution control facility being something that filters pollutants from a smokestack, like a scrubber or a baghouse, it can also apply to technologies that prevent air emissions from forming in the first place, such as with low-NOx burners on a boiler, which burn fuel in a such a way to reduce the formation, and thus the emission, of nitrogen oxides. In its October 2023 decision on the property tax exemption, the Maine DEP concluded that the ISFSI serves these same goals by preventing radionuclides from being emitted in the first place. Specifically, the Maine DEP found (1) that radionuclides are industrial air pollutants; (2) that the primary purpose of the TSCs is to control and prevent air pollution by confining those radionuclides; and (3) that the VCCs and pads are necessary for the operation and support of the TSCs, and thus are necessary to their primary function of controlling air pollution. The Town of Wiscasset has appealed that decision to the Maine Superior Court in *Town of Wiscasset v. Maine BEP*, AP-23-11, and so the question of whether the Maine BEP's decision will stand remains open.

Thank you for the opportunity to testify.