

MAINE STATE LEGISLATURE

The following document is provided by the
LAW AND LEGISLATIVE DIGITAL LIBRARY
at the Maine State Law and Legislative Reference Library
<http://legislature.maine.gov/lawlib>



Reproduced from electronic originals
(may include minor formatting differences from printed original)



Paul R. LePage, Governor

Ricker Hamilton, Commissioner

Department of Health and Human Services
Commissioner's Office
221 State Street
11 State House Station
Augusta, Maine 04333-0011
Tel.: (207) 287-3707; Fax: (207) 287-3005
TTY Users: Dial 711 (Maine Relay)

March 7, 2018

MEMORANDUM

TO: Senator Michael Thibodeau, President of the Senate, and Representative Sara Gideon, Speaker of the House

FROM: Ricker Hamilton, Commissioner
Department of Health and Human Services

A handwritten signature in black ink, appearing to read "Ricker Hamilton", is positioned to the right of the "FROM:" line.

SUBJECT: State Nuclear Safety Inspector's November and December 2017 Monthly Report to the Legislature on the Interim Spent Fuel Storage Facility in Wiscasset, Maine

Legislation enacted in the spring of 2008 requires the State Nuclear Safety Inspector to provide monthly reports to the President of the Senate, Speaker of the House, the U.S. Nuclear Regulatory Commission, and Maine Yankee. The report emphasizes local and national highlights on the storing and disposing of used nuclear fuel.

The enclosed report provides the information required under Title 22 of the Maine Revised Statutes Annotated §666, as enacted under Public Law, Chapter 539, in the second regular session of the 123rd Legislature.

Should you have questions about its content, please feel free to contact Mr. Patrick J. Dostie, State Nuclear Safety Inspector, at 287-6721.

RH/klv

Enclosure

cc: Michael Layton, U.S. Nuclear Regulatory Commission
Monica Ford, U.S. Nuclear Regulatory Commission, Region I
J Stanley Brown, Independent Spent Fuel Storage Installation Manager, Maine Yankee
Nick Adolphsen, Acting Senior Health Policy Advisor
Dr. Bruce Bates, Director, Maine Center for Disease Control and Prevention
Paul Mercer, Commissioner, Department of Environmental Protection
Barry Hobbins, Maine Public Advocate
Lieutenant Scott Ireland, Special Services Unit, Maine State Police
Nancy Beardsley, Director, Division of Environmental Health
Jay Hyland, PE, Manager, Radiation Control Program

State Nuclear Safety Inspector Office Maine CDC – DHHS

November 2017 Monthly Report to the Legislature

The report covers activities at the Maine Yankee Independent Spent Fuel Storage Installation (ISFSI) facility, including the State's ongoing environmental radiation surveillance and provides updates on the national and international effort to license and construct a consolidated interim storage facility and/or a permanent geologic repository for the disposal of spent nuclear fuel. Maine's goal is to move the ISFSI waste stored at Maine Yankee to one of these facilities. The report highlights the significant activities that took place either locally, nationally or, at times, internationally during the month.

National:

- The Public Service Commission of Alabama sent letters to their two representatives on the House Appropriations Committee alerting them of the urgency of protecting the electric consumer payments into the Nuclear Waste Fund as written in the proposed Nuclear Waste Policy Amendments Act of 2017. The Commissioners noted that the proposed legislation provides certain amounts from the Fund for key program expenses to correct some of the funding problems that have plagued the nation's nuclear waste management program for decades.
- The House Committee on Energy and Commerce put out a fact sheet on its proposed Nuclear Waste Policy Amendments Act of 2017 that was approved by its subcommittee by a vote of 49-4. The bill contained ten key provisions:
 1. Permit local stakeholders to engage directly with the federal government to mitigate impacts from hosting a repository or interim storage facility.
 2. Authorize at least \$50 million a year from 2020 to 2022 to fund the first interim storage facility.
 3. Authorize the Department of Energy (DOE) to contract with a private entity for interim storage.
 4. Direct DOE to take ownership of commercial spent nuclear fuel once it is accepted for transport to an interim storage facility or repository.
 5. Allow one interim facility to be built and funded prior to a NRC decision on Yucca Mountain.
 6. Reform the Nuclear Waste Fund to assure long-term funding for the repository program.
 7. Clarify that the Office of Civilian and Radioactive Waste Management at DOE will carry out all nuclear waste management activities.
 8. For stability and continuity provide for a five-year fixed term appointee to lead waste management efforts for a maximum of two terms.
 9. Include a land withdrawal provision for a repository at Yucca Mountain to remove impediments for license approval of the site.
 10. Direct DOE to make payments to Nevada once spent nuclear fuel arrives, prioritize work with Nevada academic institutions, and reserve future economic value from spent fuel to Nevada.

The Committee is awaiting approval from the House Appropriations Committee before submitting the proposed legislation for a floor vote from the full House.

- The Council of State Governments' Eastern Regional Conference's Northeast High-Level Radioactive Waste Transportation Task Force held its semi-annual meeting in Portland. Discussion topics included an update on the three Yankee Companies and the national scene on spent nuclear fuel, an update from the Nuclear Energy Office of the DOE on their spent nuclear fuel and waste disposition programs, which included the status of the Rail/Routing and Section 180 (c) national working groups, a presentation from

Oak Ridge National Laboratory on the De-Inventory studies to remove spent nuclear fuel from Maine Yankee and Connecticut Yankee, the Federal Railroad Administration's perspective on rail safety, safety compliance, and operation lifesaver program, Connecticut's experience on a Kryton-85 release during dry shielded canister loading at the Millstone station, the status of New Jersey's three nuclear power sites, Pennsylvania's transition to a keyhole approach on emergency response and its low-level waste minimization plans, and DOE's training programs available for state radiation programs and local responders.

- Holtec International announced that its HI-STORM UMAX independent spent fuel storage installation is built and ready to receive spent fuel canisters at the San Onofre Nuclear Generating Station in California. The in-ground storage modules can withstand an earthquake with a peak acceleration of 1.5g in all three directions. In addition, the spent fuel canisters have been laser peened to reduce the susceptibility of the stainless-steel canisters to chloride-induced stress corrosion cracking. (Laser Shock Peening is a process that induces residual stresses in materials to increase their resistance to stress corrosion cracking, fatigue, and fretting fatigue.)
- The Chair of the Nuclear Waste Technical Review Board sent a letter to the DOE's Acting Assistant Secretary for Nuclear Energy commenting on the Board's review of the latest draft of the high-burnup fuel sister rod test plan for spent nuclear fuel. The Board recommended that the draft report clarify which of the three test plans for destructive examinations would take precedence and elaborate how the internal atmosphere will be controlled when the fuel rods are punctured. The Chair also noted that the draft report did not address two issues the Board raised last year, namely, how the test results will be used to support modeling efforts and how the 25 fuel rods will be stored for future testing so that characteristics will not change.
- As mandated by the Energy Policy Act of 2005, the DOE released its report to Congress on the alternatives for the disposal of Greater Than Class C (GTCC) low-level radioactive waste and Greater Than Class C-like waste. The GTCC waste includes activated metals from decommissioning nuclear power plants, sealed sources used for diagnosing and treatment of cancer, radioactivity used in support of space exploration and wastes from environmental cleanup at DOE sites such as West Valley in New York. The five alternatives evaluated involve the use of land disposal at six federally owned sites and at four commercial sites in the country. The disposal alternatives considered intermediate-depth boreholes, enhanced near-surface trenches, above grade vault facilities, and the Waste Isolation Pilot Project repository in New Mexico. The preferred alternative recommended was for commercial land disposal facilities, which would require congressional legislation to implement its disposal.

International:

- Four local communities received \$200,000 from Canada's Nuclear Waste Management Organization (NWMO) in support of their communities' well-being as part of their engagement in advance phases of the country's site selection process for disposing of spent nuclear fuel. In one of those communities, Ignace, borehole drilling began to obtain core samples at a potential deep geological repository site. The testing is expected to last three months with an additional year to review the data and share the findings.
- At a recent Geoscience Seminar two geochemists from Canada's NWMO presented their findings on ancient sedimentary rocks in Bruce County, Ontario, Canada. They demonstrated from their research that despite geologic events and water movement closer to the surface, the fluid in rock deep below the surface has been there for the last 435 million years. The sedimentary rock has remained virtually impermeable all these years despite unstable geologic events such as seismic activity, glaciation, mountain-building events, and movements in the earth's crust.