

MAINE YANKEE
321 Old Ferry Road, Wiscasset, Maine 04578

January 23, 2017
OMY-17-001
10 CFR 50.82(a)(7)

ATTN: Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Maine Yankee Atomic Power Company
Maine Yankee Independent Spent Fuel Storage Installation
NRC License No. DPR-36 (NRC Docket No. 50-309)

Subject: Notification of Changes in accordance with 10 CFR 50.82(a)(7)

Maine Yankee Atomic Power Company (Maine Yankee) is notifying the U.S. Nuclear Regulatory Commission (NRC) of significant changes to the decommissioning schedule in accordance with 10 CFR 50.82(a)(7) prior to incorporating these changes into the Maine Yankee Post-Shutdown Decommissioning Activities Report (PSDAR). This schedule change reflects a new decommissioning cost estimate that includes a cost estimate for management of irradiated fuel and Greater than Class C waste that was approved by the Federal Energy Regulatory Commission on November 15, 2016.

Currently, the Maine Yankee PSDAR provides a schedule and cost estimate for the management of irradiated fuel and GTCC waste and decommissioning of the ISFSI for the time period of 2016 through 2033. This time period will be extended from 2016 through 2036. The attachment to this letter provides a mark-up of the Maine Yankee PSDAR that establishes the applicable changes regarding the decommissioning schedule and the cost estimate. Maine Yankee will update the Maine Yankee PSDAR to reflect this new schedule and cost estimate in February 2017.

In addition, Maine Yankee is sending a copy of this letter to the State of Maine as required by 10 CFR 50.82(a)(7).

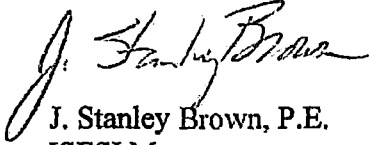
This letter contains no commitments.

NMSSDI
NMSS

Maine Yankee Atomic Power Company
OMY-17-001/January 23, 2017/Page 2

If you have any questions regarding this submittal, please do not hesitate to contact me at
(207) 882-1303.

Respectfully,



J. Stanley Brown, P.E.
ISFSI Manager

Attachment: Mark-up of Revision 3 of the Maine Yankee Post-Shutdown Decommissioning
Activities Report

cc: D. Dorman, NRC Region I Administrator
R. Powell, Chief, Decommissioning Branch, NRC, Region I
J. Goshen, NRC Project Manager
P. J. Dostie, SNSI, State of Maine
J. Hyland, State of Maine

ATTACHMENT TO OMY-17-001

MARK-UP OF REVISION 3 OF THE

MAINE YANKEE POST-SHUTDOWN DECOMMISSIONING ACTIVITIES REPORT

MAINE YANKEE ATOMIC POWER STATION

POST-SHUTDOWN DECOMMISSIONING ACTIVITIES REPORT

REVISION 43 – ~~JANUARY 2016~~ FEBRUARY 2017

Maine Yankee Atomic Power Station Post-Shutdown Decommissioning Activities Report

shallow-land waste disposal facility. Packaged items meeting 10 CFR 61.55 Class C or less were shipped and buried.

The ISFSI storage pads and Vertical Concrete Casks are not expected to be significantly activated. However, the ISFSI decommissioning cost estimate assumes that the material comprising the ISFSI storage pads and Vertical Concrete Casks will be disposed of as low-level radioactive waste.

Other Decommissioning Activities

Other decommissioning activities which do not meet the definition of "major activities" include the following:

- Removal of low level waste. Radioactively contaminated or activated materials will be removed from the site as necessary to allow the site to be released for unrestricted access. LLW will be processed in accordance with procedures and existing commercial options, and sent to licensed disposal facilities. Wastes may be incinerated, compacted, or otherwise processed by authorized and licensed contractors as appropriate.
- Removal of mixed wastes. If mixed wastes are generated, they will be managed according to all applicable federal and state regulations to the extent they are not inconsistent with NRC handling, storage, and transportation regulations. Mixed wastes from Maine Yankee will be transported only by authorized and licensed transporters and shipped only to authorized and licensed facilities. Processes to render the mixed wastes nonhazardous will be evaluated if technology, resources, and approved processes are available.

Storage of Spent Fuel

Congress passed the "Nuclear Waste Policy Act" in 1982, assigning the responsibility for disposal of spent nuclear fuel created by the commercial nuclear generating plants to the Department of Energy (DOE). This legislation also created a Nuclear Waste Fund to cover the cost of the program, which is funded, in part, by the sale of electricity from the Maine Yankee plant (and an estimated equivalent for assemblies irradiated prior to April, 1983). The target date for startup of the federal Waste Management System was originally 1998.

The backlog of spent fuel in the national inventory, delays in site characterization, and intermittent progress in the development of a waste transportation system, make it necessary to reflect spent fuel storage in the cost and schedule of commercial reactor decommissioning. For planning purposes, Maine Yankee has assumed that the high-level waste repository or some interim storage facility will be operational by 2031-2034. Spent fuel and GTCC waste will be stored at the Maine Yankee ISFSI until DOE takes possession of the material and removes it from the site.

Maine Yankee Atomic Power Station Post-Shutdown Decommissioning Activities Report

Period 3 - Site Restoration

- Demolition of the ISFSI storage pads, Vertical Concrete Casks, and remaining buildings and other structures will be performed using conventional demolition techniques. Site Areas affected by the dismantling activities will be cleaned and the ISFSI area graded as required to prevent ponding and inhibit the refloating of subsurface materials.
- The Maine Yankee ISFSI is expected to be operated until 2033, when the spent fuel and GTCC waste is expected to be removed from the site. Using this assumption, the Maine Yankee license will be terminated after the ISFSI is decommissioned. This is scheduled to occur in 2033.

V. DECOMMISSIONING COST ESTIMATE

The current Federal Energy Regulatory Commission (FERC) approved decommissioning cost estimate (Docket # ER13-1395-000) and cost estimate for management of spent fuel and GTCC waste (Docket # ER16-2726-000) is based on was filed with the Federal Energy Regulatory Commission (FERC) on September 30, 2016 and approved by FERC on November 15, 2016 with no objections from the State agencies that were party to the April 30, 2013 the Stipulation and Settlement Agreement between MYAPCO and including the Connecticut Public Utilities Regulatory Authority, the Connecticut Office of Consumer Counsel, the Maine Public Utilities Commission, the Maine Office of Public Advocate, the Massachusetts Department of Public Utilities, and the Attorney General of Massachusetts dated April 30, 2013.

This cost estimate includes the cost associated with the projected ISFSI decommissioning costs and a funding assumption of 15 years of operations costs to manage spent fuel and GTCC waste. A funding mechanism provides that damage awards and settlement proceeds that MYAPCO receives in future phases of its litigation with the Department of Energy (DOE) will be applied to maintain the adequacy of the Nuclear Decommissioning Trust (NDT) to cover 15 years of ISFSI operations (as well as all other projected decommissioning costs). In addition, MYAPCO has the right to resume collection of decommissioning charges from its customers subject to the submittal of a proposal under section 205 of the Federal Power Act, if needed.

MYAPCO has an account within its NDT entitled, "ISFSI Radiological Decom," that segregates the funds for radiological decommissioning of the ISFSI from the larger balance of funds for ongoing management of spent fuel and GTCC waste held in the NDT.

The assumptions of the current decommissioning cost estimate are discussed in the Decommissioning Funding Plan submitted to the NRC on December 16, 2015 in accordance with 10 CFR 72.30(c) (Reference 9). The decommissioning cost estimate incorporates the most recent assumptions with respect to the remaining decommissioning activities and related costs (i.e., those associated with the Maine Yankee ISFSI). The total un-escalated cost estimate for decommissioning the ISFSI, including contingency is approximately \$27.4 million and \$28.1 million in 2015 and 2016 dollars, respectively. This includes approximately \$21.6 million and \$22.1 million for radiological removal in 2015 and 2016 dollars, respectively, and approximately

Maine Yankee Atomic Power Station Post-Shutdown Decommissioning Activities Report

~~\$5.9 million and \$6.0 million for non-radiological removal in 2015 and 2016 dollars respectively.~~

ISFSI operations will continue until DOE removes the spent fuel and GTCC waste, allowing for the decommissioning of the ISFSI. MYAPCO expects that the ISFSI operating costs will continue to cover a number of categories, including costs for insurance, labor, security, materials and supplies, miscellaneous expenses, outside services, property taxes, regulatory fees, rentals and leases and utilities. The un-escalated cost estimate for the management of spent fuel and GTCC waste from 2016 through ~~2032~~2036, including contingency, is ~~\$167.4 million and \$198.6174.6 million in 2015 and 2016 dollars, respectively. This is based on the estimate submitted to the NRC on December 16, 2015 (Reference 9).~~

The total un-escalated cost estimate ~~in 2016 dollars is approximately \$194.3 million and \$226.7199.7 million in 2015 and 2016 dollars, respectively,~~ for decommissioning the ISFSI and managing the storage of spent fuel and GTCC waste for the time period of 2016 through ~~2032~~2036.

MYAPCO will continue to inform the NRC regarding the status of this funding by complying with the obligations defined in: 1) 10 CFR 50.75(f)(1) and (2) to submit an annual Decommissioning Funding Status Report; 2) 10 CFR 50.82(a)(8)(v) to submit an annual financial assurance status report regarding decommissioning funding; 3) 10 CFR 72.30(c) to resubmit the decommissioning funding plan at intervals not to exceed three years; and 4) 10 CFR 50.82(a)(8)(vii) to submit an annual report regarding the status of the funding for managing irradiated fuel.

VI. ENVIRONMENTAL IMPACTS

10 CFR 50.82 (a)(4)(i) describes the Post-Shutdown Decommissioning Activities Report (PSDAR), and requires that it include "a discussion that provides the reasons for concluding that the environmental impacts associated with the site-specific decommissioning activities will be bounded by appropriate previously issued environmental impact statements." The following discussion provides our reasons for drawing that conclusion, based on three previously issued documents: 1) Maine Yankee Atomic Power Station Environmental Report, Supplement One, dated April 19, 1972 [Reference 4]; 2) the Final Environmental Statement Related to Operation of Maine Yankee Atomic Power Station, dated July 1972 [Reference 2]; and 3) NUREG-0586, "Final Generic Environmental Impact Statement (GEIS) on decommissioning nuclear facilities" [Reference 1].

Decommissioning the Maine Yankee plant and ISFSI will have generally positive environmental effects, in that:

- Radiological sources that create the potential for radiation exposure to site workers and the public will be eliminated
- Decommissioning will return the site to a condition allowing unrestricted use

Maine Yankee Atomic Power Station Post-Shutdown Decommissioning Activities Report

4. Maine Yankee Atomic Power Station Environmental Report, Supplement One, dated April 19, 1974 (MY APC to AEC)
5. NUREG/CR-5849, "Manual for Conducting Radiological Surveys in Support of License Termination"
6. AIF/NESP-036, "Guidelines for Producing Commercial Nuclear Power Plant Decommissioning Cost Estimates"
7. Letter from (NRC) to (MYAPCO), Issuance of Amendment No. 167 to Facility Operating License No. DPR-36, dated July 30, 2002
8. Letter from D. Gillen (NRC) to J. Niles (MYAPCO), Issuance of Amendment No. 172 to Facility Operating License No. DPR-36 – Maine Yankee Atomic Power Station (TAC No. M8000), dated September 30, 2005
9. Letter from C. Pizzella (MYAPCO) to U.S. Nuclear Regulatory Commission, OMY-15-053, "Three-Year Update to the Independent Spent Fuel Storage Installation Decommissioning Funding Plan," dated December 16, 2015
10. Letter from Alston & Bird LLP to Federal Energy Regulatory Commission, "Maine Yankee Atomic Power Company Docket No. ER13ER16-____-000," dated May 1, 2013September 30, 2016