

State Nuclear Safety Inspector Office
Maine CDC – DHHS

June 2013 Monthly Report to the Legislature

Executive Summary

As part of the State’s long standing oversight of Maine Yankee’s nuclear activities, legislation was enacted in the second regular session of the 123rd Legislature and signed by Governor John Baldacci requiring that the State Nuclear Safety Inspector prepare a monthly report on the oversight activities performed at the Maine Yankee Independent Spent Fuel Storage Installation (ISFSI) facility located in Wiscasset, Maine.

The report covers activities at the storage facility, including the State’s ongoing environmental radiation surveillance and the national debate over the licensing and construction of a geologic repository for the disposal of spent nuclear fuel. The report’s highlights assist readers to focus on the significant activities that took place nationally. The national highlights primarily focused on a federal court decision, agency activities, and a congressional legislative proposal.

National:

- The Department of Energy’s (DOE) Office of Nuclear Energy issued a report, entitled “A Project Concept for Nuclear Fuels Storage and Transportation”. The report provided guidance for defining systems, equipment, and facilities necessary to implement DOE’s strategy for the management and disposition of used nuclear fuel and high-level radioactive waste. The report included requirements for a pilot interim storage facility, a larger interim storage facility, and the transportation system and equipment needed to move used nuclear fuel from current storage locations to interim storage and then to a permanent geologic repository. The report provided a schedule for key milestones for interim storage facilities and transportation equipment for those facilities.
- The Waste Confidence Directorate of the Nuclear Regulatory Commission (NRC) informed stakeholders that it had drafted three documents for the Commission’s review relative to the Waste Confidence environmental review and rulemaking. The first informed the Commission of its progress and recommendations for publishing the draft rule and environmental impact statement. The second provided a draft of the Federal Register Notice outlining the rule’s proposed text, the explanations, and the conclusions that support the proposed rule. The final document was the draft generic environmental impact statement. The Commission was expected to review the draft reports and approve the documents. After approving the draft documents the NRC staff will publish the documents for a 75 day public comment period. In addition, the staff will hold 10 public meetings around the country to solicit public input.
- The National Association of Regulatory Utility Commissioners and the Nuclear Energy Institute filed a reply brief with the U.S. Court of Appeals for the D.C. Circuit that continued to challenge the Department of Energy’s (DOE) Nuclear Waste Fund fee assessment that maintained it had the right to continue collecting \$750 million a year even “to fund a nonexistent nuclear waste program”. The brief maintained that the 2009, 2010 and 2013 DOE fee determinations were legally defective as their considerations were not thorough, and their reasoning invalid and inconsistent with precedents and practice.
- Four senators introduced bipartisan legislation to safeguard and permanently dispose of used nuclear fuel and high-level waste. The bill, entitled the “Nuclear Waste Administration Act of 2013, is based in part on recommendations from the President’s Blue Ribbon Commission for America’s Nuclear Future. The legislation proposed a new agency to administer the nation’s nuclear waste program and a consent-

based process to find sites for temporary and permanent storage. It also provided a linkage between storage facilities and a repository such that new storage facilities cannot be sited unless at least one site has been selected for evaluation as a potential repository. In addition, the proposed legislation would create a Working Capital Fund from which fees deposited into the Fund would be immediately available without congressional appropriations. Finally, the bill would allow the Energy Secretary to revisit the decision not to commingle defense and commercial used nuclear fuel.

Introduction

As part of the Department of Health and Human Services' responsibility under Title 22, Maine Revised Statutes Annotated (MRSA) §666 (2), as enacted under Public Law, Chapter 539 in the second regular session of the 123rd Legislature, the foregoing is the monthly report from the State Nuclear Safety Inspector.

The State Inspector's individual activities for the past month are highlighted under certain broad categories, as illustrated below. Since some activities are periodic and on-going, there may be some months when very little will be reported under that category. It is recommended for reviewers to examine previous reports to ensure connectivity with the information presented as it would be cumbersome to continuously repeat prior information in every report. Past reports are available from the Radiation Control Program's web site at the following link: www.maineradiationcontrol.org and by clicking on the nuclear safety link in the left hand margin.

Commencing with the January 2010 report the glossary and the historical perspective addendum are no longer included in the report. Instead, this information is available at the Radiation Control Program's website noted above. In some situations the footnotes may include some basic information and may redirect the reviewer to the website. In October 2011, the format of the report was changed to include an executive summary which replaced the official memorandum to the legislative leadership transmitting the report. To further streamline efforts, beginning in August, 2012, the report featured hyperlinks to documents that would normally be attached as copies to the report. The hyperlinks should facilitate the reports review with some readers focusing on the report while others who wish to explore the cited documentation can do so.

Independent Spent Fuel Storage Installation (ISFSI)

During June, the general status of the ISFSI was normal, with no instances of spurious alarms due to environmental conditions.

There were no fire-related or security-related impairments for the month. However, there were eight security events logged for the month. Six involved transient environmental conditions. One was for a missing key card and the last one was for not initiating a security event report in a timely manner.

There were nineteen condition reports¹ (CR) for the month and they are described below.

- 1st CR: Documented the finding of an abandoned cable during the excavation for a new vehicle barrier gate. The cable was cut and removed.
- 2nd CR: Documented the finding of a cracked thermometer during cleanup efforts. The thermometer was placed inside some clear plastic tubing and taken to the recycle facility.
- 3rd CR: Was written to document the performance of a regulatory screen on a form that did not contain a procedure revision number on the form. The proper procedure revision number was placed on the form.

¹ A condition report is a report that promptly alerts management to potential conditions that may be adverse to quality or safety. For more information, refer to the glossary on the Radiation Program's website.

- 4th CR: Documented the contact between the building crane and a man-lift during the gate cable installation. The workers were counseled and additional supervision was assigned to the job.
- 5th CR: Documented the finding of an abandoned cable and piping during the trenching for the water line to the new maintenance building. This was not unexpected given the location of the new building to the old Staff building and annex.
- 6th CR: Documented the finding of a raw water line during the excavation for the water line to the new maintenance building. Again, this was not an unexpected occurrence.
- 7th CR: Documented excessive rain eroding the new gate excavation.
- 8th CR: Was written to document computer fan noise. The fan was replaced.
- 9th CR: Was written to document additional erosion from excessive rain in the same location as before.
- 10th CR: Documented the failure to filter water pumped from the gate excavation. The Department of Environmental Protection was notified and a remediation plan was put into place.
- 11th CR: Documented one fire damper failing it surveillance. Damper was adjusted and retested satisfactorily.
- 12th CR: Was written to document a log filled out using an old revision number. The worker was counseled and the proper revision number used.
- 13th CR: Documented a small hydraulic spill of two tablespoons onto the pavement from a contractor's excavator. The excavator was removed for repairs. The spill was remediated and the spill pads were taken to a licensed disposal facility.
- 14th CR: Documented some minor damage to a heat shield on a temperature monitor from contact with the excavator. The minor damage was repaired and the operator of the excavator was counseled.
- 15th CR: Was written to document the discovery of an unsealed ceiling cable penetration. The penetration was sealed immediately. All the other penetrations were inspected and no unsealed cable penetrations were found.
- 16th CR: Documented a tractor mower hitting a rock. The mower was examined with no damage evident.
- 17th CR: Was written to track training observations from a self-assessment.
- 18th CR: Documented the tripping of the man-lift's electrical breaker. The man-lift was removed from service for repairs.
- 19th CR: Documented an emergency exit light bulb out. The bulb was replaced.

Environmental

The quarterly surveillance results will be reported in July's monthly report.

Other Newsworthy Items

1. On June 6, the quarterly conference call of the Federal Energy Regulatory Commission (FERC) rate case settlement briefing on spent fuel storage issues. The group was briefed on the status of the three Yankee companies (Maine Yankee, Connecticut Yankee, and Yankee Atomic) Phase I, II, and III lawsuits. In the first lawsuit the U.S. Court of Appeals unanimously awarded the three Yankee Companies nearly \$160 million for the federal government's failure to take the used nuclear fuel. On May 1st each of the three Yankee Companies filed their plans on how the damage awards would be distributed. All three Public Utilities Commissions in Connecticut, Maine, and Massachusetts supported the Yankees filings before FERC. However, the Attorney General of Massachusetts, Northeast Utilities and the Office of Consumer Advocate from New Hampshire filed motions to intervene in the case. FERC was expected to rule on the interventions by July 1st. In the Phase II lawsuits the parties were waiting for the Federal Court of Claims to issue its decision. The three Yankees were expected to file their Phase III lawsuits by the end of this year. The states were also briefed on the Department of

Energy's initiative to issue a Request for Proposal for bids to develop a general agreement on a volunteer siting process for those communities wishing to host an interim storage facility for housing used nuclear fuel. Currently, several organizations in four states (Kentucky, Mississippi, New Mexico, and Texas) were expressing an interest in hosting such a facility. However, the organizations were keenly interested in receiving funding from DOE to scope out a process that would best suit them. Finally, it was reported that the President's Proposed Budget released in April provided \$60 million for the continued assessment of the Blue Ribbon Commission's recommendations for managing the used nuclear fuel and for moving forward a consent-based siting process.

2. On June 7, the U.S. Nuclear Waste Technical Review Board (NWTRB) sent a letter to the Senate's Committee on Energy and Natural Resources providing comments to the Committee's discussion draft nuclear waste legislation. The NWTRB provided comments on the consent-based process, site characterization, safety case and regulatory standard, implementing organization, and transportation of defense waste. The comments pointed out some shortcomings and improvements to the discussion draft. According to international experience the most surprising comment was the support for a prescriptive consent-based process, which is contrary to what United States host communities have advocated. In addition, the Board also commented on two of the eight questions the Committee had asked for feedback before crafting legislation. The web link for the [letter](#) can be accessed by positioning the cursor over the underlined text and following the directions.
3. On June 12, the Department of Justice (DOJ) and the Department of Energy (DOE) filed their initial brief to the U.S. Court of Appeals for the D.C. Circuit as respondents to the National Association of Regulatory Utility Commissioners and the Nuclear Energy Institute petition requesting the Court to declare the Energy Secretary's 2013 nuclear waste fee assessment as invalid. The DOJ and DOE maintained that the fee assessment was adequate, met the intent of the Nuclear Waste Policy Act of 1982 addressed the Court's concerns identified in the previous fee determination, and reject the petitioners' claims that the fee should be suspended until such time a national waste management plan is adopted. The web link for the [brief](#) can be accessed by positioning the cursor over the underlined text and following the directions.
4. On June 15, the Department of Energy's (DOE) Office of Nuclear Energy issued a report, entitled "A Project Concept for Nuclear Fuels Storage and Transportation". The report provided guidance for defining systems, equipment, and facilities necessary to implement DOE's strategy for the management and disposition of used nuclear fuel and high-level radioactive waste. The report included requirements for a pilot interim storage facility, a larger interim storage facility, and the transportation system and equipment needed to move used nuclear fuel from current storage locations to interim storage and then to a permanent geologic repository. The report provided a schedule for key milestones for interim storage facilities and transportation equipment for those facilities. The web link for the [report](#) can be accessed by positioning the cursor over the underlined text and following the directions.
5. On June 18, the House's Subcommittee on Energy and Water Development and Related Agencies held a hearing for the Fiscal Year 2014 Appropriations Bill. The Appropriations Bill totaled \$30.4 billion with the highest priorities going to national defense and the Army Corps of Engineers. The Bill also proposed \$25 million to sustain the Yucca Mountain Project by supporting the Nuclear Regulatory Commission to finish its licensing proceedings. The Assistant Secretary of Energy testified before the House that the Department was moving forward on the Administration's strategy document to manage the used nuclear fuel by developing design concepts for storage facilities including an analysis of spent nuclear fuel shipments from shutdown reactor sites.
6. On June 19, the Nuclear Regulatory Commission (NRC) held a public teleconference to discuss the status of the Waste Confidence Generic Environmental Impact Statement (GEIS) and proposed rulemaking. The NRC staff identified the ten chapters and eight appendices of the draft GEIS. The staff

informed the public that the Commission Review Draft documents would be available on June 24th and anticipated that the draft GEIS and proposed rule would be published in late summer or early fall.

7. On June 19, the Nye County, Nevada issued a news release reaffirming its commitment to accept the Department of Energy's high-level radioactive waste as long as it can be done safely.
8. On June 24, the Nuclear Regulatory Commission (NRC) issued a press release seeking public input on their draft spent fuel pool study. The NRC initiated the study following the March 2011 Fukushima nuclear accidents. The study explored a full spent fuel pool and one with less fuel under earthquake conditions several times stronger than what a pool is designed for together with emergency procedures for adding water to the pool should the pool lose water. The draft study showed that a very strong earthquake is very unlikely to damage the pool to the point of losing water. Except for a few extraordinary instances, the study showed the spent fuel could be safely cooled. In those situations where the analysis showed fuel damage, the study deduced existing emergency measures would keep the population safe. The web link for the [press release](#) and the [spent fuel pool study](#) can be accessed by positioning the cursor over the underlined texts and following the directions.
9. On June 24, the Waste Confidence Directorate of the Nuclear Regulatory Commission (NRC) informed stakeholders that it had drafted three documents for the Commission's review relative to the Waste Confidence environmental review and rulemaking. The first informed the Commission of its progress and recommendations for publishing the draft rule and environmental impact statement. The second provided a draft of the Federal Register Notice outlining the rule's proposed text, the explanations, and the conclusions that support the proposed rule. The final document was the draft generic environmental impact statement. The Commission was expected to review the draft reports and approve the documents. After approving the draft documents the NRC staff will publish the documents for a 75 day public comment period. In addition, the staff will hold 10 public meetings around the country to solicit public input. The web link for the [notification](#) can be accessed by positioning the cursor over the underlined text and following the directions. The notification also provided web links for the three draft documents.
10. On June 26, the National Association of Regulatory Utility Commissioners and the Nuclear Energy Institute, petitioners in the case, filed a reply brief with the U.S. Court of Appeals for the D.C. Circuit that continued to challenge the Department of Energy's (DOE) Nuclear Waste Fund fee assessment that maintained it had the right to continue collecting \$750 million a year even "to fund a nonexistent nuclear waste program". The brief maintained that the 2009, 2010 and 2013 DOE fee determinations were legally defective as their considerations were not thorough, and their reasoning invalid and inconsistent with precedents and practice. The petitioners make seven legal arguments to demonstrate the inadequacy of DOE's claims. The web link for the [reply brief](#) can be accessed by positioning the cursor over the underlined text and following the directions.
11. On June 26, the House Appropriations Committee passed their Energy and Water Development Bill by a vote of 28-21. The bill provided \$25 million for the Nuclear Regulatory Commission to continue its deliberations on the Yucca Mountain license application. The House's legislation did not fund the Department of Energy's strategy to implement the nuclear waste management recommendations of the President's Blue Ribbon Commission on America's Nuclear Future.
12. On June 26-27, the U.S. Nuclear Infrastructure Council in conjunction with the Institute of Nuclear Materials Management held a technical workshop on the Department of Energy's (DOE) 2021 proposed pilot interim storage project. The majority of speakers were from the DOE, the Nuclear Regulatory Commission (NRC), former DOE and NRC staff, and representatives from the national laboratories. Topics covered included DOE's key strategy components, pilot project elements, licensing, transportation, storage, industry's perspective, design concepts, states perspective, shipments from shut-

down reactor sites, and standardized casks. The web link for the [agenda](#) can be accessed by positioning the cursor over the underlined text and following the directions.

13. On June 27, four senators introduced bipartisan legislation to safeguard and permanently dispose of used nuclear fuel and high-level waste. The bill, entitled the “Nuclear Waste Administration Act of 2013, is based in part on recommendations from the President’s Blue Ribbon Commission for America’s Nuclear Future. The legislation proposed a new agency to administer the nation’s nuclear waste program and a consent-based process to find sites for temporary and permanent storage. It also provided a linkage between storage facilities and a repository such that new storage facilities cannot be sited unless at least one site has been selected for evaluation as a potential repository. In addition, the proposed legislation would create a Working Capital Fund from which fees deposited into the Fund would be immediately available without congressional appropriations. Finally, the bill would allow the Energy Secretary to revisit the decision not to commingle defense and commercial used nuclear fuel. The bill updated an earlier draft that received more than 2,500 comments. The web link for the [Senate news release](#), the [two page summary](#), and the [section by section analysis](#) of the Act can be accessed by positioning the cursor over the underlined text and following the directions.
14. On June 27, The Senate Appropriations Committee approved their version of their Energy and Water Development Bill by a vote of 24-6. The Senate bill had a limited provision that provided the Secretary of Energy with the authority to introduce a pilot program for a consolidated storage facility for used nuclear fuel. The Senate’s version did not include any language on the Yucca Mountain Project.
15. On June 28, the Chair of the House’s Subcommittee on the Environment and Economy forwarded a letter to Energy Secretary Moniz requesting any information on activities the Department of Energy’s Office of Nuclear Energy has initiated in response to the Administration’s strategy document for the management and disposal of nuclear waste. The request demanded specifics on deliverables, the amount of resources expended, whether revenues from the Nuclear Waste Fund were used, the legal basis for the activities, and the Department’s efforts at developing a consent-based process. The web link for the [letter](#) can be accessed by positioning the cursor over the underlined text and following the directions.