Maine Center for Disease Control and Prevention
An Office of the Department of Health and Human Services

John E. Baldacci, Governor Brenda M. Harvey, Commissioner

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July 10, 2009

To: Honorable Ms. Elizabeth Mitchell, President of the Senate
Honorable Ms. Hannah Pingree, Speaker of the House

Subject: State Nuclear Safety Inspector Office's June 2009 Monthly Report to the Maine Legislature

New legislation was enacted in the second regular session of the 123rd and signed by Governor John Baldacci last spring 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 facility located in Wiscasset, Maine.

Enclosed please find the Inspector's June 2009 monthly activities report. Should you have questions about its content, please feel free to contact me at 207-287-6721, or e-mail me at pat.dostie@maine.gov.

Patrick J. Dostie
State Nuclear Safety Inspector

Enclosure
cc:
Mr. E. William Brach, U.S. Nuclear Regulatory Commission
Ms. Nancy McNamara, U.S. Nuclear Regulatory Commission, Region I
Mr. James Connell, Site Vice President, Maine Yankee
Ms. Brenda Harvey, Commissioner, Department of Health and Human Services
Mr. Geoff Green, Deputy Commissioner, Department of Health and Human Services
Ms. Lucky Hollander, Director of Legislative Relations, Department of Health and Human Services
Dr. Dora Mills, Director, Maine Center for Disease Control and Prevention
Mr. Patrick Ende, Senior Policy Advisor, Governor's Office
Mr. David Littell, Commissioner, Department of Environmental Protection
Mr. Richard Davies, Maine Public Advocate
Lt. William Snedeker, Special Services Unit, Maine State Police
Ms. Nancy Beardsley, Director, Division of Environmental Health
Mr. Jay Hyland, PE, Manager, Radiation Control Program

State Nuclear Safety Inspector Office

June 2009 Monthly Report to the Legislature

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 twelfth monthly report from the State Nuclear Safety Inspector under this new legislation.

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.

Since the footnotes are expanded definitions of some scientific terms, for simplicity they were placed in a glossary at the end of the report. In addition, to better understand some of the content of the topics, some effort was placed in providing some historical information. However, for the time being this historical context will be provided as an addendum to the report.

Independent Spent Fuel Storage Installation (ISFSI)

During June the general status of the ISFSI was normal. There were seven instances of spurious alarms due to environmental conditions. All alarms were investigated and no further actions were warranted.

There was one fire related impairment on June 24th. The impairment is due to 60 boxes of paper records being returned to Maine Yankee from a records storage facility. The impairment has no impact on the Site's Security Plan. Fire safety checks are performed twice per shift. The impairment was unresolved as of June 30th and will remain in place until the records are scanned and the paper records shredded.

There were 13 security events logged (SEL) in June. There were eight SEL's logged on June 3rd for security cameras due to ongoing maintenance activities. Four other SEL's were generated during the month for environmental issues. Another SEL was written on June 21st to address a camera lens issue. That issue was corrected the following day. There were no security related impairments.

There were five condition reports[1] (CRs) for the month of June. The first CR was written on June 3rd and was related to the security camera mentioned in the SEL's above. A second CR written on June 4th involved an error discovered on a controlled drawing, which was immediately corrected. On June 18th two CR's were written. The first included another camera issue, while the second dealt with the damage to the tail light of the site pickup truck. A fifth CR was written on June 19th on the soft ground around the recently installed diesel tank pad due to excessive rain. That area has been barricaded until the ground firms up.

[1] Refer to the Glossary on page 5.

Other ISFSI Related Activities

On June 10th Maine Yankee conducted its annual fire and medical drill. Since this was a mutual aid drill, it included the Wiscasset fire and ambulance crews and the departments of Westport and Woolwich. The drill involved a structure fire in the ISFSI building which required evacuation of the building. There was a simulated injury to a firefighter during the drill. A post drill critique indicated that all participants performed extremely well, and all drill objectives were achieved. After completion of the drill and critique, participants took a familiarization tour of the facility.

On June 23rd the Nuclear Regulatory Commission (NRC) conducted a conference call on the security debriefing of the three stand alone Yankee plants, Connecticut Yankee, Yankee Rowe and Maine Yankee. The NRC had a four person team of security specialists from headquarters in Rockville, Maryland perform security inspections at the three decommissioned Yankee plants in New England that have an ISFSI. The briefing related no violations or findings.

On June 25th the annual meeting of the Maine Yankee Community Advisory Panel (CAP) on Spent Nuclear Fuel and Storage was held at the Chewonki Foundation in Wiscasset. The Panel is chaired by the Honorable Marge Kilkelly, a former state Senator and now Deputy Director of the Eastern Regional Conference of the Council of State Governments. The Vice Chair is Dr. W. Donald Hudson Jr., President of the Chewonki Foundation. The CAP membership represents broad interests and is comprised of the Chair, Vice-Chair, the State Senator from Lincoln County, the Governor's representative, the Town of Wiscasset's representative, a business representative located on former Maine Yankee property, and a Maine Yankee representative. In addition to the sevlen core positions, there are five other members who served as former members of the decommissioning CAP and continue serving on the current Spent Fuel Storage CAP. They include a science teacher from the Wiscasset High School, a former town planner and now consultant, a retired Major General, USAF, a former state legislator from Boothbay Harbor and a former small business owner. The CAP receives annual updates from Maine Yankee on its ISFSI operations, from the State of Maine on its oversight, as well as a regional and national update on spent nuclear fuel removal and disposal efforts. The CAP also provides an opportunity for public comments.

Environmental

In addition to its on-going air sampling at the old Bailey Farm House, on June 30th the State performed its quarterly sampling regimen of freshwater, saltwater, and seaweed besides its quarterly field replacement of its ambient radiation thermoluminescent dosimeters[2] (TLD) from Bailey Cove and the ISFSI. The sampling and TLD findings will be published in a future report when results become available from the State's Health and Environmental Testing Laboratory and the State's TLD vendor, Global Dosimetry Solutions from California.

Maine Yankee Decommissioning

On June 18th the State Inspector surveyed a 560 foot section of the East Access Road near the ISFSI. The road abutting the ISFSI was marked off at 50 foot intervals with fixed, one minute measurements taken at the centerline of the road and approximately 10 feet on each side of the centerline to see if there was any gradient across the road. The results indicate that the radiation levels across the road were fairly uniform and mostly within plus or minus 500 counts per minute (cpm) of the average. The measurements also revealed a 250 foot section of the road with less than optimum conditions for re-surveying as the readings were still

[2] Refer to the Glossary on page 6.

high, (more than 22,000 cpm). The results also indicated that the elevated readings tended more toward the southern portion of the ISFSI, which correlates well with the height of the bermed area near the ISFSI. That means the skyshine[3] affect is more pronounced in this location. The highest fixed reading was about 25,100 cpm with the highest scan (walking) reading at 27,000 cpm. With these observations the State will be weighing a number of options on how best to complete the survey of this portion of the East Access Road.

At the end of June one final confirmatory report remained to be completed. At present, there are ten confirmatory reports that are essentially complete with the last report nearing completion. Several technical reviews and a conference call with the State's consultant were conducted in June to discuss the State's comments and finalize the remaining report. The last confirmatory report for the final site survey is expected to be completed in July. Due to the extensive write-up and delay in finalizing this last report including on-going commitments, the decommissioning summary report is now expected to be completed in September.

Groundwater Monitoring Program

The State Inspector completed his review of Maine Yankee's third annual ground water report in May and forwarded his comments and observations to the Department of Environmental Protection (DEP) on June 19th. The State Inspector also commented on DEP's review of Maine Yankee's report. It is expected that the State's technical reviews will be combined and forwarded to Maine Yankee to review and respond. Also on June 19th, the State Inspector forwarded his comments to Maine Yankee and DEP on the September 2008 and the March 2009 groundwater results received from Maine Yankee on May 12th.

Other Newsworthy Items

1. On June 3rd the quarterly conference call of the Federal Energy Regulatory Commission (FERC) rate case settlement briefings relevant to Yankee Atomic, Maine Yankee, and Connecticut Yankee was held. The briefings provide updates to both state and private officials in the states affected by the FERC settlements on the status of the Yankee companies' lawsuits as well as regional and national issues on spent nuclear fuel storage.

2. On June 3rd Energy Secretary Chu reaffirmed the Administration's position that the Yucca Mountain repository is dead to the House Committee on Appropriations' Subcommittee on Energy and Water Development, and Related Agencies. Dr. Chu also stated that if the nuclear waste material is to be permanently isolated, then other geological sites become more desirable. Dr. Chu did not specify what types of geologic media he was referring to, such as granite formations or salt beds.

3. On June 8th the State of Nevada filed two new contentions to the Department of Energy's February 19, 2009 License Application Update on Yucca Mountain. Both contentions deal with the probabilistic volcanic hazard analysis (PVHA) of Yucca Mountain and the failure of the updated PVHA to adequately calculate the probability of future volcanic activity in the Yucca Mountain region.

4. On June 9th, as a member of the Northeast High Level Radioactive Waste Transportation Task Force, the State Inspector commented on the U.S. Department of Transportation (DOT) rule change to increase the contamination limits on shipped spent nuclear waste to be compatible with that of the International Atomic Energy Agency's proposal. The State Inspector seconded the comments from the Northeast Task Force members that expressed dissent in their June 15th letter to the DOT citing

[3] Refer to the Glossary on page 6.

no technical basis for the increase in specific radioactive element surface contamination limits and the imposition of increased burdens to states to appropriately measure the radioactive contamination.

5. On June 10th the U.S. House of Representatives introduced a new energy plan that would build 100 reactors in the next 20 years and would increase the limit on nuclear waste at Yucca Mountain with plans for more repositories and reprocessing. The Nevada delegation, which has opposed Yucca Mountain, reacted negatively to the proposal.

6. On June 11th Mark Holt, a specialist in energy policy for the Congressional Research Service, a branch of the Library of Congress, told the Nuclear Waste Technical Review Board (NWTRB) that "choosing another repository site will draw opposition similar to Nevada's wherever it is" and be just as costly. The NWTRB is an independent agency of the U.S. Federal Government. Its sole purpose is to provide independent scientific and technical oversight of the Department of Energy's program for managing and disposing of high-level radioactive waste and spent nuclear fuel.

7. On June 14th 19 Governors from western states, under the auspices of the Western Governors' Association, adopted a resolution that would deter the Obama administration and private energy companies from constructing any interim, spent fuel storage facilities in the Western US. Citing growing uncertainties about US nuclear waste policy, such as the abandonment by the Administration and Energy Secretary Chu of the Yucca Mountain repository in Nevada, the Governors expressed their concern that any interim storage site could become a permanent nuclear waste site.

8. On June 17th 25 bipartisan members of the U.S. House of Representatives, representing 13 states, signed and sent a letter to Energy Secretary Chu expressing their support for the continuation of the Yucca Mountain project, their concerns of Department of Energy's abandonment of Yucca Mountain and finding another suitable repository, and their support for increased funding to ensure the licensing review of Yucca Mountain is kept on track. A copy of the letter is attached to the end of the report.

9. On June 24th the Nuclear Waste Strategy Coalition (NWSC) held its periodic status briefing. The major topics of discussion focused on a) Congressional activities such as the House letter to Secretary Chu, the Senate's amendment on nuclear energy policy and the House bill "American Energy Act", b) the NWSC letter to Energy Secretary Chu, signed by various organizations including the Maine Public Utilities Commission, (a copy of the letter is attached to the end of the report), and c) the Western Governors Association Resolution.

10. On June 30th the Nuclear Regulatory Commission unanimously upheld the three Atomic Safety and Licensing Boards decisions on the Department of Energy's application to build and operate a high level waste repository at Yucca Mountain. The Commission's decisions included the rejection of most of the NRC's staff appeal of several admitted contentions as well as the rejection of two Nevada contentions challenging DOE's managerial competence and institutional integrity.

Other Noteworthy Item:

1. On May 29th the Acting Director of Department of Energy's (DOE) Yucca Mountain Project responded to the March 24th House of Representatives letter that included the signatures of Maine's two Congressional Representatives, Michael Michaud and Chellie Pingree. His letter stated that they consider the issue of permanently shutdown plants seriously and that he expects the Blue Ribbon Panel being formed will address this issue. Although a copy of the DOE letter to the Maine Congressional members was not available, a copy of a similar letter to another Representative, John Olver from Massachusetts, who also signed the March 24th letter signed by the Maine delegation is attached to the end of the report.

Glossary

Condition Report (CR): A report that promptly alerts management to potential conditions that may be adverse to quality or safety. The report is generally initiated by a worker at the ISFSI facility. The report prompts management to activate a process to identify causal factors and document corrective and preventative measures stemming from the initial report.

Decay Series: There are three naturally occurring decay series of heavy elements that transform into a series of various radioactive elements by releasing energy in the form of particles, (such as alpha or beta), and/or gamma rays to end in a stable form of non-radioactive Lead. All three decay series start with extremely long lived radioactive, heavy elements that can be measured in geologic time units. They are Uranium-238 with an approximate half-life of 4.5 billion years, Uranium -235 with a half-life of about 700 million years, and Thorium-232 with a half-life of 14 billion years. All three series contain some more well-known radioactive species, Radium and Radon.

Dose is the amount of radiation that is absorbed by a person's body. In the radiation field the term dose is sometimes used interchangeably with dose equivalent, which is defined as the rem and described below.

fCi/m^3 is an acronym for a femto-curie per cubic meter, which is a concentration unit that defines how much radioactivity is present in a particular air volume, such as a cubic meter. A curie, named after its discoverers Pierre and Marie Curie, is defined as the rate at which a radioactive element transforms itself into another element that is most often another radioactive element. It is mathematically equivalent to 37 billion disintegrations or transformations per second. A "femto" is a scientific prefix for an exponential term that is equivalent to one quadrillionth (1/1,000,000,000,000,000).

Gamma Spectroscopy is a scientific method used to analyze gamma rays emanating from radioactive elements. The analytical system determines the gamma ray energy which acts as a "fingerprint" for specific radioactive materials. For example, Potassium-40 (K-40) has a very, distinctive gamma energy at 1460 keV. This uniqueness allows the instrument to positively identify the K-40 1460 energy as its own unique fingerprint. A keV is an abbreviation for kilo electron volt, which is a measure of energy at the atomic level. A kilo is a scientific prefix for the multiplier 1,000.

Gross Beta is a simple screening technique employed to measure the total number of beta particles emanating from a potentially radioactive sample, with higher values usually indicating that the sample contains natural and/or man-made radioactive elements. High values would prompt further analyses to identify the radioactive species. A beta is a negatively charged particle that is emitted from the nucleus of an atom with a mass equal to that of an orbiting electron.

Liquid Scintillation is an analytical technique by which Tritium and many other radioactive contaminants in water are measured. A sample is placed in a special glass vial that already contains a special scintillation cocktail. The vial is sealed and the container vigorously shaken to create a homogeneous mix. When the tritium transforms or decays it emits a very low energy beta particle. The beta interacts with the scintillating medium and produces a light pulse that is counted by the instrument. Although a different scintillation cocktail is used, this is basically how radon in well water is measured.

milliRoentgen (mR) is one thousandth (1/1000) of a Roentgen.

pCi/kg is an acronym for a pico-curie per kilogram, which is a concentration unit that defines how much radioactivity is present in a unit mass, such as a kilogram. A "pico" is a scientific prefix for an exponential term that is equivalent to one trillionth (1/1,000,000,000,000).

pCi/L is an acronym for a pico-curie per liter, which is a concentration unit that defines how much radioactivity is present in a unit volume, such as a liter.

Rem is an acronym for roentgen equivalent man. It is a conventional unit of dose equivalent that is based on how much of the radiation energy is absorbed by the body multiplied by a quality factor, which is a measure of the relative hazard of energy transfer by different particles, (alpha, beta, neutrons, protons, etc.), gamma rays or x-rays. In comparison the average natural background radiation dose equivalent to the United States population is estimated to be 292 millirems per year, or 0.8 millirem per day, with 68 % of that dose coming from radon. A millirem is one thousandth, (1/1000), of a rem.

Roentgen is a special unit of exposure named after the discoverer of X-Rays, Wilhelm Roentgen. It is a measure of how much ionization is produced in the air when it is bombarded with X-Rays or Gamma Rays. Ionization is described as the removal of an orbital electron from an atom.

Skyshine is radiation from a radioactive source that bounces off air molecules in the sky, much like a cue ball does off the banking of a billiard table, and is scattered/redirected back down to the earth.

Thermoluminescent Dosimeters (TLD) are very small plastic-like phosphors or crystals that are placed in a small plastic cage and mounted on trees, posts, etc. to absorb any radiation that impinges on the material. Special readers are then used to heat the plastic to release the energy that was stored when the radiation was absorbed by the plastic. The energy released is in the form of invisible light and that light is counted by the TLD reader. The intensity of the light emitted from the crystals is directly proportional to the amount of radiation that the TLD phosphor was exposed to.

Tritium (Hydrogen-3 or H-3) is a special name given to the radioactive form of Hydrogen usually found in nature. All radioactive elements are represented as a combination of their chemical symbol and their mass number. Therefore, Tritium, which is a heavy form of the Hydrogen molecule with one proton and two neutrons in the nucleus of its atom, is abbreviated and represented by its chemical symbol, H, for Hydrogen and 3 for the number of particles in its nucleus, or mass number. Similarly, other radioactive elements, such as Potassium-40, can be represented and abbreviated as K-40, and so on.

Addendum

Historical Perspective

Independent Spent Fuel Storage Installation (ISFSI)

In 1998 the Department of Energy (DOE) was required to take title and possession of the nation's spent nuclear fuel as mandated by the Nuclear Waste Policy Act (NWPA) of 1982. When the NWPA was enacted, Congress assumed that a national repository would be available for the disposal of the spent fuel. Since the licensing and construction of the high level waste repository at Yucca Mountain in Nevada has experienced significant delays, DOE is currently projecting that the Yucca Mountain site will not be available until at least the year 2020 or later.

DOE's inaction prompted Maine Yankee to construct an ISFSI during decommissioning to store the more than 1434 spent fuel assemblies that were previously housed in the spent fuel pool in the plant, into 60 storage casks on-site. Another four casks contain some of the more radioactive components of the reactor internals that were cut up during decommissioning, since their radioactive concentrations were too high to dispose at a low level radioactive waste facility. These are expected to be shipped along with the spent fuel to the Yucca site should the repository open. Since then the Obama Administration and Energy Secretary Chu have advocated that the Yucca Mountain site is no longer a viable option for disposing of the nation's high level waste and spent nuclear fuel and plan to assemble a Blue Ribbon Panel of experts to review alternative strategies for managing these waste forms.

Environmental

Since 1970 the State has maintained an independent, radiological environmental monitoring program of the environs around Maine Yankee. Over the years there was an extensive quarterly sampling and analysis program that included such media as salt and fresh water, milk, crabs, lobsters, fish, fruits, vegetables, and air. Since the decommissioning the State's program has been reduced twice to accommodate decreased revenues for sample analyses at the State's Health and Environmental Testing Laboratory (HETL). Presently, the State monitors one freshwater location, one saltwater and seaweed location, and one air sample location. The State maintains a quarterly sampling regimen, except for the air sample, which is performed bi-weekly near the old Bailey Farm House. Besides the media sampling, over the years the State has maintained a robust thermoluminescent dosimeter (TLD) program to measure the radiation environment. The TLDs were placed within a 10 to 20 mile radius of the plant to measure the background radiation levels and later, when the plant was operating, any potential increases in background levels due to plant operations. Over time the number of TLDs nearly doubled to address public concerns over the clam flats in Bailey Cove and the construction of the ISFSI. After the plant's decommissioning the State reduced the number of TLDs around Bailey Cove, but maintained the same number for the environmental surveillance of the ISFSI. A further evaluation of reducing the State's radiological environmental monitoring program is planned for the fall of 2009.

Maine Yankee Decommissioning

Maine Yankee's decommissioning was completed in the fall of 2005. At that time the State Nuclear Safety Inspector (SNSI) also commenced his final walk down survey of the site. Certain areas such as the transportation routes exiting the plant site were surveyed after the plant industrial area was decommissioned.

Due to the length of the egress routes, it took a considerable amount of time to complete both half-mile east and west access routes and the two thirds of a mile of the railroad track. In addition, seven specific areas, including the dirt road, were also examined as part of the final site survey. The State's final survey of the dirt road leading to the old softball field was extended in the fall of 2007 when the State discovered three localized elevated areas on the road that were contaminated. At that time, extensive bounding samples were taken to determine the extent of the contamination.

Because of the State's findings the original Class III designation of little or no potential for small areas of elevated activity was deemed incorrect. Therefore, the Dirt Road systematic sampling was necessary to ensure that all the State's findings would still pass Maine Yankee's License Termination Plan (LTP) Class I criteria. In September's report the results of Maine Yankee's 18 Dirt Road soil samples identified one sample with man-made Cesium-137, with the remaining radioactivity from natural radioactive elements normally found in soil and bedrock, namely Uranium and Thorium and their respective decay series, and Potassium-40. On October 16th the State met with Maine Yankee to discuss their findings. The State's analyses reported that six of their 18 soil samples contained the radioactive element Cesium-137 with the remainder from the same natural decay series and Potassium-40 that was found in the Maine Yankee samples. In both cases the findings indicated that the concentration of the Cesium-137 was low and comparable to what is normally found in nature from past weapons testing during the 1950's and 1960's. On October 31st the State issued a letter to Maine Yankee stating that, based on the recent systematic sampling and bounding efforts on the elevated areas, the results demonstrated that Maine Yankee had met its Class I LTP criteria. Therefore, the State concluded that there were no further outstanding issues relative to the Dirt Road and considered the issue closed. Even though some residual radioactivity remains, due to the localized nature of the contaminant and the restricted security access to the site, the contamination found does not present a public health hazard.

With the closure of the Dirt Road, the only remaining walk down survey left to be performed on-site is the portion of the East Access Road adjacent to the ISFSI bermed area. This area remains as the background radiation levels from the ISFSI were initially too high to survey, (greater than 30,000 counts per minute), and could mask potential elevated areas. Since then the State has been monitoring the levels every spring and has observed a steady decrease in the ambient radiation levels down to 25,000 counts per minute (cpm). When the levels reach about 20,000 cpm the area will be surveyed to close out all transportation routes at the Maine Yankee site.

The State will publish its decommissioning findings in a confirmatory summary that is expected in June of 2009. As part of that process the State will condense over 40 major survey areas into eleven confirmatory reports that are being worked on by an outside consultant. The independent consultant has been collecting all the State's findings and summarizing them in confirmatory reports that the State Nuclear Safety Inspector will use to complete the State's confirmatory summary.

Groundwater Monitoring Program

In June of 2004, the State, through the Department of Environmental Protection's (DEP) authority under 38 MRSA §1455, signed an agreement with Maine Yankee for a five year, post decommissioning radiological groundwater monitoring program at the site. Presently, the program is in its fourth year. The details of how the agreement would be carried out relative to the quality assurance facets of the monitoring, sampling and analyses would be captured in Maine Yankee's Radiological Groundwater Monitoring Work Plan.

The normal sampling regimen for the groundwater monitoring program is March, June and September of each year. However, since the first sampling took place in September of 2005, the annual sampling

constitutes the September sampling of the current calendar year and finishes with the June sampling of the following year.

It should be noted that the Agreement between the State and Maine Yankee set an administrative limit of 2 mrems per year per well as a demonstration that it has met the State's groundwater decommissioning standards of a 4 mrem dose per year above background values. If a well exceeds the 2 mrem value after the five year monitoring program ends, Maine Yankee would allow the State to continue monitoring that well. To-date fifteen of the sixteen wells sampled have not exceeded one tenth of the limit, or 0.2 mrems/yr. Only well number MW-502 has come close to exceeding the 2 mrems administrative limit and that was back in March of 2006 when the dose was 1.96 mrems. Since then the Tritium in this well has been steadily decreasing. It is expected that this well will remain elevated for some time as the water infiltration rates are very low. Consequently, the decrease will be slow and steady.

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Congress of the United States
House of Representatives

June 17, 2009

The Honorable Steven Chu
Secretary of Energy
U.S. Department of Energy
1000 Independence Ave., SW
Washington, DC 20585

Dear Secretary Chu:

We are writing to express our strong support for the continuation of the Department of Energy's (DOE) Yucca Mountain nuclear waste repository program and its related Nuclear Regulatory Commission (NRC) licensing review.

There are 121 sites in 39 states around the country where there is presently stored spent nuclear fuel and high-level waste. Many of these sites are DOE Environmental Management (EM) cleanup sites, such as Hanford, Savannah River, Oak Ridge, and Idaho, where DOE has an obligation to clean up and dispose of the legacy waste generated from the U.S. nuclear weapons program.

Without a viable repository program to provide a reliable means of disposition, DOE spent fuel and high-level waste will become stranded, and the sites themselves will become de facto repositories.

The House Appropriations Committee report accompanying the Energy and Water Appropriations bill for Fiscal Year 2009 bill stated that the final disposition plan for all of DOE's current and future inventory of defense-related spent fuel and high-level waste depends entirely on the timely licensing and operation of the Yucca Mountain repository.

Yucca Mountain is the linchpin for the Department's entire spent fuel strategy. If Yucca does not open on schedule, or if its capacity cannot be expanded, or if a reliable source of funding is not secured, then the other elements of DOE's spent fuel strategy will collapse.

Currently, there is no "Plan B" for the disposition of DOE's inventory of spent fuel and high-level waste accumulating at DOE EM cleanup sites. The proposed Blue Ribbon Commission to study options to Yucca Mountain is unlikely to find a "a silver bullet solution," since we already have over 50 studies by prestigious institutions, like the National Academy of Sciences, and Yucca still remains a suitable repository site. Any attempt to find a new repository site would likely take an additional 20 years and upwards of $15 billion to develop.

Accordingly, we support increased funding for the Yucca Mountain project to a level that adequately, not "minimally" as the Administration has proposed, keeps the licensing review of Yucca Mountain on track. Inadequate funding is certain to have an adverse impact on the scheduled startup date of the Yucca Mountain repository and hence likely to:

- Jeopardize timely responses to the NRC's requests for additional information as a result of the Commission's ongoing review of the DOE Yucca Mountain license application;
- Jeopardize timely responses to filed contentions as part of the preparation of NRC's public hearing process;
- Delay the timely removal and final disposition, as well as increase costs, of defense spent fuel and high-level waste from DOE cleanup programs, including Hanford, Idaho, Oak Ridge, and Savannah River. Such delays are almost certain to cause DOE to be in non-compliance with its commitments under Tri-Party Agreements and consent orders with the states in which this DOE defense waste is located; and
- Disrupt the U.S. Navy spent nuclear fuel defueling and storage plans, and impact planned shipments of Navy fuel from Idaho to Yucca Mountain in accordance with the Idaho Batt agreement.

In order to avoid further delays and to provide the expeditious removal of DOE defense waste compliant with court-stipulated agreements, we strongly support additional funding of the Yucca Mountain nuclear waste repository. The Yucca Mountain repository is an important national asset that is needed for disposal of the defense waste generated as part of our nuclear weapons program.

Sincerely,

Doc Hastings
Member of Congress

Norm Dicks
Member of Congress

Mike Simpson
Member of Congress

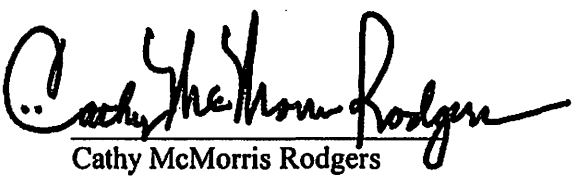
John Spratt
Member of Congress

Zach Wamp
Member of Congress

J. Gresham Barrett
Member of Congress

Ed Whitfield
Member of Congress

Rick Larsen
Member of Congress



Cathy McMorris Rodgers
Member of Congress

Marsha Blackburn
Member of Congress

Robert Andrews
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Joe Wilson
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Paul C. Broun
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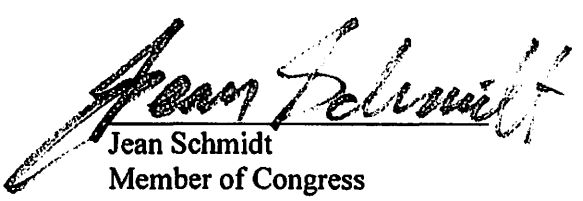

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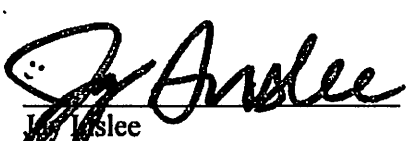
Member of Congress

Bill Delahunt
Member of Congress

Steve Scalise
Member of Congress



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Bill Cassidy
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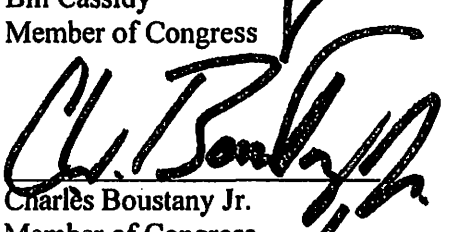
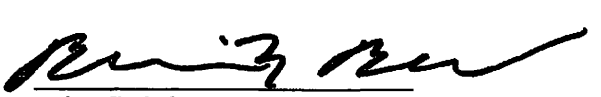
Michele Bachmann
Member of Congress



Charles Boustany Jr.
Member of Congress



Brian Baird
Member of Congress

Rodney Alexander
Member of Congress

Jim Moran
Member of Congress

John Fleming
Member of Congress

MAINE PUBLIC UTILITIES COMMISSION
NATIONAL ASSOCIATION OF REGULATORY UTILITY COMMISSIONERS
NUCLEAR WASTE STRATEGY COALITION
PENNSYLVANIA PUBLIC UTILITY COMMISSION
PRAIRIE ISLAND INDIAN COMMUNITY
THE NEW ENGLAND COUNCIL

June 17, 2009

Original letter in the mail
Letter sent by facsimile

The Honorable Steven Chu
Secretary of Energy
United States Department of Energy
Washington, D.C. 20585-1000

Dear Mr. Secretary:

We commend you for moving forward to appoint a Blue Ribbon Panel Commission (Commission) to evaluate alternatives for the management and disposal of spent nuclear fuel and high-level radioactive waste currently stranded in 39 states at commercial, decommissioned and Department of Energy (DOE) sites.

However, while the Commission is studying alternatives, the Administration should request sufficient funds on an annual basis to ensure that DOE's Yucca Mountain license application will be reviewed by the Nuclear Regulatory Commission in 3-4 years, as mandated by the current law of the land, the *1982 Nuclear Waste Policy Act*, as amended.

In order for this Commission to succeed, we feel it is imperative that it includes some the following principles:

- The *Federal Advisory Committee Act* should apply to the Commission's activities.
- The Chairman of the Commission should be beyond reproach, with expertise in the field.
- The Commission should be unbiased and impartial, providing fair and comprehensive recommendations.

- The Commission activities and hearings should be open to the public.
- Advice is sought from the Commission on how to inform the public and the media on the realities of spent fuel and other waste transportation risks by an impartial and objective organization.
- The Commission should be composed of credible experts with relevant technical and non-technical disciplines in the field, to include elected local government officials, state regulators and state representatives who have spent nuclear fuel storage facilities in their states and districts, respectively.
- DOE career civil service personnel should serve on the Commission. Many have valuable historic experience and technical skills of the disposal program that would enable the Commission to effectively do its work.
- Neither present, nor past, Members of Congress, nor present or past congressional staff should be included on the Commission.
- The Commission should complete its findings and report back to the Secretary within 24 months.
- The Commission should place greater emphasis on seeking and attaining public acceptance in siting permanent disposal, interim storage or reprocessing facilities, following the examples from such countries as Finland, Sweden and Canada.

The Commission should not be given the responsibility to review or be the final judge of the scientific work that has been carried out by *the Department of Energy* over the past 25 years. Since the DOE submitted its license application in June 2008, it is now under the purview of the *Nuclear Regulatory Commission* and it should complete its official review process.

The Commission should consider the *1982 Nuclear Waste Policy Act*, as amended, is the current law of the land. Therefore, all options should be taken into consideration, including the geologic repository at Yucca Mountain, Nevada, as well as a central interim storage facility or regional facilities to provide storage for spent nuclear fuel and high-level radioactive waste currently stranded at commercial and decommissioned plant sites.

While, the NRC is currently reviewing the DOE's license application for the Yucca Mountain project, the Commission should encourage the DOE to implement the pilot projects proposed in its National Transportation Plan. These pilot projects will demonstrate that transporting Greater-Than-Class-C waste, spent nuclear fuel and high-level radioactive waste to a central interim storage facility or regional facilities would be safe and a cost-effective option for managing the material from commercial, decommissioned and federal facilities.

The Commission should consider the burden to the nation's nuclear utility ratepayers, which are now impacting all taxpayers too. Ratepayers are: 1) paying into the Nuclear Waste Fund; 2) paying through rates for the utility to keep the waste stored on site because there is no repository, and; 3) paying, along with all taxpayers, through the paying out of awards from the *Judgment Fund* for the DOE's failure to fulfill its statutory and contractual obligations to remove spent nuclear fuel and high-level radioactive waste from commercial and decommissioned plant sites and the storing of spent fuel at commercial plant sites. The Commission should also be made aware that judgments against DOE are now approaching one billion dollars, with additional future liabilities currently estimated to be $11 billion dollars.

The Commission should also take into consideration the disruption this is causing in the DOE defense clean-up program in the states of Washington, Idaho, South Carolina and other states.

We thank you for the opportunity to submit our input with regards to the formation of the Blue Ribbon Panel Commission.

Respectfully yours,

Sharon, M. Reishus — June 4, 2009
Chairman
Maine Public Utilities Commission

Frederick F. Butler — May, 21, 2009
President
National Association of Regulatory Utility Commissioners

David Wright — June 12, 2009
Commissioner, South Carolina Public Service Commission, and
Chairman, Nuclear Waste Strategy Coalition

Robert F. Powelson — June 8, 2009
Robert F. Powelson
Commissioner
Pennsylvania Public Utility Commission

Ronald Johnson — June 12, 2009
Tribal Council President
Prairie Island Indian Community

James T. Brett — May 14, 2009
President and CEO
The New England Council

Department of Energy
Washington, DC 20585

May 29, 2009

The Honorable John W. Olver
U.S. House of Representatives
Washington, D.C. 20515

Dear Congressman Olver:

Thank you for your March 24, 2009, letter to the President expressing your concern over the Administration's position regarding Yucca Mountain.

While the Administration does not view Yucca Mountain as a workable option, we recognize the Federal responsibility for managing and ultimately disposing of spent nuclear fuel and high-level radioactive waste. We remain committed to meeting all our obligations.

The Administration intends to convene a "blue-ribbon" panel of experts to evaluate alternative approaches for meeting the Federal responsibility to manage and ultimately dispose of spent nuclear fuel and high-level radioactive waste from both commercial and defense activities. This panel will provide the opportunity for a full public dialogue on how best to address this challenging issue and will provide recommendations that may form the basis for working with Congress to revise the statutory framework for managing and disposing of spent nuclear fuel and high-level radioactive waste.

The Administration looks forward to ongoing dialogue with members of Congress, interested stakeholders, and others as we review options for alternatives to Yucca Mountain in the months ahead. It is my expectation that the issue raised in your letter with respect to permanently shutdown reactor sites will be addressed by the panel, and I want to assure you that we take your concerns about this issue seriously.

If you have any questions, please contact me at (202) 586-6850 or Ms. Betty A. Nolan, Senior Advisor, Office of Congressional and Intergovernmental Affairs, at (202) 586-5450.

Sincerely,

Christopher A. Kouts
Acting Director
Office of Civilian Radioactive
Waste Management