

# MAINE STATE LEGISLATURE

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State Nuclear Safety Inspector Office  
Maine CDC – DHHS

March 2012 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 123<sup>rd</sup> 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 facility located in Wiscasset, Maine.

The report covers activities at the storage facility, including the State’s on-going environmental radiation surveillance and the national debate over the licensing and construction of a geologic repository for the disposal of spent nuclear fuel at Yucca Mountain in Nevada. The report’s highlights assist readers to focus on the significant activities that took place during the month, both locally and nationally.

LOCAL:

- Maine Yankee submitted to the Nuclear Regulatory Commission a Licensee Event Report on the January 12<sup>th</sup> snowstorm that precipitated a security event when compensatory measures were instituted “that were not fully effective for their intended purpose”. The intrusion detection system was bypassed due to environmental factors and compensatory measures were instituted. However, nearly three hours into the event security personnel noted that the additional measures were not fully compensating and repositioned a camera to compensate for the degraded zone coverage without notifying the ISFSI Shift Supervisor. The degraded coverage was not picked up until the evening shift reported and assumed the watch. As soon as the deficiency was corrected, the protected area was inspected by security personnel. There was no evidence of any unauthorized access. Senior management was notified along with the Nuclear Regulatory Commission Region I and the State Nuclear Safety Inspector. The total time the affected area was not fully covered was about 5.6 hours.
- The Nuclear Regulatory Commission (NRC) issued a letter to Maine Yankee acknowledging they had received Maine Yankee’s response to the NRC’s Notice of Violation. The NRC issued its lowest level violation, a Severity Level 4, to Maine Yankee stating that they had violated NRC regulations on foreign ownership, control, or domination (FOCD) after reviewing the proposed merger of Northeast Utilities and NSTAR. According to the NRC’s Notice of Violation Maine Yankee “is governed by a board of directors whose members are appointed, in part, by companies that are ultimately controlled by foreign entities, as follows: Central Maine Power Co. (38% - Iberdrola S.A.), New England Power Co. (24% - National Grid); Bangor Hydro-Electric and Maine Public Service Co. (12% - Emera)”. Iberdrola is based in Spain. National Grid is based in the United Kingdom and Emera is based in Canada. Maine Yankee’s response disagreed with the violation, provided four reasons as a basis for its contentions that it was not a violation, implemented a December 14, 2011 Negation Action Plan through a Board of Directors resolution to ensure that there would be no issues relative to FOCD, and formally executed the Board resolution and Negation Action Plan on January 3, 2012. As part of the Negation Action Plan Board Directors or Officers appointed from foreign sponsor companies will be excluded from access to classified or safeguards information, and special nuclear material. All the Directors who were appointed

by foreign-controlled owners were required to attest to their exclusion from classified information and special nuclear material and certify they would adhere to protective measures instituted by Maine Yankee to prevent any foreign control or influence. .

The national highlights primarily focused on other states and county activities as noted below and included:

National:

- The Board of Commissioners from Nye County, Nevada sent a letter to Energy Secretary Chu stating they were prepared to host a proposed repository at the Yucca Mountain site. Nye County and six other Nevada counties support the construction of a nuclear waste repository at Yucca Mountain. The Governor of Nevada followed with a letter of his own to Energy Secretary Chu expressing his adamant opposition to any interim storage facility or repository site at Yucca Mountain and stating that Nye County does not speak for the State.
- Senator Lindsey Graham from South Carolina introduced legislation that would require President Obama to certify Yucca Mountain as the geologic disposal site in the United States. If the President failed to certify the Yucca Mountain site, then nuclear utilities would not be required to pay into the Nuclear Waste Fund and the balance of \$27 billion remaining in the Fund would be returned to the utilities. The utilities would then use 75% of the refund to rebate the ratepayers with the remaining 25% to be used at nuclear facilities to enhance their on-site storage and security of the used nuclear fuel.
- The U.S. Court of Appeals heard oral arguments on the lawsuits from the states of Connecticut, New York, Vermont, and environmental groups over the Nuclear Regulatory Commission's (NRC) revised Waste Confidence Rule extending on-site storage of used nuclear fuel out to 120 years. The states maintained that the NRC cannot revise their Waste Confidence Rule for that length of time without performing an Environmental Impact Statement as mandated by the National Environmental Policy Act of 1969. The three judge panel expressed skepticism over how the NRC has dealt with issues regarding the potential environmental impact of storing spent nuclear fuel at sites around the country.
- The National Conference of State Legislatures (NCSL) sent a letter to House Speaker John Boehner, House Minority Leader Nancy Pelosi, Senate Majority Leader Harry Reid, and Senate Minority Leader Mitch McConnell urging them "to move expeditiously" on the Blue Ribbon Commission's (BRC) recommendations to resolving the nation's used nuclear fuel. The NCSL applauded the BRC for proposing the inclusion of state, local governments and tribes in decisions. The NCSL also noted that the BRC report had included NCSL recommendations on an interim storage facility, on Congress using the Nuclear Waste Fund for its intended purpose, and providing financial support to state, tribal and local governments on the safe transportation of nuclear waste.
- The Minnesota Senate Energy Committee passed in final form a resolution calling on the President of the United States and the Congress "to enact legislation and take other federal government action related to interim storage of used nuclear fuel." The resolution also called for ensuring access to the Nuclear Waste Fund and enabling the Nuclear Regulatory Commission to license private interim storage facilities to meet the nation's needs.
- The Pennsylvania Public Utility Commission sent a letter to their Congressional Senators unanimously expressing their concerns over the handling of the Nuclear Waste Fund and its impact to the state's ratepayers. The Commissioners stated that ratepayers have contributed about \$1.4 billion into the Nuclear Waste Fund "with little to show for it". The Commissioners asked the Senators for their help to resolve this national issue.

## 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 123<sup>rd</sup> 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](http://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.

## Independent Spent Fuel Storage Installation (ISFSI)

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

There was one fire-related impairment due to the issuance of a permit for fire extinguisher training. There were no security-related impairments for the month. However, there were two security events that were logged. Both were due to transitory environmental conditions.

There were eight condition reports<sup>1</sup> (CR) for the month of March and they are described below.

- 1<sup>st</sup> CR: Was written to track follow on actions in response to the Nuclear Regulatory Commission's Notice of Violation.
- 2<sup>nd</sup> CR: Was issued to track open items from a fire protection program review.
- 3<sup>rd</sup> & 4<sup>th</sup> CRs: Were written to document the omission to log incoming and outgoing correspondence on the Notice of Violation.
- 5<sup>th</sup> CR: Documented the failure of a flexible electrical conduit due to water intrusion.
- 6<sup>th</sup> CR: Documented a missing surveillance record.
- 7<sup>th</sup> CR: Documented a discrepancy in a controlled inventory where the index was not updated.
- 8<sup>th</sup> CR: Documented the cask manufacturer's specification reference to the Nuclear Regulatory Commission's (NRC) Code of Federal Regulation (CFR) 72.48 as opposed to Maine Yankee's reference to the NRC's CFR of 50.59.

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<sup>1</sup> 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.

## *Other ISFSI Related Activities*

1. On March 5<sup>th</sup> Maine Yankee submitted to the Nuclear Regulatory Commission a Licensee Event Report on the January 12<sup>th</sup> snowstorm that precipitated a security event when compensatory measures were instituted “that were not fully effective for their intended purpose”. The intrusion detection system was bypassed due to environmental factors and compensatory measures were instituted. However, nearly three hours into the event security personnel noted that the additional measures were not fully compensating and repositioned a camera to compensate for the degraded zone coverage without notifying the ISFSI Shift Supervisor. The degraded coverage was not picked up until the evening shift reported and assumed the watch. As soon as the deficiency was corrected, the protected area was inspected by security personnel. There was no evidence of any unauthorized access. Senior management was notified along with the Nuclear Regulatory Commission Region I and the State Nuclear Safety Inspector. The total time the affected area was not fully covered was about 5.6 hours.
2. On March 6<sup>th</sup> Maine Yankee submitted two annual reports to the Nuclear Regulatory Commission. By design there are no gaseous or liquid releases from the ISFSI. Therefore, there was no radioactivity to report in its Annual Effluent Release Report. In addition, there were no solid waste shipments from the ISFSI site to describe in the Effluent Release Report. The second document, the Annual Radiological Environmental Operating Report, explains the environmental monitoring program. Since there were no effluent releases from the casks, Maine Yankee was only required to monitor the direct radiation exposure from the facility, which it does with passive devices, called thermoluminescent dosimeters (TLDs)<sup>2</sup>. There are nine TLD stations in the vicinity of the ISFSI and one control station at the Wiscasset Fire Station. All nine stations were comparable to or slightly higher than the control station. However, there was one station that was noticeably higher than the other eight ISFSI stations. This location has been consistently high since March of 2005. Due to its distance from the bermed area of the ISFSI, the values are higher than expected and could be due to its proximity to naturally higher background radiation, such as a ledge outcrop.
3. On March 13<sup>th</sup> while reviewing a tape from the previous day a security officer noted that a worm digger had trespassed on Maine Yankee property by crossing from Bailey Cove onto Foxbird Island to get to Montsweag Bay.
4. On March 14<sup>th</sup> at about the same time another worm digger was observed crossing from Bailey Cove onto Foxbird Island to get to Montsweag Bay. The Local Law Enforcement Agency (LLEA) was notified and responded. The LLEA counseled the worm digger and issued a warning. The incident was reported to the Nuclear Regulatory Commission’s Operations Center.
5. On March 15<sup>th</sup> another worm digger was observed crossing from Bailey Cove onto Foxbird Island to get to Montsweag Bay. The Local Law Enforcement Agency (LLEA) was again notified and responded. The LLEA counseled the worm digger and issued a warning. The incident was reported to the Nuclear Regulatory Commission’s Operations Center.
6. On March 21<sup>st</sup> the Nuclear Regulatory Commission (NRC) issued a letter to Maine Yankee acknowledging they had received Maine Yankee’s response to the NRC’s January 27<sup>th</sup> Notice of Violation (NOV). The NRC issued its lowest level violation, a Severity Level 4, to Maine Yankee stating that they had violated NRC regulations on foreign ownership, control, or domination (FOCD) after reviewing the proposed merger of Northeast Utilities and NSTAR. According to the NRC’s Notice of Violation Maine Yankee “is governed by a board of directors whose members are appointed, in part,

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<sup>2</sup> Thermoluminescent Dosimeters (TLD) are very small, passive radiation monitors requiring laboratory analysis. For a further explanation, refer to the glossary on the Radiation Program’s website.

by companies that are ultimately controlled by foreign entities, as follows: Central Maine Power Co. (38% - Iberdrola S.A.), New England Power Co. (24% - National Grid); Bangor Hydro-Electric and Maine Public Service Co. (12% - Emera)". Iberdrola is based in Spain. National Grid is based in the United Kingdom and Emera is based in Canada.

The State requested and received a copy of Maine Yankee's response to the NRC. In its response Maine Yankee disagreed with the violation, provided four reasons as a basis for its contentions that it was not a violation, implemented a December 14, 2011 Negation Action Plan through a Board of Directors resolution to ensure that there would be no issues relative to FOCD, and formally executed the Board resolution and Negation Action Plan on January 3, 2012. As part of the Negation Action Plan Board Directors or Officers appointed from foreign sponsor companies will be excluded from access to classified or safeguards information, and special nuclear material. All the Directors who were appointed by foreign-controlled owners were required to attest to their exclusion from classified information and special nuclear material and certify they would adhere to protective measures instituted by Maine Yankee to prevent any foreign control or influence.

7. On March 30<sup>th</sup> a vehicle drove up to the Gatehouse asking for directions. When the driver left he stopped the vehicle at the railroad crossing on Ferry Road. A security officer reporting for duty noted that a suspicious vehicle was parked at the railroad crossing and notified the onsite security staff. A security officer was dispatched and investigated the vehicle. The vehicle was the same one that had just stopped at the Gatehouse with the driver asking for directions. Neither the Local Law Enforcement Agency nor the Nuclear Regulatory Commission's Operations Center was contacted.

## Environmental

The State will perform its quarterly field replacement of its environmental radiation monitoring devices in early April.

## Other Newsworthy Items

1. On March 5<sup>th</sup> the Chairman of the Nuclear Regulatory Commission (NRC) forwarded a letter to Senator Kirk of Illinois in response to the Senator's request dated December 22, 2011. The Senator questioned the NRC's retention and availability of records on the Yucca Mountain license review activities and the NRC's ability to resume the licensing process. The Chairman noted that the NRC had issued three Technical Evaluation Reports that captured the staff's technical review of the Department of Energy's Yucca Mountain license application. The Chairman further stated that there were 46 additional reports that summed up "important technical or regulatory information, insights, and lessons learned from more than 25 years of work" besides other NRC documents generated over the history of the high-level waste program. The Chairman did say that the Agency did not have a contingency plan to resume the licensing process and would, if directed. However, the Chairman indicated the difficulty in resuming the process. A copy of the letter is attached.
2. On March 6<sup>th</sup> the Nye County Board of Commissioners sent a letter to Energy Secretary Chu acknowledging the County's support for the Blue Ribbon Commission's (BRC) first recommendation on a new consent-based approach to siting a geologic disposal site. The County also notified Secretary Chu that they were prepared to host a proposed repository at Yucca Mountain. The letter included attachments of Nye County's previous 2002, 2004 and 2011 resolutions indicating their consistent support for such a facility besides their comments on the

- BRC's final report and recommendations. Nye County is the host county for the Yucca Mountain repository. A copy of the letter is attached.
3. On March 6<sup>th</sup> the House Committee on Energy and Commerce issued an internal memorandum in preparation for the March 8<sup>th</sup> hearing on the Department of Energy (DOE) Budget for FY 2013. The memorandum listed the specific funding requests for the various DOE programs. The most noteworthy is the \$770 million request for the Office of Nuclear Energy, which would have oversight over the spent fuel consolidated interim storage and geologic repository sitings. Of the \$770 million requested \$60 million was apportioned for geologic repositories and consolidated storage sites. Representative Shimkus did ask Energy Secretary Chu on the readiness of DOE to restart the Yucca Mountain licensing process should the Courts deem it so. Although Dr. Chu stated that the DOE would respond accordingly, he did state it could take upwards of two years to fully mobilize his agency
  4. On March 6<sup>th</sup> the Nuclear Energy Institute proposed an action plan for the Department of Energy, in cooperation with industry, to implement for fiscal year 2013. The plan was a consolidated storage appropriations concept providing some milestones and action items for achieving a success path towards the availability of a consolidated storage facility by 2020 while protecting the waste fee payments from being diverted from their intended purpose. A copy of the proposal is attached.
  5. On March 7<sup>th</sup> the quarterly conference call of the Federal Energy Regulatory Commission rate case settlement briefing took place with representatives from the states of Connecticut, Maine and Massachusetts. The briefing provided the status of the two nuclear waste lawsuits against the federal government. The Phase I lawsuit, which awarded Maine Yankee about \$81 million, was being appealed by the Department of Justice (DOJ). Oral arguments were heard in November and a decision is expected in May. The second suit went to trial in October and the Judge allowed a limited window for the DOJ to reopen the records. Further briefs were scheduled for this year. Other updates were provided on national activities, such as the Blue Ribbon Commission's report, Congressional efforts and hearings on budget proposals to address the Yucca Mountain Project, the Appeals Court ruling that litigation on the Yucca Mountain Project was ripe based on the Nuclear Regulatory Commission's (NRC) Order suspending the Yucca licensing proceedings, the NRC's activities on the new security rule for spent fuel storage facilities and extended storage regulations, the efforts of the Nuclear Waste Strategy Coalition and Nuclear Energy Institute, the Council of State Governments extensive involvement in the BRC meeting held in Boston, and the National Association of Regulatory Utility Commissioners. Regional activity included that of the New England Council.
  6. On March 7<sup>th</sup> Nye County in Nevada, Aiken County in South Carolina, the states of South Carolina and Washington, and the National Association of Regulatory Utility Commissioners filed a petition for review with the U.S. Court of Appeals for the District of Columbia Circuit "for protective purposes in the event this Court does not resolve all of the issues on the merits" before the Court. Oral arguments on the case have been scheduled for May 2<sup>nd</sup>.
  7. On March 7<sup>th</sup> the U.S. Nuclear Waste Technical Review Board held a meeting in Albuquerque, New Mexico, to receive presentations on the Blue Ribbon Commission's recommendations, an update of the Department of Energy's (DOE) Used Fuel Disposition Program's activities including repository site selection criteria, the Nuclear Regulatory Commission's report on the content of the DOE's Yucca Mountain license application, performance models for geologic media, research associated with engineered barrier systems, deep borehole disposal, and permeability and fluid flow in the Earth's upper crust. A copy of the agenda is attached.

8. On March 7<sup>th</sup> the Nuclear Waste Strategy Coalition held its biweekly conference call to update its membership on upcoming congressional hearings, litigation before the Appeals Court, and activities of the Blue Ribbon Commission and the Nuclear Regulatory Commission (NRC). The congressional hearings were scheduled to hear testimony from the Department of Energy and Nuclear Regulatory Commission FY 2013 budgets before the House and Senate Appropriations Committees. The call also focused on the NRC's assumptions with its draft environmental impact statement to substantiate its 2010 Waste Confidence Ruling for storage of spent nuclear fuel out to 200 years. The litigation issues involved the lawsuit against the NRC for inaction on the Yucca Mountain proceedings with the second case dealing with the suspension of nuclear waste fund fees until an assessment is performed by the Department of Energy. The Court is expected to hear oral arguments on May 2<sup>nd</sup> for the Yucca issue and April 20<sup>th</sup> on the Nuclear Waste Fund fee case.
9. On March 8<sup>th</sup> Senator Lindsey Graham from South Carolina introduced a bill in the Senate, S. 2176, which would require the President to certify Yucca Mountain as the geologic disposal site in the United States. If the president failed to certify the Yucca Mountain site, then the nuclear utilities would not be required to pay into the Nuclear Waste Fund and the balance in the Nuclear Waste Fund would be returned to the utilities. The utilities would then use 75% of the refund to rebate the ratepayers with the remaining 25% to be used at nuclear facilities to enhance the on-site storage and security of the used nuclear fuel. A copy of the Senate Bill is attached.
10. On March 9<sup>th</sup> the National Conference of State Legislatures (NCSL) sent a letter to House Speaker John Boehner, House Minority Leader Nancy Pelosi, Senate Majority Leader Harry Reid, and Senate Minority Leader Mitch McConnell urging them "to move expeditiously" on the Blue Ribbon Commission's (BRC) recommendations to resolving the nation's used nuclear fuel. The NCSL applauded the BRC for proposing the inclusion of state, local governments and tribes in decisions. The NCSL also noted that the BRC report had included NCSL recommendations on an interim storage facility, on Congress using the Nuclear Waste Fund for its intended purpose, and providing financial support to state, tribal and local governments on the safe transportation of nuclear waste. A copy of the letter is attached.
11. On March 12<sup>th</sup> the Governor of Nevada sent a letter to Secretary of Energy Chu expressing his adamant opposition to any interim storage facility or repository site in Nevada, including the "defunct Yucca Mountain project". The Governor's letter was in response to an earlier letter from Nye County, Nevada to the Energy Secretary Chu expressing their consent to host such facilities. A copy of the letter is attached.
12. On March 13<sup>th</sup> the National Association of Regulatory Utility Commissioners (NARUC) sent a letter to Senator Feinstein from California attempting to re-initiate momentum on nuclear waste. The letter praised her and other lawmakers' efforts to revitalize the nation's nuclear waste program. The letter reproved the Administration for not being proactive in requesting funds from the \$26 billion in the Nuclear Waste Fund to revive efforts to resolve the nation's decades' long, nuclear waste dilemma. A copy of the letter is attached.
13. On March 16<sup>th</sup> the town of Manitouwadge in Ontario, Canada has joined the list of communities looking into the possibility for storing used nuclear fuel. However, the Town has not formally joined the process. The Town joined other communities in various stages of investigating the feasibility of storing nuclear wastes, such as Ignace, Ear Falls, Schreiber, Nipigon, Wawa and Hornepayne. The town of Red Rock, which was in the program, was deemed by Canada's Nuclear Waste Management Organization as unlikely due to its unsuitable geologic formations. Manitouwadge is located approximately 50 miles north of Lake Superior.

14. On March 16<sup>th</sup> the U.S. Court of Appeals heard oral arguments on the lawsuits from the states of Connecticut, New York, Vermont, and environmental groups over the Nuclear Regulatory Commission's (NRC) revised Waste Confidence Rule extending on-site storage of used nuclear fuel out to 120 years. The states maintained that the NRC cannot revise their Waste Confidence Rule for that length of time without performing an Environmental Impact Statement as mandated by the National Environmental Policy Act of 1969. The three judge panel expressed skepticism over how the NRC has dealt with issues regarding the potential environmental impact of storing spent nuclear fuel at sites around the country. The NRC argued that a national repository will be constructed within the next 60 years. The Chief Judge told the NRC lawyer, "We don't owe any deference to your political predictions."
15. On March 19<sup>th</sup> a member of the Board of County Commissioners from Nye County, Nevada wrote a letter to the Governor of Nevada expressing his disagreement with the Governor's opposition to Yucca Mountain and urging him to reconsider. A copy of the letter is attached.
16. On March 21<sup>st</sup> the E-5 Committee of the Conference of Radiation Control Program Directors held a conference call to discuss low-level waste issues confronting the nation. The Committee discussed reviewing the Department of Energy's (DOE) latest draft Environmental Impact Statement for the disposal of "Greater Than Class C" (GTCC) wastes. The State Inspector, an advisor to the group, suggested that the Committee review the DOE's Summary Document to focus its efforts on the specific disposal alternatives before commenting on the document. Maine Yankee has four casks at its spent fuel storage facility in Wiscasset that are classified as CTCC wastes. The casks contain the cut-up internals of the reactor vessel.
17. On March 21<sup>st</sup> the Nuclear Waste Strategy Coalition (NWSC) held its second biweekly conference call to update its membership on upcoming congressional hearings, litigation before the Appeals Court, and activities of the Blue Ribbon Commission and the Nuclear Regulatory Commission (NRC). The discussions were a follow-up to the topics covered in its earlier conference call held on March 7<sup>th</sup>. In addition, the discussion also focused on the Department of Energy's upcoming report to Congress on how it will implement the Blue Ribbon Commission's recommendations. Concern was expressed about the DOE's ability to provide such a detailed road map by the July 26<sup>th</sup> deadline imposed by Congress.
18. On March 22<sup>nd</sup> the Chairman of the House Committee on Energy and Commerce and the Chairman of the Subcommittee on Environment and the Economy forwarded a letter to Energy Secretary Chu as a follow-up to Secretary Chu's March 8<sup>th</sup> testimony before the Committee. The Chairs requested the availability of funds, whether uncosted, unobligated, reserves, or past unspent funds, from the current fiscal year to support the Nuclear Regulatory Commission's Yucca Mountain license application. A copy of the letter is attached.
19. On March 25<sup>th</sup> the energy company Fennovoima and the nuclear waste disposal company Posiva clashed over Finland's underground nuclear waste disposal site. Fennovoima proposed a stake in the Olkiluoto nuclear waste site near Onkalo. However, Posiva rejected Fennovoima's proposal. The refusal may compel Fennovoima to construct its own waste disposal facility at a cost of about \$1.7 billion. If Posiva had allowed Fennovoima to share in the Onkalo site, it could have saved nearly \$400 million. Before deciding on other alternatives the parties were waiting for a nuclear waste working group report due at the end of the year that will provide recommendations on the number of nuclear waste disposal sites required for Finland.
20. On March 26<sup>th</sup>-27<sup>th</sup> the Nuclear Waste Strategy Coalition held its annual spring meeting. The main topic of discussion was the Blue Ribbon Commission's recommendations with special emphasis on

the new consent-based approach, reform of the Nuclear Waste Fund, transportation, and establishing a federal corporation to manage the nation's used nuclear stockpile. The Department of Energy discussed the potential impacts of the BRC recommendations. The Nuclear Regulatory Commission elaborated on their waste confidence activities. The Chief Counsel of the House Committee on Energy and Commerce provided a congressional perspective on the Blue Ribbon Commission's suggested legislative reform. A copy of the agenda is attached.

21. On March 27<sup>th</sup> the Nuclear Waste Strategy Coalition issued a release calling on Congressional Offices to enact critical nuclear waste program reforms in funding, reinstating funding for regional transportation groups to support much needed infrastructure planning and preparation, and holding the Department of Energy accountable for developing an action plan. A copy of the release is attached.

22. On March 28<sup>th</sup> the Energy Communities Alliance released "A Community Handbook on Nuclear Energy: Understanding Nuclear Energy and Alternatives for the Future". The handbook is designed to assist local communities in identifying and understanding the multitude of issues associated with hosting a nuclear facility and the role that local governments can play in the development of a nuclear facility in their community. The handbook outlines five general recommendations for local communities considering hosting a nuclear energy facility. Besides providing a historical context on the nation's used nuclear fuel, in its 117 page publication four of the ten chapters contain information on the nuclear waste issue: regulating nuclear waste, nuclear waste disposal in the United States, permanent geologic disposal, and interim storage of waste. This handbook was not written by people that work for the nuclear industry, the federal government or anti- or pro-nuclear groups. Instead, it was written from the experience of local governments who host nuclear facilities, who have been and will be most impacted by any policies regarding nuclear energy development and nuclear waste management. The members are mayors, council members, commissioners, chairpersons, judges, city/county managers, economic development professionals, and others. They assisted in the development of this handbook and provided input into the realities of hosting such a facility, including the benefits and challenges.

23. On March 28<sup>th</sup> the U.S. Nuclear Waste Technical Review Board (NWTRB) sent a letter to the Department of Energy's (DOE) Assistant Secretary for Nuclear Energy providing feedback to DOE on the NWTRB's last two meetings, one in Arlington, Virginia and Albuquerque, New Mexico. The Board recommended that DOE place a special emphasis at integrating various programs that "will have an impact on the management" of used nuclear fuel and high level waste. The NWTRB commented on four major topic areas, each with its own institutional and technical challenges:

- Fuel Cycle Integration and Evaluation
- Effects of Waste Package Sizes
- Work to Prepare for Geologic Disposal
- DOE Activities Related to Deep Borehole Disposal

A copy of the letter is attached.

24. On March 29<sup>th</sup> the Minnesota Senate Energy Committee passed in final form a resolution calling on the President of the United States and the Congress "to enact legislation and take other federal government action related to interim storage of used nuclear fuel." The resolution also called for ensuring access to the Nuclear Waste Fund and enabling the Nuclear Regulatory Commission to license private interim storage facilities to meet the nation's needs. A copy of the resolution is attached.

25. On March 30<sup>th</sup> the Pennsylvania Public Utility Commission sent a letter to their Congressional Senators unanimously expressing their concerns over the handling of the Nuclear Waste Fund and its impact to the state's ratepayers. The Commissioners stated that ratepayers have contributed about \$1.4 billion into the Nuclear Waste Fund "with little to show for it". The Commissioners asked the Senators for their help to resolve this issue. A copy of the letter is attached.

March 5, 2012

The Honorable Mark Kirk  
United States Senate  
Washington, D.C. 20510

Dear Senator Kirk:

On behalf of the U.S. Nuclear Regulatory Commission (NRC), I am responding to your letter of December 22, 2011, regarding the retention and availability of records associated with the NRC's Yucca Mountain license review activities, and the agency's ability to reconstitute the necessary organization to resume the licensing process.

On October 1, 2010, at the beginning of fiscal year 2011, the NRC began an orderly closure of its Yucca Mountain activities, which included an array of knowledge capture and management activities. As part of this process, the staff prepared three technical evaluation reports. These reports provide the staff's technical review of the Department of Energy's Yucca Mountain license application in the areas of pre-closure and post-closure repository safety, as well as the staff's assessment of administrative and programmatic areas related to repository operations. These reports, published between July and September 2011, are the staff's primary public record of its technical review of the DOE Yucca Mountain repository license application.

The NRC staff and its contractor, the Center for Nuclear Waste Regulatory Analyses, also developed 46 additional reports that capture important technical or regulatory information, insights, and lessons learned from more than 25 years of work during the pre-licensing and licensing phases of the Yucca Mountain Program. These materials supplement the technical evaluation reports, as well as Volume 1 of the Safety Evaluation Report for the Yucca Mountain Repository that was issued in 2010, and the many reports and other documents generated over the NRC's multi-decade high-level waste program.

Yucca Mountain-related documents, including Volume 1 of the Safety Evaluation Report and the three technical evaluation reports, are available to the public in the NRC's Agencywide Documents Access and Management System, which is accessible through the NRC website. The NRC documents relating to the Yucca Mountain Program, including materials regarding the licensing review and adjudicatory proceedings, will continue to be retained as permanent records, as required under National Archives and Records Administration regulations.

The agency does not have a formal contingency plan for resuming the licensing process. The Fiscal Year 2012 Energy and Water Development Appropriations Act provided no funds to the NRC to support work on the Yucca Mountain repository license application. In addition, on October 1, 2011, the agency's Division of High-Level Waste Repository Safety was realigned into a three-branch division and renamed the Division of Spent Fuel Alternative Strategies. The Division is now focused on extended spent fuel storage, alternative disposal approaches, and related topical areas. The contractor staff previously supporting the Yucca Mountain license application review also has transitioned to technical activities in other areas.

Should the NRC be directed and funded to resume the Yucca Mountain review, we would identify and acquire, if needed, the appropriate staffing, contractor, and physical resources required to restart the licensing review; with additional resources likely needing to be added over time. Although the adjudicatory proceeding has been suspended, judges from the Atomic Safety and Licensing Board Panel could resume assigned duties or replacements appointed, if necessary. With the continuing passage of time our ability to promptly re-engage in this work becomes more limited.

If you need any additional information, please contact me or Rebecca Schmidt, Director of the Office of Congressional Affairs, at (301) 415-1776.

Sincerely,

/RA/

Gregory B. Jaczko



**Board of County Commissioners  
Nye County  
Pahrump, Nevada**

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2100 E. Walt Williams Drive  
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Phone (775) 751-7075  
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March 6, 2012

The Honorable Dr. Steven Chu  
Secretary, U.S. Department of Energy  
1000 Independence Ave., S.W.  
Washington, D.C. 20585

**Subject: Consent to Host the Proposed Repository at Yucca Mountain**

Dear Dr. Chu:

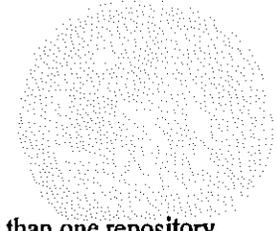
Nye County wants to acknowledge the Department of Energy's FY2011 payments to the Yucca Mountain "Affected Units of Local Government" (AULG) and your "Payment Equal to Taxes (PETT)" to Nye County for the period through FY2011. Nye County has considered itself a partner of the Department for many years as we have undertaken our role as host county to the only site designated by law as the Nation's geologic repository. We look forward to working with you in the ongoing quest for solutions to the challenges associated with the disposition of spent nuclear fuel (SNF) and defense high level waste (DHLW).

As you know, the first recommendation of the Blue Ribbon Commission on America's Nuclear Future (BRC) calls for a new, consent-based approach to siting future nuclear waste management facilities. This recommendation goes to the heart of the purpose for this letter. Nye County, Nevada hereby provides notice to you, the Secretary of Energy, that we consent to host the proposed repository at Yucca Mountain consistent with our previous resolutions (attached) that support the safe and successful development of the Yucca Mountain Repository. Our detailed comments on the BRC Final Report are also attached.

Importantly, the BRC report states, *"The approach we recommend also recognizes that successful siting decisions are most likely to result from a complex and perhaps extended set of negotiations between the implementing organization and potentially affected state, tribal, and local governments, and other entities."* We acknowledge that opposition by the State of Nevada has been challenging. Up to this point in time, Nevada, represented by the Nevada Commission on Nuclear Projects, has been steadfast in its belief that there are no serious incentives to be had for hosting the Yucca Mountain Project. However, we, like the BRC, believe that (1) assurances from the Federal government of an enduring and significant role for State and Local government involvement in the project to assure safety, and (2) a significant federal incentive package to the State and Local governments could alter the status quo and lead to a resolution of the decades long dispute.

Since the BRC members have testified that the Nation may well need more than one repository,

Dr. Steven Chu  
March 6, 2012  
Page 2



Since the BRC members have testified that the Nation may well need more than one repository, and that the need is urgent, Yucca Mountain should not automatically be excluded. The fact that over 30 years of scientific and technical work has already been successfully conducted leads us to conclude that Yucca Mountain could be ready to safely receive waste years ahead of any other site. This specifically addresses the "promptness" issue of the fourth BRC recommendation "...that leads to the timely development of one or more permanent deep geologic repositories..."

We ask that you invite Nye County to meet with you or your designated representatives to initiate the cooperative negotiation process the BRC recommends. We want to explore and define potential incentives, and move this urgently needed program forward as promptly as possible. Thanks to the additional AULG oversight funding you provided, we are ready to start that process now. In order to establish our mutual negotiating teams, we propose an initial meeting at the time and place of your choosing in March or soon thereafter. Let us start the dialogue now. We do not need to wait. We look forward to your prompt reply.

Sincerely,

*Joni Eastley FOR*

Lorinda Wichman, Chairman  
Nye County Board of County Commissioners

Attachments: Nye County Resolutions 2002-007, 2002-22, 2004-25 & 2011-21  
Nye County BRC Final Report Comments, March 5, 2012

CC: The White House  
Governor Sandoval  
Nevada Congressional Delegation  
Nevada Commission on Nuclear Projects  
Senate Committee on Energy and Water  
Senate Committee on Environment and Public Works  
House Energy and Commerce  
House Science Committee  
House Sub Committee on Energy and Environment  
House Sub Committee on Science and Technology  
NARUC  
NEI  
USNIC  
Nye Board of County Commissioners  
Nye County Manager  
AULGs  
NV4CFE  
NWSC  
NWTRB  
NRC  
DOE/NE  
DOE/GC  
DOE/EM

## FY2013 Central Storage Appropriations Concepts

During FY2012 – pursuant to instructions in the FY2012 Omnibus Conference Report – DOE is developing a design concept for consolidated storage facilities, and as part of the strategy requested by Congress, DOE is addressing transportation, a consent-based siting process, and concepts for a new organization to manage the “back-end” of the nuclear fuel cycle – all consistent with the Blue Ribbon Commission recommendations.

In FY2013, the focus should be on practical implementation steps aimed at opening a consolidated storage facility by 2020 and protecting the waste fee payments as soon as practical:

- Within three months, working closely with the nuclear utility industry, adapt the work performed in FY2012 to develop timelines for development, licensing, construction, and operation of a consolidated storage facility for the following two scenarios:
  - DOE is responsible for all engineering, design and licensing efforts, and contracts for facility operations;
  - A private entity performs the engineering, design and licensing efforts, and operates the facility with DOE contracting with the facility for storage services.
- Within 6 months, working closely with affected states, Indian Tribes, and utilities develop specific transportation plans for moving stranded fuel from decommissioned sites. For planning purposes DOE should set a target date of 2020 to initiate transportation. The plan should identify all necessary infrastructure improvements, schedule for procurement of equipment and associated costs. The plan should build on the successful plan DOE used for shipments to the Waste Isolation Pilot Plant and would serve as a model for moving all used fuel to consolidated storage.
- Within 6 months, working closely with affected states, Indian Tribes, and industry, develop and implement a plan for training first responders under section 180c of the NWPA in preparation for transportation.
- Identify communities that may be interested in hosting a consolidated storage facility and
  - determine, in consultation with each community, a program for achieving consent among the stakeholders within the state, and
  - develop, in consultation with each community, a methodology for incentive payments and other benefits.
- To facilitate the potential creation of a federal corporation, develop a transition plan for transferring the necessary high-level waste program information to a new management entity.
- Undertake the administrative actions identified in the BRC regarding the waste fee and work with industry to develop suggested changes to standard contract that would be acceptable to all parties.
- Develop specific plans for R&D facilities that support ongoing DOE, industry, and NRC research on extended storage, preferably located at or near the consolidated storage site.
- Forward to the appropriate Committees of the Senate and House of Representatives
  - Needed appropriations funding and language to take the steps required after FY2013 to put the plans listed above into effect;
  - Draft authorizing legislation, if needed, and long-term funding requirements to meet the requirements of these plans and move commercial used nuclear fuel to a consolidated storage facility no later than 2020.



UNITED STATES  
NUCLEAR WASTE TECHNICAL REVIEW BOARD  
2300 Clarendon Boulevard, Suite 1300  
Arlington, VA 22201

**Agenda**  
**Spring 2012 Board Meeting**  
**Wednesday, March 7, 2012**

Sheraton Albuquerque Airport Hotel, Chaco Room  
2910 Yale Blvd., SE  
Albuquerque, NM 87106  
Tel: (505)-843-7000  
Fax: (505)-843-6307

- 8:00 a.m. **Call To Order and Introductory Statement**  
*B. John Garrick, Chairman*
- 8:15 a.m. **Presentation on the Report to the Secretary of Energy of the Blue Ribbon Commission on America's Nuclear Future (BRC)**  
*Albert Carnesale*  
Commissioner, BRC  
Chancellor Emeritus and Professor, UCLA
- 8:45 a.m. *Questions and Discussion*
- 9:15 a.m. **Update on Activities of the Office of Used Fuel Disposition**  
*William Boyle*  
Director  
Office of Used Fuel Disposition Research and Development  
Office of Nuclear Energy  
U.S. Department of Energy
- 9:35 a.m. *Questions and Discussion*
- 9:50 a.m. **BREAK**
- 10:05 a.m. **Panel – Analysis of Repository Site-Selection Criteria and Constraints**
- 10:05 a.m. *William Boyle*  
Director  
Office of Used Fuel Disposition Research and Development  
DOE Office of Nuclear Energy  
U.S. Department of Energy
- 10:35 a.m. *Questions and Discussion*

- 10:55 a.m. *Kenneth Skipper*  
Senior Geologist  
Office of Ground Water  
U.S. Geological Survey (USGS)  
U.S. Department of the Interior
- 11:25 a.m. *Questions and Discussion*
- 11:45 a.m. **LUNCH (1 hour 15 minutes)**
- 1:00 p.m. **Technical Evaluation Report on the Content of the U.S. Department of Energy's Yucca Mountain Repository License Application**  
*Lawrence Kokajko*  
Director  
Nuclear Material Safety and Safeguards (NMSS)  
Spent Fuel Alternative Strategies (SFAS)  
U.S. Nuclear Regulatory Commission (NRC)
- Timothy McCartin*  
Senior Advisor  
NMSS/SFAS  
U.S. NRC
- 1:40 p.m. *Questions and Discussion*
- 2:00 p.m. **Performance Assessment Models for Geologic Media and Potential Application to Site Screening, Selection, and Characterization**  
*Peter Swift*  
National Technical Director  
DOE-NE Used Fuel Disposition Campaign  
Sandia National Laboratories (SNL)
- 2:45 p.m. *Questions and Discussion*
- 3:10 p.m. **BREAK**
- 3:25 p.m. **DOE Research and Development Activities Related to the Development of Engineered Barrier Systems for Different Geologic Media**  
*Carlos Jové Colón*  
DOE-NE Used Fuel Disposition Campaign  
SNL
- 3:55 p.m. *Questions and Discussion*

- 4:15 p.m. Panel – Deep Borehole Disposal**
- 4:15 p.m. Geological and Practical Aspects of Deep Borehole Disposal**  
*Bill Arnold*  
 DOE-NE Used Fuel Disposition Campaign  
 Sandia National Laboratories
- 4:45 p.m. Fluid Flow and Permeability in the Upper Crust**  
*Steven Ingebritsen*  
 Senior Research Hydrologist  
 Water Mission Area, National Research Program  
 USGS  
 U.S. Department of the Interior
- 5:15 p.m. Deep Borehole Panel Discussion**
- 5:40 p.m. Public Comments**
- 6:00 pm Adjourn**

112TH CONGRESS  
2D SESSION

# S. 2176

To amend the Nuclear Waste Policy Act of 1982 to require the President to certify that the Yucca Mountain site remains the designated site for the development of a repository for the disposal of high-level radioactive waste, and for other purposes.

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IN THE SENATE OF THE UNITED STATES

MARCH 8, 2012

Mr. GRAHAM (for himself, Mr. MCCAIN, Mr. DEMINT, Mr. CHAMBLISS, and Mr. JOHNSON of Wisconsin) introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

---

## A BILL

To amend the Nuclear Waste Policy Act of 1982 to require the President to certify that the Yucca Mountain site remains the designated site for the development of a repository for the disposal of high-level radioactive waste, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*  
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the "Nuclear Waste Fund  
5 Relief and Rebate Act".

1 SEC. 2. CERTIFICATION OF COMMITMENT TO YUCCA MOUN-  
2 TAIN.

3 (a) IN GENERAL.—Subtitle E of title I of the Nuclear  
4 Waste Policy Act of 1982 (42 U.S.C. 10172 et seq.) is  
5 amended by adding at the end the following:

6 "SEC. 162. CERTIFICATION OF COMMITMENT TO YUCCA  
7 MOUNTAIN SITE.

8 "(a) DEFINITION OF DEFENSE WASTE.—In this sec-  
9 tion, the term 'defense waste' means—

10 "(1) transuranic waste;

11 "(2) high-level radioactive waste;

12 "(3) spent nuclear fuel;

13 "(4) special nuclear materials;

14 "(5) greater-than-class C, low-level radioactive  
15 waste; and

16 "(6) any other waste arising from the produc-  
17 tion, storage, or maintenance of nuclear weapons  
18 (including components of nuclear weapons).

19 "(b) CERTIFICATION OF COMMITMENT.—Not later  
20 than 30 days after the date of enactment of this section,  
21 the President shall publish in the Federal Register a no-  
22 tice that the President certifies that the Yucca Mountain  
23 site is the selected site for the development of a repository  
24 for the disposal of high-level radioactive waste and spent  
25 nuclear fuel, in accordance with section 160.

1     “(c) FAILURE TO PUBLISH CERTIFICATION; REV-  
2     OCATION OF CERTIFICATION.—If the President fails to  
3     publish the certification of the President in accordance  
4     with subsection (b), or if the President revokes the certifi-  
5     cation of the President after the date described in that  
6     subsection, not later than 1 year after the date described  
7     in subsection (b), or the date of revocation, as appropriate,  
8     and in accordance with subsection (d)—

9             “(1) each entity that is required under section  
10     302 to make a payment to the Secretary shall not  
11     be required to make any additional payment; and

12             “(2) each entity that has made a payment  
13     under section 302 shall receive from the Secretary of  
14     the Treasury, from amounts available in the Nuclear  
15     Waste Fund, an amount equal to the aggregate  
16     amount of the payments made by the entity (includ-  
17     ing interest on the aggregate amount of the pay-  
18     ments) to the Secretary for deposit in the Nuclear  
19     Waste Fund.

20     “(d) USE OF RETURNED PAYMENTS.—

21             “(1) IN GENERAL.—Subject to paragraph (2),  
22     of the aggregate amount of payments returned to an  
23     entity described in subsection (c)(2)—

1           “(A) 75 percent shall be used by the entity  
2           to provide rebates to ratepayers of the entity;  
3           and

4           “(B) 25 percent shall be used by the entity  
5           to carry out upgrades to nuclear power facilities  
6           of the entity to enhance the storage and secu-  
7           rity of materials used to generate nuclear  
8           power.

9           “(2) DEFENSE WASTE.—In the case of a pay-  
10          ment required to be paid to an entity for the storage  
11          of defense waste, the Secretary shall use the amount  
12          required to be paid to the entity to meet the penalty  
13          payment obligation of the Secretary under sub-  
14          section (e)(2) to the State in which the entity is lo-  
15          cated.

16          “(e) DISPOSITION OF DEFENSE WASTE.—

17               “(1) IN GENERAL.—Not later than January 1,  
18               2017, the Secretary shall initiate the transportation  
19               of defense waste from each State in which defense  
20               waste is located to the Yucca Mountain site.

21               “(2) PENALTY.—

22                       “(A) IN GENERAL.—Subject to subpara-  
23                       graph (B), if the Secretary fails to initiate the  
24                       transportation of defense waste in accordance  
25                       with paragraph (1), the Secretary shall pay to

1           each State in which defense waste is located  
2           \$1,000,000 for each day that the defense waste  
3           is located in the State until the date on which  
4           the Secretary initiates the transportation of the  
5           defense waste under paragraph (1).

6           “(B) MAXIMUM AMOUNT.—Subject to sub-  
7           section (c)(2), for each calendar year, the Sec-  
8           retary shall not pay to any State described in  
9           subparagraph (A) an amount greater than  
10          \$100,000,000.

11          “(C) REQUIRED USE OF PAYMENTS.—A  
12          State that receives amounts through a payment  
13          from the Secretary under this paragraph shall  
14          use the amounts—

15                 “(i) to help offset the loss in commu-  
16                 nity investments that results from the con-  
17                 tinued storage of defense waste in the  
18                 State; and

19                 “(ii) to help mitigate the public health  
20                 risks that result from the continued stor-  
21                 age of defense waste in the State.

22          “(f) DETERMINATION BY COMMISSION TO GRANT OR  
23          AMEND LICENSES.—In determining whether to grant or  
24          amend any license to operate any civilian nuclear power  
25          reactor, or high-level radioactive waste or spent fuel stor-

1 age or treatment facility, under the Atomic Energy Act  
2 of 1954 (42 U.S.C. 2011 et seq.), the responsibilities of  
3 the President and the Secretary described in this subtitle  
4 shall be considered to be sufficient and independent  
5 grounds for the Commission to determine the existence of  
6 reasonable assurances that spent nuclear fuel and high-  
7 level radioactive waste would be disposed of safely and in  
8 a timely manner by the entity that is the subject of the  
9 determination.

10 “(g) EFFECTS.—

11 “(1) TERMINATION OF PAYMENT REQUIRE-  
12 MENT; ACCEPTANCE OF RETURNED PAYMENTS.—

13 With respect to an entity that receives a benefit  
14 under paragraph (1) or (2) of subsection (c)—

15 “(A) the entity shall not be considered by  
16 the Commission to be in violation under section  
17 302(b); and

18 “(B) the Commission shall not refuse to  
19 take any action with respect to a current or  
20 prospective license of the entity on the grounds  
21 that the entity has cancelled or rescinded a con-  
22 tract to which the entity is a party as the result  
23 of—

1                   “(i) the failure by the entity to make  
2                   a payment to the Secretary under section  
3                   302; or

4                   “(ii) the acceptance by the entity of  
5                   amounts described in subsection (c)(2).

6                   “(2) DISPOSITION OF WASTE.—Nothing in this  
7                   section affects the responsibility of the Federal Gov-  
8                   ernment under any Act (including regulations) with  
9                   respect to the ultimate disposition of high-level ra-  
10                  dioactive waste and spent nuclear fuel.”.

11                  (b) CONFORMING AMENDMENT.—The table of con-  
12                  tents of the Nuclear Waste Policy Act of 1982 (42 U.S.C.  
13                  prec. 10101) is amended by adding at the end of the items  
14                  relating to subtitle E of title I the following:

“Sec. 162. Certification of commitment to Yucca Mountain site.”.

○



NATIONAL CONFERENCE of STATE LEGISLATURES

*The Forum for America's Ideas*

Stephen Morris  
Senate President  
Kansas Senate  
President, NCSL

Michael P. Adams  
Director, Strategic Planning  
Virginia Senate  
Staff Chair, NCSL

William Pound  
Executive Director

March 9, 2012

The Honorable John Boehner  
Speaker of the House  
United States House of Representatives  
1011 Longworth House Office Building  
Washington, D.C. 20515

The Honorable Harry Reid  
Majority Leader  
United States Senate  
522 Hart Senate Office Building  
Washington, D.C. 20510-2803

The Honorable Nancy Pelosi  
Minority Leader  
United States House of Representatives  
235 Cannon House Office Building  
Washington, D.C. 20515

The Honorable Mitch McConnell  
Minority Leader  
United States Senate  
317 Russell Senate Office Building  
Washington, D.C. 20510-1702

Dear Speaker Boehner, Representative Pelosi, Senator Reid and Senator McConnell:

On behalf of the National Conference of State Legislatures (NCSL), we urge Congress to move expeditiously to review and act on recommendations made by the Blue Ribbon Commission on America's Nuclear Future (BRC) in its final report issued on January 26, 2012. This report represents an important opportunity to find a permanent, safe and secure solution to America's nuclear waste problem.

Through the testimony of state legislators, NCSL has consistently encouraged the BRC to recognize the critical role of states in managing the waste from the Cold War arms race and nuclear energy plants. NCSL applauds the BRC for recognizing the importance of states in advancing this critical conversation and including in its report a proposal for states, tribes and local governments to be included in all storage and disposal decisions on nuclear waste and spent fuel.

The BRC final report also incorporates other recommendation made by NCSL to the BRC. It proposes the development of an interim storage facility where nuclear waste, which is currently stored in numerous power plants and federal facilities throughout the country, can be stored temporarily until a permanent underground disposal facility is built. It calls for Congress to use the Nuclear Waste Fund for its intended purpose of funding the management of spent nuclear fuel and not to offset unrelated spending in the federal budget. And the report recognizes that state, tribal

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Washington  
444 North Capital Street, N.W. Suite 515  
Washington, D.C. 20001  
Phone 202.624.5400 Fax 202.737.1069

Website [www.ncsl.org](http://www.ncsl.org)  
Email [info@ncsl.org](mailto:info@ncsl.org)

and local governments need federal support to continue the safe transportation of nuclear waste throughout the country.

NCSL has a long history of working on issues related to nuclear waste management and welcomes the opportunity to work with Congress to continue to advance the conversation forward and build on the recommendations of the BRC final report.

Sincerely,



Senator Stephen R. Morris  
Senate President, Kansas  
President, NCSL

Delegate Sally Young Jameson  
Maryland House of Delegates  
Chair, NCSL Nuclear Legislative Workgroup

CC: Members of the U.S. House of Representatives and U.S. Senate

ONE HUNDRED ONE NORTH CARSON STREET  
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FAX NO.: (775) 684-5683



555 EAST WASHINGTON AVENUE, SUITE 5100  
LAS VEGAS, NEVADA 89101  
OFFICE: (702) 486-2500  
FAX NO.: (702) 486-2505

## Office of the Governor

March 12, 2012

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

RE: BRC Recommendation for Consent-Based Approach

Dear Secretary Chu:

It has come to my attention that the U.S. Department of Energy is in the process of establishing an internal study group to consider implementation of the recommendations of the Blue Ribbon Commission on America's Nuclear Future (BRC). A centerpiece of the BRC's recommendations for restructuring the nation's nuclear waste management system is the requirement for a consent-based approach whereby potential host states must agree to a storage or disposal facility within their borders. The BRC also has recommended that the country move ahead expeditiously to find an interim storage site for spent nuclear fuel in order to address issues involving shut down nuclear power reactors or instances where operating reactors are not able to implement sufficient on-site spent fuel storage.

There should be no uncertainty or misunderstanding of my position with regard to an interim spent fuel storage site or repository site in Nevada; the state of Nevada does not support the location of any such site within the state and will oppose any attempt to either resurrect the defunct Yucca Mountain project or locate an interim storage facility at Yucca or elsewhere in Nevada. While I am cognizant of the letter sent to you last week from Nye County expressing support for a Yucca Mountain repository, Nye County does not and cannot speak for the state of Nevada.

Under the provision of the Nuclear Waste Policy Act of 1982 as amended, DOE is explicitly prohibited from locating an interim storage site in Nevada while Yucca Mountain is still a potential repository location. Even though DOE has indicated it intends to terminate the Yucca program and has taken steps in that direction, the NRC licensing proceeding remains "suspended" and not terminated. In addition, Nevada statutes (NRS 459.910) make it "unlawful for any person or governmental entity to store high-level radioactive waste in Nevada" and reflect the clear position of the Nevada Legislature on this matter.

Dr. Steven Chu, Secretary of Energy  
March 12, 2012  
Page 2



Please be advised that Nevada wholeheartedly supports the recommendations of the BRC and believes that the consent-based approach represents the best chance for ultimately solving the nation's nuclear waste management problem. However, Nevada will not consent to an interim storage facility or repository being considered in the state.

Sincere regards,

A handwritten signature in black ink, which appears to read "Brian Sandoval", is written over a horizontal line.

**BRIAN SANDOVAL**  
Governor

cc: Nevada Congressional Delegation  
Catherine Cortez Masto, Nevada Attorney General  
Richard Bryan, Chairman, Nevada Commission on Nuclear Projects



N A R U C  
National Association of Regulatory Utility Commissioners

March 13, 2012

Honorable Dianne Feinstein  
Chair  
Appropriations Committee,  
Energy and Water Development Subcommittee  
United States Senate  
Washington, DC 20510

**Re: Re-Initiating Momentum on the Nuclear Waste Front**

Dear Chairman Feinstein:

The National Association of Regulatory Utility Commissioners (NARUC) has been a stakeholder in the matter of disposition of used (often called "spent") nuclear fuel ever since 1983 when the Nuclear Waste Policy Act (NWPA) set national policy that:

- The federal government is responsible for the safe, permanent disposal of all government and commercial high-level radioactive waste, and
- Those who have been the beneficiaries of commercial nuclear power (the utilities which produce nuclear-generated electricity and their customers) should pay for the share of disposal cost for the commercial waste.

NARUC members—State public utilities commissioners—on behalf of ratepayers who are holding up their end of the bargain, grew frustrated while the disposal became entangled in one form of delay after another. No used fuel was moved. A cascade of lawsuits added to the taxpayers' liability.

There was a flurry of interest when the Blue Ribbon Commission on America's Nuclear Future (BRC) released its Report to the Secretary of Energy on January 26, 2012. The Report culminated two years of reviewing the troubled history of implementation of the Nuclear Waste Policy Act. There were some congressional hearings, media reporting and editorial expressions that often speculated whether the Report's recommendations will break the impasse and provide a new pathway that might lead toward success in disposal of government and commercial nuclear waste.

We received an indication that the Administration was not going to be proactive in seizing the recommendations from the Report — which called for "prompt" and "urgent" actions—when they put a placeholder in the FY 2013 Budget request released February 13. Other than \$10 million requested for some used fuel R&D with no direct linkage to waste storage or disposal, the Department of Energy requests no appropriations from the Nuclear Waste Fund (the Fund) for what was until 2009 the Civilian Radioactive Waste Management program. Some might say there was too little time between the release of the Report and the point at which the Budget is locked in, but there was a draft report available in the previous July from which a proactive responsible official might have assembled a small budget to support whatever first activities that would begin once FY 2013 begins in October. In our view, an opportunity was missed.

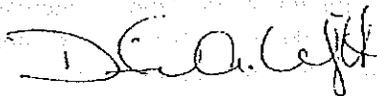
So, as we understand the situation for FY 2013, absent an unlikely reprogramming:

- There will be no appropriations to support implementation of the BRC recommendations before October 2013, aside from the \$10 million for used fuel R&D.
- Close to \$2 billion dollars will be credited to the Fund (actually in Treasury securities e.g. debt) while \$10 million is requested to be appropriated. The \$2 billion is comprised of an estimated \$770 million in fees paid by nuclear utilities (and their customers) plus over \$1 billion in what DOE records as returns on investments—bringing the illusory total in the Fund into the territory of well over \$30 billion by end of FY 2013.
- Since the Office of Management and Budget declared in the FY 2011 Budget that the Yucca Mountain repository was “terminated”—including the disbanding of the office that had managed the waste program since 1983—the Fund has grown by over \$5 billion, while the waste which was to have begun to be disposed of in 1998 accumulates at 72 reactor sites across the country and the government’s liability for partial breach of contracts to remove the waste grows toward \$20.8 billion.

From our point of view, one must wonder what is to become of any sense of momentum from the recommendations of the distinguished BRC panelists between now and October 2013, as the fees continue to flow into the Nuclear Waste Fund and yet remain inaccessible? While the BRC recommends the establishment of a new organization to take over most of the duties currently assigned by the NWPA to the Secretary of Energy, the first congressional hearings on their report led the BRC Co-Chairs to conclude that legislation necessary to create such an organization was unlikely this year. It would not be wasted money from the Fund to appropriate a nominal amount (in the \$25 million range) to provide for some staffing support and planning for such initiatives as the development of a central interim storage facility for the transfer and consolidation of used nuclear fuel from the nine sites, such as Rancho Seco and Humboldt Bay, where the reactors have been shut down but the used fuel remains. The BRC recommended “prompt efforts” to establish such consolidated storage with first priority for that cohort of decommissioned sites. Any work started by the DOE could be transferrable to the new waste management organization later, it seems to us.

We appreciate the leadership shown by you, Senators Alexander, Bingaman and Murkowski in revitalizing the civilian radioactive waste management program. If there are upcoming occasions for NARUC to meet and discuss these topics in informal or formal settings we would welcome an opportunity to participate.

Sincerely,



David A. Wright  
President

CC: Ranking Member Alexander



**Board of County Commissioners  
Nye County  
Pahrump, Nevada**

**Pahrump Office  
2100 E. Walt Williams Drive  
Pahrump, NV 89048  
Phone (775) 751-7075  
Fax (775) 751-7093**

March 19, 2012

**Office of the Governor  
The Honorable Brian Sandoval  
One Hundred One North Carson Street  
Carson City, NV 89701**

**Dear Governor Sandoval;**

I have seen a copy of your letter to the Department of Energy (DOE) Secretary Chu regarding your position on the future of Yucca Mountain. I am writing in my individual capacity as a Nye County Commissioner and the Liaison Commissioner on Nuclear Projects.

Your letter was partially in response to a letter the Nye County Commission sent to the Secretary asking him to enter negotiations with us over the repository. We well know that we do not speak for the State of Nevada, but we do speak for Nye County. I respectfully disagree with your position and urge you to reconsider.

As a former Attorney General and Federal Judge, I know you have great respect for the law. Yet DOE clearly violated the requirements of the Nuclear Waste Policy Act (NWPA) when it moved to withdraw the license application without citing a safety concern. While Secretary Chu initially suggested that there were safety issues, he quickly recanted, saying the project had become "unworkable." The law does not give the Secretary permission to use that reason for withdrawal. The Nuclear Waste Policy Act has not been repealed. It is the law of the land. Congress overrode Nevada's veto and designated Yucca Mountain as the nation's site for geologic disposal of spent nuclear fuel and defense high-level waste. The law should be obeyed or changed.

I am aware that the State of Nevada's position is that the repository is unsafe. Yet the State's evidence on that is yet to be tested. DOE spent nearly 30 years and \$15 billion to show that the repository can be built safely. All the evidence needs to be fully reviewed and analyzed. The license application proceeding will do that. Believe me Governor, if the evidence shows that Yucca Mountain cannot be built safely, I will join you in your opposition to the project.

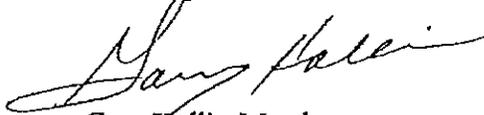
Governor Sandoval  
March 19, 2012  
Page 2

Finally regarding benefits, the State is yet to actively pursue them. At a time of tight public budgets, I believe we have the responsibility as elected leaders to explore how extensive the benefits can be to the State of Nevada, Nye County and the other affected counties. I believe the benefit package could be quite substantial, provided the repository is found to be safe.

Nye County has received Payments Equal to Taxes (PETT) as the site county for many years. The highest annual payment to date was \$11,250,000. If Yucca is terminated, PETT will go away. Will the State be willing to make up the shortfall?

I am confident we share a deep love for this State. I hope we can work together on this important issue.

Sincerely,



Gary Hollis, Member  
Nye County Board of County Commissioners

GH/ep

cc: Patrick Guinan, Nevada Legislative Committee on High Level Radioactive Waste  
Nye County Board of County Commissioners  
Pam Webster, Nye County Manager  
Darrell Lacy, Department Director, Nye County Nuclear Waste Repository Project  
Office

FRED UPTON, MICHIGAN  
CHAIRMAN

HENRY A. WAXMAN, CALIFORNIA  
RANKING MEMBER

ONE HUNDRED TWELFTH CONGRESS

# Congress of the United States

## House of Representatives

COMMITTEE ON ENERGY AND COMMERCE

2125 RAYBURN HOUSE OFFICE BUILDING

WASHINGTON, DC 20515-6115

Majority (202) 225-2927

Minority (202) 225-3641

March 22, 2012

The Honorable Steven Chu  
Secretary  
U.S. Department of Energy  
1000 Independence Avenue, S.W.  
Washington, D.C. 20585

Dear Secretary Chu:

We write to follow up on your testimony before a hearing of the Energy and Power Subcommittee this past March 8, 2012.

During that hearing, Chairman of the Environment and the Economy Subcommittee John Shimkus asked you whether the Department of Energy (DOE) had the resources to pursue the Yucca Mountain application before the Nuclear Regulatory Commission (NRC), should the U.S. Court of Appeals (D.C. Circuit) order the application to be pursued. You replied that "if the federal court orders us to do so, we will do so." When asked to describe the funding resources, you testified that you would provide to the Committee details of the resources that could be made available.

In connection with this request for resource information, we ask that you respond to the following by March 30, 2012:

1. What is the total funding that could be made available this current fiscal year for support of the NRC license application to construct a repository at Yucca Mountain?
  - a. Please provide details of the particular accounts in which these funds are held.
  - b. Please provide current uncosted obligations and current unobligated funds, including funds held in the Chief Financial Officer's reserves, which could be made available for application support.

2. In DOE's January 2012 Report on Uncosted Balances for Fiscal Year Ended September 30, 2010, the uncosted (or unspent) obligations available at the end of FY 2010, when DOE zeroed out its funding for the Yucca Mountain Program, amounted to a total of \$71.2 million (split between the Nuclear Waste Fund and Defense Nuclear Waste Disposal accounts).

- a. What uncosted obligations in these accounts were available at the end of FY 2011 and are available at present in these accounts?
- b. Explain, to the extent these amounts differ from those available at the end of FY 2010, how the funds were expended; what, if any, funds were deobligated; and what happened to any such deobligated funds?

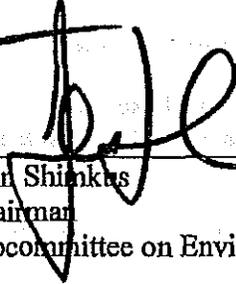
Thank you for promptly attending to our requests. Should you have any questions, please do not hesitate to contact Peter Spencer of the Majority Committee staff at (202) 225-2927.

Sincerely,



---

Fred Upton  
Chairman



---

John Shimkus  
Chairman  
Subcommittee on Environment and the Economy

cc: The Honorable Henry A. Waxman, Ranking Member

The Honorable Gene Green, Ranking Member  
Subcommittee on Environment and the Economy

*David A. Wright, Chairman*  
Vice-Chairman, South Carolina Public Service Commission

*Renze Hoeksema, Vice Chairman*  
Director of Federal Affairs, DTE Energy

*David Boyd, Membership*  
Commissioner, Minnesota Public Utilities Commission

*Robert Capstick, Finance*  
Director of Government Affairs, Yankee Atomic

*Greg R. White, Communications*  
Commissioner, Michigan Public Service Commission

# NWSC

## Nuclear Waste Strategy Coalition

### AGENDA: NWSC Spring 2012 Member Meeting

*Monday & Tuesday, March 26-27, 2012*

**Holiday Inn Central ♦ Mayors Room**

1501 Rhode Island Avenue, NW ♦ Washington, DC

#### Monday, March 26<sup>th</sup>

- 8:00 AM Continental Breakfast (in meeting room)
- 8:30 AM **Welcome & Opening Remarks**  
*The Honorable David Wright (South Carolina PSC), NWSC Chairman*
- 8:35 AM **Introductions of Members & Invited Guests**
- 8:40 AM **NWSC Executive Committee & Staff Reports**
- **NWSC 2012 Strategic Plan, Coordination & Recent Activities**  
*The Honorable David Wright (South Carolina PSC), NWSC Chairman*
  - **NWSC Communications**  
*The Honorable Greg White (Michigan PSC), NWSC Executive Committee*
  - **NWSC Finances**  
*Mr. Bob Capstick (Yankee Atomic), NWSC Executive Committee*
  - **Congressional & Federal Activities**  
*Mr. Renze Hoeksema (DTE Energy), NWSC Vice Chairman*
  - **NWSC Membership**  
*The Honorable David Boyd (Minnesota PUC), NWSC Executive Committee*
- 9:10 AM **Meeting Goals & Strategy Discussion**  
*Discussion Leader: Ms. Katrina McMurrian, NWSC Executive Director*
- 9:45 AM **Focus on BRC Consent-Based, Interim Storage & Permanent Disposal Recommendations**
- **Potential Host Communities for Interim Storage and Permanent Disposal Facilities**  
*Mr. Steven P. Kraft, Senior Director, Special Projects, Nuclear Energy Institute*
- 10:00 AM **Break**
- 10:15 AM **Focus on BRC Consent-Based, Interim Storage & Permanent Disposal Recs (continued)**
- **Strategy Discussion regarding Consent-Based Recommendation: Meaning, Logistics, Etc.**  
*Discussion Leader: Mr. Terry Pickens, Director, Nuclear Regulatory Policy, Xcel Energy*
- 10:45 AM **Focus on Key BRC Near-Term Recommendations & DOE Implementation - NWF Reform**
- **Overview of BRC Recommended Steps & Advocacy regarding Funding Reform**  
*Mr. Brian O'Connell, Nuclear Waste Program Director, NARUC*
  - **Strategy Discussion regarding Funding Reform Achievable in Near-Term**  
*Discussion Leader: Ms. Sarah Hofmann, Deputy Commissioner, Vermont DPS*

# AGENDA: NWSC Spring 2012 Member Meeting

Monday & Tuesday, March 26-27, 2012

Holiday Inn Central ♦ Mayors Room

1501 Rhode Island Avenue, NW ♦ Washington, DC

- 11:25 AM **Focus on Key BRC Near-Term Recommendations & DOE Implementation – Transportation**
- **Regional Transportation Planning & Implications of BRC Transportation Recs**  
*Mr. Cort Richardson, Director, NE High-Level Radioactive Waste Transportation Project, The Council of State Governments - Eastern Regional Conference*
  - **Strategy Discussion regarding Near-Term Transportation Recommendations**  
*Discussion Leader: Mr. Bob Capstick, Yankee Atomic & NWSC Executive Committee*
- 12:00 PM **Lunch Buffet in Avenue Café (Holiday Inn Central Hotel, Main Level)**
- 1:00 PM **Roundtable Discussion with Department of Energy**
- **Potential Program Impacts of BRC Report Recommendations**  
*Dr. Peter Lyons, Assistant Secretary for Nuclear Energy, Department of Energy*  
*Mr. Phillip Niedzielski-Eichner, Nuclear Materials Management & Disposition Task Force (MDTF), Department of Energy*
  - **NWSC Member Input to DOE on Key BRC Recommendations**  
*Discussion Leader: Ms. Katrina McMurrian, NWSC Executive Director*
- 2:00 PM **Congressional Perspective on BRC & Potential Nuclear Waste Reform Legislation**  
*Mr. David J. McCarthy, Chief Counsel, House Committee on Energy & Commerce*
- 3:00 PM **Break**
- 3:15 PM **Focus on BRC Fed Corp Recommendation**
- **History & Overview of Independent Waste Management Organization Concept**  
*Dr. Thomas Cotton, Vice President, Complex Systems Group, LLC*
  - **Strategy Discussion regarding Fed Corp Recommendation**  
*Discussion Leader: Mr. Steve Nesbit, Director, Nuclear Policy & Support, Duke Energy Corporation*
- 4:15 PM **Preparation for Hill Visits**  
*Discussion Leader: Ms. Katrina McMurrian, NWSC Executive Director*
- 5:30 PM **Adjourn**
- 6:30 PM **Depart for Dinner at Trattoria Alberto of Capitol Hill Restaurant**  
506 8<sup>th</sup> Street, SE ♦ Washington, DC ♦ (202) 544-2007

## Tuesday, March 27<sup>th</sup>

- 8:00 AM **Hot Breakfast Buffet (in meeting room)**
- 8:30 AM **Focus on Waste Confidence**
- **NRC Waste Confidence Activities & Pending Litigation**  
*Mr. Bradley W. Jones, Assistant General Counsel for Reactor & Materials Rulemaking, Nuclear Regulatory Commission*
  - **Strategy Discussion regarding Waste Confidence**  
*Discussion Leader: Mr. Lake H. Barrett, Owner, L. Barrett Consulting*
- 9:15 AM **Final Preparation for Hill Visits**  
*Discussion Leader: Ms. Katrina McMurrian, NWSC Executive Director*
- 10:00 AM **Adjourn to Congressional Visits**

**David A. Wright, Chairman**  
Vice-Chairman, South Carolina Public Service Commission

**Renze Hoeksema, Vice Chairman**  
Director of Federal Affairs, DTE Energy

**David Boyd, Membership**  
Commissioner, Minnesota Public Utilities Commission

**Robert Copstick, Finance**  
Director of Government Affairs, Yankee Atomic

**Greg R. White, Communications**  
Commissioner, Michigan Public Service Commission

# NWSC

## Nuclear Waste Strategy Coalition

**DATE:** March 27, 2012  
**TO:** Congressional Offices  
**FROM:** Nuclear Waste Strategy Coalition  
**RE:** Call for action toward used fuel removal

The Federal Government should act now to meet its obligation to promptly remove used nuclear fuel from reactor sites in our states. Yucca Mountain remains the law of the land, and we acknowledge that it is before the court. Given that context, the Nuclear Waste Strategy Coalition seeks your assistance with the following:

- **Funding Reform.** The Administration, with Congressional support, needs to fix the funding for the nuclear waste program, consistent with the recommendations by the Blue Ribbon Commission on America's Nuclear Future (BRC).
- **Restoration of Regional Transportation Group Funding.** The Department of Energy (DOE) should be directed to reinstate funding to regional transportation groups that facilitate communication between the federal government and state officials about federal nuclear waste shipments. This work is necessary regardless of the destination of the used fuel and should be supported at historic levels (prior to the elimination of the Office of Civilian Radioactive Waste Management).
- **Timely DOE Action Plan.** DOE should be held accountable to deliver an Action Plan by July 26, 2012, that reflects a sense of urgency and takes ownership for the country's high-level radioactive waste program.

Your leadership is needed to advance these critical nuclear waste program reforms. Please let us know if you would like to discuss further.

*The Nuclear Waste Strategy Coalition is an ad hoc organization representing the collective interests of state utility regulators, state attorneys general, consumer advocates, electric utilities, and associate members, on nuclear waste policy matters. NWSC's primary focus is to protect ratepayer payments into the Nuclear Waste Fund and to support the removal and ultimate disposal of spent nuclear fuel and high-level radioactive waste currently stranded at some 125 commercial, defense, research, and decommissioned sites in 39 states. For more information, please contact Katrina McMurrian, the NWSC Executive Director, at the number or email address below.*



UNITED STATES  
NUCLEAR WASTE TECHNICAL REVIEW BOARD  
2300 Clarendon Boulevard, Suite 1300  
Arlington, VA 22201

March 28, 2012

The Honorable Peter Lyons  
Assistant Secretary for Nuclear Energy  
Office of Nuclear Energy/NE-1  
U.S. Department of Energy  
1000 Independence Avenue, SW  
Washington DC 20585

Dear Dr. Lyons:

It was a pleasure to have you participate in the Board's January 9, 2012, meeting held in Arlington Virginia. Among the issues discussed at that meeting was integration within the Department of Energy's Office of Nuclear Energy (DOE-NE), including the Office of Fuel Cycle Technologies. I am writing to provide the Board's feedback on those discussions and on information presented by you and your staff. This letter also contains Board comments on deep borehole disposal based on information presented by representatives of DOE-NE and Sandia National Laboratories at the Board meeting held in Albuquerque, New Mexico on March 7, 2012.

The Board found informative your discussion of the mission of your Office and your candid response to questions at the January meeting. Clearly the focus of DOE-NE continues to be the development of reactor and fuel-cycle technologies. However, the transfer to DOE-NE of many of DOE's responsibilities under the Nuclear Waste Policy Act provides real opportunities for integrating DOE work across the nuclear fuel-cycle. Even though this arrangement may eventually change as a result of, among other things, the recommendations of the Blue Ribbon Commission on America's Nuclear Future (BRC), the Board recommends that DOE-NE place a particular emphasis on integration, both within its own programs and with other DOE programs that will have an impact on the management of spent nuclear fuel and high-level radioactive waste in the United States.

#### **Fuel Cycle Integration and Evaluation**

The technical and institutional complexities of integrating activities throughout current as well as possible future nuclear fuel cycles were well illustrated in Deputy Assistant Secretary Dr. Monica Regalbuto's presentation. For example, the mix of public organizations and private sector firms that may be responsible for various elements of the fuel cycle presents challenges for effectively integrating the entire enterprise that are less daunting in countries such as France and Sweden.

Consequently, the Board strongly encourages DOE to engage the nuclear utilities regularly and fully as it maps out approaches for managing the backend of the fuel cycle as currently configured and as it investigates and considers other potential strategies for managing the backend of the nuclear fuel cycle. The importance of this engagement was reinforced in talks by Dr. Roald Wigeland, Mr. Jeffrey Williams, and Dr. Ernest Hardin. Each of these speakers described strong interdependencies among various elements of the nuclear fuel cycle and the need to ensure that the "pieces" fit together well. Dr. Wigeland detailed the early stages of a comprehensive fuel-cycle evaluation project that is not expected to be completed for more than two years. Because of the study's current status and the time constraints imposed by the meeting schedule, this talk could not address many key issues that are necessary to evaluate the study's technical validity. These include (1) criteria used to determine whether a fuel cycle is "promising;" (2) metrics developed to operationalize the criteria; and (3) trade-offs made among outcomes, some of which will inevitably conflict.

Based on information published by DOE-NE<sup>1</sup> as well as other documents the Board has reviewed, the Board offers the following words of caution.<sup>2</sup>

- *There seems to be a risk that comprehensiveness will be purchased at the price of relevance.* Many potential nuclear fuel cycles are conceivable in the abstract, but few seem to have been developed to the extent that their attributes can be evaluated effectively, and even fewer appear to have the potential to be deployed at commercial scale in the next 50 or so years. Although the study concluded that approximately 25 percent of the initial number of groupings were not promising and thus could be eliminated from further consideration, the Board believes that opportunities exist for additional reductions without serious risk of losing options that offer significant benefits in comparison with the ones retained.
- *Simplifying the analysis would have the added benefit of increasing the timeliness of its results.* This could be particularly useful to DOE-NE in preparing the administration's response to the recommendations of the BRC.
- *The methodological challenges to carrying out this type of evaluation are significant.* Developing appropriate metrics for some of the evaluation criteria, such as proliferation risk, institutional issues, and even waste management considerations, raises serious measurement and conceptual issues. These challenges should carefully be considered by DOE-NE as it moves forward with this analysis. In addition, the metrics that are developed and how they are traded off should be exposed to broad stakeholder review.
- *Only a very abbreviated description of the study is available publicly.* Because the conclusions developed from this work are dependent to a great extent on the evaluation criteria adopted, early publication of these criteria and exchanges with interested and affected parties would be valuable.

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<sup>1</sup> "A Screening Method for Guiding R&D Decisions: Pilot Applications to Nuclear Fuel Cycle Options," Department of Energy, Office of Nuclear Energy, August, 2011.

<sup>2</sup> These are broadly consistent with the comments presented at the June 15, 2011, meeting of the Nuclear Energy Advisory Committee and those prepared by the study's internal peer review group.

- *The conclusions of this study should not be pushed beyond what can reasonably and conservatively be inferred.* The results of this study should be used as one of many decision-aiding tools and inputs as DOE-NE makes investments in fuel cycle research and development.

### Effects of Waste Package Sizes

The paired presentations by Mr. Williams and Dr. Hardin on waste package sizes and repository thermal analysis, respectively, conveyed an essential message: Decisions about waste packaging and storage that have been or are being taken may have a profound effect on repository design. For, example, disposing of the large waste packages currently being loaded by utilities may require substantial operational and engineering interventions<sup>3</sup> to avoid exceeding repository temperature limits, especially in a geologic repository constructed in clay/shale or crystalline rock formations.

As we heard at the meeting, the prospect of having to repackage spent nuclear fuel is not a welcome one, especially if the repackaging has to be carried out at reactor sites. The Board believes that DOE should consider the existing and expected inventory of spent nuclear fuel in storage as a waste form that needs to be accommodated in a geological repository. By doing so, the costs and risks associated with repackaging a substantial amount of spent nuclear fuel could be avoided.

### Work to Prepare for Geologic Disposal

As you know, the Board, along with most other commenters, strongly concurs with the finding by the BRC that deep geological disposal is the most promising and accepted method currently available for safely isolating high-level radioactive waste and spent nuclear fuel. Because of this strong consensus, the Board believes that work on the following activities can and should begin without delay.

- Generic repository site-selection criteria are clearly needed. As a starting point for this work, it is very important that DOE-NE take into account past efforts to specify siting criteria in this country and abroad. The Board is considering publishing its own survey of past siting initiatives worldwide later this year.
- Regardless of what geological formation will host this country's repository, it remains essential that there is a realistic understanding of the radiation source term, particularly with respect to the processes involved in mobilizing the waste. Such fundamental understanding is a prerequisite for evaluating the effects of the release of dose-contributing radionuclides.
- Because of the prospect that spent nuclear fuel will remain in storage for extended periods, fuel-degradation mechanisms, especially for high-burnup fuel, need to be better understood, both with respect to the requirement for transportation from reactor sites and as input to analysis of the radiation source term.

<sup>3</sup> These might include extended cooling at the surface, greater spacing between packages in the repository, and selection of a mix of hotter and cooler fuel assemblies for loading into containers for repository disposal.

## DOE Activities Related to Deep Borehole Disposal

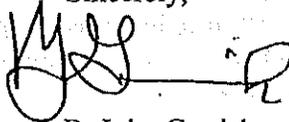
At the Board's March 7 meeting in Albuquerque, Dr. Bill Arnold of SNL and Dr. Steven Ingebritsen of the United States Geological Service participated in a panel on deep borehole disposal. This was a most interesting panel and resulted in considerable discussion within the Board.

The Board has recommended in recent reports and correspondence that consideration be given to using different methods of geologic disposal for different high-activity wastes, depending on the potential for reuse of materials that can be recovered from the waste. For example, deep borehole disposal could prove to be a suitable option for disposing of long-lived minor actinides or vitrified fission products, which have no apparent reuse value. The Board understands, however, that there may be significant complications in using deep borehole disposal for other wastes. For example, current technology for borehole construction would require spent fuel to be repackaged into smaller diameter containers to fit the borehole and this increased handling of spent fuel would be, at best, highly undesirable.

In the Board's view, research related to deep borehole disposal should not delay higher priority research on a mined geologic repository. However, if that condition can be met, the Board believes that DOE should continue its research on deep borehole disposal. This should include an analysis of the real costs of activities associated with deep borehole disposal, including a realistic assessment of the site-characterization effort that would be needed and an accounting of potential additional exposures to workers from the increased fuel handling that would be required to consolidate and repackage fuel rods. This information would provide a realistic basis for comparison with other geologic disposal options.

Once again, I would like to record the Board's appreciation for the participation of DOE-NE and SNL staff at the Board's meetings in January and March.

Sincerely,



B. John Garrick  
Chairman



2.1 WHEREAS, the Blue Ribbon Commission has recommended an integrated nuclear fuel  
2.2 management program incorporating: (1) development of one or more Nuclear Regulatory  
2.3 Commission-licensed (NRC) private or government-owned centralized interim storage facilities  
2.4 in communities in states that would willingly host such facilities; (2) continued public  
2.5 and private sector research, development, and deployment of used fuel and nuclear waste  
2.6 recycling technologies to close the nuclear fuel cycle in a safe, environmentally responsible,  
2.7 proliferation-resistant, and economically viable process; and (3) assured access by the nuclear  
2.8 waste program to revenues generated by consumers' continued payments and to existing balances  
2.9 in the Nuclear Waste Fund; NOW, THEREFORE,

2.10 BE IT RESOLVED by the legislature of the State of Minnesota that it calls on the President  
2.11 Obama Administration and the United States Congress to:

2.12 (1) adopt legislation enabling the construction of one or more centralized interim fuel  
2.13 storage facilities through directives to the United States Department of Energy and through  
2.14 incentives to interested communities funded through access to the accumulated Nuclear Waste  
2.15 Fund;

2.16 (2) recognize there are willing host communities and states that are ready to voluntarily  
2.17 accept used fuel;

2.18 (3) assure access by the Nuclear Waste Management program to the revenues generated by  
2.19 consumers' continuing fee payments and to the significant balance in the Nuclear Waste Fund; and

2.20 (4) enable one or more NRC-licensed private interim storage facilities to meet this public  
2.21 policy need of the United States.

2.22 BE IT FURTHER RESOLVED that the Secretary of State of Minnesota is directed to  
2.23 prepare copies of this memorial and transmit them to the President of the United States, the  
2.24 Speaker of the United States House of Representatives, the Majority Leader of the United States  
2.25 Senate, and the Secretary of the United States Department of Energy.



PENNSYLVANIA PUBLIC UTILITY COMMISSION  
COMMONWEALTH OF PENNSYLVANIA  
HARRISBURG, PENNSYLVANIA

March 30, 2012

The Honorable Robert P. Casey, Jr.  
Senator  
United State Senate  
393 Russell Senate Office Building  
Washington, D.C. 20510

The Honorable Patrick J. Toomey  
Senator  
United States Senate  
502 Hart Senate Office Building  
Washington, D.C. 20510

Dear Senators Casey and Toomey:

The purpose of our letter is to share with you some concerns we have with the current handling of the Nuclear Waste Fund, and its impact on electric ratepayers here in the Commonwealth.

Since the inception of this federally mandated fund in 1983, the U.S. Government has collected almost \$18 billion from electric ratepayers for the design, construction and operation of a permanent high level radioactive waste (HLRW) storage facility. With interest on these contributions, the fund has grown to over \$27 billion. Pennsylvania's share of the direct contributions is almost \$1.4 billion.

By law, the Energy Secretary is required to annually assess the adequacy of the fees to be collected from nuclear energy generators in order to cover the future costs of storage, transportation and disposal of commercially used nuclear fuel. Section 302 of the Nuclear Waste Policy Act of 1982 (NWPA) requires that the federal government accept commercial spent nuclear fuel for disposal at a centralized repository by a date which is now long past.

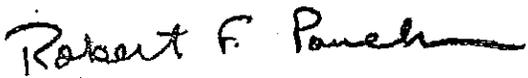
Although required to submit a license with the Nuclear Regulatory Commission for the construction and operation of a HLRW storage facility at Yucca Mountain (where considerable work has already occurred and funds have been expended), it has become apparent that the Administration will no longer pursue the development of a repository at that location. Accordingly, the Administration appointed a Blue Ribbon Commission on America's Nuclear Future tasked with conducting a comprehensive review of policies for managing the back end of

the nuclear fuel cycle, including all alternatives for the storage, processing, and disposal of civilian and defense used nuclear fuel, high-level waste and material derived from nuclear activities.

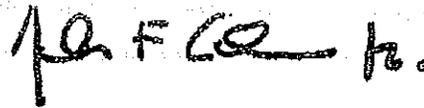
Senators, as you know, the federal government is contractually bound to use the nuclear waste fee monies to provide for an ultimate disposal of spent nuclear fuel. There must be a commitment to move forward with some type of plan to deal with spent fuel nuclear waste that is currently being stored at over 70 separate nuclear plant sites here in the Commonwealth, and across the country. Our other major concern is the ongoing impact to ratepayers with no apparent benefit to them. As mentioned, through September 20, 2010, Pennsylvania ratepayers have paid in almost \$1.4 billion to the nuclear waste fund – with little to show for it.

We would very much appreciate your thoughts on this issue, and what you see as possible solutions to this decades-long challenge. Thank you for your consideration.

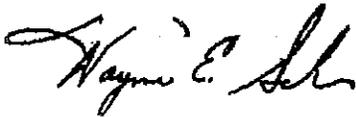
Sincerely,



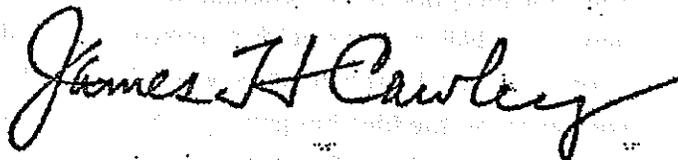
Robert F. Powelson, Chairman



John F. Coleman, Jr., Vice Chairman



Wayne E. Gardner, Commissioner



James H. Cawley, Commissioner



Pamela A. Wiltmer, Commissioner