

June 23, 2010

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

Subject: State Nuclear Safety Inspector Office's May 2010 Monthly Report to the Maine Legislature

As part of the State's long standing oversight of Maine Yankee's nuclear activities, legislation was enacted in the second regular session of the 123rd 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.

Enclosed please find the Inspector's May 2010 monthly activities report. This month's report is larger in order to provide some perspectives from various positions on nuclear waste that were recently presented at the Administration's Blue Ribbon Commission on America's Nuclear Future. Please note that this year's reports will not feature the glossary and the historical addendum. However, both the glossary and the addendum are available on the Radiation Control Program's website at <u>http://www.maineradiationcontrol.org</u> under the nuclear safety link. For facilitating the connectivity and impact of some of the newsworthy items an editorial section is being contemplated. Should you have questions about its content, please feel free to contact me at 207-287-6721, or email me at <u>pat.dostie@maine.gov</u>.

Patrick J. Dostie State Nuclear Safety Inspector

Enclosure

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

State Nuclear Safety Inspector Office

May 2010 Monthly Report to the Legislature

Introduction

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

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

Commencing with the January 2010 report the glossary and the historical perspective addendum will no longer be included in the report. Instead, this information will be available at the Radiation Control Program's website noted above. In some situations the footnotes may include some basic information and will redirect the reviewer to the website.

Independent Spent Fuel Storage Installation (ISFSI)

During May the general status of the ISFSI was normal. There were no instances of spurious alarms due to environmental conditions. There were no fire-related or security impairments.

There were twenty three security events logged. Twenty-one of the 23 SELs logged were associated with transient camera issues due to temporary environmental conditions. One SEL was related to a computer alarm issue and the other was due to a failing switch which was repaired and returned to service.

There were 16 condition reports¹ (CRs) for the month of May. Due to the number of CR's Table 1 below describes the CR's and when they occurred.

Table 1 - Condition Reports

<u>No.</u>	Date	Description
1	5/6	Track recommendations contained in an independent site security review
2	5/10	Concerning the handling of alarm history data
3	5/10	Document a mismatch in the training matrix
4	5/13	A failing computer component
5	5/17	Track actions on implementation of a new security rule
6	5/17	A recurring computer component malfunction
7	5/17	Document a delivery truck getting stuck at the entrance while trying to turn around
8	5/19	Document a drawing not matching the as built configuration
9	5/20	A minor leak (less than one quarter cup) of priming oil which leaked to the pavement from a local fire truck during a fire drill

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

Table 1 - Condition Reports Cont'd

<u>No.</u>	<u>Date</u>	Description
10	5/20	Track recommendations from the annual Radiation Protection Program Assessment
11	5/27	Document improvement opportunities associated with the biennial Quality Assurance Audit*
		* (Each improvement opportunity is tracked as a single CR)
12	5/27	Document improvement opportunities associated with the biennial Quality Assurance Audit
13	5/27	Document improvement opportunities associated with the biennial Quality Assurance Audit
14	5/27	Document improvement opportunities associated with the biennial Quality Assurance Audit
15	5/27	Track resolution of the Condition Report trend analysis report
16	5/27	Worker complained of pain and was taken to the hospital

Other ISFSI Related Activities

On May 3rd there was an incident of a person photographing wild turkeys. The local law enforcement agencies were notified.

On May 12th Maine Yankee sent a letter to the Nuclear Regulatory Commission (NRC) on its security licensing basis correspondence with the NRC since its decommissioning declaration on August 6, 1997. Maine Yankee compiled a list of several pages of its security related correspondence over this time span.

On May 26th the radiation restricted area at the ISFSI was changed from the entire fenced area of the ISFSI to a newly posted area off of the ISFSI storage pads within the fenced area.

On May 27th a Fairpoint Communications employee was observed on-site, unannounced with binoculars. The individual was there in advance of a planned line addition and was unaware of the security requirements.

On May 27th the State's Radiation Control Program Manager updated Maine Yankee's Community Advisory Panel (CAP) on Spent Fuel Storage and Removal on the state's activities since last year's CAP meeting. In addition, the CAP received briefings from Maine Yankee on ISFSI operations plus a status on regional and national efforts on the Yucca Mountain litigation and the new role of the Administration's Blue Ribbon Commission on America's Nuclear Future for developing a national nuclear waste management strategy going forward.

On May 30th a driver was observed turning around at the entrance to the site. The local law enforcement agencies (LLEA) were notified and the individual was intercepted. Apparently, the driver was lost and was looking for Westport. The LLEA helped the driver to his destination.

On May 31st a worm digger was intercepted attempting to leave the site. Apparently, the worm digger had accessed the mud flats by walking along the shoreline. However, instead of leaving the same way, he decided to take a short cut over Maine Yankee's land. The worm digger was aware that he was trespassing as he placed his shirt over the "No Trespassing" sign. The local law enforcement agencies were notified and escorted the worm digger off-site.

Environmental

On May 12th the State received the Health and Environmental Testing Laboratory's (HETL) results from the April 2nd quarterly Radiological Environmental Monitoring Program of freshwater, saltwater, and seaweed. The State's HETL employs various analytical methods to measure certain radioactive elements. All the positive results indicated in Table 2 highlight naturally occurring background levels and ranges. There are seasonal variations, but

these would be difficult to point out with only one data point for the calendar year. When additional surveillance results become available the data will be plotted to illustrate trends.

Besides the bi-weekly gross beta analysis, a quarterly composite of the air filters is evaluated for the gamma energy fingerprints of most radioactive elements. The gross beta values reported are comparable to the historical values seen previously at Maine Yankee and at the control station on HETL's roof.

Table 2 – REMP Media Results						
Media Type	Positive Results	Quarterly Sampling Period 1 st Quarter 2010				
Freshwater	Gross Beta ⁽²⁾	0.91 pCi/L ⁽³⁾				
	Tritium (Hydrogen-3 or H-3)	140 pCi/L				
<u>Seawater</u>	Tritium (H-3)	134 pCi/L				
	Potassium-40 (K-40)	117 pCi/kg ⁽⁴⁾				
Seaweed	Beryllium-7 (Be-7)	355 pCi/kg				
	Potassium-40 (K-40)	3,210 pCi/kg				
Air Filters	Gross Beta (range)	10.5 – 27.8 fCi/m ^{3 (5)}				
(Control)	Quarterly Composite (Be-7)	76.6 fCi/m ³				

Tritium (Hydrogen-3 or H-3)⁶ and Beryllium-7 (Be-7) are both naturally occurring "cosmogenic" radioactive elements, which mean they are continuously being produced by cosmic-ray interactions in the atmosphere. Be-7 is produced from the high-energy cosmic rays bombarding the oxygen, carbon and nitrogen molecules in the atmosphere. Besides being naturally produced, Tritium is also a man-made element as it is a by product of the fission and neutron activation processes in nuclear power plants.

Since Potassium-40 (K-40) has such a long half life, approximately 1.3 billion years, it is a "primordial" radioactive element, which means it has survived in detectable quantities in the earth's crust since the formation of the earth. Generally speaking K-40 is not normally found in freshwater, but it is readily detected in saltwater due to minerals being washed into streams and rivers and ultimately emptying into the ocean.

 $^{^{2}}$ Gross Beta is a screening technique that measures the total number of beta particles (negative electrons) emanating from a potentially radioactive sample.

³ pCi/L is an acronym for a pico-curie per liter, a concentration unit that describes how much radioactivity is present in a particular volume, such as a liter. A "pico" is a scientific prefix for an exponential term that is equivalent to one trillionth (1/1,000,000,000,000).

⁴ pCi/kg is also an acronym for a pico-curie per kilogram, a concentration unit that describes how much radioactivity is present in a particular mass, such as a kilogram.

³ fCi/m³ is another acronym for a femto-curie per cubic meter. Again it describes a concentration of how much radioactivity is present in a particular mass, such as a kilogram. A "femto" is a scientific prefix that is equivalent to one quadrillionth (1/1,000,000,000,000,000). ⁶ Tritium (Hydrogen-3 or H-3) is a special name given to the radioactive form of Hydrogen usually found in nature.

For further information on any of the above footnotes, please refer to the glossary on the radiation program's website.

Maine Yankee Decommissioning

At present, there are eleven confirmatory reports that are essentially complete. Due to the extensive delays in ongoing commitments and emerging issues, the confirmatory summary report is expected to be partially drafted in May.

Groundwater Monitoring Program

On May 4th the Department of Environmental Protection (DEP) received Maine Yankee's April 28th letter indicating that they had conducted their annual inspection of their property as per their Environmental Covenant with DEP. Although there has been no change in the condition of the property, it was noted that the Soil Management Plan of the Environmental Covenant was invoked on three separate occasions over the past year. The first involved installing a concrete slab for a small diesel fuel storage tank. The second was to supply a new underground electrical feed to the sand and salt shed. The third instance involved repairs to the sewer line. In all three excavation activities samples were taken and no evidence of chemical contamination was found.

On May 8th the State received Maine Yankee's groundwater results form the March sampling. Trace quantities of some radioactive elements were noted in six wells. Two wells had indications of Zinc-65 and another well had Zirconium-95. The remaining three wells had tritium. The data will be reviewed and the impacts assessed in next month's report.

On May 10th Maine Yankee notified the State Inspector of the impending June ground water sampling date. The Inspector related that the State's sample containers would be delivered the following week.

On May 12th the State Inspector provided his comments on Maine Yankee's fourth annual ground water monitoring to the Department of Environmental Protection (DEP). The DEP forwarded the comments to Maine Yankee on May 13th.

On May 20th the State delivered its groundwater sampling containers to Maine Yankee for the seven split samples as part of its quality assurance oversight of the ground water monitoring program. The last sampling event of the five year groundwater program under the Post Decommissioning Ground Water Radiation Monitoring Agreement will take place the first week of June.

Other Newsworthy Items

- 1. On May 3rd the U.S. Court of Appeals for the District of Columbia dismissed the State of Washington's request for an injunction against the Department of Energy (DOE) from terminating the shutdown of the Yucca Mountain Project. The Court rejected the motion because the State of Washington could not demonstrate that it would suffer irreparable harm if the DOE continued to shutdown the Project. The rejection paved the way for the Department of Energy to continue with the Yucca Mountain shutdown. A copy of the court order is attached to the end of the report.
- 2. On May 6th Senator Voinovich of Ohio introduced a bill to amend the Atomic Energy Act of 1954 to establish a United States Fuel Management Corporation that will take the place of the Department of Energy in managing the nation's nuclear waste stockpile. The bill was referred to the Senate's Committee on Environment and Public Works. A copy of the press release is attached to the end of the report.
- 3. On May 7th the Nye County Commissioners in Nevada approved \$251,000 in spending to incorporate exhibits on Yucca Mountain at the Pahrump Valley Museum. Nye County obtained the exhibits from the Department of Energy in August of 2009.

- 4. On May 11th the Department of Energy notified the USA Repository Services, the main contractors on the Yucca Mountain Project, to stop work on the nuclear waste program and prepare for further job reductions. The halt does not affect the work on preserving records, administering the workers pension and compensation plans, and medical coverage. The stop work order is effective May 24th.
- 5. On May 11th the Reuters news organization reported that Finland's plan for spent nuclear fuel will be a repository on a wooded island more than 100 miles northwest of Helsinki, near Eurajoki. The repository is being constructed by Finnish engineers and is expected to be completed in 10 years. When it is done, it will be a corkscrew three miles in and 1600 feet down in granite-like, crystalline gneiss bedrock. The Finnish repository is designed for 100,000 years.
- 6. On May 12th the Nuclear Waste Strategy Coalition (NWSC) held its bimonthly conference call. The topics for discussion were the Fiscal Year 2010 and 2011 Appropriations, the March 23rd House Resolution 1209 that compels the Department of Energy (DOE) to continue with the licensing of the Yucca Mountain repository, a status on the petitions filed with the U.S. Court of Appeals for the District of Columbia and the Nuclear Regulatory Commission's Atomic Safety and Licensing Board.
- 7. On May 12th the Yankee Rowe Spent Fuel Storage and Removal Community Advisory Board wrote a letter to the Blue Ribbon Commission (BRC) on America's Nuclear Future supporting Maine Yankee's Community Advisory Panel request to the BRC to hold a meeting at a single unit decommissioned site. The letter also emphasized the growing number of organizations supporting the expedited removal of the spent nuclear fuel from the single unit sites to a centralized interim storage facility. A copy of the letter is attached to the end of the report.
- 8. On May 13th the Blue Ribbon Commission on America's Nuclear Future sent a letter to Energy Secretary Chu requesting approval of the establishment of three subcommittees for carrying out its mission and charter. The three subcommittees are Reactor and Fuel Cycle Technology, Transportation and Storage, and Disposal. A copy of their letter is attached to the end of the report.
- 9. On May 13th the U.S. Court of Appeals for the District of Columbia established the briefing schedule for the next two months on the lawsuits filed in federal court by the National Association of Regulatory Utility Commissioners and the Nuclear Energy Institute. A copy of the order is attached to the end of the report.
- 10. On May 14th Lincoln County, Nevada responded to the Nuclear Regulatory Commission's (NRC) Atomic Safety and Licensing Board's April 21st order on how it will preserve its document collection on the Yucca Mountain Project.
- 11. On May 14th the Florida Public Service Commission filed a motion for leave to participate as a friend of the court on the Department of Energy's motion to withdraw. According to the amicus brief the Commission believes that the Atomic Safety and Licensing Board's decision may affect its interests when it comes to passing on just and reasonable costs to its ratepayers.
- 12. On May 17th several parties were required by the Nuclear Regulatory Commission's (NRC) Atomic Safety and Licensing Board's April 27th order to file their positions on the Department of Energy's (DOE) motion to withdraw its license application on Yucca Mountain. The filings indicated that a split existed between Nevada and several of its counties over ending the Yucca Mountain Project. The State of Nevada and Clark County agreed that DOE has the authority to end the Project whereas six counties opposed the DOE's motion to withdraw. The six counties, (Nye, White Pine, Churchill, Esmeralda, Lander, and Mineral), argued that there has been no final determination on the site's suitability. The State of California, the Joint Timbisha Shoshone Tribal Group, and the Native Community Action Council sided with the DOE and

Nevada. The states of Washington and South Carolina, the Nuclear Energy Institute, the National Association of Regulatory Utility Commissioners and the Prairie Island Indian Community near Red Wing, Minnesota sided with the six Nevada counties. The exception was Inyo County in California, which did not take a position on whether the motion to withdraw is granted or not. Inyo contended that the Nuclear Regulatory Commission could not issue a license to construct a repository at Yucca Mountain and requested that if the DOE motion with or without prejudice is granted that six terms and conditions be applied to the Board's order to safeguard the County's interests.

- 13. On May 17th the Nuclear Regulatory Commission (NRC) staff's responded to the Department of Energy's (DOE) motion to withdraw its license application for Yucca Mountain with prejudice. The prejudice portion of the motion would permanently prevent the DOE from resubmitting a license application for Yucca Mountain. The staff recommended to the NRC's Atomic Safety and Licensing Board that DOE'S motion should be granted without prejudice as the DOE had not demonstrated that withdrawal with prejudice was justified. A copy of the NRC response is attached to the end of the report.
- 14. On May 17th Representative Wilson from South Carolina introduced an amendment in the House for the National Defense Authorization Act for Fiscal Year 2011. The amendment would require the Secretaries of Energy and Defense to submit a report to the Senate and House Armed Services' Committees on how the closing of Yucca Mountain "will impact the Departments of Defense and Energy, and national defense activities". A copy of the amendment is attached to the end of the report.
- 15. On May 18th the Nuclear Regulatory Commission's Atomic Safety and Licensing Board issued an order that set forth the subject and terms of the oral argument for their June 3rd hearing in Las Vegas on the Department of Energy's motion to withdraw its license application. The order also addressed the case management conference for the June 4th hearing on the preservation of the Yucca Mountain research.
- 16. On May 19th the State of Nevada responded in opposition to the amendment proffered by the National Association of Regulatory Utility Commissioners (NARUC) petition to intervene. Nevada contended that NARUC's amendment is legally prohibited, that the procedure followed by NARUC in consulting other parties was flawed, and that the content of NARUC's supplement confirmed its filing was intended to effect an unlawful introduction of additional evidence in its reply.
- 17. On May 19th the U.S. Nuclear Waste Technical Review Board issued a press release indicating that they will meet in Idaho Falls on June 29th to discuss the amounts and characteristics of wastes stored at the Idaho National Laboratory, the agreements between the State of Idaho and the federal government for civilian and defense related wastes, and how the termination of the Yucca Mountain Project will affect waste management plans. A copy of the press release is attached to the end of the report.
- 18. On May 19th the Nuclear Regulatory Commission's (NRC) Licensing Support Network (LSN) Administrator responded to the NRC's Atomic Safety and Licensing Board's April 21st order. The LSN Administrator replied to 10 questions on the costs associated with terminating and preserving the NRC's LSN system on the Yucca Mountain license application.
- 19. On May 20th the Nuclear Regulatory Commission issued a news release stating that the Atomic Safety and Licensing Board will convene in Las Vegas on June 3rd to hear oral arguments on the Department of Energy's motion to withdraw its license application on Yucca Mountain. The ASLB will also hear on June 4th DOE's efforts to preserve its documentation supporting its license application. The webcasts of the hearings will be available up to 90 days after the hearing dates. A copy of the news release is attached to the end of the report.

- 20. On May 21st the Nuclear Regulatory Commission staff replied to the National Association of Regulatory Utility Commissioners' (NARUC) amendment for a petition to intervene. The staff contended that the amendment is an unauthorized and untimely filing, according to the Commission's rules since it can be construed as a late filing without good cause.
- 21. On May 24th the Western Governors' Association sent a letter to Energy Secretary Chu urging him to create a State Subcommittee as part of the Blue Ribbon Commission for America's Nuclear Future to ensure states have an "opportunity to participate in the reformulation of the nation's policies for managing" nuclear wastes. A copy of the letter is attached to the end of the report.
- 22. On May 24th the Nuclear Regulatory Commission staff responded to the Atomic Safety and Licensing Board's April 21st order on its collection and preservation of Yucca Mountain documents. The staff answered six specific questions on its information system, most notably the Agencywide Documents Access and Management System ADAMS.
- 23. On May 24th the Department of Energy (DOE) responded to the Nuclear Regulatory Commission's Atomic Safety and Licensing Board's April 21st order on what steps it will take to preserve its 3.6 million documents. The DOE responded to 131 specific questions in nine major categories from document description to storage and retrieval, to government archiving, to DOE's own archiving plans, to converting and restructuring DOE's documentation, to records transfer, to virtualization, and costs for preservation.
- 24. On May 24th the Nuclear Regulatory Commission staff answered the Florida Public Service Commission's motion for leave to participate in an amicus brief. The staff did not oppose the Commission's motion.
- 25. On May 25th the National Association of Regulatory Utility Commissioners (NARUC) issued a press release on Greg White's comments to the Blue Ribbon Commission's meeting in Washington, D.C. urging reform to the Nuclear Waste Fund. Mr. White is with the Michigan Public Service Commission and spoke in behalf of NARUC. A copy of the press release is attached to the end of the report.
- 26. On May 25th Representatives John Spratt of South Carolina and Doc Hastings of Washington introduced an amendment to the National Defense Authorization Act for Fiscal Year 2011 that would force the Secretary of Energy to "immediately carry out the requirements" of the Nuclear Waste Policy Act. A copy of the amendment is attached to the end of the report.
- 27. On May 25th-26th the Blue Ribbon Commission (BRC) on America's Nuclear Future held its second meeting in Washington, D.C. There were presentations from constituents both for and against nuclear activities. The agenda for the two day meeting is attached to the end of the report. In addition, to gain an appreciation and a perspective of the BRC's deliberations of the various positions, presentations from Matthew Bunn, Associate Professor of Public Policy at Harvard University, the American Nuclear Society, the Nuclear Energy Institute, the Natural Resource Defense Council, the Michigan Public Service Commission, and the Energy Communities Alliance were selected and attached to the end of the report.
- 28. On May 25th -26th the State Inspector attended the Department of Energy's (DOE) National Transportation Stakeholders Forum in Chicago. The DOE Forum highlighted all the various agencies within DOE that are tasked with transportation issues, communication issues going forward with stakeholders and other federal partners, and enhancements to the DOE transportation emergency preparedness program. In addition, the Forum allowed the four regional state transportation groups to meet and discuss their respective regional issues. The State Inspector provided a report to the Northeast High-Level Radioactive Waste Transportation Task Force on Maine's activities and involvement on spent nuclear fuel. A copy of the meeting's agenda is attached to the end of the report.

- 29. On May 26th House Democrats blocked the Spratt and Hastings amendment introduced on May 25th in the House defense bill that would keep the Yucca Mountain Project going forward.
- 30. On May 27th the Maine Yankee Community Advisory Panel (CAP) on Spent Nuclear Fuel Storage and Removal held its annual meeting at the Chewonki Foundation in Wiscasset. The CAP received a briefing from Maine Yankee on its ISFSI's operations, federal oversight and efforts on spent fuel removal and disposal. The State's Radiation Control Manager provided an update of the State's oversight activities at the storage installation. A copy of the agenda is attached to the end of the report.
- 31. On May 27th the Nuclear Waste Strategy Coalition (NWSC) held its second bimonthly conference call to discuss the recent Blue Ribbon Commission's meeting, status updates on the Department of Energy's motion to withdraw its license application before the U.S. Court of Appeals for the District of Columbia and the Nuclear Regulatory Commission, status on the FY 2010 and 2011 appropriations, and senate bill, S.3322, establishing a government corporation to manage the nation's nuclear wastes. The NWSC is an ad hoc group of state utility regulators, state attorneys general, electric utilities and associate members representing 47 member organizations in 30 states.
- 32. On May 27th the Department of Energy (DOE) filed its reply to the Nuclear Regulatory Commission's Atomic Safety and Licensing Board on the previous responses to DOE's motion to withdraw its license application for Yucca Mountain. The DOE defended its motion to withdraw by noting that the Atomic Energy Act vested the Department with broad powers over the disposal of used nuclear fuel and high level waste. The filing also indicated that the Nuclear Waste Policy Act (NWPA) does not strip the DOE of its authority or force the DOE to move forward on the construction of the Yucca Mountain repository. Rather, it noted that the NWPA mandates that DOE's application be subject to NRC rules, including the rule permitting applicants to withdraw their applications.
- 33. On May 28th the House passed a defense bill that calls for studies on the Yucca Mountain Project. The bill includes the amendment as proposed by Representative Wilson on May 17th. The bill also includes a provision authored by Representative John Spratt from South Carolina that would require the Secretary of Energy to deliver a report on what actions would be required to preserve and restart Yucca Mountain as an option for disposing of defense nuclear wastes. Aides to Senate Majority Leader Harry Reid say that the defense studies will be dropped when the defense bill is debated in the Senate.

Other Noteworthy Items

1. On April 30th the Blue Ribbon Commission (BRC) on America's Nuclear Future responded to Marge Kilkelley's invitation letter to hold a meeting at the Chewonki Foundation in Wiscasset to discuss the unique issues related to single unit decommissioned sites. The Co-Chairs of the BRC expressed their appreciation of the offer and would give it due consideration. Ms. Kilkelley is the Chair of the Maine Yankee Community Advisory Panel on Spent Nuclear Fuel Removal and Storage. A copy of their letter is attached to the end of the report.

FOR THE DISTRICT OF COLUMBIA CIRCUIT

No. 10-1050

September Term 2009

DOE-Yucca Mtn NRC-63-001

Filed On: May 3, 2010

In re: Aiken County,

Petitioner

Consolidated with 10-1052, 10-1069, 10-1082

BEFORE: Ginsburg, Griffith, and Kavanaugh, Circuit Judges

ORDER

Upon consideration of the petitions for review filed in No. 10-1052, No. 10-1069, and No. 10-1082; the petitions for a writ of mandamus filed in No. 10-1050 and No. 10-1069; the response to the mandamus petition in No. 10-1050, and the reply thereto; the requests for a stay and injunctive relief filed in No. 10-1050, No. 10-1069, and 10-1082; the motions for expedited consideration filed in No. 10-1052 and No. 10-1069, the responses thereto, and the replies; the Rule 28(j) letters; the motion to hold No. 10-1050, et al., in abeyance, and the opposition thereto; and the reply, it is

ORDERED that the motion to hold the cases in abeyance be dismissed as moot. The Nuclear Regulatory Commission has issued its decision on the Department of Energy's petition for administrative review. It is

FURTHER ORDERED that the motion for a preliminary injunction filed in No. 10-1082 and the request for a stay of the Atomic Safety and Licensing Board proceedings filed in No. 10-1069 be denied. Petitioners have not satisfied the stringent standards required for an injunction or stay pending court review. <u>See Washington Metropolitan</u> <u>Area Transit Commission v. Holiday Tours, Inc.</u>, 559 F.2d 841, 843 (D.C. Cir. 1977);

FOR THE DISTRICT OF COLUMBIA CIRCUIT

No. 10-1050

September Term 2009

<u>D.C. Circuit Handbook of Practice and Internal Procedures</u> 32-33 (2009). In particular, Petitioners have not demonstrated that they are likely to suffer irreparable injury absent a preliminary injunction or stay. <u>See Winter v. Natural Resources Defense Council</u>, 129 S.Ct. 365, 375 (2008). It is

FURTHER ORDERED that the requests for an injunction in No. 10-1050 and No. 10-1069 to prevent the Department of Energy from filing a motion to withdraw the license application be dismissed as moot, in light of the fact that the Department of Energy has already filed such a motion. It is

FURTHER ORDERED that the remaining requests for injunctive relief, construed as requests for permanent injunctions, be referred to the merits panel to which these cases are assigned. It is

FURTHER ORDERED that the petitions for a writ of mandamus be referred to a merits panel. The parties are directed to address in their briefs the issues presented in the petitions, rather than incorporate those arguments by reference. It is

FURTHER ORDERED that the motions for expedited consideration be granted in part. The Clerk is directed to calendar these cases for argument on the first available date in September following the completion of briefing. Due to the expedited nature of these cases, the court will not entertain dispositive motions. The parties should therefore address in their briefs any arguments otherwise properly raised in such motions. Although not otherwise limited, the parties are directed to address in their briefs whether final agency action is necessary to confer jurisdiction over a petition for review filed pursuant to the Nuclear Waste Policy Act, 42 U.S.C. § 10139(a)(1)(A), (B), (C), (D), and, if so, whether final agency action has been taken. It is

FURTHER ORDERED, on the court's own motion, that the parties and amicus curiae submit, by May 10, 2010, proposed formats for the briefing of these cases. The parties and amicus are strongly urged to submit a joint proposal and are reminded that the court looks with extreme disfavor on repetitious submissions and will, where appropriate, require a joint brief of aligned parties with total words not to exceed the standard allotment for a single brief. The parties and amicus are directed to provide detailed justifications for any request to file separate briefs or to exceed in the aggregate the standard word allotment. Requests to exceed the standard word allotment must specify the word allotment necessary for each issue. It is

FOR THE DISTRICT OF COLUMBIA CIRCUIT

No. 10-1050

September Term 2009

FURTHER ORDERED that the Respondents file the certified index to the record within 14 days of the date of this order.

Per Curiam

FOR THE COURT: Mark J. Langer, Clerk

By:

/s/ MaryAnne Lister Deputy Clerk



News Center

FACT SHEET: U.S. NUCLEAR FUEL MANAGEMENT CORPORATION ESTABLISHMENT ACT OF 2010

May 6, 2010

U.S. NUCLEAR FUEL MANAGEMENT CORPORATION ESTABLISHMENT ACT OF 2010

• This bill would establish a framework for addressing the used nuclear fuel issue that has been deadlocked for decades. Specifically, the objective of the bill is to:

o Implement an accountable and sustainable government corporation with a ninemember bipartisan board of directors appointed by the president and confirmed by the U.S. Senate for the short- and long-term management of used nuclear fuel;

o Create a technology-neutral fuel management business that appropriately considers related issues of safety, nuclear proliferation, environmental impacts and economic factors; and

o Ensure that the fees paid into the Nuclear Waste Fund are applied for the disposal of radioactive materials produced by the generation of electricity from nuclear power.

• The corporation will have a nine-member bipartisan board of directors appointed by the president and confirmed by the U.S. Senate. It would be subject to congressional oversight as well as Nuclear Regulatory Commission licensing and the National Environmental Policy Act.

• This bill would empower the corporation to assume the responsibilities of the Department of Energy, with full authority consistent with government policy for managing used nuclear fuel. The government corporation will take liability for used nuclear fuel contracts no later than 10 years after the license termination date of the reactor for which the contracts apply.

• This government corporation will operate on a self-sustaining basis without the need for annual federal appropriations by having access to the Nuclear Waste Fund. The 1982 Nuclear Waste Policy Act established a Nuclear Waste Fund – consisting of a fee paid by utilities to deal with nuclear waste. Since its inception the fund has collected nearly \$30 billion. Unfortunately only about \$10 billion was used to deal with waste. The rest – more than \$20 billion – amounts to little more than an IOU to American ratepayers.

• Continued uncertainty over the disposal of used nuclear fuel will only cost taxpayers more in the long run. The federal government continues to accrue waste liabilities due to

its Nuclear Waste Policy Act commitments. Even if the federal government begins accepting waste by 2020 – which is unlikely – estimates for the government's potential liability range from \$12 billion to \$50 billion and will continue to grow as the date slips.

• Opponents of nuclear energy often point to the unsolved nuclear waste issue as the primary reason why nuclear energy should be rejected, despite the fact that nuclear energy generates dependable base-load electricity free of greenhouse gas emissions and pollutants. It also creates thousands of well-paying jobs in operation, construction and component manufacturing. The 104 nuclear power plants operating today, which represent about 20 percent of the nation's generating capacity, provide more than 70 percent of the nation's emission-free energy, avoiding 681 million tons of carbon dioxide.

• This independent entity framework is supported by a majority of nuclear interests including the American Nuclear Society, the U.S. Nuclear Infrastructure Council, and the Nuclear Energy Institute.

- END -

May 12, 2010

The Honorable Lee Hamilton The Honorable Brent Scowcroft Co-Chairmen Blue Ribbon Commission on America's Nuclear Future U.S. Department of Energy Forrestal Building 7A-257 1000 Independence Avenue, SW Washington D.C. 20585

Dear Chairmen,

I am writing on behalf of the Yankee Rowe Spent Fuel Storage and Removal Community Advisory Board in support of the March 10, 2010 Maine Yankee Community Advisory Panel request to the Blue Ribbon Commission on America's Nuclear Future requesting that the Commission hold a meeting at a single-unit permanently shutdown reactor site to learn firsthand about the unique circumstances at these sites.

The Yankee Rowe Advisory Board, like Maine Yankee's, was established to enhance open communication, public involvement, and education of the decommissioning and spent fuel storage at the Rowe Massachusetts nuclear reactor site. The independent spent fuel storage installation facility at Yankee Rowe, just as at Maine Yankee, exists solely because of the federal government's failure to fulfill its obligation under the NWPA to remove the Spent Nuclear Fuel and High-Level Radioactive Waste (SNF/HLW) at the site beginning in 1998.

Decades long storage of SNF/HLW at single-unit decommissioned reactor sites such as Yankee Rowe in Massachusetts is unacceptable - it was never intended as a matter of federal policy or by the Nuclear Waste Policy Act of 1982 (NWPA), and prevents the full reuse of the former reactor site. In light of the increasing delays in the federal nuclear waste repository program, the Blue Ribbon Commission needs to address as a priority matter expediting the process of transferring the SNF/HLW material stranded at decommissioned reactor sites like Yankee Rowe (material that is packaged in canisters licensed by the NRC for both storage and transportation) to a centralized interim storage facility.

My colleagues on the Yankee Rowe Advisory Board are encouraged by the increasing number of organizations supporting the expedited removal of nuclear waste from decommissioned reactor sites to centralized interim storage pending the construction and operation of a national nuclear waste disposal repository. We are also encouraged that the President has formed the Blue Ribbon Commission to provide recommendations for developing a long-term solution to managing the nation's nuclear waste and are hopeful that the Commission will recognize the request of the Maine Yankee Community Advisory Panel to learn firsthand about the unique circumstances confronting single-unit decommissioned reactor sites.

Thank you for your consideration of this important and urgent nuclear waste storage concern.

Sincerely,

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Leonard Laffond, Chairman

Copy:

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U.S. Senator John Kerry U.S. Senator Scott Brown Congressman John Olver Governor Deval Patrick State Senator Benjamin Downing State Representative Daniel Bosley

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Blue Ribbon Commission on America's Nuclear Future

c/o U.S. Department of Energy 1000 Independence Ave, SW Washington, DC 20585

May 13, 2010

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

Dear Secretary Chu:

Thank you for your remarks to the Blue Ribbon Commission on America's Nuclear Future at our inaugural meeting on March 25, 2010. Your guidance was both enlightening and invaluable as we establish a plan to fulfill the Commission's charter.

A significant portion of the Commission's first meeting was focused on how best to conduct a comprehensive review of policies for managing the back end of the nuclear fuel cycle and recommend a new plan. We determined that the Commission's work would be aided by the formation of three subcommittees to investigate and recommend answers to three major questions facing the Commission:

- Reactor and Fuel Cycle Technology Subcommittee Will address the question: "Do technical alternatives to today's once-through fuel cycle offer sufficient promise to warrant serious consideration and R&D investment, and do these technologies hold significant potential to influence the way in which used fuel is stored and disposed?"
- Transportation and Storage Subcommittee Will address the question: "Should the US change the way in which it is storing used nuclear fuel and high level waste while one or more final disposal locations are established?"
- Disposal Subcommittee Will address the question: "How can the U.S. go about establishing one or more disposal sites for high-level nuclear wastes in a manner that is technically, politically and socially acceptable?"

The membership on the subcommittees will be designed to overlap to ensure the subcommittees do not operate in isolation from one another. Each subcommittee will also address a series of questions related to governance and institutional arrangements. The enclosure sets forth the proposed membership of each subcommittee.

As required by the Commission charter we respectfully request your approval to establish and populate the three subcommittees as described above.

With best regards,

Lee Hamilton Co-Chairman

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Brent Scowcroft Co-Chairman

cc: Tim Frazier, BRC DFO

Enclosure: Proposed Subcommittee membership

FOR THE DISTRICT OF COLUMBIA CIRCUIT

No. 10-1050

September Term 2009

DOE-Yucca Mtn NRC-63-001

Filed On: May 13, 2010

In re: Aiken County,

Petitioner

Consolidated with 10-1052, 10-1069, 10-1082

BEFORE: Rogers, Garland, and Brown, Circuit Judges

<u>ORDER</u>

Upon consideration of the joint proposed briefing format and schedule, it is

ORDERED that the following briefing format and schedule will apply in these consolidated cases:

Joint Brief of Petitioners and Intervenor NARUC (not to exceed 16,000 words)	June 18, 2010
Brief of Amicus Curiae in support of the Petitioners Nuclear Energy Institute (not to exceed 7,000 words)	June 28, 2010
Brief(s) of Respondents and Intervenor State of Nevada (not to exceed 23,000 words in the aggregate, divided as the parties deem fit)	July 28, 2010
Joint Reply Brief of Petitioners and Intervenor NARUC (not to exceed 7,000 words)	August 11, 2010

FOR THE DISTRICT OF COLUMBIA CIRCUIT

No. 10-1050

September Term 2009

Deferred Appendix

August 17, 2010

Final Briefs

August 20, 2010

The parties will be notified by separate order of the date of oral argument and the composition of the merits panel. The court reminds the parties that

In cases involving direct review in this court of administrative actions, the brief of the appellant or petitioner must set forth the basis for the claim of standing.... When the appellant's or petitioner's standing is not apparent from the administrative record, the brief must include arguments and evidence establishing the claim of standing.

See D.C. Cir. Rule 28(a)(7).

The parties are directed to hand deliver the paper copies of their briefs and appendix to the Clerk's office on the date due. All briefs and appendices must contain the date that the case is scheduled for oral argument at the top of the cover. <u>See</u> D.C. Cir. Rule 28(a)(8).

Per Curiam

FOR THE COURT: Mark J. Langer, Clerk

BY:

/s/

Sabrina M. Crisp Deputy Clerk

May 17, 2010

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

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In the Matter of

U.S. DEPARTMENT OF ENERGY

(High-Level Waste Repository)

Docket No. 63-001-HLW

ASLBP No. 09-892-HLW-CAB04

NRC STAFF ANSWER TO DOE'S MOTION TO WITHDRAW ITS APPLICATION WITH PREJUDICE

INTRODUCTION

On March 3, 2010, the Department of Energy (DOE) filed the "U.S. Department of Energy's Motion to Withdraw" ("Motion") the license application for a proposed high-level waste repository at Yucca Mountain, Nevada. As set forth below, the Motion may be granted to the extent that it permits withdrawal of the license application but, under the current circumstances, withdrawal with prejudice is not justified.

BACKGROUND

The Nuclear Waste Policy Act (NWPA) of 1982 established the Federal government's intent to dispose of high-level radioactive waste in a deep geologic repository. Pub. L. No. 97-425, 96 Stat. 2201 (1982) (codified as amended at 42 U.S.C. § 10101 *et. seq.* (2006)). The NWPA designated DOE as the agency responsible for designing, constructing, operating and decommissioning a permanent disposal facility, *see id.* § 10134(b); designated the Environmental Protection Agency (EPA) as the agency responsible for developing safety standards for the repository, *id.* § 10141(a); and designated the NRC as the agency responsible

for developing regulations to implement EPA's safety standards and for licensing and overseeing construction and operation of the repository, *see id.* §§ 10134(c); 10141(b). Pursuant to the NWPA, DOE recommended three candidate sites for site characterization in 1986: Yucca Mountain, Nevada; Deaf Smith County, Texas; and Hanford, Washington. "Recommendation by the Secretary of Energy of Candidate Sites for the First Radioactive-Waste Repository," DOE/S-0048, May 1986 (LSN No. DEN000000972); *see also* NWPA § 112(b)(1)(B). In 1987, Congress ordered the cessation of site-specific activities at all candidate sites other than Yucca Mountain and amended the NWPA to designate Yucca Mountain as the single site for further study. Pub. L. No. 100-203 (101 Stat. 1330) (1987) section 5011 (codified at 42 U.S.C. § 10101 *et seq.*).

After further site characterization activities at Yucca Mountain, the Secretary of Energy recommended the site to the President for development of a repository.¹ "Recommendation by the Secretary of Energy Regarding the Suitability of the Yucca Mountain Site for a Repository Under the Nuclear Waste Policy Act of 1982," February 2002, at 46 (DN2002307853). Subsequently, Congress designated Yucca Mountain for the development of a geological repository, via a joint resolution passed over the State of Nevada's disapproval. See Pub. L.

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¹ The Secretary also submitted the "Final Environmental Impact Statement for a Geologic Repository for the Disposal of Spent Nuclear Fuel and High-Level Radioactive Waste at Yucca Mountain, Nye County, Nevada," dated February 2002 (FEIS), along with the site recommendation. DOE updated the FEIS in the "Final Supplemental Environmental Impact Statement for a Geologic Repository for the Disposal of Spent Nuclear Fuel and High-Level Radioactive Waste at Yucca Mountain, Nye County, Nevada," dated June 2008 (FSEIS). DOE also published two EISs related to transportation of high-level waste to the repository, "Final Supplemental Environmental Impact Statement for a Geologic Repository for the Disposal of Spent Nuclear Fuel and High-Level Waste at Yucca Mountain, Nye County, Nevada," for the Disposal of Spent Nuclear Fuel and High-Level Waste at Yucca Mountain, Nye County, Nevada – Nevada Rail Transportation Corridor," dated June 2008 (Rail Corridor SEIS), and the "Final Environmental Impact Statement for a RailAlignment for the Construction and Operation of a Railroad in Nevada to a Geologic Repository at Yucca Mountain, Nye County, Nevada," dated June 2008 (Rail Alignment EIS).

No. 107-200, 116 Stat. 735 (2002) (codified at 42 U.S.C. § 10135 note). President George W. Bush signed the joint resolution into law on July 23, 2002.

On June 3, 2008, DOE submitted the "Yucca Mountain Repository License Application," ("LA" or "application") seeking authorization to begin construction of a permanent high-level waste repository at Yucca Mountain, and, on June 17, 2008, the NRC provided notice of the availability of the application in the *Federal Register*. Yucca Mountain, Notice of Receipt and Availability of Application, 73 Fed. Reg. 34,348 (June 17, 2008); corrected 73 Fed. Reg. 40,883 (July 16, 2008). On September 5, 2008, the NRC staff ("Staff") found that the LA contained sufficient information for the Staff to begin its detailed technical review, and accordingly, the Staff docketed the LA.² Department of Energy; Notice of Acceptance for Docketing of a License Application for Authority to Construct a Geologic Repository at a Geologic Repository Operations Area at Yucca Mountain, NV, 73 Fed. Reg. 53,284 (Sept. 15, 2008).

On October 17, 2008, the Commission issued a "Notice of Hearing and Opportunity to Petition for Leave to Intervene," which provided that intervention petitions must be filed within 60 days. *U.S. Dep't of Energy* (High-Level Waste Repository), CLI-08-25, 68 NRC 285 (2008); *see also* In the Matter of U.S. Department of Energy (High-Level Waste Repository); Notice of Hearing and Opportunity To Petition for Leave to Intervene on an Application for Authority To

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² Pursuant to section 114(f)(4) of the NWPA and 10 C.F.R. § 51.109(c), the Staff was required to adopt, to the extent practicable, DOE's EISs. The Staff undertook a review of these documents and determined that is was practicable to adopt the EISs, with supplementation. "U.S. Nuclear Regulatory Commission Staff's Adoption Determination Report for the U.S. Department of Energy's Environmental Impact Statements for the Proposed Geologic Repository at Yucca Mountain," dated September 5, 2008 (EISADR) (ADAMS Accession No. ML082420342; LSN No. NRC000029699); 73 Fed. Reg. at 53,285. The Staff found that neither the FEIS nor the FSEIS adequately addresses all the impacts on groundwater, or from surface discharges of groundwater, from the proposed action, and, therefore, additional information was required. EISADR at 5-1.

Construct a Geologic Repository at a Geologic Repository Operations Area at Yucca Mountain, 73 Fed. Reg. 63,029 (Oct. 22, 2008). Requests for a hearing were received from twelve entities: the State of Nevada; the Nuclear Energy Institute (NEI); Nye County, Nevada; the Nevada Counties of Churchill, Esmeralda, Lander and Mineral, jointly ("Four Counties"); the State of California; Clark County, Nevada; the County of Inyo, California; White Pine County, Nevada; the Timbisha Shoshone Tribe; the Timbisha Shoshone Yucca Mountain Oversight Program Non-Profit Corporation³; the Native Community Action Council (NCAC); and Caliente Hot Springs Resort, LLC. *See U.S. Dep't of Energy* (High-Level Waste Repository), LBP-09-6, 69 NRC 367, 377-78 (2009), *aff'd in part, rev'd in part*, CLI-09-14, 69 NRC 580 (2009). Two entities filed requests to participate as interested government participants: Eureka County, Nevada and Lincoln County, Nevada. *Id.* at 378.

DOE filed answers to the intervention petitions on or before January 16, 2009. See id. at 379 n.20. The Staff responded to the intervention petitions on February 9, 2009. NRC Staff Answer to Intervention Petitions, filed February 9, 2009 ("Staff Answer"). On or before February 24, 2009, ten petitioners filed timely replies to the DOE and Staff answers. *See High-Level Waste Repository*, LBP-09-6, 69 NRC at 379 n.24. Following oral arguments on the intervention petitions in Las Vegas, Nevada on March 31 through April 2, 2009, the three Construction Authorization Boards (CABs or Boards) designated to rule on the petitions⁴

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³ The Timbisha Shoshone Tribe and the Timbisha Shoshone Yucca Mountain Oversight Program Non-Profit Corporation were consolidated as a new entity representing the Tribe, JTS. *High Level Waste Repository*, LBP-09-6, 69 NRC at 429.

⁴ On June 19, 2009, Construction Authorization Board 04 (CAB 04) was established "to preside over matters concerning discovery, Licensing Support Network compliance, new or amended contentions, grouping or consolidation of contentions, scheduling, [and] case management matters relating to any of the foregoing." "Establishment of Atomic Safety and Licensing Board," dated June 19, 2009. (continued. . .)

The Staff⁶ and Clark County⁷ appealed portions of the Boards' decision on contention admissibility on May 21, 2009. The Commission affirmed in part, and reversed in part, the Boards' decision to admit one contention, reversed the admission of three additional contentions, and affirmed the remainder of the Boards' contention rulings. *High-Level Waste Banacitant*, CLL00.14, 60 NBC at 610

Repository, CLI-09-14, 69 NRC at 610.

On December 9, 2009, CAB 04 admitted five additional contentions filed after the

original petitions to intervene. U.S. Dep't of Energy (High-Level Waste Repository), LBP-09-29,

70 NRC __ (slip op. at 14) (2009). The Board has yet to rule on NEV-SAFETY-203, which it

construed to be a petition for rule waiver. See id. at 13.

Pursuant to "CAB Case Management Order #2," dated September 30, 2009, the

proceeding was divided into stages, with the first stage, Phase I, including all safety,

id. at 499-500.

⁶ NRC Staff Notice of Appeal of LBP-09-06 and NRC Staff Brief in Support of LBP-09-06, filed May 21, 2009.

^{(...} continued)

Subsequently, CAB 04 directed all further pleadings in this proceeding to be filed before CAB 04. Order (Filing and Accessing Pleadings), dated November 20, 2009.

⁵ At the time of the Board's initial ruling on contention admissibility, neither NCAC nor JTS had demonstrated substantial and timely compliance with Licensing Support Network (LSN) requirements pursuant to 10 C.F.R. § 2.1012(b) and, therefore, were not admitted as full parties. *High-Level Waste Repository*, LBP-09-6, 69 NRC at 446-451. Both parties subsequently complied and were admitted to the proceeding on August 27, 2009. Order (Granting Party Status to Native Community Action Council), dated August 27, 2009; Order (Granting Party Status to the Joint Timbisha Shoshone Tribal Group), dated August 27, 2009.

⁷ Clark County, Nevada's Notice of Appeal of LBP-09-06, Memorandum and Order of May 11, 2009, and Clark County, Nevada's Brief on Appeal of LBP-09-06, Memorandum and Order of May 11, 2009, filed May 21, 2009.

environmental or legal contentions related to the subject matter reviewed in Volume 1 or Volume 3 of the Staff's Safety Evaluation Report (SER). Formal Phase I discovery began with the submission of initial witness disclosures by the parties on or before October 10, 2009. CAB Case Management Order #2 at 5. Depositions were scheduled to begin on February 16, 2010. *Id.* at 7. Briefing on Phase I legal issue contentions began on December 7, 2009, see Order (Identifying Phase I Legal Issues for Briefing), dated October 23, 2009, and oral argument was held on the Phase I Legal Issues on January 26 and 27, 2009. Order (Scheduling Oral Argument), dated January 7, 2009.

A DOE "Motion to Stay the Proceeding," filed on February 1, 2010 ("Stay Motion") stated that the President, in the proposed budget for fiscal year 2011, "directed that the Department of Energy 'discontinue its application to the U.S. Nuclear Regulatory Commission for a license to construct a high-level waste geologic repository at Yucca Mountain in 2010 " Stay Motion at 1. The Stay Motion further stated that the proposed budget indicated that all DOE funding for Yucca Mountain would be eliminated in 2011.⁸ *Id*. Therefore, DOE stated its intent to withdraw the license application by March 3, 2010, and requested a stay of the proceeding in order to avoid unnecessary expenditure of resources by the Board and parties. *See* Stay Motion at 2. CAB 04 granted a stay of the proceeding on February 16, 2010.⁹

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⁸ The Stay Motion referenced statements in the proposed budget prepared by the Office of Management and Budget for Fiscal Year 2011. Budget of the U.S. Government, Fiscal Year 2011, Appendix at 437 (available at http://www.whitehouse.gov/omb/budget/fy2011/assets/doe.pdf).

⁹ Order (Granting Stay of Proceeding), dated February 16, 2010 (unpublished) (slip op.).

On March 3, 2010, DOE filed the instant Motion to withdraw its LA with prejudice. Five late-filed intervention petitions were filed to oppose the Motion.¹⁰ On April 5, 2010, the participants completed briefing on three of these intervention petitions: South Carolina, Washington, and Aiken County.¹¹ On April 6, 2010, the Board suspended briefing on the intervention petitions of the Prairie Island Indian Community and the National Association of Regulatory Utility Commissioners and the DOE Motion to Withdraw, until further notice.¹² Both DOE and Nye County petitioned the Commission for interlocutory review of the April 6, 2010 Board order.¹³ On April 23, 2010, the Commission vacated the April 6, 2010 Board order and remanded the matter back to the Board for resolution of the DOE Motion to Withdraw by June 1, 2010.¹⁴ Briefing on the intervention petitions of the Prairie Island for mession was completed on May 11, 2010.¹⁵

The Staff's answer to DOE's Motion to withdraw its LA with prejudice is set forth below.

¹⁰ Petition of the State of South Carolina to Intervene, dated February 26, 2010 ("South Carolina Petition"); State of Washington's Petition for Leave to Intervene and Request for Hearing, dated March 3, 2010 ("Washington Petition"); Petition of Aiken County, South Carolina, to Intervene, dated March 4, 2010 ("Aiken Petition"); Petition to Intervene of the Prairie Island Indian Community, dated March 15, 2010 ("PIIC Petition"); National Association of Regulatory Utility Commissioners Petition to Intervene, dated March 15, 2010 ("NARUC Petition").

¹¹ See Order (Concerning Scheduling), dated March 5, 2010 (unpublished) (slip op. at 2).

¹² Memorandum and Order (Suspending Briefing and Consideration of Withdrawal Motion), dated April 6, 2010 (unpublished) (slip op. at 13).

¹³ U.S. Department of Energy's Petition for Interlocutory Review, dated April 12, 2010; Nye County Nevada's Petition for Interlocutory Review of CAB04 April 6, 2010 Order, dated April 15, 2010.

¹⁴ U.S. Dep't of Energy (High-Level Waste Repository), CLI-10-13, 71 NRC ___ (April 23, 2010) (slip op. at 5). The Board indicated that it would decide DOE's Motion to Withdraw by June 30, 2010. Order (Setting Briefing Schedule), dated April 27, 2010 (unpublished) (slip op. at 2).

¹⁵ Order (Setting Briefing Schedule), dated April 27, 2010 (unpublished) (slip op. at 2).

DISCUSSION

DOE requests that its LA be withdrawn with prejudice. Motion at 1. DOE explains that "it does not intend ever to refile an application to construct a permanent geologic repository for spent nuclear fuel and high-level radioactive waste at Yucca Mountain." *Id.* at 3 n.3. Since the Secretary of Energy and President have decided not to pursue a geologic repository at Yucca Mountain, DOE seeks to avoid further expenditure of funds on a licensing proceeding for the Yucca Mountain project. *See id.* at 1-2. DOE further argues that the Secretary of Energy has determined that withdrawal of the LA with prejudice is appropriate, and that the Board should defer to this judgment. Motion at 4. DOE acknowledges its obligation under the NWPA to file the LA, but asserts that "[n]othing in the text of the NWPA strips the Secretary of an applicant's ordinary right to seek dismissal" pursuant to 10 C.F.R. § 2.107. *Id.*

As discussed further below, DOE's motion to withdraw may be granted by the Board, but dismissal *with prejudice* is inconsistent with NRC case law. In addition, withdrawal *with prejudice* is inappropriate under the present circumstances.

A. Standards Governing Withdrawal

Under the NWPA and the Commission's regulations and case law, CAB 04 may grant withdrawal of DOE's LA. Section 114(d) of the NWPA provides as follows:

The Commission shall consider an application for a construction authorization for all or part of a repository *in accordance with the laws applicable to such applications*, except that the Commission shall issue a final decision approving or disapproving the issuance of a construction authorization not later than the expiration of 3 years after the date of submission of such application....

NWPA, § 114(d), 42 U.S.C. § 10134(d) (emphasis added). Plainly, this section directs the NRC to consider an application, but it does not create any obligation on the part of the NRC if an application is no longer before it for consideration. The direction for the Commission to consider an application "in accordance with the laws applicable to such applications" reflects that

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Congress intended the NRC to consider DOE's application consistent with the usual processes and procedures under which NRC executes its statutory mandate to consider license applications. This includes 10 C.F.R. § 2.107, which allows the presiding officer to condition the withdrawal of an application on such terms as it may prescribe after a notice of hearing has been issued. As discussed below, NRC licensing boards have permitted withdrawal of applications in the past.

For example, in *Philadelphia Electric Co.* (Fulton Generating Station, Units 1 & 2), ALAB-657, 14 NRC 967, 970 (1981) ("*Fulton*"), the applicant requested permission to withdraw, without prejudice, its construction permit application for a nuclear reactor. Two of the intervenors requested that the withdrawal be with prejudice. *Id.* The licensing board granted the intervenors' request and dismissed the proceeding with prejudice, and the matter was appealed. *Id.* at 971. The NRC Appeal Board noted that the meaning of "with prejudice" was unclear because neither the intervenors' request for dismissal with prejudice nor the licensing board's decision defined the phrase. *Id.* at 973. The Appeal Board opined that "with prejudice" could have several meanings, but interpreted the dismissal with prejudice as precluding the applicant from ever filing a new application to construct any type of reactor at the same site. *Id.*

The Appeal Board confirmed that 10 C.F.R. § 2.107(a) "gives the boards substantial leeway" in conditioning voluntary withdrawal of applications, but noted that the conditions "must bear a rational relationship to the conduct and legal harm at which they are aimed. And, of course, the record must support any findings concerning the conduct and harm in question." *Id.* at 974 (citing *LeCompte v. Mr. Chip, Inc.*, 528 F.2d 601, 604 (5th Cir. 1976)). In *Fulton*, the Appeal Board found the effective prohibition against the applicant's future use of the site for any type of nuclear reactor to be particularly harsh and punitive and concluded that "[t]he conduct and harm for which dismissal *with prejudice* is intended to serve as the remedy, therefore, must

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be of comparable magnitude." *Id.* (emphasis added). Because the licensing board did not show that the harm sought to be remedied was comparable to the severity of the dismissal with prejudice, the Appeal Board vacated the licensing board's decision. *Id.* at 974, 979 ("In the absence of a demonstrated injury to a private or public interest, we cannot affirm the Board's dismissal of [the] application with prejudice.").

Another Appeal Board decision, *Puerto Rico Electric Power Authority* (North Coast Nuclear Plant, Unit 1), ALAB-662, 14 NRC 1125, 1131 (1981) ("*North Coast*"), further illustrated the meaning and application of dismissal with prejudice. In *North Coast*, the applicant for a nuclear reactor construction permit withdrew its application and filed a motion to terminate the proceeding. The intervenor requested that the dismissal be with prejudice, but the licensing board terminated the proceeding without prejudice. *Id.* at 1131-32. The Appeal Board stated that three factors underlie the standard for determining whether a reactor construction permit proceeding should be terminated with prejudice:

(1) it is highly unusual to dispose of a proceeding on the merits, *i.e., with prejudice*, when in fact the health, safety and environmental merits of the application have not been reached;
(2) the effect [effort] spent in pursuing a nuclear power plant application at the same site for a second time is presumptively preceded by a judgment, entitled to some credence, that there exists a public interest need for the plant's power; and (3) the number of potentially acceptable sites for a nuclear power plant are perforce limited: they should not be eliminated from further consideration absent good and sufficient reason.

Id. at 1133 (emphasis in original).

The *North Coast* Appeal Board noted that the party requesting a severe and unusual sanction, such as withdrawal with prejudice, bears "a more compelling burden of justification both for its imposition and for demonstrating that the allegation should be pursued in the shape of an evidentiary hearing." *Id.* In order to hold a hearing on whether the withdrawal should be with prejudice, the allegations must be serious and "supported by a showing, typically through affidavits or unrebutted pleadings, of sufficient weight and moment to cause reasonable minds to inquire further." *Id.* at 1133-34.

Therefore, as discussed above, the Board is authorized to permit withdrawal of the LA,

and may attach appropriate conditions to the withdrawal. However, to dismiss the proceeding

with prejudice requires a showing on the record of injury to a private or public interest that

cannot be remedied through conditions on the withdrawal of the LA without prejudice.

B. The Board Is Authorized Under the Nuclear Waste Policy Act to Permit Withdrawal of the LA

Section 114(d) of the NWPA provides, in part, as follows:

The Commission shall consider an application for a construction authorization for all or part of a repository in accordance with the laws applicable to such applications, except that the Commission shall issue a final decision approving or disapproving the issuance of a construction authorization not later than the expiration of 3 years after the date of submission of such application, except that the Commission may extend such deadlines by not more than 12 months if, not less than 30 days before such deadlines, the Commission complies with the reporting requirements established in subsection (e)(2).

NWPA, § 114(d), 42 U.S.C. § 10134. As discussed above in Section A, Standards Governing Withdrawal, section 114(d) effectively directs the Commission to consider DOE's application in accordance with its usual processes and procedures governing such applications, which includes 10 C.F.R § 2.107. Section 2.107 was originally promulgated in 1962 and amended in 1963 to address withdrawal of an application after a notice of hearing has been issued. Part 2—Rules of Practice, Part 3—Rules of Procedure in Contract Appeals: Revision of Rules, 27 Fed. Reg. 377, 379 (Jan. 13, 1962); Part 2—Rules of Practice: Miscellaneous Amendments, 28 Fed. Reg. 10,151, 10,152 (Sept. 17, 1963). Because Congress is presumed to know the state of the law at the time it enacts legislation, *e.g., Private Fuel Storage* (Independent Spent Fuel Storage Installation), CLI-02-29, 56 NRC 390, 401 (2002), the Board should presume that

when Congress enacted the NWPA, it was aware that the Commission's usual processes and procedures, specifically 10 C.F.R. § 2.107, allowed applicants to withdraw license applications.

Section 2.107 was promulgated pursuant to the Commission's authority under the AEA. See 27 Fed. Reg. at 377. Where two statutes are capable of coexistence, each should be regarded as effective unless there is a clear expression of congressional intent otherwise. See, *e.g., Private Fuel Storage* (Independent Spent Fuel Storage Installation), CLI-02-29, 56 NRC 390, 401 (2002) (footnote omitted). "One of the strongest maxims of statutory interpretation is that the law disfavors implied repeals." *Id.* (footnote omitted). While 10 C.F.R. § 2.107 is not a statute, it was promulgated pursuant to NRC's authority under the AEA, and the same principle should apply with respect to statutes and administrative agency regulations when they are capable of coexistence. Therefore, 10 C.F.R. § 2.107 should be given effect unless Congress clearly expressed its intent to limit the applicability of the AEA or Commission rules enacted pursuant to the AEA. Because the NWPA does not reflect a limitation on the applicability of the AEA or the applicable Commission rules¹⁶ and because § 114(d) of the NWPA can be interpreted so that § 114(d) and 10 C.F.R. § 2.107 can both be given effect, 10 C.F.R. § 2.107 should be viewed as applicable in this proceeding.

In § 114(d) of the NWPA, the clause immediately following the direction to consider the application in accordance with applicable laws, "except that the Commission shall issue a final decision...not later than the expiration of 3 years after the date of submission of such application," charges the NRC with issuing a final decision within three years (or 4 years if

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¹⁶ As noted earlier, NRC is to consider the LA "in accordance with the laws applicable to such applications." NWPA, § 114(d), 42 U.S.C. § 10134.

certain conditions are met). However, this clause does not preclude the applicability of 10 C.F.R. § 2.107. The Commission interpreted this clause when it amended the 10 C.F.R. Part 2 rules applicable to the use of the Licensing Support Network in 2001. Licensing Proceedings for the Receipt of High-Level Radioactive Waste at a Geologic Repository: Licensing Support Network, Design Standards for Participating Websites, 66 Fed. Reg. 29,453, 29,453 n.1 (May 31, 2001). The Commission stated that it interprets the NWPA § 114(d) three-year schedule requirement to mean "three years from the docketing of the application" rather than three years from DOE's submission of the application because such an "interpretation is consistent with the Commission's general practice since its establishment in 1975 to tie hearing schedules to the docketing of a license application rather than the tendering of the application by the applicant, for the obvious reason that a license application may be substantially deficient in some material respect and must be returned to the applicant." Id. When providing the NRC responsibility for approving or disapproving the issuance of a construction authorization, Congress intended for the NRC to make a substantive, considered decision on the DOE LA. However, the three-year schedule requirement establishes a deadline for the NRC to issue a decision on the LA with the expectation that an LA would still be before the NRC. But the section simply does not address the authority of DOE to withdraw such application, nor the authority of the NRC to permit such withdrawal. Accordingly, the three-year schedule requirement does not vitiate the applicability of § 2.107; nor does it constrain or limit the Commission's authority under that section. Accordingly, the Board is authorized to assent to the dismissal of the DOE LA.

It could be argued that, since § 113 of the NWPA provides a method for DOE to discontinue the Yucca Mountain project during site characterization and § 114 does not provide a similar method in the site approval and construction authorization phase, the NWPA should be

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interpreted to constrain or limit the Board's authority to grant withdrawal pursuant to 10 C.F.R. § 2.107. NWPA, § 113(c)(3), 42 U.S.C. § 10133(c)(3); see NWPA, § 114, 42 U.S.C. § 10134. However, this argument is not persuasive because, during the site characterization period, the LA had not yet been submitted to the NRC, and therefore, the Commission's rule regarding withdrawal did not apply. At the time of the LA submittal, the process had moved beyond the site characterization period into the "Site Approval and Construction Authorization" period under § 114.¹⁷ As discussed above in Section A, Standards Governing Withdrawal, § 114 in effect directs that the Commission's usual process regarding withdrawal applies. Accordingly, Congress did not need to specifically provide a method for DOE to discontinue the project if DOE determined the site was not suitable. Congress knows how to draft legislation that clearly states its intent. *E.g., Private Fuel Storage*, CLI-02-29, 56 NRC at 397. If Congress intended to prohibit DOE from withdrawing its LA once it was submitted to the NRC, it could have specified that in the NWPA. It did not do so.

C. DOE Has Not Demonstrated that Withdrawal With Prejudice Is Justified

The NWPA directs that the NRC "shall consider an application" for a high-level waste repository submitted by DOE. NWPA, as amended, § 114(d), 42 U.S.C. § 10134(d). The plain meaning of the phrase "shall consider" is that the NRC must judge or make a decision regarding an application from DOE for a construction authorization. Because dismissal with prejudice implies, and is ordinarily associated with, a ruling on the merits and because of the NWPA's mandate for the NRC to consider "an application," it would be inappropriate for the NRC to grant

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¹⁷ See Letter from Dr. Margaret Chu, Dir., DOE Office of Civilian Radioactive Waste Mgmt. to Chairman Diaz (July 11, 2003) (ML032020301).

DOE's motion for withdrawal of the license application *with prejudice*. At this stage, the NRC has not made a decision on the merits of the LA, and the NWPA remains in effect and directs NRC to consider "an application." ¹⁸ If DOE withdraws its current LA but submits an LA for Yucca Mountain in the future, NRC's existing statutory mandate would require NRC to review that future application. Thus, the NRC could not at that time decline to conduct its review because of an earlier dismissal "with prejudice." Accordingly, in light of NRC's ongoing statutory obligation to consider a license application for Yucca Mountain, dismissal with prejudice of the LA would not be appropriate at this time.

Further, DOE has not demonstrated that withdrawal of its LA with prejudice is necessary or otherwise justified. DOE claims that the Board should defer to the Secretary's "judgment that scientific and engineering knowledge on issues relevant to disposition of high-level waste and spent nuclear fuel has advanced dramatically over the twenty years since the Yucca Mountain project was initiated" and "that dismissal of the pending application with prejudice is appropriate

¹⁸ Some have argued that this language precludes any withdrawal of the application. See South Carolina Petition at 25; Washington Petition at 16; PIIC Petition at 15-16; NARUC Petition at 24-25. While this argument is not consistent with the position of the Staff, should the Board decide that any withdrawal (whether with or without prejudice) is not permissible at this time, the Clinch River Breeder Reactor Plant (CRBRP) case provides some guidance on how the Board might proceed. In that case, a licensing board suspended the proceeding, which involved a cooperative effort between industry and government to create a demonstration-scale fast breeder reactor. Dep't of Energy Project Mgmt. Corp. Tenn. Valley Auth. (Clinch River Breeder Reactor Plant), LBP-84-4, 19 NRC 288, 294 (1984), vacated in part, ALAB-761, 19 NRC 487 (1984) (vacating the licensing board's decision to limit participation in the limited work authorization proceeding). The Energy Research and Development Administration (ERDA), which later became part of DOE, was included in the CRBRP cooperative effort. Id. at 295. The case was suspended at the applicants' request after the Carter Administration announced its opposition to the CRBRP project in April 1977. Dep't of Energy Project Mamt. Corp. Tennessee Valley Auth. (Clinch River Breeder Reactor Plant), ALAB-721, 17 NRC 539, 542 (1983). After a change in administration in 1981, the suspension was lifted and the proceeding continued. Id. Ultimately, the applicants agreed to terminate the project after Congress declined to appropriate funds for the project in FY 1984. Clinch River, LBP-84-4, 19 NRC at 291; Dep't of Energy Project Mamt. Corp. Tennessee Valley Auth. (Clinch River Breeder Reactor Plant), LBP-85-7, 21 NRC 507, 508 (1985). The construction application was withdrawn, and the proceeding was dismissed without prejudice. Clinch River, LBP-85-7, 21 NRC at 515.

here." Motion at 3-4. DOE argues that dismissal with prejudice will provide finality to the Yucca Mountain project and will enable the Blue Ribbon Commission to focus on alternative methods for dealing with high-level waste and spent nuclear fuel. *Id.* at 3. DOE asserts that the Secretary of Energy is the appropriate entity to decide whether withdrawal with prejudice is in the public interest because section 3 of the Atomic Energy Act of 1954, as amended, ("AEA"), gives the Secretary broad authority to carry out the AEA's purposes. *Id.* at 4 n.5. However, that section does not give the *Secretary* alone the authority to direct the Government's "control of the possession, use, and production of atomic energy and special nuclear material." Rather, it states that one of the Act's purposes is to provide for "a program of *Government* control" of such material. AEA, § 3(c), 42 U.S.C. § 2013(c) (2006) (emphasis added). The reference to "Government" in section 3 of the AEA applies to both DOE and NRC. *See, e.g.,* H.R. REP. NO. 93-707, at 26 (1973). Accordingly, section 3 does not require NRC to defer to the Secretary's judgment that attaching the "with prejudice" condition to withdrawal of the LA is necessary or otherwise appropriate.

DOE also claims that the NRC must defer to the judgment of the Executive Branch that dismissal with prejudice is in the public interest. Motion at 3-4 & n.4 (citing *Dep't of Energy* (Plutonium Export License), CLI-04-17, 59 NRC 357, 377 (2004); *Private Fuel Storage* (Independent Spent Fuel Storage Installation), LBP-03-30, 58 NRC 454, 472 (2003); *Environmental Radiation Protection Standards for Nuclear Power Operations, 40 CFR 190*, CLI-81-4, 13 NRC 298, 307 (1981); *Pacific Gas & Electric Co.* (Stanislaus Nuclear Project, Unit 1), LBP-83-2, 17 NRC 45 (1983) (*"Stanislaus"*)). While these cases indicate that NRC defers to the opinions of other agencies in certain circumstances, they do not mandate that CAB 04 prescribe conditions on the withdrawal of the LA (*i.e.*, with prejudice) without regard to NRC precedent interpreting § 2.107. Under NRC case law, attaching the condition of *"*with prejudice"

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to the withdrawal requires a demonstration, on the record, that the condition is necessary to alleviate the legal harm at which it is aimed. *See, e.g., Fulton*, ALAB-657, 14 NRC at 974, 979. Where the NRC has deferred to the opinion of another agency, that agency had explicit authority to take the particular action to which NRC deferred.

For example, in CLI-04-17, the Commission noted that, contrary to the intervenors' assertion, the Department of State found that the proposed export of plutonium oxide would not be inimical to the common defense and security. Plutonium Export License, CLI-04-17, 59 NRC at 374. The Commission stated that "[t]he Executive Branch's noninimicality determinations involve 'strategic judgments' and foreign policy and national security expertise regarding the common defense and security of the United States, and the NRC may properly rely on those conclusions." Id. (citations omitted). This decision was made in the context of export licensing, where the Commission has a specific statutory directive to seek the position of the Executive Branch. Section 126 of the AEA prohibits the NRC from issuing an export license for any production or utilization facility, source material, or special nuclear material until it "has been notified by the Secretary of State that it is the judgment of the executive branch that the proposed export...will not be inimical to the common defense and security." AEA, § 126a.(1). 42 U.S.C. § 2155. The NRC's reliance on Department of State noninimicality findings in the export licensing area, where there is a specific statutory directive that requires deference to the Executive Branch, does not support DOE's argument that the NRC should defer to DOE's judgment here. By contrast, there is nothing in the NWPA or AEA that directs the NRC to consider or defer to the Secretary's judgment on whether the public interest would be served by attaching a "with prejudice" condition to the withdrawal of the application. Accordingly, DOE must satisfy the standards set forth in Commission case law in order to withdraw its application with prejudice.

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Similarly, in *Private Fuel Storage*, the licensing board deferred to the judgment of the Bureau of Land Management ("Bureau") regarding the wilderness status of a tract of land. LBP-03-30, 58 NRC at 472. The land in question was overseen by the Bureau, which is charged with studying tracts of public land for designation as wilderness area under the Federal Land Policy and Management Act of 1976, 43 U.S.C. § 1782(a), (b). *See id.* at 464-65. In *Private Fuel Storage*, the Bureau was clearly acting within its authority when it found the area to be lacking in wilderness characteristics; also, the NRC did not have any statutory authority or expertise with respect to wilderness designations. Accordingly, deferral to the Bureau's expertise in that case was both necessary and appropriate. Here, however, there is nothing in the NWPA or AEA that directs the NRC to defer to the Secretary's judgment on whether attaching a "with prejudice" condition to the withdrawal of the LA is appropriate.

DOE's final example of NRC's deferral to the judgment of the Executive Branch is a case where NRC did not stay implementation and enforcement of rules of the Environmental Protection Agency (EPA). *Environmental Radiation Protection Standards for Nuclear Power Operations, 40 CFR 190*, CLI-81-4, 13 NRC 298, 307 (1981). In that case, petitioners sought to stay implementation and enforcement of EPA's radiation protection standards, and NRC's corresponding rules, for NRC-licensed uranium mills. *Id.* at 298, 300. The Commission denied the petitions "[b]ecause EPA is the agency authorized to issue generally applicable radiation standards" and the NRC "does not sit as a reviewing court for a sister agency's regulations." *Id.* at 307, 301. In CLI-81-4, EPA had clear authority to promulgate radiation protection standards, and "[i]t is well established that each agency's regulations are presumed valid until the promulgating agency or a court modifies or invalidates them." *Id.* at 301. In short, the Commission declined to interfere with the applicability and administration of the rules of a different agency. That is not the case here. Like *Clinch River* and *Private Fuel Storage*,

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CLI-81-4 does not compel the conclusion that the NRC must defer to the Secretary of Energy's judgment that it is appropriate to condition withdrawal of its license application on doing so with prejudice.

DOE cites *Stanislaus*, LBP-83-2, 17 NRC 45, for the proposition that the Commission need not judge whether an applicant's decision to withdraw an application is sound. Motion at 4 n.4. However, here, DOE does not seek simply to withdraw the application, but to do so *with prejudice*, which could involve considerations of soundness, or at a minimum, whether the requested relief is consistent with NRC regulations and applicable law. The Board must determine whether the condition bears a rational relationship to the conduct and legal harm at which it is aimed. *See, e.g., Fulton*, ALAB-657, 14 NRC at 974.

DOE has not made the requisite showing of harm to private or public interests that would result if the Board simply ordered that the LA be withdrawn—without attaching the condition that such withdrawal be with prejudice. *See Fulton*, ALAB-657, 14 NRC at 974, 979; *North Coast*, ALAB-662, 14 NRC at 1132-34. In the absence of such a showing, application of NRC case law leads to the result that the Board should grant the withdrawal without the additional condition of prejudice. *See id*.

DOE claims that dismissal with prejudice would provide finality to the project and allow the Blue Ribbon Commission to focus on alternatives. Motion at 3. In establishing the Blue Ribbon Commission, the Administration directed it to focus on "all alternatives for the storage, processing, and disposal of civilian and defense used nuclear fuel and nuclear waste." Memorandum of January 29, 2010: Blue Ribbon Commission on America's Nuclear Future, 75 Fed. Reg. 5485 (Feb. 3, 2010). Furthermore, the Blue Ribbon Commission was given 24 months, beginning on January 29, 2010, to issue a final report and has already begun its work. *See id.*; Notice of Open Meeting, 75 Fed. Reg. 10,791 (Mar. 9, 2010); Notice of Open

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Meeting, 75 Fed. Reg. 25,850 (May 10, 2010). It is unclear how dismissal of the LA without prejudice would adversely affect the Blue Ribbon Commission's work. DOE does not allege any basis for the NRC to conclude that, nor has DOE demonstrated on the record why, dismissal with prejudice is necessary to alleviate harm that would result from dismissal without prejudice. In fact, it can fairly be argued that dismissal "with prejudice" is not consistent with the public interest because such a condition would unnecessarily preclude waste disposal options that might otherwise be available to Government leadership in the future.

D. Implementation of the President's Proposed Budget

DOE's Motion was prompted by a decision to discontinue the pending LA, which was announced in the President's proposed budget for FY 2011. See Motion at 2, n.2. However, this proposed budget does not have binding legal effect because Congress, not the President, is responsible for enacting the budget into law. Because Congress has not yet determined what Nuclear Waste Funds, if any, will be appropriated to DOE relating to the LA in FY 2011, dismissal with prejudice is inappropriate.

If Congress does enact the President's proposed budget, the legal effect of the appropriation will depend on the language in the appropriations statute. In general, a "provision in an annual appropriations bill presumptively applies only during the fiscal year to which the bill pertains." *Atlantic Fish Spotters Ass'n v. Evans*, 321 F.3d 220, 224 (1st Cir. 2003). Therefore, all provisions of the NWPA (including the requirement that NRC consider a license application for Yucca Mountain) would remain in effect unless the FY 2011 appropriation is given the effect of permanent legislation.

There is a general presumption against construing an appropriation act as permanent legislation "unless the language used therein or the nature of the provision makes it clear that Congress intended it to be permanent." U.S. Gov't Accountability Office, *Principles of Federal*

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Appropriations Law, Vol. I at 2-34 (3d ed. 2004). Congress indicates permanence through use of "words of futurity' such as 'hereafter' or 'after the date of approval of this act." 65 Comp. Gen. 588, 589 (1986). There are six factors in addition to "words of futurity" that may indicate that Congress intends an appropriations act to be permanent legislation: (1) whether the provision occurs in subsequent appropriations acts, 32 Comp. Gen. 11, 12-13 (1952); (2) whether the provision is included in the United States Code, Principles of Federal Appropriations Law at 2-37; (3) whether the legislative history of an appropriations statute supports interpreting the statute as permanent legislation, id. at 2-38; (4) whether the provision is worded as a positive authorization rather than a restriction on the use of an appropriation, id. at 2-38; (5) whether "the provision [in question] bears no direct relationship to the appropriation act in which it appears, [which] is an indication of permanence," id.; and (6) whether construing the provision as other than permanent would result in a meaningless or absurd result, id. Because none of the above factors may be analyzed until after Congress enacts a FY 2011 appropriations statute, it is impossible to determine whether any Yucca Mountain-related appropriation could be interpreted as permanent legislation that amends or nullifies the NWPA. Therefore, dismissal with prejudice is inappropriate at this juncture.

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CONCLUSION

For the foregoing reasons, the Board should grant DOE's request to withdraw the LA,

but deny DOE's request to attach the "with prejudice" condition.

Respectfully submitted,

/Signed (electronically) by/

Andrea L. Silvia Counsel for NRC Staff U.S. Nuclear Regulatory Commission Mail Stop O-15-D21 Washington, DC 20555-0001 (301) 415-8554 <u>alc1@nrc.gov</u>

/Executed in accord with 10 C.F.R. § 2.304(d)/

Jessica A. Bielecki Counsel for NRC Staff U.S. Nuclear Regulatory Commission Mail Stop O-15-D21 Washington, DC 20555-0001 (301) 415-1391 jessica.bielecki@nrc.gov

Dated at Rockville, Maryland this 17th day of May, 2010

111TH CONGRESS 2d Session	HOUSE OF REPRESENTATIVES	REPORT
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NATIONAL DEFENSE AUTHORIZATION ACT FOR FISCAL YEAR 2011

MAY , 2010.—Committed to the Committee of the Whole House on the State of the Union and ordered to be printed

Mr. SKELTON, from the Committee on Armed Services, submitted the following

REPORT

together with

____ VIEWS

[To accompany H.R. 5136]

[Including cost estimate of the Congressional Budget Office]

The Committee on Armed Services, to whom was referred the bill (H.R. 5136) to authorize appropriations for fiscal year 2011 for military activities of the Department of Defense, to prescribe military personnel strengths for such fiscal year, and for other purposes, having considered the same, reports favorably thereon with amendments and recommends that the bill as amended do pass.

The amendments are as follows:

The amendment strikes all after the enacting clause of the bill and inserts a new text which appears in italic type in the reported bill.

The title of the bill is amended to reflect the amendment to the text of the bill.

F:\VHLC\051710\051710.103 May 17, 2010 project cost but a realignment of funding consistent with the heightened level of activity and investment required in the middle stages of construction projects.

The committee is concerned that the Office of Environmental Management may be proceeding with procurement and installation of equipment for which specifications may change pending the resolution of the technical and safety issues described above. The committee expects the Office of Environmental Management to consider the potential impact of outstanding technical issues when making decisions related to procurement and installation of equipment and to carefully manage project risk.

The committee authorizes \$740.2 million for the WTP at the Hanford site, the amount of the budget request.

Other Defense Activities

The budget request contained \$878.2 million for Other Defense Activities, including: \$464.2 million for Health, Safety, and Security; \$188.6 million for the Office of Legacy Management; and \$88.2 million for Nuclear Energy.

The committee recommends \$878.2 million for Other Defense Activities, the amount of the request.

Defense Nuclear Waste Disposal

The committee is aware that the Secretary of Energy recently announced the formation of the Blue Ribbon Commission on America's Nuclear Future to provide recommendations for developing a safe, long-term solution to managing used nuclear fuel and nuclear waste. The commission will consider alternatives to the Yucca Mountain site, which remains designated as the sole repository site by law as set forth in section 10134 of title 42, United States Code. The committee is concerned that defense waste, which accounts for approximately 10 percent of the total material previously destined for disposition at the Yucca Mountain site, might be overlooked considering the breadth of civilian nuclear fuel cycle issues the panel will address. The committee expects the Secretary's panel to focus on challenges and solutions that may be unique to defense waste.

Report on Defense Repository at Yucca Mountain

The committee directs the Secretary of Energy to submit to the congressional defense committees, within 120 days after the date of the enactment of this Act, a report on the steps and actions required to preserve and restart the nuclear waste repository located at Yucca Mountain, Nevada, as an option for disposing of defense nuclear waste, as well as a plan to complete a geologic repository at Yucca Mountain, Nevada, that is able to accommodate the disposal of defense nuclear waste.

Closing of the Yucca Mountain Nuclear Repository

The committee directs the Secretary of Defense and the Secretary of Energy to jointly submit a report to the Senate Committee on Armed Services and the House Committee on Armed Services within 180 days of enactment of this Act that provides a detailed analysis of how closing the Yucca Mountain waste repository will impact the Department of Defense, the Department of Energy, and national defense activities. This report shall include a description of the following:

- (1) An analysis of how the Department of Defense and Department of Energy can handle, transport, and store indefinitely its entire stockpile of highlevel radioactive defense waste without a national repository.
- (2) The impact on the operations of the National Nuclear Security Administration to transform itself and the entire nuclear weapons complex to be smaller, safer, more secure, and more efficient.
- (3) The security risks associated with nuclear waste materials stored throughout the country-in-multiple-locations.
- (4) A full assessment of the compliance of the Department of Defense and the Department of Energy with any agreements with States for the disposal of highly enriched defense nuclear fuel and radioactive wastes at Yucca Mountain.

LEGISLATIVE PROVISIONS

SUBTITLE A-NATIONAL SECURITY PROGRAM AUTHORIZATIONS

Section 3101—National Nuclear Security Administration

This section would authorize funds for the National Nuclear Security Administration for fiscal year 2011, including funds for weapons activities, defense nuclear nonproliferation programs, naval reactor programs, and the Office of the Administrator.

Section 3102-Defense Environmental Cleanup

This section would authorize funds for defense environmental cleanup activities for fiscal year 2011.

Section 3103—Other Defense Activities

This section would authorize funds for other defense activities for fiscal year 2011, including funds for Health, Safety, and Security, the Office of Legacy Management, and Nuclear Energy.

Section 3104—Energy Security and Assurance

This section would authorize funds for energy security and assurance programs for fiscal year 2011.



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

May 19, 2010 For Immediate Release Karyn D. Severson External Affairs

NWTRB Meeting to Focus on DOE Plans for Managing Spent Nuclear Fuel and High-Level Waste

The U.S. Nuclear Waste Technical Review Board will meet in Idaho Falls, Idaho, on Tuesday, June 29, 2010, to review U.S. Department of Energy (DOE) plans for managing spent nuclear fuel (SNF) and high-level radioactive waste (HLW). Among the topics that will be discussed are the amounts and characteristics of waste stored at the Idaho National Laboratory, agreements in place between the State of Idaho and the federal government related to the packaging and movement of the waste, how the recent decision to terminate the Yucca Mountain repository program will affect waste management plans, and plans underway at DOE to transition its responsibilities under the Nuclear Waste Policy Act (NWPA) from the Office of Civilian Radioactive Waste Management to the Office of Nuclear Energy. Also on the agenda are discussions of innovative reactor technologies that could affect amounts or types of SNF or HLW requiring disposal and presentations on studies of advanced fuel cycles. The Nuclear Waste Policy Amendments Act of 1987 requires the Board to conduct an independent review of the technical and scientific validity of DOE activities related to nuclear waste management, including transporting, packaging, and disposing of SNF and HLW.

The Board meeting will be held at the Hilton Garden Inn, 700 Lindsay Boulevard; Idaho Falls, ID 83402; (tel.) 208-522-9500, (fax) 208-522-9501.

A block of rooms has been reserved for meeting attendees at the Hilton Garden Inn. When making a reservation, please ask for the "NWTRB" rate. *Reservations should be made by June 21, 2010, to ensure receiving the meeting rate.* To make reservations, call 208-522-9500.

A detailed meeting agenda will be available on the Board's web site <u>www.nwtrb.gov</u> approximately one week before the meeting. The agenda also may be obtained by telephone request at that time. The meeting will be open to the public, and opportunities for public comment will be provided. The meeting will begin at 8:30 a.m. on Tuesday morning. Time has been set aside at the end of the day for public comments. Those wanting to speak are encouraged to sign the "Public Comment Register" at the check-in table. A time limit may have to be set on individual remarks, but written comments of any length may be submitted for the record.

Transcripts of the meeting will be available on the Board's website, by e-mail, on computer disk, and in paper format on library-loan from Davonya Barnes of the Board's staff no later than July 19, 2010.

The Board was established as an independent federal agency to provide objective expert advice to Congress and the Secretary of Energy on technical issues and to review the technical validity of DOE activities related to implementing the NWPA. Board members are experts in their fields and are appointed to the Board by the President from a list of candidates submitted by the National Academy of Sciences. The Board is required to report to Congress and the Secretary no fewer than two times each year. All Board reports, correspondence, congressional testimony, and meeting transcripts and related materials are posted on the Board's website.

For information on the meeting agenda, contact Carl Di Bella, for information on lodging or logistics, contact Linda Coultry; 2300 Clarendon Boulevard, Suite 1300; Arlington, VA 22201-3367; (tel) 703-235-4473; (fax) 703-235-4495.



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No. 10-091

May 20, 2010

NRC'S YUCCA MOUNTAIN BOARD TO HOLD ORAL ARGUMENTS IN LAS VEGAS JUNE 3-4 ON DOE MOTION TO WITHDRAW APPLICATION

The Nuclear Regulatory Commission's Construction Authorization Board will convene June 3-4 in Las Vegas, Nev., to hear oral arguments on the Department of Energy's motion to withdraw its license application for a high-level radioactive waste repository at Yucca Mountain and to hold a case management conference.

Oral arguments on June 3 will concern DOE's motion to withdraw the application. A case management conference on June 4 will discuss DOE's efforts to preserve its documentation supporting the application in the NRC's Licensing Support Network in case the application is withdrawn.

Proceedings will be held at the NRC's Las Vegas Hearing Facility, Pacific Enterprise Plaza, Building 1, 3250 Pepper Lane in Las Vegas, beginning at 9:00 a.m. Pacific Time each day. Proceedings will be Webcast at these addresses:

- June 3: <u>http://www.visualwebcaster.com/event.asp?id=69198</u>
- June 4: <u>http://www.visualwebcaster.com/event.asp?id=69199</u>

Media wishing to cover the sessions are strongly encouraged to register in advance with NRC's Office of Public Affairs in Rockville, Maryland, by calling (301) 415-8200. Pre-registration is essential for television media, as space inside the hearing room is limited. Photographers (video or still) will not be permitted to move around the hearing room while the board is in session. Board judges will not grant interviews. **No television interviews shall be permitted inside the hearing facility.** Two brochures on the Las Vegas Hearing Facility – one for media and one for the general public – are available on the NRC's Web site at this address: <u>http://www.nrc.gov/reading-rm/doccollections/fact-sheets/</u>.





Brian Schweitzer Governor of Montana Chairman

C.L. "Butch" Otter Governor of Idaho Vice Chairman

Pam O. Inmann Executive Director

Headquarters: 1600 Broadway Suite 1700 Denver, CO 80202

> 303-623-9378 Fax 303-534-7309

Washington, D.C. Office: 400 N. Capitol Street, N.W. Suite 388 Washington, D.C. 20001

> 202-624-5402 Fax 202-624-7707

www.westgov.org

May 24, 2010

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

Dear Secretary Chu:

Western Governors are aware of the formation of the Blue Ribbon Commission on America's Nuclear Future, and we strongly recommend you provide for state government participation during the period of its deliberations. Although the 15-member Commission is impressively credentialed, it does not include representatives from state government. Western states have worked with the Department of Energy over the past 25 years on issues related to Yucca Mountain, the Waste Isolation Pilot Plant, Hanford, Idaho National Laboratory, the Nevada Test Site, and the proposed Private Fuel Storage central storage facility. Given that experience, Western states are arguably the best source of insight into the intergovernmental and local consideration of policy choices for the safe and effective transportation, storage and disposal of spent nuclear fuel (SNF) and high-level waste (HLW). If the Commission will also consider management of low-level waste (LLW), Western states again provide expertise through the work of the Interstate Compacts on Low-Level Radioactive Waste Management.

The Western Governors' Association and the affiliated Western Interstate Energy Board's High-Level Waste Committee have coordinated Western state participation in DOE's SNF/HLW program for 25 years, including the following:

- WGA negotiated with DOE an agreement and transportation policies and procedures that are the cornerstone of the highly successful transportation program for transuranic waste shipments to WIPP. The stringent protocols have produced a stellar safety record for over 8,500 shipments with no release of radioactive materials;
- WGA adopted policy resolutions that address siting processes for interim storage of SNF, and interactions between federal and state governments on many aspects of SNF/HLW management;
- WIEB's HLW committee includes several members with more than 20 years experience working with DOE on SNF/HLW transportation and related issues; and

The Honorable Steven Chu May 24, 2010 Page 2

> • The HLW committee has reviewed and commented on many relevant federal agency reports, including NRC's revision to its "Waste Confidence" rule, NRCs' proposed plutonium packaging regulations, DOE's Global Energy Partnership Programmatic Environmental Impact Statement, and the DOE Office of Civilian Radioactive Waste Management's National Transportation Plan.

We note that Section 12 of the Commission's Charter allows for the establishment of subcommittees to "undertake fact-finding and analysis on specific topics and to provide appropriate information and recommendations to the Commission." Accordingly, we recommend that DOE establish and fund a subcommittee to the Commission consisting of gubernatorial appointees to establish a state and role in a reformulated program for managing the nation's spent nuclear fuel and high-level nuclear waste. U.S. Territories should also be included in the discussion should they be impacted by any of the deliberations of the Commission.

We strongly urge state participation in these important deliberations for three key reasons:

- 1. The Commission's success will depend on its appreciation of the institutional, intergovernmental, siting, and transportation implications of SNF/HLW management. Such considerations must be "built-into" a reformulated program for the management of the nation's SNF and HLW. After 25 years experience with the institutional dimensions of nuclear waste policy, Western states provide invaluable insight and expertise on such issues.
- 2. As DOE and the Commission develop policies and recommendations for a long-term nuclear waste management solution, they must also consider short- and medium-term issues, many with important implications for Western states. These include:
 - The disposition of high-level defense waste, especially given DOE's Settlement Agreements with Washington, Idaho and other states;
 - A plan for Class B, Class C, and Greater-Than-Class C Low-level Wastes. (Yucca Mountain was considered as a disposal option for Greater-Than-Class C waste.)
 - A plan for clearing and reusing 8 to 10 shutdown nuclear plant sites;
 - Major legal/financial issues indirectly affecting Western states regarding the disposition of the nuclear waste fund, and breach of contract costs;
 - Resistance to extended onsite storage in states whose nuclear plants have shut down and/or have limited or problematic onsite storage, including potential legal action to force removal of waste;
 - The implications of extended onsite storage for subsequent cask handling and transport; and

The Honorable Steven Chu May 24, 2010 Page 3

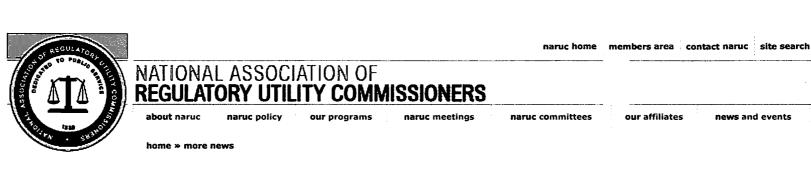
- Resistance to added mission scope in states that already host waste repositories with agreed-to waste-class limitations.
- 3. States should have a full opportunity to participate in the reformulation of the nation's policies for managing SNF and HLW. Although intended to benefit the nation as a whole, policies for SNF/HLW management are distinctive in their highly disparate effects among states. To neglect the states' role in this process could undermine the effectiveness and public acceptability of any Commission recommendations. Western states are prepared to:
 - Attend and participate in Commission and related meetings, e.g., Nuclear Waste Technical Review Board, and report back to states;
 - Identify and articulate state issues of concern;
 - Review and consider issues among states and with DOE, NRC and the Commission, including such topics as federal-state interactions in SNF/HLW management, siting policies and processes (permanent disposal, interim storage and other facilities), federal-state roles as co-regulators in SNF/HLW management, and consultative federal-state transportation system design;
 - Develop state recommendations and/or positions that may occur on a regional or other basis, e.g., among states with settlement agreements with the federal government;
 - Participate on a subcommittee on nuclear waste transportation to ensure that the lessons learned from past successful federal nuclear waste transportation programs and state/federal cooperation for shipments are considered; and
 - Propose appropriate state roles or actions to implement the reformulated national policy.

We look forward to working with you and the Commission. Please have your staff contact Pam Inmann, WGA's Executive Director at 303-623-9378 or by e-mail at <u>pinmann@westgov.org</u> regarding future coordination efforts.

Sincerely, Brian Schweitzer Governor of Montana Chairman

C**(**L. "Butch" Otter Governor of Idaho Vice Chairman

cc: Lee Hamilton, Co-chair Blue Ribbon Commission on America's Nuclear Future Brent Scowcroft, Co-chair Blue Ribbon Commission on America's Nuclear Future Tim Frazier, U.S. Department of Energy Designated Federal Official to the Blue Ribbon Commission on America's Nuclear Future



For Immediate Release: May 25, 2010 Contact: Rob Thormeyer, 202-898-9382, rthormeyer@naruc.org

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White Urges Reform of Nuclear Waste Fund

WASHINGTON—Despite years of delay and questions over its viability, one aspect of the nation's nuclear-waste strategy has never failed: the collection of fees from ratepayers to pay for the eventual collection and disposal of spent-nuclear waste.

This was the message Commissioner Greg White of Michigan took to Washington on May 25 when he testified on behalf of NARUC before the Blue Ribbon Commission on America's Nuclear Future. The Blue Ribbon Commission was created by the U.S. Department of Energy earlier this year after the Obama Administration shuttered the proposed spent-nuclear fuel repository site in Yucca Mountain, Nev.

Although the expert panel has a broad charter to chart a new nuclear course for the U.S., Commissioner White said it needs to focus heavily on reforming the Nuclear Waste Fund, the bank account Congress established in 1982 as a way to pay for the development of an eventual nuclear-waste repository. The fund charges a fee to nuclear utilities, which is passed through by State commissions to end-use consumers.

"Let me start by expressing my frustration" at the current situation, Commissioner White said. "Ratepayers have been given the shortest shrift" since the fund was established almost 30 years ago. "The only part of this program that has never failed is the collection of fees from ratepayers."

To date, DOE reports a balance of more than \$24 billion in the Nuclear Waste Fund, with nearly all of that coming from ratepayers. Commissioner White said at present there is no correlation between the NWF revenue and the repository program, which is often mistaken as a "trust fund," though it does not operate that way.

"Suffice it to say, the Nuclear Waste Fund is a mess and needs substantial reform if it is to be the primary source of financing a new disposal strategy," Commissioner White said in his written statement. "Various schemes have been advanced for the use of the fund to pay for such proposals as having DOE take title and manage spent-nuclear fuel at present reactor sites (often without saying for how long) or to shift to a recycling program using the fund to get started or to make up the unfavorable cost disadvantage of reprocessed fuel to fresh fuel. Such proponents may not realize that the \$24 billion is not readily available."

Commissioner White also urged the panel to learn from the Yucca Mountain project so the country can avoid the same mistakes when it attempts to site the next repository location. The public has little faith that the government can manage this program based on how it handled Yucca Mountain, he said.

The panel should examine "how we get a commitment to a disposal strategy that doesn't waver through different [presidential] administrations," he said, noting that President Carter once promised that resolving the nuclear-waste question will not be pushed to future generations.

The testimony is available on NARUC's website at: http://www.naruc.org/Testimony/NARUC%20Statement%20to%20BRC%20May%2025%202010.pdf.

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AMENDMENT TO H.R. 5136, AS REPORTED OFFERED BY MR. SPRATT OF SOUTH CAROLINA

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Page 679, after line 25, add the following new section:

1 SEC. 3115. DISPOSAL OF DEFENSE NUCLEAR WASTE.

2 (a) IN GENERAL.—The Secretary of Energy shall im3 mediately carry out the requirements under the Nuclear
4 Waste Policy Act of 1982 (42 U.S.C. 10101 et seq.) to
5 provide for the permanent disposition of high-level defense
6 nuclear waste.

7 (b) REPORT.—Not later than 30 days after the date 8 of the enactment of this Act, the Secretary shall submit 9 to the congressional defense committees a report on the 10 amount of funding necessary to carry out subsection (a).

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Blue Ribbon Commission on America's Nuclear Future Agenda

May 25 – 26, 2010 Washington Marriott, 1221 22nd Street NW Washington, DC

Tuesday, May 25, 2010

Open Meeting

8:30 a.m.	Open meeting/review agenda	Tim Frazier
8:35 a.m.	Opening discussion, review of Commission work plan	Honorable Lee Hamilton General Brent Scowcroft Commission members
9:00 a.m.	National Congress of American Indians	TBD
9:30 a.m.	National Conference of State Legislatures	Delegate Sally Young Jameson, State of Maryland
10:00 a.m.	Break	
10:15 a.m.	Energy Communities Alliance	Seth Kirshenberg, Executive Director
10:45 a.m.	National Association of Regulatory Utility Commissions	Commissioner Greg R. White, Michigan Public Service Commission
11:15 a.m.	American Nuclear Society	Dr. Tom Sanders, President
11:45 a.m.	Lunch	
1:00 p.m.	Nuclear Energy Institute	Marv Fertel, President & CEO
1:30 p.m.	Institute for Energy and Environmental Research	Dr. Arjun Makhijani, President
2:00 p.m.	Natural Resources Defense Council	Dr. Tom Cochran, Senior Scientist, Nuclear Program

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2:30 p.m.	Nuclear Threat Initiative	Corey Hinderstein, Vice President for International Programs
3:00 p.m.	Break	
3:15 p.m.	Managing the Atom Project, Harvard University	Dr. Matthew Bunn, Co- Principal Investigator
3:45 p.m.	Commission discussions	Commission
4:00 p.m.	Adjourn	

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Wednesday, May 26, 2010

Open Meeting

8:30 a.m.	Open meeting/review agenda	Tim Frazier
8:35 a.m.	Commission discussions	Commission
8:45 a.m.	Overview of National Academy of Sciences Reports on Nuclear Waste Transport, Storage and Disposal	Dr. Kevin Crowley, Director, Nuclear and Radiation Studies Board
9:30 a.m.	Commission discussions of subcommittee work and plans	Commission
10:00 a.m.	Coffee break	
10:15 a.m.	Continue Commission discussions	Commission
11:00 a.m.	Oral statements	Public
12:00 p.m.	Adjourn meeting	

Managing Spent Fuel and Nuclear Waste Successfully – What Needs to Be Done?

Testimony to the Blue-Ribbon Commission on the Nuclear Future - Key Points

25 May 2010

Matthew Bunn

- The key to success is rebuilding public trust, through a voluntary, democratic process.
 - The most important contribution the Commission could make is to design and help to launch a process capable of regaining public trust and acceptance for siting the needed facilities.
- We have time; we should not rush to judgment or lock in technological choices prematurely.
 - The Commission should focus first on interim storage of spent nuclear fuel and nuclear waste, including establishing at least limited centralized storage for spent fuel from decommissioned reactor sites.
- We will need a permanent geologic waste repository no matter what nuclear fuel cycle options we pursue.
 - We should not put permanent repositories on an indefinite back-burner, but should establish a credible repository program, in part because this is likely to be important to gaining public acceptance for interim storage sites.
- Reprocessing with existing or near-term technologies poses high costs and risks and few benefits.
 - Traditional reprocessing technologies are more expensive than open fuel cycles and raise additional safety, security, and proliferation risks. More advanced technologies may be more expensive, and would still, if deployed in many countries, offer facilities and expertise that would be very useful to a nuclear weapons program.
 - There are sufficient supplies of uranium to fuel a growing global nuclear enterprise for decades, and repositories can easily be designed with sufficient capacity for once-through disposal of spent nuclear fuel.
- We should manage the nuclear fuel cycle in the United States in a way that allows nuclear energy to grow and spread around the world while minimizing nuclear proliferation and terrorism risks.
 - The United States should seek to minimize and ultimately elimimate the civil use of HEU and separated plutonium, and should seek to ensure that stringent security measures are in place for all nuclear weapons and weapons-usable material worldwide.
 - The United States should reiterate that it does not reprocess for either civilian energy or nuclear weapons purposes, and does not encourage others to do so.
 - The United States should take additional steps to limit the spread of enrichment and reprocessing facilities including, in cooperation with other countries, being willing to take limited quantities of spent power reactor fuel from foreign countries, as part of an effort to convince countries they do not need their own enrichment and reprocessing facilities.
 - The United States should seek the strongest practicable controls over enrichment and reprocessing facilities and related technologies including, in the long run, moving toward multinational control and staffing of such facilities.
- It is worth investing in research and development on improved approaches to both open and closed fuel cycles.

TESTIMONY OF Thomas L. Sanders President American Nuclear Society

BEFORE THE BLUE RIBBON COMMISSION ON AMERICA'S NUCLEAR FUTURE May 19, 2009

Chairmen Hamilton and Scowcroft, members of the Commission, thank you for the opportunity to testify. I am here on behalf of 11,000 men and women of the American Nuclear Society who believe passionately that nuclear science and technology has a central role to play in ensuring our national security, our economic prosperity and quality of life, and our environment. No group of individuals will be more directly impacted by the decisions this Commission makes, and none are better positioned to provide the technical know-how we will need to develop and execute an effective, durable, and flexible nuclear fuel cycle for the 21st Century and beyond.

Let me say from the outset that the ANS does not represent any specific interest within the nuclear enterprise. I am not here on behalf of the utilities, or vendors of nuclear goods and services, or the government agencies and national laboratories that conduct nuclear related research and development, or the universities that educate our nuclear scientists and engineers. I am here to represent the "general interest" of the nuclear community to the extent that it can be defined and articulated today.

As ANS President, I have created the Special Committee on Used Nuclear Fuel Management Options. The purpose of this committee, co-chaired by Audeen Fentiman of Purdue University and Margaret Chu, former director of the DOE Office of Civilian Radioactive Waste Management, is to evaluate the technical advantages and challenges of various fuel cycle alternatives and prepare a report for the November, 2010 ANS meeting. With that in mind, my remarks today will be more general in nature.

I am not envious of the job you have before you. The Blue Ribbon Commission exists because US nuclear waste policy is essentially a failure. The federal government has spent nearly \$10 billion over a period of more than 40 years to develop a long-term repository for nuclear waste, with practically nothing to show for it.

ANS members are uniformly hopeful that the Commission will provide a constructive "reset" to US fuel cycle policy, but we are also realistic about the challenges and limitations you face.

I do not expect the Commission will seek to select candidate sites for long-term geological repositories to replace Yucca Mountain, nor do I imagine it will

recommend a specific technological pathway to reprocess and/or close the fuel cycle, as the last administration did with the Global Nuclear Energy Partnership. If these issues are off the table, it seems to me the only potential game-changer left is reforming the "operational mechanics" of the fuel cycle.

Clearly, the system we have today is unworkable. Taxpayers contribute to an illusory "trust fund" that serves mostly to mask the federal deficit. The men and women of the Department of Energy make an honest effort to comply with its legal mandate to take possession of spent fuel, but are hindered at every turn by a suffocating web of contradictory laws, regulations, and bureaucratic culture. Indeed, the only winners in this sad saga seem to be the lawyers who are getting rich helping utilities sue the government to pay for their stop-gap measures to manage their spent fuel inventory. The system is broken, and needs to be changed fundamentally.

Also, consider that while the US spent fuel inventory today is comprised of light water reactor fuel, that will likely change in the years to come as high temperature gas and sodium cooled fast reactors penetrate the global marketplace. If the situation today seems intractable, imagine 20 or 30 years from now when the US may have three distinct fuel cycles to manage. It is time to recognize that a new framework is needed, one that provides greater flexibility to manage multiple fuel cycles in a timely and efficient manner with a higher level of input from the nuclear industry. The ANS has adopted a formal position statement (http://www.ans.org/pi/ps/docs/ps22.pdf) supporting the creation of an independent entity to entity to oversee management of the current and expected stockpile of U.S. used nuclear fuel. This entity should have direct access to nuclear waste fees; be minimally reliant on the annual congressional appropriations for funding; have a governance structure that promotes long-range planning and continuity of leadership; possess authority to provide consolidated interim storage, nuclear fuel recycling, and geologic disposal consistent with laws, policies, and regulations; and be given the authority to support U.S. national security and nonproliferation objectives on a full-cost reimbursement basis.

I strongly urge the Commission to make management reform of the nuclear fuel cycle a principal area of focus.

In addition, I urge the Commission to recognize that US fuel cycle policy must anticipate the need to support so-called cradle-to-grave fuel solutions for our international partners. The world is set to embark on a massive expansion of nuclear energy generation capacity with more than 60 nations actively considering the addition of nuclear to their energy portfolios. I, and most of my colleagues in the ANS, believe strongly that the US must help facilitate this global nuclear renaissance through the export of American nuclear plants and technology in order to ensure the highest levels of operational safety while minimizing the threat of materials diversion of nuclear proliferation. The current administration has on numerous occasions voiced its interest in pursuing cradle-to-grave solutions as a tool to assist developing nations in capitalizing on nuclear energy without the need for them to indigenously develop sensitive technologies such as enrichment and reprocessing. Cradle-to-grave services will require that we have the capacity to accept spent nuclear fuel from partner nations and recycle and/or dispose of it as necessary. Let me be clear - this means we will need both the operational and the political wherewithal to accept what some will define as "waste" from other nations.

I also urge the Commission to consider the larger context of US fuel cycle policy, and how it has changed since the last time comprehensive nuclear waste legislation was passed by Congress. Our current policy was developed 20 to 30 years ago under the broad assumption that the existing fleet of nuclear plants would be phased out at the end of their design lifetimes and replaced with nonnuclear generation capacity. Under this scenario, the adoption of a once through nuclear fuel cycle with spent fuel assemblies being employed in longterm geologic repository made complete sense. However, in the intervening 30 years, the fundamental assumptions upon which our current policy is predicated have changed, and changed dramatically.

Under any credible scenario, the US will have to dramatically increase the percentage of electricity derived from nuclear energy in order to meaningfully reduce CO2 emissions without negatively impacting our economic competitiveness and quality of life. There is also an emerging consensus that electrification of the transportation sector, through plug-in hybrids, electric cars, street cars, high-speed rail, etc., is the easiest and most realistic way to reduce our dependence on foreign petroleum and reduce emissions. This will further heighten the need for large quantities of clean, dependable baseload generation that only nuclear can provide.

What does this mean for US policy? Above all, it means that while there is no immediate crisis in used fuel management, we still must move with some sense of urgency to prepare for a much larger volume fuel cycle in the decades ahead.

Lastly, and perhaps most importantly, I encourage the Commission to recognize that the "nuclear waste problem" is and has always been largely a political problem: driven by fear, prone to exaggerated interpretation of risks, and manipulated by those with narrow political agendas. From an engineering perspective, effective management of the backend of the nuclear fuel cycle is a clearly achievable objective, and there are any number of realistic technological pathways to meet it. Of course each has its own set of implementation challenges, but the general consensus in the nuclear community is that there are no hard technological showstoppers that would prevent us from success. In short, no matter what fuel cycle we ultimately choose to pursue - once through, reprocessing, full actinide recycle, even some combination of all - you can be assured that the men and women of the US nuclear community have the skill, knowledge, and commitment to make it a reality. Nuclear energy is no longer the polarizing issue it once was. Consider that the Obama and Bush administrations, while ideologically divergent in many respects, have both recognized the federal need for more nuclear energy. Likewise in Congress, there is an increasing bipartisan consensus that nuclear must be a central solution to our energy and environmental challenges.

Public support for nuclear energy, as reflected in opinion polls, stands at an all time high. Nonetheless, there is still an opportunity for misunderstanding, fostered in some cases by willful manipulation, on matters related to nuclear technology, especially waste. As such, the ANS believes it is appropriate for the federal government to actively facilitate and promote a higher level of "nuclear literacy". The ANS stands ready to partner with the federal government to accomplish this task.

In closing, I urge you to recognize that in your final recommendations, there can be no relevance without controversy. If there was a technically elegant, politically expedient option for managing the backend of the nuclear fuel cycle, we would have adopted it long ago. So I challenge you to do more than just present recommendations that represent the lowest common political denominator. Instead, let the science guide you, even if it means rocking the political boat a little.

Thank you for the opportunity to testify and I am pleased to answer any questions you may have.

Summary Statement of Marvin S. Fertel Blue Ribbon Commission on America's Nuclear Future May 25, 2010

The Nuclear Energy Institute's utility members and the Nation's electricity ratepayers have committed over \$34 billion^{*} since 1982 to the Nuclear Waste Fund for the federal program that was supposed to have begun removing used fuel from commercial nuclear power plant sites over 12 years ago.

Within the federal government, inconsistency in the approach to managing used nuclear fuel and a lack of policy and management accountability have impeded the ability to build political consensus on this issue and pursue needed used fuel management projects. The following principles will help ensure that a stable used nuclear fuel management policy is created:

- The Nation must have a durable policy to manage used nuclear fuel responsibly.
- The Nation must have a plan for the ultimate disposal.
- An ideal technical solution is not required to begin implementation of a new policy direction. Evolutionary (and even revolutionary) advances in technology improvements can be incorporated over time without deferring decisions until decades of research are completed.
- Non-proliferation goals must be met.
- The successes and failures of the past (particularly in facility siting) must be heeded.

The following recommendations are offered to assist the Commission to judge the various policies, technologies, and systems that are available now or might be in the future.

- 1. An integrated used fuel management system will include both near- and long-term programs that must be operated over decades cannot be successful if policies regarding used fuel and high-level waste are continually subject to change.
- 2. The costs of a long-term management program must not be an undue burden.
- 3. Geologic disposal will be necessary in any used fuel management scenario and the nation's policy must establish a clear and achievable path to disposal; the licensing review of Yucca Mountain should be completed, even if the project will not be used.
- 4. Future disposal efforts should build broad based public support with a step-wise approach.
- 5. Centralized interim storage should be a strategic element of used fuel management.
- 6. The commercial used nuclear fuel program should be transferred to an entity with a management and financing structure that is able to function in the presence of the inevitable political and policy changes that will occur over the coming decades
- 7. Both current and advanced recycling and related nuclear fuel cycle technologies will not provide the sole solution for used fuel management, but can be a strategic element of used fuel management. Consistent, sustained political and policy support is a must and any system must provide value to justify the investment. Meeting non-proliferation goals is a must.
- 8. Research, development and demonstration of advanced technologies should be pursued, but real, practical approaches that the private sector would be willing to develop, finance, and that can be successful in the market place are needed.
- 9. Different technologies can be developed to handle fuels from different types of reactors to gain greater benefits.

In closing, the greatest service that the Commission can render to the Nation is to develop a used fuel management policy that will endure, define a process for implementing the policy, determine the timelines to be followed to achieve the policy, and delineate the legal and legislative changes needed to make the policy a reality.

^{*} Including interest earned in the Fund and one-time fees owed.

Statement of

Thomas B. Cochran, Ph.D. Senior Scientist, Nuclear Program, Natural Resources Defense Council, Inc.

Before the Blue Ribbon Commission on America's Nuclear Future Washington, D.C.

May 25, 2010

Natural Resources Defense Council, Inc. 1200 New York Avenue, N.W., Suite 400 Washington, D.C. 20005 Tele: 202-289-6868 tcochran@nrdc.org I. Introduction. Co-chairmen and members of the Commission, thank you for providing the Natural Resources Defense Council (NRDC) the opportunity to present its views on the how the nation should proceed in managing and disposing of spent nuclear fuel (SNF) and radioactive high level waste (HLW). NRDC is a national, non-profit organization of scientists, lawyers and environmental specialists dedicated to protecting public health and the environment. Founded in 1970, NRDC has more than 1.3 million members and e-activists nationwide, served from offices in New York, Washington, Los Angeles, San Francisco, Chicago and Beijing. Since its founding NRDC has been involved actively in a wide range of nuclear fuel cycle and advanced reactor research and development issues.

In my testimony today I will focus on five points:

- The membership of the Blue Ribbon Commission (hereafter the "Commission") is not fairly balanced with respect to the range of informed views it encompasses toward the matters within its purview, and therefore is in violation of the Federal Advisory Committee Act (FACA).
- The Commission's priority focus should be on getting the geologic repository program back on track.
- There is a need for a new policy for storage of power reactor spent fuel that ends the practice of dense compaction of spent fuel assemblies in wet pools, and moves spent fuel into interim hardened dry cask storage.
- The single-pass plutonium-recycle fuel cycle as practiced in France should not be adopted by the United States.
- The Commission should oppose investing significant federal resources in a futile attempt to develop uneconomical closed fuel cycles, advance reprocessing technologies and fast reactors, and instead recommend that the substantial ongoing research efforts be redirected to develop non-nuclear technologies that are more likely to mitigate climate change sooner and at lower cost.

II. The Commission membership is not balanced as required by law. First, let me make clear that we do not question the integrity of the members of the Commission, for which we have high regard, and we recognize your dedication to public service. The issue arises from the legal requirement that committees under FACA be balanced in terms of the points of view represented, and from the common-sense view that if you desire to succeed you shouldn't begin by locking out constituencies that you need for success. This commission is not balanced and important points of view are not represented on the Commission.

On April 2nd, we wrote to the Commission's Designated Federal Official about our concerns (see Attachment 1), and on May 19th the Department of Energy (DOE) responded taking the position that the Commission is well balanced (Attachment 2). We believe this issue does not rest solely with DOE and its Office of the General Counsel, but is a matter for the Commission to address. It is the Commission's credibility and fairness that is on the line.

As I'm sure they would acknowledge (as does DOE), there are at least appearances of conflicts of interest for three of the members of the Commission—Mr. John W. Rowe, Dr. Richard A.

Meserve and Mr. Mark H. Ayres. All three have extensive ties to the nuclear industry. Their service without submission to DOE of conflict of interest statements is permissible under FACA, but only provided that the Commission is "fairly balanced with respect to the issues under consideration." It is not balanced.

Mr. Rowe, Dr. Meserve and Mr. Ayres all deserve a seat at the table. But so do others who do not necessarily share their views about the need for additional federal government subsidies for the nuclear power industry.

NRDC, other NGOs and individuals with long interest and sometimes active participation in federal policy related to the management and disposal of nuclear wastes share a range of views from a position that nuclear power should compete for market share without further federal subsidies to the belief that the role of nuclear power should not be expanded due to cost, proliferation, safety and waste management considerations. Many believe further nuclear subsidies carry high opportunity costs in mitigating climate change. The views of these groups and individuals are not represented on the Commission.

For example, Attachment 3 is a statement of Principles for Safeguarding Waste at Reactor Site. This statement was produced and circulated long before the formation of the Blue Ribbon Commission. It is signed by representatives of some 170 national and local groups in 50 states a very large, thoughtful constituency that are actively participating in matters now under consideration by the Commission. In NRDC's view these groups have essentially no representation on the Commission. The DOE and the Obama administration should have been aware of this statement, the long involvement of many of these organizations in the "issues under consideration" by the Commission, and should have made sure that they were represented on the Commission just as the nuclear industry is well represented.

The Commission cannot expect to be an effective voice in solving the nuclear waste problem if it excludes representation of important constituencies from participating in its discussions and formulating its recommendations. If you expect to reform the process for managing and disposing of spent fuel and nuclear waste, you best not begin by locking out of the process important constituencies whose inclusion is needed to reach a durable consensus on future policy.

III. The Commission should focus on getting the geologic repository program back on track. Regardless of whether U.S. nuclear capacity increases, decreases or stays approximately the same, and regardless of which nuclear fuel cycle is adopted or when, the United States needs one or more geologic repositories for the sequestering of spent fuel and high level radioactive waste for very long periods. Consequently, in our view the highest priority of the Blue Ribbon Commission is to get the repository program back on track. This should be the focus of your efforts and recommendations of your interim report. The issue of what is the preferred future fuel cycle can wait.

Moreover, the DOE-Office of Nuclear Energy's (DOE-NE) FY-2011 budget allocates \$195 million for research and development on advanced fuel cycles, exclusive of infrastructure costs. DOE-NE has its own FACA advisory committee, the Nuclear Energy Advisory Committee

(NEAC), and a Subcommittee on Fuel Cycle R&D. It would not be a good use of the Commission's time and effort to review the DOE-NE fuel cycle R&D effort or duplicate the NEAC advisory committee efforts.

With only one geologist among its members the Commission is not properly constituted to recommend preferred geologic repository media or sites. With its more diverse membership, including several former politicians, the Commission could be most helpful if it analyzed what went wrong with the previous processes for siting and licensing a repository in the United States, leading to the proposal to license and then the termination of the Yucca Mountain repository.

This analysis might well begin with Interagency Review Group of President Carter's administration, and then trace the corruption of the site selection process first by DOE and then by the Congress, and similarly trace the corruption of the licensing process by the Environmental Protection Agency (EPA), the Office of Management and Budget (OMB) and again the Congress. In this regard, I offer for your review my own summary of some of these failures in a speech I gave at Vanderbilt University in 2008 (Attachment 4). The Commission also should study the repository programs in foreign countries, e.g., in Sweden and Finland. Given the makeup of the Commission we urge you to focus on process so that we can get the process right the next time.

IV. There is a need for a new spent power reactor fuel storage policy that ends the practice of dense compaction of spent fuel assemblies in wet pools, and moves spent fuel into interim hardened dry cask storage. Fuel pools were originally designed for temporary storage of a limited number of irradiated fuel assemblies in a low density, open frame configuration. Since it is going to be decades before there is a geologic repository, to improve the safety of wet storage of spent fuel we should bite the bullet and decide as a matter of policy to end the practice of dense compaction of spent fuel in wet pools. The Commission should recommend that the Nuclear Regulatory Commission (NRC) establish appropriate licensing criteria for this purpose.

While dry cask storage of spent fuel at existing reactor sites is relatively safer than the operation of the reactors, dry cask storage can be made even safer by storing the dry casks in a hardened building such as the Ahaus Spent Fuel Storage Facility in Germany. The Commission should recommend that the Ahaus approach be adopted at most operational reactor sites and any new off-site interim spent fuel storage facility. The added security of such hardened enclosed storage is worth the small additional cost.

NRDC believes it makes sense to provide for consolidated dry storage of spent fuel from permanently shut down reactors that are not at sites with reactors still operational. This would facilitate decommissioning of shut down reactor sites. NRDC is opposed to off-site consolidation of spent fuel from any reactors at sites where there are operational reactors, because a) it is unnecessary, b) it does not reduce significantly security risks at the reactor sites, c) it increases risks associated with transportation of spent fuel, and d) it reduces the pressure to obtain a geologic repository.

V. The single-pass plutonium recycle fuel cycle as practiced in France should not be adopted by the United States. There are numerous fuel cycle options, but three have

commanded the most attention:

1) the once-through cycle and practiced today in the United States;

2) a single-pass recycle in thermal reactors (the French/Areva option); and

3) a balanced closed cycle with transmutation of plutonium and other actinides in fast reactors.

Two issues the Commission will undoubtedly address are: (a) whether the United States should shift now, or in the foreseeable future, from option 1) to option 2); and (b) whether the federal government should continue to invest heavily in research and development on option 3).

We believe the costs to the United States of adopting the single-pass recycle fuel cycle as practiced in France today vastly outweigh the benefits because:

- 1. The cost of fresh plutonium-uranium mixed oxide (MOX) fuel is several times that of low enriched uranium (LEU) fuel, and this cost gap is likely to persist for decades, if not indefinitely.
- 2. The commercial development of a closed fuel cycle in the United States would be very costly and would either require massive federal subsidies or a "state-socialist" federal enterprise.
- 3. It would increase the level of foreign interest and activity, and therefore the proliferation risk, associated with plutonium separation in non-weapon states of concern.
- 4. The safety and environmental risks associated with reprocessing, MOX fuel fabrication, and managing the larger quantities of low level radioactive waste outweigh the reduction in harms associated with uranium mining, which I acknowledge are significant and need to be addressed directly by significantly improving environmental regulation of uranium mining and recovery operations. But in this case the proposed plutonium cure is worse than the disease.
- 5. The closed or partially closed fuel cycle results in higher intermediate and low-level radioactive waste including decommissioning waste.
- 6. There is no significant reduction in geologic repository requirements from moving to an interim single-pass MOX recycle—any such putative benefit is premised on an eventual transition to a balanced fast reactor cycle in which the single-pass stored MOX has remaining fuel value to be extracted.

VI. The wide spread use of fast reactors and a closed fuel cycle to burn selective actinides for waste management purposes has essentially no chance of succeeding within any policy time frame that is relevant to resolving either current nuclear waste storage issues or the problem of decarbonizing the U.S. electric power generation sector. Continued U.S. research and development (R&D) on advanced reprocessing will also fan global interest in plutonium separation and utilization technology and thereby increase nuclear weapons proliferation risks.

Closed fuel cycle schemes to reduce repository requirements typically require that on the order of one-third of the reactor capacity be comprised of fast reactors. The precise fraction is not important here—only to note it is a large fraction. To achieve such a balanced ratio of fast to

thermal reactor capacity in the United States in the next few decades would require roughly that the next 50 gigawatts-electric (GWe) of reactor capacity built in the United States to be fast reactors, e.g., 50 fast reactors each about the average size of U.S. nuclear power reactors operational today. The Commission should acknowledge the fundamental reasons why this outcome is highly unlikely in the next few decades or for that matter in this century.

History has not been kind to fast reactors. They have cost considerably more than thermal reactors, and seem likely to stay that way, and have proven to be much less reliable than thermal reactors.

Commercial fast reactor development programs failed in: 1) the United States; 2) France; 3) the United Kingdom; 4) West Germany; 5) Italy; 6) Japan; and 7) the Soviet Union/Russia. After spending on the order of \$100 billion current dollars on fast reactor development there is only one operational commercial-size fast reactor out of about 436 operational commercial power reactors worldwide and even this one at the Beloyarsk Nuclear Power Station in Russia is not fueled with plutonium. Despite decades of state-socialist support, Russia has not fully closed its fuel cycle. The fast reactor program in India is not showing any signs of success, and the program in China is at a very early stage, although China is preparing to purchase two BN-800 fast reactors from Russia. (For a more complete history of the fast reactor programs in the United States, France, United Kingdom, Russia, Japan and India, see Thomas B. Cochran, Harold A. Feiveson, Walt Patterson, Gennadi Pshakin, M.V. Ramana, Mycle Schneider, Tatsujiro Suzuki, and Frank von Hippel, "Fast Breeder Reactor Programs: History and Status," International Panel on Fissile Materials, Research Report 8, February 2010, available at <u>http://www.fissilematerials.org.</u>)

The U.S. and Soviet navies also tried to adopt fast reactors for naval reactor propulsion, but these programs were failures as well. In the view of Admiral Hyman G. Rickover, fast reactors were "expensive to build, complex to operate, susceptible to prolong shutdown as a result of even minor malfunctions, and difficult and time-consuming to repair."¹

Admiral Rickover got it right, and this has been the history of fast reactors. One need only review the experience of the flagship fast reactors in the United States, United Kingdom, Germany, and Japan. The U.S. *Clinch River Breeder Reactor* experiences huge cost overruns well before it was cancelled in 1983. The French *Superphenix* operated only eleven years at an average capacity factor between 6 and 7 percent. The U.K's Prototype Fast Reactor (PFR) experienced problems with its steam generators. Japan's *Monju* demonstration reactor, which was recently restarted after being shut down for 14 years following a small sodium leak, now has a lifetime capacity factor of less than one-half of one percent.

The Soviet navy adopted lead-bismuth cooled fast reactors for its Alfa Class submarines; but then like the United States the Soviets abandoned fast reactors in favor of pressurized water reactors for naval propulsion.

¹ Richard G. Hewlett and Francis Duncan, *Nuclear Navy: 1946–1962* (Chicago: University of Chicago Press, 1974), p. 274.

VII. Nuclear Economics.

Fuel Costs. Like most major minerals, the improving efficiency of uranium extraction has kept pace with the depletion of accessible, known reserves and the costs of finding new reserves. If this trend continues the constant dollar cost of uranium extraction is likely to remain about what it is today or possibly even decline somewhat. This is not to say that there will not be significant short term price fluctuations due to temporary supply-demand imbalances in the global uranium market, as occurred in the mid-1970s and again three or four years ago.

In 1960 the Atomic Energy Commission (AEC) was paying \$8.85 per pound of $U_3O_8^2$ Using the GDP deflator index, that price would be six times this amount in today's dollars, or \$53 per pound of U_3O_8 (\$138/kg U). Over the past year monthly spot uranium prices fluctuated between about \$51 and the current value of just over \$40 per pound of U_3O_8 . Prices have been descending following a very sharp short-term increase.

The other principal component of the cost of low enriched uranium (LEU) fuel is the cost of enrichment. On July 1, 1962, the AEC charge for enriched UF_6 reflected a charge of about \$30/kg SWU, equivalent to \$175/kg SWU in 2010 dollars.³ I suspect the actual cost was much higher and the charge did not reflect the entire cost of constructing the gaseous diffusion plants. In any case, the price of SWUs today is about \$160/kg SWU, so SWUs costs have not increased appreciably in over the past 50 years.⁴

In 1970, reprocessing costs were on the order of \$30/kg, the equivalent of about \$140/kg in 2010 dollars, and the AEC was predicting reprocessing costs would go down. Today, in real terms reprocessing costs are more than an order of magnitude higher than they were 40 years ago.

In the 2003 MIT report, "The Future of Nuclear Power," the cost of a MOX fuel was estimated to be \$8,890/kg, some four times greater than the cost of LEU fuel, \$2040/kg, or 2.24 cents/kWh versus 0.515 cents/kWh.⁵ Assuming this 1.725 cent/kWh cost differential and that one out of eight fuel assemblies are MOX assemblies (where the plutonium recovered from reprocessing 7 spent LEU fuel assemblies is used to make one MOX assembly), U.S. consumers would be paying \$1.7 billion/year more for their electricity today, or \$70 billion more over 40 years.

² "Prior to April 1, 1962, all domestic uranium mills operated under negotiated-price contracts with the U.S. Atomic Energy Commission. The prices paid under these contracts varied with the grade of the ore handled and with the cost structure of the individual mills. The 1960 average was \$8.85 per pound of U_3O_8 or equivalent, and in that year sales to the AEC approximated \$300 million. Starting April 1, 1962, and continuing through December 31, 1966, the AEC will purchase mill concentrates at a guaranteed base price of \$8.00 per pound under contracts that will specify production rate, ore source, and related matters." John F. Hogerton, *The Atomic Energy Deskbook* (New York: Reinhold Publ. Corp., 1963), p. 586.

³ John F. Hogerton, The Atomic Energy Deskbook, p. 582.

⁴ From FY 1971 to FY 1982 the AEC/DOE's cost of enrichment at the three gaseous diffusion plants gradually increased from \$23.80/kg SWU to 102.62/kg SWU, the equivalent of about \$105/kg SWU to \$190/kg SWU in 2010 dollars. AEC, "AEC Gaseous Diffusion Plant Operations," January 1972, p. 17, and DOE, "Uranium Enrichment, 1983 Annual Report," ORO-842, pp.28-29.

⁵ Massachusetts Institute of Technology, "The Future of Nuclear Power: An Interdisciplinary MIT Study," 2003, Appendix Chapter 5 — Economics.

In sum, barring an explosive global nuclear demand growth scenario that permanently outstrips the capacity of uranium suppliers to keep pace—leading to a long term secular upward trend in prices like the one we have seen in the petroleum markets since 1999—LEU fuel costs in real terms are unlikely to increase significantly for many decades and MOX fuel will remain non-competitive with LEU fuel.

Capital Costs. In 1968 the AEC was pegging the capital cost of light water reactors (LWRs) at \$150/kW and predicting that it decrease to about \$125/kW by 2000, or in today's dollars from \$770/kW in 1970 to \$640/kW in 2000. These historical nuclear capital cost estimates were too low by roughly an order of magnitude. In 1968, the AEC also estimated that the capital cost of a liquid metal fast breeder reactor (LMFBR) would be about 20% higher than that of an LWR, but the cost differential was projected to shrink to zero by about 2015. Today, LWRs cost \$4,000/kW to \$9,000/kW and the estimated LMFBR-LWR cost differential is greater than 20%. Thus, the cost differential between a LWR and a fast reactor is likely to be some multiple of \$1000/kW, which translates into a multiple of 1 cent/kWh. For a 50 GWe fleet of fast reactors operating at 90% capacity factor—needed to balanced 100 GWe of thermal reactors in a closed fuel cycle for actinide burning—the added cost over 150 GWe of LWR capacity would be some multiple of \$4 billion/yr, or one to several times \$160 billion over 40 yrs. To this one must add the higher closed fuel cycle costs—an added cost of more than \$100 billion over 40 years.

Plutonium recycle and the introduction of fast reactors would contribute nothing toward the decarbonization of global electricity supplies for many decades, while consuming valuable capital resources better spent on less costly and more practical energy alternatives for climate change mitigation. Continued research into actinide recycle could encourage the development of hot cells and reprocessing R&D centers in non-weapon states of concern, as well as the training of cadres of experts in plutonium chemistry and metallurgy, all of which pose a serious proliferation risk. Essential predicates for introducing plutonium fuels and fast reactors on a large scale must include not only reliable technology and sound economics, but also an international nuclear security and nonproliferation framework that is far stronger than the one that exists today. And finally, for those who take the long term prospect of nuclear disarmament seriously, I would note that premature proliferation of closed nuclear fuel cycle facilities, without such a robust framework in place would effectively doom prospects for global elimination of nuclear weapon arsenals.

VIII. Concluding remarks. Faced with a host of more urgent budget and R&D priorities related to decarbonization of our energy supply system over the next several decades, NRDC opposes spending additional federal resources on technically dubious and economically inefficient schemes to further develop or deploy closed fuel cycles, advanced reprocessing technologies, and fast reactors. We support research toward developing incremental improvements in the once-through fuel cycle, particularly improvements in air-cooling systems that could diminish the significant ongoing and future impacts of nuclear reactors on freshwater resources and marine life, and most importantly we support getting the geologic repository program back on track.

Plutonium is currently a valuable resource for nuclear weapons, but not for nuclear energy production. It has a negative economic value for this purpose and we see little prospect that this will change in the foreseeable future because there is no evidence that uranium resources are likely to become scarce in the world, or even in those countries that are closely allied with the United States.

In 1944, when Enrico Fermi, Leo Szilard, Eugene Wigner, Alvin Weinberg and others gathered at the Metallurgical Laboratory in Chicago to discuss the possibilities for using nuclear fission to heat and light cities, uranium was scarce and so they proposed to use plutonium breeders. Today many nuclear engineers refuse to learn some of the most important lessons from the subsequent 66 years of nuclear developments. They are still living the dream of Fermi, et al.—hanging onto the notion that *someday* civil plutonium use will become economical, and therefore we should continue to spend hundreds of millions or billions of dollars annually preparing for the imminent arrival of the closed nuclear fuel cycle. While no one can say definitively that this "someday" will *never* come, we are clearly talking about a period of at least several and more likely many decades from now before the economic and international security calculus begins to shift in favor of this option.

In the meantime, all that spent fuel isn't going anywhere. It will continue to sit there in wet pools and dry casks, preserved for possible use by or harm to future generations. This Commission is not properly constituted to be making a recommendation as to whether it is in the best interest of future generations that spent fuel be disposed of permanently or retained for possible use generations from now. At the very least the Commission should not take up this societal issue unless it is prepared to review the literature on the theory of justice and the intergenerational transfer of risks related to nuclear power. One would hope that the Commission could focus its attention on more practical possibilities for arriving at a social and political consensus on some of real issues that confront nuclear power, spent fuel management, and nuclear waste disposal over the next few decades.

Statement before the

Blue Ribbon Commission on America's Nuclear Future

Of

Honorable Greg R. White Michigan Public Service Commission

On behalf of

The National Association of Regulatory Utility Commissioners



May 25, 2010 Washington, D.C.

NARUC Preferences for Nuclear Waste Management and Disposal

Background

The National Association of Regulatory Utility Commissioners (NARUC) supports the policy in the Nuclear Waste Policy Act of 1982 setting forth:

- The federal government is responsible for disposal of high-level radioactive waste including spent (used) nuclear fuel from commercial reactors
- The owners of spent nuclear fuel, and their ratepayers, shall pay (and have paid) for the share of disposal costs for their material.
- Disposal shall be in a geologic repository licensed by the Nuclear Regulatory Commission with radiation standards from the Environmental Protection Agency

We had an expectation from the NWPA that the Department of Energy (DOE) would begin initial waste acceptance and disposal in the properly licensed and constructed repository by January 31, 1998 as the law and contracts signed with owners of spent fuel required. Those expectations began to fade as the project encountered one difficulty after another. The date was revised to 2010, but that proved elusive as well. The last official schedule forecast possible opening in 2017, subject to several conditions including adequate appropriations and prevailing over further legal challenges.

NARUC had no preference for Yucca Mountain when Congress amended the NWPA in 1987 to study that site alone for suitability as a repository. We supported the congressional resolution in 2002 to override the veto of the Governor of Nevada of the site suitability decision. We took that position with the understanding that once approved by Congress, the repository would still be required to meet the Nuclear Regulatory Commission and Environmental Protection Agency regulatory requirements in an extensive NRC license review proceeding that was expected to take three or four years.

NARUC and the State public utilities commissions it serves are stakeholders on the disposition of used nuclear fuel from commercial reactors because the fees paid to the Nuclear Waste Fund by the owners of the used fuel are passed on the ratepayers who are supplied with electricity from nuclear power generation¹.

Changes at Yucca Mountain

We are not here to argue whether the decision by President Obama that Yucca Mountain is "not on the table" and that the Secretary of Energy has determined that building a repository there is "not a workable option." We do observe that when the Director of the Office of Civilian Radioactive Waste Management (OCRWM) within the Department of Energy (DOE) submitted the Yucca Mountain repository license application in June 2008

¹ A table of cumulative Nuclear Waste Fund payments by States is attached

it was a major document. This 8,000 page document was the culmination of over 25 years of exhaustive investigation of the site and calculations of the forecast of radiation risk that the facility would meet, first for a period of 10,000 years then later revised by EPA revised standard to an unimaginable period of one million years. We expected the staff of the NRC, aided by expert consultants to conduct a rigorous review, and that an open adjudicatory process would be subject to contentions by those who challenged the proposal.

In early 2009, the Obama Administration announced its intent to terminate the Yucca Mountain project and to create a blue ribbon panel to make recommendations on an alternative disposal strategy, but the FY 2010 DOE budget contained funding to support the continuation of the license review.

When the FY 2011 DOE budget was released a year later, it took a different approach:

- 1. The license application would be withdrawn with prejudice from further consideration.
- 2. No funding for Yucca Mountain would be included in the FY 2011 budget.
- 3. The Blue Ribbon Commission on America's Nuclear Future was formed.
- 4. The OCRWM organization would be dissolved and residual functions would be split between two other DOE offices beginning in FY 2011.

On March 3, 2010 the Department of Energy filed a motion with the NRC's Atomic Safety and Licensing Board to withdraw the license application with prejudice. Our organization and several others filed a petition to intervene for the purpose to oppose the withdrawal, asserting that the withdrawal gave little rational explanation or record-based findings to justify it. Concurrently, several lawsuits were filed before the U. S. Court of Appeals challenging whether DOE had the authority to terminate the Yucca Mountain repository.

Those questions will be addressed before the respective bodies. We will express our preferences to the Commission as though a repository at Yucca Mountain is unlikely but still possible in the future and the Commission has been tasked with coming up with a recommended strategy "to meet the government's obligation to dispose of our Nation's used nuclear material," as the President's January 29, 2010 Memorandum stated.

NARUC Preferences

1. Since 1998 when DOE failed to meet its statutory and contractual obligation to begin waste acceptance for disposal, we have simply asked that the government fulfill its part of the NWPA disposal bargain and remove the spent fuel per the Standard Contract since the utilities and ratepayers continue to pay for services not performed. That remains our position as we believe that the license application shows that Yucca Mountain will meet the requirements of NWPA and regulations.

- 2. If Yucca Mountain cannot be licensed or is licensed but not built, we interpret NWPA as still requiring DOE to develop and dispose of spent nuclear fuel in a geologic repository. Therefore, unless the law is repealed or amended to direct otherwise, Congress should authorize DOE to conduct a site search for another suitable repository site. This requirement to amend the NWPA in order to pursue an alternate site was confirmed in a Congressional Research Service report². We understand Secretary Chu's statement before the Commission is that you are not a siting board, but we believe you can and should review site selection criteria and whether different incentives might make siting less contentious.
- 3. It may be difficult to re-open the question of applicability of the radiation standards set after many years and several lawsuits, but we suggest that some review process be conducted or recommended. Those who lack knowledge of radiation health find difficulty conceiving the radiation standards (40 CFR Part 197) that extend to a million years. The 1995 report of the National Research Council recommended a risk-based regulation, but the Environmental Protection Agency issued a dose-based standard.
- 4. We would hope that the Yucca Mountain experience and more positive results in other countries have lessons learned that make development of a repository more successful on a second try. We believe the roles of government and the nuclear industry should be reconsidered for the next try and the way in which the Nuclear Waste Fund is managed definitely needs reform. We will be glad to explain why.
- 5. Recognizing that "starting over" to develop a repository will take years, possibly decades, there remain several critical matters to address immediately:
 - a. There are nine sites where ten reactors have been permanently shut down, yet the sites cannot be fully returned to other productive uses since spent fuel is still stored there. In 2007 Congress asked DOE to come up with a plan to move that fuel to a central interim storage facility DOE would build and manage. Congress should direct DOE to implement such a plan or make arrangements with the private sector to provide this storage. We solicit the Blue-Ribbon Commission's support for this for immediate implementation. We would even request an early signal from the Commission that it sees no conflict with any of the foreseeable disposal or reprocessing strategies it may recommend and the development of a modest sized consolidated interim storage facility.
 - b. Federal courts have already ruled that the federal government is liable for the added storage costs past the dates agreed in contracts with spent fuel owners (termed as "purchasers" in contract parlance.) This is particularly costly in most locations where the cooling pool storage at the reactor sites

² The Yucca Mountain Litigation: Breach of Contract Under the Nuclear Waste Policy Act of 1982. Congressional Research Service, December 2009.

has long since been filled to capacity and the older fuel removed and placed in concrete and steel containers called dry casks that are stored outside or in vaults. Damage awards and, in some cases, settlement agreements have been reached. In 2009—when DOE had a plan to begin waste acceptance and disposal at Yucca Mountain by 2017—DOE officials estimated that the liability for 65 cases could reach \$12.3 billion. That estimate can only grow as long as the government does not take title to the fuel. Something needs to be done to limit the liability.

- c. Not in all locations where spent fuel is stored 72 operating and shutdown reactor sites in 34 States—and certainly not constantly, but periodically some neighboring community or individual or organization opposed to nuclear power will raise questions or even voice fears over safety and security of these storage facilities. Even President Obama in 2007 referred to a need for "improving the safety and security of spent fuel at plant sites" until a safe, long-term solution can be implemented. Although the owners and the NRC contend the storage is safe and secure, this factor was included in the site recommendation by Energy Secretary Abraham in 2002, as the country became more concerned about terrorism threats in the wake of the 9/11 attacks. While we are not alarmed or even concerned about these risks, the important point is that some of the public can be stirred to fearing risks that they perceive.
- 6. During the Yucca Mountain site decision debate, suggestions were made by those who either opposed the site or who expressed fears over perceived risk of transporting spent fuel from present location that the spent fuel should remain where it is. Most never said how long that might be, but a few were more thoughtful by adding, "...until technology provides a better solution." That "leave it where it is" disposition was precisely what the findings of the NWPA over 27 years ago declared to be inadequate. Leaving spent fuel at reactor sites was not the basis for utilities and ratepayers to provide close to \$30 billion to the Nuclear Waste Fund since 1983. And that is not what President Jimmy Carter had in mind when he said in 1980, "Resolving civilian waste management problems shall not be deferred to future generations."
- 7. It may seem unnecessary or beyond the scope of the Commission, but we believe attention should be focused by the commission on the gap between the excellent (unblemished) safety record in transportation of all forms of radioactive waste over the past 40 years yet many people have a perception that transportation of this material poses great risk. It is time to be plain in understanding that Yucca Mountain opponents sought to exploit that sense of danger to serve their purpose. The Senator Majority Leader said, "It would be dangerous and irresponsible to ship the most dangerous substance known to man through cities and small towns, and past schools, hospitals and businesses so it could be buried 90 miles outside

of Las Vegas.³" How will any of the possible alternatives the Commission may recommend be feasible if the senator's belief extends to other locations? The mass media seems to add to the sense of dread of shipments of almost any type of radioactive material. Journalists are rarely familiar with such objective analyses of transport risk as found in the *Going the Distance*? report of the National Research Council⁴.

8. We expect the Commission will be interested in reprocessing spent nuclear fuel or "recycling" as many find it more appealing to refer to the means of extracting more of the energy value of the partially used fuel. There will be questions and discussions over economics, technologic advances, and potential for proliferation. NARUC has supported continued research into reprocessing and shares the view that if there will be substantial global nuclear power expansion there will probably come a time when uranium becomes more scarce and expensive and closing the fuel cycle will become necessary. No one can say now when that may occur. We do believe this:

Even if we reprocess spent nuclear fuel a geologic repository is still needed for (a) the defense-related high-level radioactive waste that has already been reprocessed or cannot be reprocessed and (b) the residue from reprocessing that still requires isolation, perhaps less of it but still for hundreds or thousands of years.

Moreover, it should not be unexpected that while many people may find the idea of recycling attractive there is still likely to be opposition to siting such a facility as well as transporting spent fuel to it. We have seen analogies with advocates of wind energy being opposed when it is sited near them. Nonetheless, it was encouraging that in the GNEP initiative DOE solicited expressions of interest in hosting recycling facilities in 2007 and eleven commercial and public entities responded with some potential interest.

9. The International Atomic Energy Agency⁵ in a position paper of international experts in 2003 had some relevant points to consider:

"Perpetual storage of radioactive waste is not a sustainable practice and offers no solution for the future."

"The argument that action should be postponed until a scientifically better solution is developed is not convincing. After decades of research on the disposal of nuclear wastes, geologic disposal is the only approach that has gained widespread credibility in the scientific community and

³ "Reid, Ensign Introduce Legislation to Fight Proposed Yucca Mountain Dump," Press release, Senator Harry Reid, March 6, 2007

⁴ Going the Distance? The Safe Transport of Spent Nuclear Fuel and High-Level Radioactive Waste in the United States, National Research Council, 2006

⁵ The Long Term Storage of Radioactive Waste: Safety and Sustainability, 2003, IAEA

therefore it is highly unlikely that some completely new idea will be forthcoming."

10. Finally, the commission should consider these statements from the National Research Council⁶ of the National Academies of Science:

"Geological disposal remains the only long-term solution available."

"Our present civilization designs, builds, and lives with technological facilities of much greater complexity and higher hazard potential.

"Today the biggest challenges to waste disposition are societal."

The National Research Council report did consider monitored storage on or near the earth's surface to be a feasible option, however "the major uncertainty is in the confidence that future societies will continue to monitor and maintain such facilities." In the Environmental Impact Statement for Yucca Mountain, the EIS analyzed environmental impacts for two "no-action" alternatives:

- 1. Continue storage at 72 commercial and 5 government sites under regulatory compliance for 10,000 years, which included replacement of dry cask storage containers every 100 years.
- 2. Continue storage at those sites, but after 100 years no effective institutional controls are assumed and storage facilities would begin to deteriorate leading to radiological contamination.

The first scenario would be far more expensive than the repository. The second would be irresponsible with unacceptable harm to humans and the environment.

If a seemingly attractive site such as Yucca Mountain –often referred to as "the most studied piece of real estate on Earth"—cannot be developed for a repository, **does that mean it will be as difficult or even more difficult in another site in another State?** Will the well known battle against Yucca by the State of Nevada be a blueprint for other State leaders to follow, should the "threat" shift in their direction? For a candid account of some of the political moves and countermoves in 1987 and more recently, see the sidebar in a 2009 Scientific American article by *New York Times* reporter, Mathew L. Wald⁷.

With the Nevada "experiment" looking like a failure, we should learn some lessons on why it failed. We can observe that the project was pursued under the leadership of five Presidents and eight Secretaries of Energy with various degrees of commitment to the goal. There were lawsuits and other actions taken to impede the evaluation process. Site investigation and pre-licensing activities have consumed more than \$7 billion.

⁶ Disposition of High-Level Waste and Spent Nuclear Fuel, 2001, National Research Council

⁷ "What Now for Nuclear Waste?", Mathew L. Wald, Scientific American, August, 2009

Are there lessons to be learned from other countries facing a similar challenge? With smaller quantities of waste, different geography to consider and different institutional and social conditions, many other countries are encountering difficulty even though there seems to be consensus among international technical experts that geologic repository disposal is the preferred alternative. There are two notable exceptions where positive signs of progress are visible. Both Sweden and Finland have considered alternatives, chose geologic disposal, had public dialogue, conducted a site search and gained both national and local concurrence for sites that were chosen in each country. In fact, many consider the key to success was assuring the local communities considered for the repository that it would only be approved for development if the community agreed. It has been our observation that Nye County, in which the Yucca repository site is located, is supportive of the repository, yet it is the more distant and much more populated Las Vegas and the State political leadership who fought the project most vigorously.

Having to gain the support of a community or State before the project site would be selected changes the whole dynamics of the relationship between the federal government (or a hybrid organization on behalf of the government) and the region. Although the magnitude of the financial incentives (benefits) authorized in Subtitle F of NWPA, that could have been provided to the State of Nevada, are not large in today's dollars, the State was adamant from the outset that it would never accept such benefits because they were convinced the facility posed unacceptable risks to the public.

Could a site search be conducted not just for technical suitability but with assurances that State and local approval would be respected and with more generous financial and other incentives? A recent report by several professors of nuclear engineering described some ideas from a 2008 workshop on how a "post-Yucca" solution to spent fuel management might be pursued.⁸ In the report, the participants propose a more market-based approach to various storage, recycling and disposal alternatives including setting up a new "permanent fund" similar to that for Alaskan oil, which has been rewarding in that State.

The Canadians have had some difficulties and delays with their disposal program have now shifted to a site search modeled along the lines of the Finland and Sweden approach. They have two other differences, and seeming advantage over their southern neighbors:

- They have a well-managed interim storage program in place. This means there is no particular time pressure to get their repository in operation.
- The Nuclear Waste Management Organization, responsible for the repository program, is created from and managed by the nuclear reactor owners. The NWMO determines the repository program costs, sets fee levels, collects and invests the fee and budgets for program expenses.

The Canadian government is involved in regulatory requirements and ensuring public participation in the repository program but relies more heavily on the nuclear industry

⁸ "Plan D for Spent Nuclear Fuel" University of Illinois at Urbana-Champaign, 2009

than we do in the United States. There are some commonalities on repository design among the Sweden, Finland and Canadian programs.

Financing the Disposal Program

The Nuclear Waste Policy Act authorized a well-designed financing scheme for the repository program. It created the Nuclear Waste Fund (Section 302) and it even had provisions for a separate Interim Storage Fund (Section 136) for a limited scope, limited duration program that has since expired. There was direction for allocating repository costs between the Nuclear Waste Fund (NWF) for commercial waste and the Defense disposal fund for government high-level radioactive waste, largely from weapons programs and nuclear propulsion systems on Navy ships and submarines.

The NWPA set the NWF fee at one mil (tenth of one cent) per kilowatt-hour of nucleargenerated electricity sold. To our knowledge the fee was not precisely calculated based on disposal costs anticipated, but the Secretary of Energy is charged with the requirement to annually review the adequacy of the fee. There are provisions to borrow to meet cash flow requirements and for the Secretary of Treasury to invest any surplus funds in the balance in securities and for the Fund to be credited with investment returns (interest.) The history of the Fund shows a steady and slightly growing revenue stream, as nuclear productivity improved in recent years, compared with a fractional appropriation rate. With the accumulating balance, there has never been a proposal for a fee increase.

Some people are puzzled when they look at the reports on the status of the Fund and ask why the repository program has had a history of budget restrictions?

The answers lie in a fog of fiscal, political and communications problems:

- 1. There is no correlation between NWF fee revenue and repository program appropriations. Appropriations come from the Fund, but appropriations have never approached the level of fee revenue.
- 2. The Fund is often referred to mistakenly as a "trust fund," although it was intended to operate as such a fund though it is not designated as such.
- 3. Federal fiscal reform legislation enacted subsequent to NWPA applied to the Fund has left the appropriations levels limited more by discretionary spending caps set for DOE than by fee revenue.
- 4. The NWF "balance" reported by DOE currently at over \$24 billion is largely an illusion. It is more accurate to consider the balance to be the sum total of the money from fees that came into the Treasury and *spent* on other government activities unrelated to nuclear waste and that this amount that was "borrowed" will be returned to the Fund by a future congress. DOE has a different understanding of this murky picture and has the securities document in a safe.

Maybe that is so, but the practical effect of all this is that money paid in fees by spent fuel owners for disposal services they contracted for is only made available for that purpose when Congress appropriates it.

- 5. The forecast for "investment returns" expected to be credited to the Fund in FY 2010 is over \$1.1 billion which is greater than the expected fee revenue of \$769 billion for the same period. In view of the of the uncertainty over a new disposal strategy as the Commission and the Administration consider alternatives that will have to gain congressional and public acceptance, in July 2009, the Nuclear Energy Institute proposed to the Secretary of Energy that the fees be suspended inasmuch as the expected interest will more than sufficiently cover the rather minimal program expenses. NARUC supports that request. The Obama Administration in its Statement of Administration Policy for the FY 2010 Energy and Water Development appropriations bill said "All of the fees collected in the Nuclear Waste Fund are essential to meet those obligations" referring to the obligation for managing and ultimately disposing of spent fuel. We find that difficult to accept since:
 - The NWPA does not currently authorize the Fund to be used to *manage* spent nuclear fuel. That is the owners responsibility until DOE takes title for disposal. The law could be revised, of course, but there should be a presentation of the costs and benefits as well as open debate.
 - Since the Administration has declared Yucca as "not an option" and there is no defined replacement disposal strategy, how can anyone know what it will cost?

When the FY 2011 DOE Budget requested no appropriations from the Nuclear Waste Fund, that led NARUC on April 2, 2010 to file a petition for judicial review before the U.S. Court of Appeals for the District of Columbia Circuit of the rejection of our 2009 proposal that fee payments be suspended until there was some sign that the recommendations of the Commission will be "actionable" and accepted by the Administration, Congress and the public.

Suffice it to say, the Nuclear Waste Fund is a mess and needs substantial reform if it is to be the primary source of financing a new disposal strategy. Various schemes have been advanced for use of the Fund to pay for such proposals as having DOE take title and manage spent nuclear fuel at present reactor storage sites (often without saying for how long) or to shift to a recycling program using the Fund to get started or to make up the unfavorable cost disadvantage of reprocessed fuel to fresh fuel. Such proponents may not realize the \$24 billion is not readily available.

We like the idea of shifting the fee structure to be a fee based on waste generated rather than based on electricity sold, so that market forces might provide incentives to reduce the amount of waste that is generated. As our introductory letter to the Commission of March 25, 2010 stated, NARUC recommends the Commission form a Finance Committee to assess the present financing mechanism and see what improvements will provide a more reliable means of ensuring success over the long haul for whatever reprocessing or disposal strategy the Commission recommends.

How Should the New Disposal Program be Managed?

Some stakeholders of the civilian radioactive waste management program—including ourselves—have been critical of the management of the repository program over the years and some have questioned whether the Office of Civilian Radioactive Waste Management (OCRWM) within DOE is the best organization to manage the disposal program. It would be unfair to place all the blame for program delays on DOE as there were numerous attempts by opponents of the Yucca repository to defeat or at least delay it. While the proposed FY 2011 budget would eliminate OCRWM, without casting any negative suggestions on the caliber and dedication of the personnel in the Office of Nuclear Energy that is expected to take up implementation of the recommendations of the BRC, what leads us to think they will be any more successful than their OCRWM predecessors? We believe the Commission should review organizational as well as technical alternatives.

In Section 303 of NWPA, Congress asked that the Secretary of Energy in consultation with the Director of the Office of Management and Budget (OMB) and other federal agencies study alternative approaches to managing the disposal program, including establishing a private corporation, and report within a year. An advisory panel of volunteers was convened and reviewed both the financing and organization of the new program. It looked at OCRWM and nine alternatives. Just about all of the alternatives were considered better than OCRWM. The report preferred a hybrid "FEDCORP."

In 2000, Congress asked DOE to review the prior study and in 2001 the Secretary of Energy submitted the Alternative Means of Financing and Managing the Civilian Radioactive Waste Management Program (AMFM) report. It concluded that reform of the financing of the program was "the highest priority issue in need of immediate action," but recommended that no decision be made on alternative management approaches be made until the Yucca Mountain site approval which had not taken place at that time. We are unaware of any reaction by Congress, although the modest, in our view, legislative proposals in 2004 and 2005 to reform the Nuclear Waste Fund were not enacted.

We can agree there are attractive benefits that could be obtained by different organization, whether within the federal government, quasi-governmental or private sector, to implement a new disposal strategy that the Commission may recommend, but, it seems to us, there needs to assurance that the chosen strategy will be supported and sustained. With over 27 years invested in the repository program that was agreed to as *national policy* with the enactment of the NWPA to come to an end with:

- Abandonment of a site studied, declared suitable and not having completed review and determination of its safety by the independent, technically qualified agency designated in law to make that judgment, and
- Some ten billion dollars having been spent on the site evaluation and the illusion of another \$23 billion accumulated in the Nuclear Waste Fund, but in reality that represents what has been "borrowed" and spent on other things with re-payment in doubt.

On May 6, Senator George Voinovich introduced the United States Nuclear Fuel Management Corporation Establishment Act, S.3322 which would set up a federal corporation to assume the responsibilities now assigned to the Department of Energy, as well as new ones, to implement an integrated spent nuclear fuel management strategy. There are elements of the bill that are conceptually attractive and others that need to be improved. It calls for establishment of a Nuclear Fuel Management Corporation Fund with an Operating Account and a Capital Reserve Account into which the present Nuclear Waste Fund would be transferred, however the corpus of the Nuclear Waste Fund would be transferred to the Capital Reserve Account as an "unfunded asset" which will continue to accrue interest at rates and maturities determined by the Secretary of Treasury. The bill seems to remove the yoke of annual appropriations, spending caps and Section 302(b) appropriations allocations. We do not have an opinion on the bill as yet, but we recommend the Commission give it consideration.

That concludes my statement. We would be pleased to work with the Commission, its subcommittees or staff to address any of the topics we referred to. NARUC appreciates the members of the Commission taking on this assignment and that your charter is related not just to how best to store, possibly reprocess and eventually dispose of nuclear waste but also to assess how the failure to make genuine progress may impede achieving America's nuclear future.

NUCLEAR WASTE FUND RATEPAYER PAYMENTS BY STATE THROUGH 3-31-10 (MILLIONS OF DOLLARS)

	PAYMENTS	RETURN ON	TOTAL		FUND ASSETS**
STATE	1 mill/kwh,	INVESTMENTS	(PAY+RETURN)	DEBT*	(TOTAL + DEBT)
	One Time+Int	as of 9/30/09	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		(
AL	525.5	392.1	917.6	0.0	917.6
AR	350.1	261.2	611.3	175.5	786.8
AZ	259.7	193.8	453.5	0.0	453.5
CA	1,001.3	747.1	1,748.4	0.0	1,748.4
со	0.2	0.1	0.3	0.0	0.3
СТ	290.1	216.5	506.6	358.2	864.8
DE	45.6	34.0	79.6	0.0	79.6
FL	831.5	620.4	1,451.9	0.0	1,451.9
GA	670.7	500.4	1,171.1	0.0	1,171.1
IA	244.4	182.4	426.8	45.1	471.9
IL	1,834.8	1,369.0	3,203.8	971.9	4,175.7
IN	245.6	183.2	428.8	229.7	658.5
KS	130.4	97.3	227.7	0.0	227.7
KY	148.1	110.5	258.6	0.0	258.6
LA	316.0	235.8	551.8	0.0	551.8
MA	348.6	260.1	608.7	163.3	772.0
MD	384.1	286.6	670.7	0.0	670.7
ME	48.3	36.0	84.3	116.8	201.1
MI	305.9	228.2	534.1	198.0	732.1
MN	311.9	232.7	544.6	0.0	544.6
MO	246.2	183.7	429.9	5.1	435.0
MS	158.8	118.5	277.3	0.0	277.3
NC	1,508.6	1,125.6	2,634.2	0.0	2,634.2
ND	17.7	13.2	30.9	0.0	30.9
NE	186.5	139.2	325.7	0.0	325.7
NH	79.9	59.6	139.5	23.8	163.3
NJ	715.1	533.6	1,248.7	196.6	1,445.3
NM	75.5	56.3	131.8	0.0	131.8
NY	831.1	620.1	1,451.2	504.9	1,956.1
OH	452.2		789.6	32.6	822.2
OR	75.1	56.0	131.1	0.0	131.1
PA	1,348.1	1,005.9	2,354.0	66.5	2,420.5
RI	5.2		9.1	6.1	15.2
SC	675.5	504.0	1,179.5	0.0	1,179.5
SD	6.9	5.1	12.0	0.0	12.0
TN	562.0	419.3	981.3	0.0	981.3 1,359.7
TX	778.7	581.0		0.0 0.0	1,198.0
VA VT	686.1	511.9 73.5	•	0.0 141.5	313.5
WA	98.5 166.4			0.0	290.6
WA	421.2			0.0	735.5
YYI	421.2	5 14.5	755.5	0.0	735.5
SUBTOTAL	17,388.1	12,973.7	30,361.8	3,235.6	33,597.4
FEDERAL	19.8	14.8	34.6	0.0	34.6
INDUSTRY	16.8		29.3	0.0	29.3
TOTAL	17,424.7	13,001.0	30,425.7	3,235.6	33,661.3

* Funds owed for fuel burned before 1983 but not yet paid by utilities (as allowed by DOE contract)
** before withdrawals for expenditures by DOE

Prepared by Ron Howe, Michigan Public Service Commission, 517-241-6021, hower@michigan.gov

Statement of

Seth D. Kirshenberg Executive Director Energy Communities Alliance

On

Policies for Managing the "Back End" of the Nuclear Energy Fuel Cycle and Local Government Role in Decision-Making

Before the

Blue Ribbon Commission on America's Nuclear Future

May 25, 2010



Local Concerns. National Impact.

Energy Communities Alliance 1101 Connecticut Avenue, NW Suite 1000 Washington, D.C. 20036 202-828-2317 <u>sethk@energyca.org</u> <u>http://www.energyca.org</u>

Introduction

Chairmen Hamilton and Scowcroft, and distinguished members of the Blue Ribbon Commission on America's Nuclear Future (Commission), thank you for providing the Energy Communities Alliance (ECA) with the opportunity to present our views on policies related to managing the back end of the nuclear fuel cycle. Founded in 1992, ECA is the national, non-profit organization of local governments adjacent to and impacted by Department of Energy (DOE) nuclear activities. Our members include most of the communities adjacent to DOE and National Nuclear Security Administration (NNSA) sites that currently produce or formerly produced defense nuclear waste, sites that store and process defense nuclear waste, sites that may accept a reprocessing/recycling mission and the sites that are current and potential recipients of defense high-level and other nuclear wastes.

ECA communities have been home to Federally owned and operated nuclear facilities for over half a century. ECA members have decades of experience working on nuclear issues and working with the DOE, Congress and state and federal regulators on large missions that are critical to our country's defense and energy security. ECA believes that any Commission recommendation must suggest that DOE (once again begin to) engage and take into account the impact on the states, tribes and local governments that currently host DOE sites with high–level defense waste.

ECA supports the Blue Ribbon Commission's mission. We believe the Commission can and should develop a comprehensive plan to address existing fuel cycle technologies and options for the management, storage and disposal of nuclear waste. We believe that the long term viability of your recommendations and future federal policy actions hinge, in part, on carefully considering these impacts at the local level.

Defense Waste and Spent Nuclear Fuel Differ

Defense high-level waste differs from private spent nuclear fuel in many ways. First, unlike spent nuclear fuel, defense high-level waste and storage of defense high-level waste is not regulated by a third party (the Nuclear Regulatory Commission regulates private spent nuclear fuel). Defense high-level radioactive waste is self-regulated by the DOE.¹ Neither the U.S. Environmental Protection Agency nor the state regulators have authority over these wastes. Second, defense high-level waste was created primarily to support the defense of our country and not for private energy production. Third, defense high-level waste, in some cases has been shipped from one defense site to another for "temporary" storage pursuant to agreements with states. Fourth, defense high-level waste is being treated to address United States international treaty obligations in some cases. Finally, much of the defense high-level waste is being vitrified and cannot be retrieved for recycling or reprocessing. It is currently being "packaged" to Yucca Mountain standards and stored in "temporary" buildings.

¹ The Defense Nuclear Facility Safety Board provides DOE with recommendations on oversight issues. The Secretary of Energy may reject any recommendation of the Board. See 42 U.S.C. § 2286 et seq., as amended.

ECA communities currently storing high-level nuclear waste were never intended to become permanent defense waste storage sites. Regardless of the findings of the Commission these same communities have operated on the premise that the defense waste would ultimately be disposed in a geologic repository.

Because ECA communities host DOE sites where this defense high-level waste has been produced and stored, our communities have unique health and safety concerns and needs. Some of this waste which has already been vitrified must eventually go to a repository. There is currently no technology that will allow vitrified waste to be reprocessed.

Local Communities Need to be Involved in the Decision-Making

All of the current primary options for consideration – interim storage, enhanced fuel utilization technologies, reprocessing/recycling, single or multiple permanent geologic disposal sites will impact local governments. Therefore, local governments have a critical role in the process and any project will ultimately need support from local communities at both sender and receiver sites. We ask that local government elected officials be asked to participate in oral interviews with the staff and subcommittees at any site that is being visited as you explore these issues at your site visits.

All levels of Government Must be Considered – including Local Governments

At the first Commission meeting there was some discussion that suggested that local governments are more supportive of Yucca Mountain and this type of project because they stand to gain more from the economic opportunities associated with the project. We do believe that local governments generally tend to take a more constructive approach and while economics certainly is an important consideration, we believe this is an oversimplification that could lead to false conclusions by the Commission. It is crucial that the Commission carefully examine and understand the different political dynamics at the local level versus the state level.

One or More Deep Geologic Repositories Are Needed

The lesson learned over the past twenty plus years is that although the majority of communities where high level waste is stored around the country support or do not oppose a central deep geologic repository -- without support from all levels of government, a project involving the back end of the fuel cycle is unlikely to proceed. The federal government, at the outset should work to try to gain the support of all levels of government through education, outreach and financial support. However, it took special legislative action to designate Yucca Mountain as the nation's geologic repository for SNF and defense HLW and we believe that legislative action will be required to implement the Commission's recommendations.

A Repository Must be Supported at all levels of Government

Although it took the WIPP facility near Carlsbad, NM in Eddy County, NM years to open, the local governments supported and promoted the project, the New Mexico Congressional delegation's leadership supported and advocated for the site, and the state generally supported the site.

Resources Ensure Local Governments and other Parties Can Participate in the Process

As Senator Domenici highlighted at the last Commission meeting, if you speak with many of the City leadership in Carlsbad, NM, they will know more than many scientists about the issues at WIPP. Part of the Nuclear Waste Policy Act provides funding for affected units of local government for education and technical expertise and the Commission's recommendation should support such funding. It allows a community to bring in experts that it trusts and whose responsibilities are to that community (rather than to DOE, NRC or private industry). The community can be reassured that there are reliable experts looking out for its interests. At several DOE sites, the technical expertise has facilitated community understanding and support. In addition, DOE has benefited from having a community able to clearly discuss issues and concerns with regulators and assist parties to compromise on issues.

Funding must also be provided for outreach programs, to educate stakeholders, government officials, students, and employees and individuals involved with law enforcement, fire fighters, emergency response, medical service, and all other state, county, city and town agencies. This funding will ensure that local communities are informed about health and safety issues, it will assist to alleviate other fears related to the proposed project, and provide awareness of any proposed benefits.

ECA developed a list of recommendations (Attachment A) about engaging the local community to facilitate success of any of the final project decisions. The recommendations underscore the need for clear laws to be developed and federal agencies and companies that may operate any site to:

- Collaborate with and engage the community (not just undertake a community involvement process),
- Financially support technical experts that work for the community,
- Develop clear milestones and goals for the projects,
- Consider community issues and concerns,
- Provide economic incentives to the community,
- Ensure senior decision-makers are based in the community, and
- Provide educational opportunities for communities on health and safety issues related to defense high-level waste.

Support for any nuclear waste program implemented by DOE or a private company can only be gained through engagement and education of the community and incorporating lessons learned from similar projects around the country.

Developing a Final Nuclear Waste Plan

The processes recommended for waste disposition must include disposal of defense high-level waste, used fuel, Greater Than Class C (GTCC) and Low Level Waste (LLW) that will be generated during waste handling and disposal operations. Total costs of disposal must be considered. Segmenting temporary storage, disposal and transportation decisions from ultimate waste disposition decisions will most likely result in less than optimum decisions regarding

management of the nuclear fuel cycle. No community should be forced to take the burden of disposal without requisite benefits, some of which could be associated with recycling or transportation and storage infrastructure.

A Repository Is Needed

Regardless of whatever programmatic decisions are made, the ultimate need for a repository to dispose of high-level radioactive waste does not go away. Scattering the location of fuel cycle facilities around the country will not optimize environmental, safety, and cost benefits. There are positive synergies associated with co-locating facilities in close proximity to where the waste streams are ultimately destined. Recycling of used fuel should be maintained as an option by utilizing long term storage and/or ensuring retrievability from a repository

Yucca Mountain Must Be Considered by the Commission

Further, the Blue Ribbon Commission must consider the use of Yucca Mountain in its deliberations. Many lessons have been learned by the technical and political actions related to various Yucca Mountain decisions over the years. Further, too much of the defense facility cleanup activities and sunk funds are dependent upon the site to abandon it is an option to be considered. Over the years, communities have been told by DOE that Yucca Mountain is the *only* safe option. Now communities are told that Yucca Mountain is "unworkable." DOE will not consider Yucca Mountain and will not engage in a discussion with communities or explain why or what will be done at sites that have prepared waste for disposal in Yucca Mountain, are storing and are currently processing the waste while the Blue Ribbon Commission develops recommendations. Communities at defense sites are concerned that if the chosen process is similar to that under which Yucca Mountain was selected, no action will be taken to address the waste that is being "temporarily" stored at defense sites.

Uncertainty about where waste will end up impacts health and safety decisions at defense sites. The Commission needs to provide a final answer. In fact, several communities believe that their economies will be negatively impacted unless a clear decision is made on the disposal of the waste.

The Hanford Site had 2100 metric tons of spent nuclear fuel left in the storage basins of the K-East and K-West Reactors when processing activities were stopped in 1990. DOE took on the challenging task of drying the fuel in multi-canister over packs designed to meet Yucca Mountain acceptance criteria. That fuel now sits in a specially designed storage building waiting for shipment to a deep geologic repository. Due to national security requirements, tens of millions of dollars are spent guarding the building each year with no end in sight. If a different repository is built with different acceptance criteria, the fuel may have to be reprocessed/repackaged at great expense to taxpayers.

DOE is now constructing a waste treatment plant at Hanford that will vitrify (turn into glass) 54 million gallons of highly radioactive liquid waste left in 177 underground tanks. The \$12 billion facility is being designed to produce two waste products. The low activity waste will be separated, vitrified and poured into stainless steel canisters that will be buried at Hanford. The high activity waste will be vitrified in a manner that meets the Yucca Mountain acceptance

criteria. It will also be poured into stainless steel canisters. Until we have a repository, the high activity waste canisters cannot be shipped, and they will accumulate over the years. Hanford will be forced to build facilities to store them again -- a considerable additional cost to taxpayers.

Recycling/Reprocessing Must Be Explored

Another option is to close the fuel cycle and undertake reprocessing/recycling to decrease the amount of waste that will likely go to an ultimate geologic repository. ECA has held several meetings with DOE since 2007 on recycling and some of our members volunteered for DOE to undertake studies to facilitate the feasibility of locating such facilities in our communities. From the meetings, it is clear that most ECA communities support reprocessing and recycling, especially given their potential to create a more efficient fuel cycle, to ease the waste burden, to use spent nuclear fuel as an energy source, to develop proliferation-resistant technology, and even to increase the viability of a long-term repository. Policies that support recycling used fuel need to be part of the discussion regarding nuclear energy and nuclear needs to be part of the future energy mix in the U.S. Additional details are set forth in Attachment B.

Conclusion

Finally, as the Commission proceeds, we ask that you continue to involve communities and local governments in the Commissions deliberations and decision making process. Every decision made by the Commission will affect communities in sender, receiver, storage, and waste producing sites and will likely have a large impact on our communities' health, safety and economy.

To be successful the ultimate projects recommended by the Commission need local government engagement and support. Most of DOE's successes over the past decade related to nuclear and other waste include a role for the local government in facilitating and then supporting a final decision.

Ultimately, a decision needs to be made by the federal government on closing the fuel cycle and developing a plan for disposal of each kind of nuclear waste. Not making a decision or indefinitely delaying a decision will have a negative impact on the country and local communities. Once a decision is made based on technical feasibility and political considerations, it should be carried out to completion. This will allow our country to move forward.

ATTACHMENT A

RECOMMENDAITONS FOR THE BLUE RIBBON COMMISSION ON AMERICA'S NUCLEAR FUTURE TO INVOLVE LOCAL COMMUNITIES

Community engagement is critical at all steps in the process — beginning with the development of the vision, refining the goals and priorities, and at all times where conflicts arise. An overriding principle is not divorcing process (such as holding meetings) from substance (engaging in a discussion of technical and political issues). For the federal government, the question of community involvement is whether more members of the public accept and support the process. For local governments and other community members, the question is whether they obtain what they want at the site. For both, the question is prioritization — as not all issues are equally weighted. When process gets in the way of discussion a tension will arise. Hence, the parties must continue to understand that the process must lead to consultation, coordination and communication.

The Commission should recommend that any policy development regarding the back-end of the nuclear fuel cycle should include the following:

Recommendation #1: <u>Collaboration</u> -- The Federal government must be required to collaborate (and not merely hold public meetings) with local governments, community members, state and federal agencies, when developing storage or recycling options.

Recommendation #2: <u>The law must be clear</u> — The law defines the process and the opportunity to engage and participate in the process.

Recommendation #3: <u>Identify Goals</u> -- Congress and DOE must identify clear milestones, which must be communicated to and understood by all parties. Clear milestones also permit Congress to annually fund the project.

- 1. Establishing expectations among the parties;
- 2. Providing a vision for Congress to fund; and
- 3. Focusing the parties on the scope of work necessary to accomplish the mission.

Recommendation #4: <u>Education Is Essential</u> — The parties must take the time to educate each other on the technical and policy issues underlying the project and to commit staff resources. Discussions that need to take place throughout the process must also include the question of technical risk and perceptions of risk, recognizing perceptions of risks posed do not always align with the technical risk.

- Hold regular technical meetings;
- Provide pre-decisional drafts of documents to the community;
- Provide local governments and other members of the community with broad access to federal site personnel;

- Hold regular meetings between the federal facilities manager and community members; and
- Educate new parties as they become involved.

Education by each party involved in the project of other parties must occur regularly. The community must not only be educated by federal and state agencies and contractors, but the community must educate federal and state agencies and contractors so that they understand the goals and needs of the community and the history of the community.

Decisions, even technical ones, are influenced by several factors (including risk) and are not solely technically based. For that reason, the federal government and the regulators also must be educated about the perceptions among local governments and others within the neighboring community regarding risk (which generally vary from community to community and even within communities), because such perceptions may not be consistent with technical risks.

Recommendation #5: <u>Resources Ensure Parties Can Participate</u> — The federal government and Congress must provide local communities with the financial resources necessary to organize and retain the staffing resources they need.

Without federal funding, local governments and community organizations will struggle to secure the funds necessary to actively engage on site issues. Without the means to partner effectively, the project will not succeed or be understood – and likely will not be supported by a community. The funds are used for education and to hire technical experts that work for the local community – not DOE, the contractor, the private company or the regulators – so the technical information is actually confirmed and conveyed by a third party technical expert and community issues are addressed.

Recommendation #6: <u>Understand Community Values</u> — To properly collaborate, the parties must work to understand the values of the community, and must work to incorporate such values into the planning process.

Recommendation #7: <u>Economic Incentives Must Be Included in Law</u> -- The economic incentives to any community or communities accepting the mission of serving as a high-level nuclear waste repository of any type must be clearly identified in legislation.

Recommendation #8: <u>Local Presence Facilitates the Project</u> — The federal entity charged with implementing the project must have a local presence and must address problems resulting from staff turnover that negatively affect long-term projects and public involvement efforts. The proximity of decision makers to the site and the neighboring community is vital to ensuring a healthy dialogue in order to gain and keep trust. DOE should not rely on its contractors for this role.

Recommendation #9: The Parties Must Build a Working Relationship — All parties must take the necessary steps to develop and maintain trust, accountability and openness. The Cold War demanded an umbrella of secrecy over the activities of DOE, resulting in the decision-making framework of "decide, announce and defend." Partnerships, which are based on trust,

accountability and openness, require a fundamentally different paradigm. DOE largely has moved away from its historic posture, but where the decision-making process is not open - like with the current decision on Yucca Mountain -- community trust will be difficult to maintain.

Trust and accountability flow from the program mission and vision — without an agreement on the goals for the program and a vision for where to go, trust and accountability are difficult to achieve. At current DOE sites, there are various ways DOE and the regulators have built trust and accountability.

Openness can be summarized by the following principles that should be embraced by officials at the local, state and federal levels:

- 1. Abide by the principle of "no surprises";
- 2. Be honest (provide accurate information);
- 3. Provide regular information and brief your counterparts;
- 4. Identify, for all parties, any real or potential impediments to success;
- 5. Be available, which could mean talking with or meeting with your counterparts in the local community on a daily or weekly basis;
- 6. Share bad news in a timely manner;
- 7. Work off-line, as not all discussions should take place in public;
- 8. Respect the parties enough to say when you do not agree; and
- 9. Search for ways to increase dialogue and openness on an ongoing basis.

ATTACHMENT B

ADCANCED NUCLEAR TECHNOLOGIES ARE BEING DEVELOPED TO CLOSE THE FUEL CYCLE

The U.S. nuclear industry currently employs an open fuel cycle. In an open fuel cycle, nuclear fuel is used once in a power plant before the SNF is stored for eventual disposal in a geologic repository. ECA supports closing the fuel cycle, which allows SNF to be reprocessed – or recycled – and begins to address two problems long associated with nuclear power: the sustainability of nuclear waste management strategies and the risk of proliferation.

In 1977, the reprocessing of civilian spent nuclear fuel in the United States was suspended due to proliferation concerns related to the separation of plutonium. Without federal financial support, and given an uncertain future, private investment in the nuclear fuel cycle ceased in the U.S. However, other countries, including France, Japan, Russia, and the United Kingdom, continued to develop policies to reprocess spent nuclear fuel.

While recycling spent nuclear fuel will not eliminate the need for a geologic repository, it can address the waste burden by potentially reducing the volume, thermal output, and/or radiotoxicity of waste requiring geologic disposal. The advanced reactors under development will potentially destroy the longest-lived radioactive components of the fuel, leaving relatively short-lived radioactive isotopes for permanent disposal. That, in turn, may make it easier to site a permanent repository in the future.²

Reprocessing can also take materials that would have been permanently disposed and recycle them as new reactor fuel. When fuel is removed from a nuclear reactor, approximately 95 percent of it is uranium and one percent is plutonium, both of which can be recycled. Advanced technologies for recycling nuclear fuel could reuse as much as 90 percent of the energy in a fuel rod.³ In addition, closing the fuel cycle could reduce the requirement for new uranium by about 25 percent.⁴

In response to proliferation concerns, DOE has already begun research and development on multiple advanced reprocessing technologies that, unlike the methods safely used in Europe and Japan today, would not create a stream of plutonium pure enough to be used in weapons.

ECA communities have focused on recycling over the past few years as an important option to consider in any nuclear waste management policy for the U.S. In 2007, ECA communities met with DOE to discuss recycling, held a meeting with community and private sector representatives around 11 potential sites being considered for future reprocessing facility development, and surveyed energy communities to better understand their perspectives on the challenges and opportunities surrounding recycling.

² Holt, Mark, Nuclear Waste Disposal: Alternatives to Yucca Mountain, Congressional Research Service. 7-5700, R40202, (February 2009), p. 2.

³ U.S. Department of Energy – Office of Nuclear Energy

⁴ U.S. Department of Energy – office of Nuclear Energy

ECA found solid support for a nuclear renaissance and the opportunity for nuclear energy to reduce carbon emissions and provide energy reliability and security. Communities support reprocessing/recycling as a resolution to the question: what do we do with the waste -a resolution that turns what until now has been a waste product into an energy resource.

Communities recognize that recycling technologies are still being developed. However, there was a proposal for flexibility, an opportunity for progressive implementation wherein existing processes are used to initiate a demonstration project, and new recycling technologies are introduced as they are ready.

The main challenge identified was communication. DOE went from working with communities on reprocessing and recycling, to ceasing to communicate as the program lost support. With studies still ongoing, the timeline for implementing a reprocessing policy in the U.S. is uncertain.⁵ However, past experience shows the importance of communicating sustained federal support for researching and developing new, proliferation-resistant, economically viable recycling technologies and nuclear reactors. That demonstration of support is essential to gain and maintain investment and momentum that can help realize the potential benefits of a nuclear renaissance and a reduction of waste to be stored and disposed.

⁵ Holt, p. 17.

ATTACHMENT C

HISTORY OF THE FUEL CYCLE—A COMMUNITY PERSPECTIVE

As the United States prioritizes energy independence and clean energy resources, nuclear energy is enjoying historically high levels of support⁶ and the potential for a "nuclear renaissance" is on the rise. New license applications have been submitted and nuclear advisory commissions are being formed. Policymakers and newspapers nationwide are debating the benefits of nuclear expansion and the challenge presented by nuclear waste.

Now, after years of research, litigation, billions spent, and potentially, the end of the Yucca Mountain project, the question still remains: *how will the U.S. manage nuclear waste?* As before, the federal government's great challenge is to engender confidence that a long-term disposal plan for high-level waste exists so that new nuclear plants will be planned, licensed and built.

In the beginning, it seemed the 1978 Blue Ribbon Commission understood the need to identify and work with a wide group of stakeholders to build broad political support for a high-level nuclear waste repository. However, it was the political environment that seemed to overtake the process for designating Yucca Mountain, ultimately leading to a more aggressive approach and timeline.

As the 1978 Blue Ribbon Commission recommended, the NWPA of 1982 called for the development of two permanent repositories. It was anticipated that one site would be in the West and a second site would be in the East to keep things geographically balanced. The NWPA of 1982 also required DOE to nominate five sites suitable for characterization in the first round of siting. By January 1, 1985, DOE was to recommend three of these to the President for characterization as candidate sites. The President was then to submit his choice for licensing and construction to Congress by March 31, 1987, and that site was to be ready to receive waste by 1998.⁷

However, as the process to characterize potential sites proceeded more slowly than expected and as cost estimates ballooned, strong resistance was developing in eastern states against siting facilities there. Congressional leaders felt they had to move forward while there was still a possibility for any repository. In 1987, the NWPA was amended to require *only* the characterization of Yucca Mountain.

While the State of Nevada had the ability to object to the President's approval of the Yucca site, Congress ultimately voted to override the State's objection by joint resolution.⁸

⁶ In recent years support has usually been in the mid-50 percent range, but a March 2010 Gallup Poll shows that figure now at 62 percent, the highest Gallup has measured since it first posed the question in 1994. Similarly, the number of people that "strongly favor nuclear" is up from 20 percent to now 28 percent. Gallup Environmental Poll, March 2010, http://www.gallup.com/poll/126827/Support-Nuclear-Power-Climbs-New-High.aspx

⁷ See: Holt, Mark, Nuclear Waste Disposal: Alternatives to Yucca Mountain, Congressional Research Service. 7-5700, R40202, (February 2009), p. 20 and Stewart, Richard B., U.S. Nuclear Waste Law and Policy: Fixing a Bankrupt System, N.Y.U. Environmental Law Journal, Volume 17, 794 (2009).

⁸ See S.J. Res. 34, <u>http://www.yuccamountain.org/archive/s.j.res.34.htm</u>

Communities and Key Stakeholders must be involved in the Commission Decision Making Process

In his article, U.S. Nuclear Waste Law and Policy: Fixing a Bankrupt System, author Richard B. Stewart finds that the "successful development of new storage facilities or repositories will require considerable engagement with states and localities, with the utility and nuclear industry, and with environmental and local non-governmental organizations (NGOs), and a capacity for negotiation with those various stakeholders."⁹

Congress seemed to recognize this need when the NWPA was amended in 1987. DOE was directed to study only Yucca Mountain and funding was provided for "affected units of local governments" within the vicinity of Yucca Mountain to oversee and participate in the Yucca Mountain Project. By affording these local governments participation rights, Congress sought to increase public confidence in the scientific integrity of the repository program, provide citizens the means to interact with the federal government, and demonstrate a commitment to external oversight.¹⁰

Under the NWPA, nine counties in Nevada and one in California were designated as affected counties as well as the Timbasha Shoshone Tribe. Each is eligible to receive financial assistance for a variety of purposes, including:

- Monitoring DOE activities;
- Assessing impacts of site characterization and repository development;
- Making recommendations to the Secretary of Energy;
- Developing claims for impact mitigation and/or compensation assistance; and
- Keeping county residents informed of project activities and issues.

The NWPA of 1987 also established the Office of the Nuclear Waste Negotiator to identify communities interested in hosting a federal repository or Monitored Retrievable Storage (MRS) facility, and to negotiate with states or private entities over the conditions for siting such a facility. However, the Office of the Nuclear Waste Negotiator never really had the opportunity to perform its role in the selection of the Yucca Mountain site. By 1992, the Secretary of Energy announced that efforts by the Nuclear Waste Negotiator to identify volunteer sites had failed. Statutory authority for the Office of the Nuclear Waste Negotiator expired in 1994 and was not renewed by Congress.¹¹ However, there are examples to consider where communities and other stakeholders were successful engaged.

The Waste Isolation Pilot Plant (WIPP) was developed outside of the NWPA framework since the site does not take HLW or SNF. The town of Carlsbad, New Mexico, expressed interest in hosting a repository. Through legislation, litigation and political pressure, the State of New Mexico and DOE agreed that New Mexico would be part of the decision-making process

⁹ Stewart, 814.

¹⁰ The term "affected unit of local government" means the unit of local government with jurisdiction over the site of a repository or a monitored retrievable storage facility. Such term may, at the discretion of the Secretary, include units of local government that are contiguous with such unit. (Churchill County Nuclear Waste Oversight Program) See: <u>http://churchillcountynwop.com/aulg.htm</u>

¹¹ See: <u>http://www.state.nv.us/nucwaste/yucca/dilemna.htm</u> and Stewart, 806.

for WIPP; DOE would provide funding for State oversight of WIPP; and federal funding would be allocated to ensure safe transportation of waste to the site. In addition, because some of the transuranic waste to be taken was mixed hazardous radioactive waste, the state got regulatory authority under the Resource Conservation and Recovery Act (RCRA).¹² Furthermore, the community received specific economic benefits for hosting the site.

In 1992, Congress enacted the Waste Isolation Pilot Plan Land Withdrawal Act to authorize operation and establish a regulatory framework for the facility. EPA certified the site in 1998 and re-certified it in 2004. As reported in *USA Today*, over the last ten years WIPP has "quietly accepted more than 7,000 shipments of radioactive material from the nation's nuclear weapons facilities."¹³ More specifically, as of March 28, 2010, WIPP has received 8,350 shipments since it opened, disposed of 66,124 cubic meters of waste, and disposed of 129,706 containers underground.¹⁴

It is important to recognize that both the state and local governments were involved in the successful development of WIPP. But failure to engage and ensure communication among stakeholders at all levels – local, state and federal – can lead to political posturing and prevent a project from moving forward.

An example to consider is Private Fuel Storage LLC, a consortium of eight nuclear utilities which partnered with the Skull Valley Band of Goshute Indians in Utah to build a private temporary storage facility for commercial waste. In February 2006, after nine years, the NRC granted a license for the facility. However, the State of Utah, which strongly opposed it, quickly filed a challenge to the NRC license. A few months later, the U.S. Department of Interior (DOI) denied a right of way over federal lands for a railroad to the site halting construction. PFS and the Skull Valley Band of Goshutes contended that the decision was influenced by political pressure from the State. In addition, the Bureau of Indian Affairs (an office of DOI) refused to back the project based on concerns that without anywhere else to go, waste would be stored there permanently. In July 2007, the Skull Valley Band of Goshutes filed a federal lawsuit to overturn the DOI administrative decisions.¹⁵

The DOI also proved to be problematic for the State of California. As the host state for the Southwestern low-level radioactive waste compact, California began developing a disposal facility in 1982. The California Department of Health Services completed an Environmental Impact Statement examining potential sites, selected the Ward Valley site, and granted a license to US Ecology to proceed with development. Because the Ward Valley site is on federally owned land, the land needed to be transferred from the Bureau of Land Management at DOI to California. Regardless of the support of California's Governor Pete Wilson for the site (albeit with other California lawmakers opposed), DOI would not transfer the land without stipulations. The California Department of Health Services felt DOI over-stepped its authority and the National Academy of Sciences' recommendations DOI wanted them to meet fell under

¹⁴ "WIPP Quick Facts." TRU TeamWorks, March 29, 2010.

¹² Stewart, 792.

¹³ "Our view on nuclear power: Responsibility? Yucca choice squanders \$8B investment." Editorial. <u>USA Today</u> 17 March 2009. <u>http://blogs.usatoday.com/oped/2009/03/our-view-on-nuc.html</u>

www.wipp.energy.gov/.../TRUTeamWorksArchives/TTW%203-29-10.pdf

¹⁵ Holt, 15.

radiological safety, the responsibility of the states. The California Department of Health Services eventually filed suit against DOI. And while Congress debated the issue, it was ultimately a state bill¹⁶ signed by California Governor Gray Davis in 2002 that prohibited the use of the Ward Valley site as a nuclear waste facility.¹⁷

As the Administration looks to develop its path forward, advisors need to consider past successes and failures such as at WIPP and in Utah or California. They should help develop a framework for communication, work and negotiation with affected units of local and state governments as early in the process as possible.

¹⁶ AB 2214, see: <u>http://www.leginfo.ca.gov/pub/01-02/bill/asm/ab_2201-</u>

^{2250/}ab 2214 bill 20020912 chaptered.html ¹⁷The American Geological Institute's Update and Hearing Summary on Low-Level Nuclear Waste Disposal (10-

^{23-98).} See: http://www.agiweb.org/legis105/lownuke.html

AGENDA

Transportation at a Crossroads

The First Meeting of the U.S. Department of Energy's National Transportation Stakeholders Forum

May 25-27, 2010

The Westin Michigan Avenue Chicago, Illinois

MONDAY, MAY 24

Tour participants will learn about the history of and observe the decontamination and decomm	
shipments of radioactive waste to sites like DO The group will also see a demonstration of DO radio-frequency identification technology to tra visit to the DOE Region 5 Radiological Assistant participants a first-hand look at the resources t states and tribes in an emergency. Finally, par see Argonne's Advanced Photon Source and Bl cutting-edge facilities that support the lab's ong development. Attendees will board the bus east of the main e	E's Waste Isolation Pilot Plant. E's new system for using ck shipments in real time. A ce Program facility will give hat are available to help ticipants will have a chance to ue Gene/P supercomputer – going mission in research and entrance beginning at 9:45 am
Registration	Cotillion South
Exhibit Setup	· Cotillion South
	The group will also see a demonstration of DOL radio-frequency identification technology to tra- visit to the DOE Region 5 Radiological Assistance participants a first-hand look at the resources to states and tribes in an emergency. Finally, par- see Argonne's Advanced Photon Source and Blu cutting-edge facilities that support the lab's ong development. Attendees will board the bus east of the main e for a prompt departure at 10 am. The bus will pm. Registration

7:30 am – 12 pm	Exhibit Setup	Cotillion South
7:30 am – 5 pm	Registration	Cotillion South

8 am – 12 pm	Risk-Communication Training	Cotillion North
	This workshop will provide communication responders will techniques necessary to address incidents involving DOE- material. Participants should expect to learn how to iden recognize how stakeholders prefer to receive information communication principles; recognize the importance of ea credibility; and use a variety of templates designed to kee focused.	owned radioactive tify stakeholders; ; integrate risk arning trust and
	Ronald Edmonds, Oak Ridge Institute for Science and Edu	ucation, Instructor
8 am – 5 pm	National Conference of State Legislatures (NCSL) High-Level Waste Working Group Meeting	Consulates 1-2
	This meeting of the NCSL High Level Waste Working Grou opportunity for members to conduct business, hear updat and engage in strategic planning for future NCSL work. I an opportunity to share the latest news from their states expectations of the NCSL HLWWG for the National Transp Stakeholders Forum during a roundtable discussion.	tes from NCSL staff, Legislators will have and discuss
	Representative John Heaton, New Mexico, presiding	
12 – 6 pm	Exhibits	Cotillion South
12:15 – 5:30 pm	The Council of State Governments' (CSG) Northeast High-Level Radioactive Waste Transportation Task Force Meeting	Consulate West
12:15 – 5:30 pm	Northeast High-Level Radioactive Waste	ion Task Force a business session, as, committee FY 2011. Task
12:15 – 5:30 pm	Northeast High-Level Radioactive Waste Transportation Task Force Meeting The Northeast High-Level Radioactive Waste Transportation meets to consider regional issues. The agenda includes a state reports, plans for small quantity shipment campaign reports, publication updates, scheduling and priorities for Force members will also discuss expectations for the NTS	ion Task Force a business session, as, committee FY 2011. Task F meeting. The
12:15 – 5:30 pm 12:30 – 6 pm	Northeast High-Level Radioactive Waste Transportation Task Force Meeting The Northeast High-Level Radioactive Waste Transportation meets to consider regional issues. The agenda includes a state reports, plans for small quantity shipment campaign reports, publication updates, scheduling and priorities for Force members will also discuss expectations for the NTS meeting is open to general attendance.	ion Task Force a business session, as, committee FY 2011. Task F meeting. The
-	Northeast High-Level Radioactive Waste Transportation Task Force Meeting The Northeast High-Level Radioactive Waste Transportation meets to consider regional issues. The agenda includes a state reports, plans for small quantity shipment campaign reports, publication updates, scheduling and priorities for Force members will also discuss expectations for the NTS meeting is open to general attendance. John Giarrusso, Massachusetts Emergency Management A CSG Midwestern Radioactive Materials	ion Task Force a business session, as, committee FY 2011. Task F meeting. The Agency, presiding Mayfair Aderials at which members as, review and nent of Radioactive the state ednesday. The uested.

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1 — 6 pm	Southern States Energy Board (SSEB) Radioactive Materials Transportation Committees	Buckingham
	The Southern States Energy Board's Radioactive Materials Tran Committees will host a spring forum to discuss matters of impor- region. Agenda topics to be addressed include revision of the or Transportation Planning Guide for the U.S. Department of Ener Shipments of Transuranic Waste, SSEB's 50th Anniversary Mee group expectations for the NTSF. In addition, presenters will be provide region-specific updates to the members. Committee be conducted from 1 to 3 pm after which the meeting will be open attendance.	ortance to the organization's gy's ting, and be available to usiness will be
1 – 6 pm	Tribal Caucus	Windsor
	An organizational meeting of the tribes (closed session) will be 1 to 3 pm. Beginning at 3 pm (open session), presenters will be provide updates to the tribes on the progress the DOE's transp programs and to respond to tribal issues and concerns related transportation planning and communication.	e available to ortation
1:30 – 5:30 pm	Western Governors' Association (WGA) Transportation Safety Technical Advisory Group Meeting	Cotillion North
	The WGA Transportation Safety Technical Advisory Group will In meeting to discuss issues pertaining to the Western Governors' ensuring safe and uneventful transport of radioactive materials discussion include revisions to the WIPP Program Implementation transportation planning for high visibility federal shipments, and expectations for the National Transportation Stakeholders Foru Committee business will be addressed from 1:30 to 3:15 pm, and meeting will be open for general attendance.	<i>goal of</i> <i>Topics of</i> on Guide, <i>d discussing</i> m.
	Anne deLain Clark, New Mexico Department of Energy, Minerals Resources, presiding	s, and Natural
evening	Organized Night Out	
	Chicago is famous for its world-class restaurants, unparalleled l performances, and hallowed sporting venues like the friendly co Wrigley Field, home of the Chicago Cubs. Take the opportunity experience Chicago while networking with other meeting attend several outings, including mouthwatering Chicago-style pizza, to steaks, and the Cubs at home against the Los Angeles Dodgers	onfines of / to dees at one of antalizing
<u></u>	All groups will gather in the lobby of the hotel. The group head Cubs game will depart at 6 pm. All other groups will depart at Registration is required for all outings.	

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WEDNESDAY, MAY 26

7:30 am — 5 pm	Registration	Cotillion South
7:30 – 8:30 am	Breakfast	Cotillion South
8 am – 6 pm	Exhibits	Cotillion South
8:30 – 8:40 am	DOE's National Transportation Stakeholders Forum (NTSF) Meeting Convenes	Cotillion North (all NTSF sessions)
	Opening Remarks Steve O'Connor, DOE/EM Office of Packaging and Transpo	rtation
8:40 – 10:30 am	Opening Plenary: Transportation Across the D	OE Complex
	A panel consisting of DOE leadership and program manage status of transportation activities within their programs and funding made available through the American Recovery an	d the impact of
	Frank Marcinowski, DOE-EM Deputy Assistant Secretary for Regulatory Support Dr. David Moody, Manager, DOE Carlsbad Field Office Jon Neuhoff, Director, New Brunswick Laboratory, DOE Off Ahmad Al-Daouk, Manager, Nuclear Security Department, Security Administration Jim Wade, DOE Office of Nuclear Energy, Packaging and T	fice of Science National Nuclear
	Ken Niles, Oregon Department of Energy, moderating	
10:30 — 10:45 am	Break	
10:45 am – 12 pm	Expectations for the National Transportation St Forum	takeholders
	DOE and its state and tribal stakeholders will have an opport their expectations and how they hope to benefit from the r also discuss possible topics to cover at future meetings or ideas for topics that might warrant the formation of ad how resolve. The discussion is sure to bring out ideas for stren collaborative, consultative process that brings DOE and its together to plan and prepare for shipments of radioactive of	NTSF. Panelists will webinars, as well as working groups to gthening the stakeholders
	Steve O'Connor, DOE/EM Office of Packaging and Transpor John Sattler, DOE Consolidated Business Center Tim Runyon, Illinois Emergency Management Agency Willie Preacher, Director, Shoshone-Bannock Tribal DOE Pr Representative John Heaton, New Mexico	
	Ray English, DOE Naval Nuclear Propulsion Program, mode	rating
12 – 1:30 pm	Lunch (on your own)	

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Representatives of the U.S. Nuclear Regulatory Commission, Federal Emergency Management Agency, U.S. Department of Transportation, and other federal partners will provide NTSF participants with timely information about specific programs and initiatives that have the potential to affect state and tribal engagement in radioactive materials transportation.Earl Easton, U.S. Nuclear Regulatory Commission Mark Abkowitz, U.S. Nuclear Regulatory Commission Mark Abkowitz, U.S. Nuclear Waste Technical Review Board Michael Conroy, Radioactive Materials/Office of Hazardous Materials, PHMSA/DOT John Woulfe, International Association of Fire Chiefs: Hazmat Fusion Center William Spurgeon, DOE/EM Office of Packaging and Transportation, moderating2:30 – 3:30 pmCommunicating with States and Tribes about Shipments In this discussion-oriented session, panelists will talk about the kind of shipment-related information tribal and state officials need, how they use that
Mark Abkowitz, U.S. Nuclear Waste Technical Review Board Michael Conroy, Radioactive Materials/Office of Hazardous Materials, PHMSA/DOT John Woulfe, International Association of Fire Chiefs: Hazmat Fusion Center William Spurgeon, DOE/EM Office of Packaging and Transportation, moderating 2:30 – 3:30 pm Communicating with States and Tribes about Shipments In this discussion-oriented session, panelists will talk about the kind of shipment-related information tribal and state officials need, how they use that
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shipment-related information tribal and state officials need, how they use that
information, the challenges DOE programs might face in providing what the states and tribes request, and possible ways to overcome those challenges. The goal will be to identify specific actions the states, tribes, and DOE can take to improve the way they communicate about shipments.
Neil S. Weber, Director, Department of Environmental and Cultural Preservation, Pueblo of San Ildefonso Delegate Sally Jameson, Maryland
Lieutenant Bill Reese, Idaho State Police Jim Wade, DOE Office of Nuclear Energy Ella McNeil, DOE/EM Office of Packaging and Transportation
Melanie Rasmusson, Iowa Department of Public Health, moderating
3:30 – 3:45 pm Break
3:45 – 4:15 pmEnhancements to the DOE Transportation Emergency Preparedness Program (TEPP)
As TEPP has matured, significant changes have been made to the program. This presentation will address the enhancements that have been made based on user feedback, partnerships, and reviews, and will address other changes on the horizon.
Tom Clawson, Technical Resources Group, Inc.
4:15 – 4:45 pm TRANSCOM: Current and Future
An overview of the current projects and activities, highlights of recent program accomplishments, and a glimpse of the next decade of shipment tracking and monitoring.
Stephen Casey, DOE TRANSCOM Contracting Officer Representative

4:45 – 5:30 pm	Closing Plenary/Wrap-up
	During this session, participants will be asked to provide on-the-spot feedback on the NTSF meeting, the plans for the new forum, and their priorities for working on transportation-related issues identified at the meeting. The session will conclude with moderators reviewing and assigning action items, as well as identifying next steps for continuing the work of the NTSF.
	Steve O'Connor, DOE/EM Office of Packaging and Transportation, and Dr. Edward Wilds, Connecticut Department of Environmental Protection, moderating

THURSDAY, MAY 27

7:15 am – 4:30 pm	Tour of Argonne National Laboratory For a description of the tour, see the listing for Mona	Board bus on Delaware lay, May 24.
	Attendees will board the bus east of the main entrance beginning at 7 am for a prompt departure at 7:15 am. The bus will return to the Westin by 4:30 pm. Attendees may arrange their own shuttle service directly from Argonne to O'Hare and Midway airports provided the pickup time is 3:30 pm or later.	
7:30 am – 12 pm	Take Down Exhibits	Cotillion South
8 am – 4 pm	TRANSCOM User's Group Meeting	Buckingham
	The TRANSCOM annual User's Group meeting will bri governor's representatives, local law enforcement, fir governments, state regional groups, and shippers of other high-visibility DOE shipments to participate in a During the first half of the meeting, TRANSCOM project program review of the monitoring system to include of the prior year. During the second half of the meeting will work together to identify priorities and activities of TRANSCOM project team to consider and pursue in 2	rst responders, tribal transuranic waste and working meeting. ect staff will present a enhancements made over g, user group participants for DOE and the

Maine Yankee Community Advisory Panel on Spent Nuclear Fuel Storage and Removal May 27, 2010

Agenda	
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6:00 - 6:05	Introduction - Chair Marge Kilkelly
6:05 - 6:25	Maine Yankee/Independent Spent Fuel Storage Installation Update - Jim Connell, VP & ISFSI Manager
6:25 - 6:45	State of Maine update - Jay Hyland, Radiation Control Program Manager
6:45 - 7:05	Spent Nuclear Fuel Removal/Disposal Update - Eric Howes, Maine Yankee
7:05 – 7:15	Break
7:15 - 7:25	Public Comment
7:25 - 8:00	Committee Discussion
8:00	Adjourn

Blue Ribbon Commission on America's Nuclear Future c/o U.S. Department of Energy 1000 Independence Ave, SW Washington, DC 20585

April 30, 2010

Ms. Marge Kilkelly, Chair Maine Yankee Community Advisory Panel on Spent Nuclear Fuel Storage and Removal 5 McCobb Road Dresden, ME 04342

Dear Ms. Kilkelly:

Thank you for your March 10th letter and for your offer to hold a Commission meeting at the Chewonki Foundation in Wiscasset, Maine.

The issue of spent fuel stored at shut down nuclear plant sites was raised during the Commission's first meeting in late March and will be a subject of deliberation by the Commissioners. We are still in the process of determining a plan and schedule for the work of the Commission, so we are not yet in a position to say if the Commission will be able to take you up on your kind offer. We will certainly ensure the Commissioners are aware of your offer and give it fullest consideration.

With best regards,

Lee Hamilton Co-Chairman

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Brent Scowcroft Co-Chairman