Department of Health and Human Services
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November 16, 2012

MEMORANDUM

TO: Senator Kevin Raye, President of the Senate, Representative Robert Nutting, Speaker of the House, and Senator Michael Thibodeau and Representative Stacey Allen Fitts, Co-Chairs of the Joint Standing Committee on Energy, Utilities and Technology

FROM: Mary Mayhew, Commissioner
Department of Health and Human Services

SUBJECT: 2010 Report to the Legislature on the State Nuclear Safety Inspector's Oversight Activities of the Maine Yankee Independent Spent Fuel Storage Installation (ISFSI) in Wiscasset, Maine

Legislation enacted in the spring of 2008 requires the State Nuclear Safety Inspector, in cooperation with the Director of the Division of Environmental Health in the Maine Center for Disease Control and Prevention, to prepare an annual report of the State Inspector's activities to the Legislature. The report must be submitted annually to the Legislature with oversight from the Joint Standing Committee on Energy, Utilities and Technology by the 1st of July. The report focuses on activities at the site and includes highlights of the national debate on storing and disposing the used nuclear fuel.

The enclosed report provides the information required under Title 22 of the Maine Revised Statutes Annotated §666, as enacted under Public Law, Chapter 539, in the second regular session of the 123rd Legislature.

Should you have questions about its content, please feel free to contact Mr. Patrick J. Dostie, State Nuclear Safety Inspector, at 287-6721.

MCM/klv

Enclosure

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

Paul R. LePage, Governor Mary C. Mayhew, Commissioner

2010 Report to the Legislature

on the

State Nuclear Safety Inspector's Oversight Activities

of the

Independent Spent Fuel Storage Installation (ISFSI)

at the

Maine Yankee Site in Wiscasset, Maine

Prepared for
Joint Standing Committee on Utilities and Energy
Pursuant to 22 MRSA §666(2)

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Executive Summary

The following report details the State Nuclear Safety Inspector's 2010 oversight activities performed at the Maine Yankee site and the Independent Spent Fuel Storage Installation (ISFSI) in Wiscasset.

The Maine Yankee plant was decommissioned over an eight year period from 1997 to 2005. The Department of Energy was unable to fulfill its contractual obligations to accept the spent nuclear fuel, Maine Yankee was compelled to construct an Independent Spent Fuel Storage Installation (ISFSI) in Wiscasset to store the high level waste in casks until a national repository is available to dispose of the nuclear waste.

The State Nuclear Safety Inspector's oversight role includes the following tasks:

- Reviews daily the operational and security reports from the on-site security staff;
- Performs environmental surveillance of the Maine Yankee environs to include fresh and saltwater monitoring, seaweed sampling, and field measurements of the local radiation levels;
- Participates in the annual Nuclear Regulatory Commission inspection of the facility;
- Participates in the ISFSI's annual emergency plan exercise;
- Conducts radiological groundwater assessments of the old industrial complex and yearly quality assurance checks of Maine Yankee's analysis of the groundwater;
- Reports activities monthly and annually to the Legislature;
- Provides an annual accounting to the Legislature of the funds received and disbursed out of the Interim Spent Fuel Storage Facility Oversight Fund;
- Interfaces with various state agencies also performing oversight functions at the ISFSI;
- Reviews Maine Yankee submittals to the Nuclear Regulatory Commission;
- Participates in regional and national organizations involved in the Yucca Mountain project in Nevada, and
- Investigates and monitors websites to keep abreast of national developments on spent nuclear waste management and research.

The storage of the high level waste in Wiscasset is an important issue to the State. It creates an undue burden to the local community and State by not being able to reuse or redevelop prime, coastal real estate. Moreover, it sets up a possible terrorist target that could result in future unintended consequences. Furthermore, it potentially imposes on our citizens a de facto high-level waste dump site in Maine. Secretary of Energy Chu's decision to withdraw the Department of Energy's license application before the Nuclear Regulatory Commission, effectively terminating the Yucca Mountain repository, means that the high level waste stored in Wiscasset may be there for 100 years or more, as per the Nuclear Regulatory Commission's 2010 waste confidence rule, or, as some fear, potentially indefinitely.

1.0 Introduction

1.1 Historical Perspective

The State had one nuclear power plant, called the Maine Yankee Atomic Power plant, and it was located in Wiscasset, Maine. It operated from the fall of 1972 to December 1996. The Maine Yankee Plant was initially rated at about 825 megawatts electric or 2440 megawatts thermal and by the end of its life the Maine Yankee plant was producing slightly over 900 megawatts electric.

At the time of its last shutdown in December 1996 the plant owners were facing some major issues, principally cable separation and the aftermath of the Nuclear Regulatory Commission's (NRC) Independent Safety Assessment Team (ISAT) findings pertaining to plant safety systems. The State was a participant in the ISAT process. In 1997 the plant owners decided that the likelihood of the nuclear plant operating at a profit was non-existent in light of Maine's electric restructuring act passed that same year. With the availability of cheaper power from Canada, the plant was no longer considered economically viable. In May 1997 Maine Yankee announced that it would either sell or close the plant if there were no buyers. Even though there was a serious assessment performed by Philadelphia Electric Company to purchase the Maine Yankee plant, in July 1997 both parties could not come to an agreement and in August 1997 the Board of Directors voted to shutdown the plant permanently and commence the immediate dismantlement of the nuclear facility. The planning process for the site's decommissioning began shortly after the official closure and the decommissioning lasted nearly eight years.

When the Nuclear Waste Policy Act (NWPA) was enacted in 1982, Congress assumed that a national repository would be available by 1998 for the disposal of the spent fuel. The NWPA mandated the Department of Energy (DOE) to take title and possession of the nation's spent nuclear fuel in 1998. Since the high level waste repository at Yucca Mountain in Nevada had experienced significant licensing and construction delays, DOE was unable to take title and possession of the nation's spent fuel and consequently breached its legal contracts with all the nation's nuclear power utilities.

Early during the decommissioning it became evident that at DOE's current pace the Yucca Mountain repository would not open at its then projected start date of 2010. DOE's inaction prompted Maine Yankee to construct an Independent Spent Fuel Storage Installation (ISFSI) during decommissioning to store the 1434 spent fuel assemblies that were previously housed in the spent fuel pool in the plant, into 60 storage casks on-site. Another four casks contain some of the more radioactive components of the reactor internals that were cut up during decommissioning, since their radioactive concentrations were too high to dispose of at a low level radioactive waste facility. The expectations are that they will be shipped along with the spent fuel to a deep geologic repository when one becomes available sometime in the future.

Although President Bush recommended to Congress and Congress approved the Yucca facility as the nation's federal repository for spent nuclear fuel in 2002, the DOE did not submit a license application until June of 2008, which was accepted for review by the NRC in September of 2008. Since then, the Obama Administration and the new Energy Secretary, Dr. Chu, have advocated for the termination of the Yucca Mountain site as it was no longer considered a viable option for disposing of the nation's high level waste and spent nuclear fuel. Energy Secretary Chu has assembled a Blue Ribbon Commission of experts to review alternative strategies for managing these waste forms. In the meantime all the nation's spent fuel will remain at their present storage locations until a new management strategy is devised and implemented.

1.2 Law

With the spent fuel at Maine Yankee likely to be stored in Wiscasset for decades to come, in March of 2008, in the second regular session of the 123rd Legislature, the Legislature enacted and the Governor signed into law the establishment of the State Nuclear Safety Inspector Office within the Department of Health and Human Services to provide independent oversight of the Maine Yankee ISFSI. The law also mandated that an Oversight Group, comprised of various state agencies, Maine Yankee and an independent expert in radiological and nuclear engineering, meet on a quarterly basis to discuss the protection of public health and safety at the ISFSI site and be involved in national activities that would hasten the timely removal of the spent nuclear fuel from the site. The law went into effect June 29, 2008.

The following sections contain the State Nuclear Safety Inspector's activities for the 2010 calendar year under certain broad categories covering the ISFSI, environmental surveillance around the Maine Yankee site, remaining pieces of the State's decommissioning efforts, on-going groundwater monitoring program, regional and national activities, and newsworthy items on the national repository situation.

2.0 State Nuclear Safety Inspector Activities

2.1 Independent Spent Fuel Storage Installation (ISFSI)

2.1.1 Annual Inspection

On December 1st the Nuclear Regulatory Commission (NRC) performed a safety inspection of the ISFSI. The inspection was conducted by two senior health physics inspectors from Region I and assessed the facility's programs for radiation protection, fire protection, emergency preparedness, surveillance, environmental monitoring, training, and quality assurance activities. No violations or findings of significance were identified. Due to the NRC's very short notice for conducting the inspections sequentially at Connecticut Yankee, Yankee Rowe in Massachusetts and Maine Yankee, the State was inadvertently not notified of the NRC inspection and was not aware of it until after the report was issued.

2.1.2 Annual Drills and Exercises

On an annual basis Maine Yankee is required to perform an emergency plan drill, a radiological drill, a medical drill and a fire drill.

On May 19th Maine Yankee conducted its annual fire and medical drill. Since this was a mutual aid drill, it included the Wiscasset fire and ambulance crews and the Westport Island fire department. The drill involved a structure fire in the ISFSI building that required an evacuation of the building. There was a simulated injury of a worker overcome by smoke during the drill. A post drill critique indicated that all participants performed extremely well, and most drill objectives were achieved. A few improvements were identified and a condition report was written to track the items to resolution.

In preparation for its annual emergency exercise Maine Yankee conducted on October 6th its annual emergency plan training to state officials at the Maine Emergency Management Agency. The overview consisted of the site's status and spent fuel considerations, emergency classifications, activation of the Maine Yankee emergency response organization, functions performed at the ISFSI control center, and the offsite interface with appropriate local, state and federal organizations.

On October 27th Maine Yankee conducted its annual mandated emergency exercise. The Maine State Police and the State Nuclear Safety Inspector participated in the exercise. The exercise scenario was of a two man armed assault, killing a security guard and using a rocket launcher to pierce the vertical concrete casks. One rocket was launched with visible damage to the external concrete but no damage to the transport and storage cask housing the spent fuel inside the concrete shield. An Unusual Event was declared and appropriate state and local officials responded. There was no gaseous or particulate radiation released, but on-site radiation levels did increase due to the damaged cask. The two perpetrators were last seen heading towards the Back River. The Marine Patrol and Coast Guard were called in. A critique was held after the drill was terminated to discuss the overall response. Some suggestions for improvement were made.

2.1.3 Daily ISFSI Operations Pass-Ons

The on-shift Security Supervisor forwards the ISFSI Pass-On, essentially three times daily, to the State Inspector. The Pass-On provides an overview per shift of the ISFSI status, the cask monitoring status, procedures/surveillances/work in progress, equipment out of service, alarm issues, and team information. It is from these daily reports that the information on condition reports, fire or security related impairments, security event logs and spurious alarms are disclosed in the State Inspector's monthly reports to the Legislature.

2.1.4 Maine Yankee Reports to the NRC

In March Maine Yankee submitted to the NRC its 2009 Annual Radiological Environmental Operating and Radioactive Release Effluent Release Reports, its annual Decommissioning Fund Assurance Status Report, and its Individual Monitoring Report. The Environmental Operating Report summarizes the direct radiation results of nine thermoluminescent dosimeters[1] (TLDs) locations situated within a 288 meter (about 945 feet) ring from the center of the ISFSI with one control station at the Wiscasset Fire Station. All nine stations were comparable to or slightly higher than the control station. However, there was one station that was noticeably higher than the other eight ISFSI stations. This location has been consistently high since March of 2005. Due to its distance from the bermed area of the ISFSI, the values are higher than expected and could be due to its proximity to naturally higher background radiation, such as a ledge outcrop. The Effluent Release Report summarizes the radioactive gaseous and liquid effluents for each calendar quarter. By design there were no gaseous or liquid releases in 2009. In addition, the report also mentioned that there were no radioactive waste shipments in 2009. The Decommissioning Fund Report noted that the Site-Specific Cost Estimate for long term operations of the ISFSI through 2023 and its subsequent decommissioning would be $119.9 million. The market value of the trust fund at the end of 2009 was $95.7 million. The Individual Monitoring Report provides information on the radiation doses for each individual monitored at the ISFSI.

In September Maine Yankee submitted its annual Special Nuclear Material (SNM) Report to the NRC for the period ending July 29, 2010. The report represents the material accountability for fissionable material, such as Uranium-235 and Plutonium-239 on U.S. Government owned or non-U.S. owned nuclear fuel between beginning and ending inventories, radioactive decay differences, if any, and receipts of or removals of SNM. The report also includes source material such as natural Uranium and Thorium.

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

2.1.5 Security Plan

In February Maine Yankee submitted to the NRC modifications to its ISFSI Security Plan. Since the submittal is Safeguards Information, the information is classified and, therefore, not available for public disclosure. Later in the month Maine Yankee submitted as part of its ISFSI Security Plan, its Memorandum of Understanding (MOU) with three local law enforcement agencies (State Police, Lincoln County Sheriff Department, and Wiscasset Police Department). Since the MOU's contain Safeguards Information, their contents can not be disclosed to the public.

In April the U.S. Nuclear Regulatory Commission (NRC) forwarded a letter to Maine Yankee stating that they had reviewed their "proposed revision to the physical security plan, and determined that no physical security changes were made, and, therefore, the proposed changes would not decrease the effectiveness of the plan." Furthermore, Maine Yankee was required to submit a report to the NRC of the security changes within two months of their implementation. In September Maine Yankee submitted in response to the NRC's April directive, its physical security plan for the ISFSI. The submittal was in response to a complete reformatting of the Plan.

In December Maine Yankee submitted a proposed amendment to their Physical Security Plan and an exemption request from NRC Regulations. Since the proposed amendment contains safeguards information, disclosure of its contents to the public is not permitted. The exemption request is to remove the central alarm station from within the protected area. The exemption would be comparable to those already approved for stand alone ISFSI's, such as Yankee Rowe in Massachusetts and Connecticut Yankee.

2.1.6 Interface with Other State Agencies

As part of the legislation's mandate, on a quarterly basis, the State Inspector and the Manager of the Radiation Control Program, met with State Police, the Public Advocate, the Department of Environmental Protection and Maine Yankee to discuss oversight activities at the ISFSI. The quarterly meeting dates were January 12th, April 13th, July 13th and October 12th. At the meetings Maine Yankee provided a status of their activities followed by the State Inspector's update of his past, current and planned near term activities. Discussions have also centered on the Group's annual and financial reports to the Legislature, national and congressional efforts on spent fuel waste management, especially centralized interim storage at some away facility outside of New England as opposed to on-site storage, groundwater monitoring and its costs, the Federal Energy Regulatory Commission rate case settlement cases pending before the federal Appeals Courts, and environmental surveillance.

2.1.7 ISFSI Topics

2.1.7.1 ISFSI Status

The status of the ISFSI from January to December was normal, except for the snowstorms on January 2nd and 3rd, January 19th and 20th, and December 27th. Additional measures were put in place for each snowstorm and were terminated once the storms passed. As part of its operational constraints after a snow event, the vent screens for the concrete casks need to be inspected daily for blockage. The venting is necessary to ensure that the cooling of the cask internals is maintained. In addition, the site lost power on February 28th for 33 minutes due to some down power lines. All systems operated as designed. The diesel started and powered all systems. On the very brief power outage that occurred on February 15th, the diesel did not start, as the interruption was too short to trigger it. The three system alarms actuated by the brief interruption were checked, acknowledged and returned to service.

2.1.7.2 Security Related Events/Impairments

There were six security related impairments in 2010. The first two impairments were in January. One was environmentally related to the snowstorms and the other was due to a piece of equipment being out of service. In February there was a security piece of equipment that was degraded and compensatory measures were instituted until the equipment was functional and all areas were returned to normal status. The affected area was cleared in about 10 minutes. In July there was one security sensitive impairment and therefore, not available for public disclosure. In August there was a communication issue that involved safeguards information that can not be disclosed to the public. This issue was resolved in September. The last impairment in October was due to the relocation of the security fence near the east side of the Security and Operations Building. The project was completed in early December.

There were 12 spurious alarms during this time frame due to environmental conditions. In all instances the alarms were investigated and no further actions were warranted. There were 213 security events logged over the course of the year of which 171 were related to environmental conditions. Of the 42 left, 13 were related to the January snowstorms, 15 involved computer issues, three were for the fence project, three were safeguards information which precludes public disclosure, with the remaining issues involving a piece of security equipment that was degraded for 10 minutes, a failing switch, two door switch issues, a yard light out, a power spike tripping an emergency power source momentarily, a communication issue with a vendor security services firm, and a loss of the dedicated phone connection to the Nuclear Regulatory Commission.

2010 witnessed a dramatic increase in the number of instances that prompted follow-up action with the Local Law Enforcement Agency (LLEA). There were 15 instances in 2010 as compared to only two in 2009. The suspicious instances of vehicles and/or persons occurred over an eight month period starting in February and ending in November. There were three incidents of worm diggers crossing on Maine Yankee property. Another three involved persons taking pictures, two of which were taking photos of wild turkeys. Three vehicles were seen parked, turning around or driving in at the site entrance. Another two incidents involved cars on Ferry Road performing suspicious activities. Two involved the old East Access Road, one of which was a couple walking their dog and the other was a truck driver getting stuck at the entrance. Another was a former Maine Yankee employee who came by to visit. Finally, there was the Fairpoint Communications employee who came unannounced with binoculars. In 14 of the 15 instances the LLEA was notified, responded and in eleven of those situations intercepted the vehicles or persons. Generally, the persons are escorted off-site, counseled on the site's security restrictions and released. People who are lost or whose vehicles are stuck are helped back on their way. In those situations where the vehicle or persons came unto Maine Yankee property, Maine Yankee notifies the Nuclear Regulatory Commission Operations Center of the incidents. In one particular case the Federal Bureau of Investigation in Augusta was also notified.

2.1.7.3 Fire Related Events/Impairments

There were five fire related impairments reported in 2010. The first three occurred in February and were all associated with Department of Energy (DOE) personnel reviewing Maine Yankee's cost records as part of its litigation discovery. The litigation is part of the Yankee companies' (Maine Yankee, Connecticut Yankee and Yankee Rowe) lawsuit against the DOE for breaching their contract with the utilities. With DOE not taking the

spent fuel in 1998, the utilities were compelled to construct and operate ISFSI's at their respective sites. The on-going litigation seeks damages for the construction and operating costs incurred until all the spent fuel is removed. In June there was one fire impairment due to the temporary removal of a conduit fire barrier. The last impairment was in October. It was due to a fire barrier penetration to the east wall of the central alarm station and included the fence relocating project described in 2.1.7.2 above. Additional measures were instituted and the impairment was resolved in less than a day.

2.1.7.4 Condition Reports

There were 115 condition reports written in 2010. A condition report (CR) is a report that promptly alerts management to potential conditions that may be adverse to quality or safety. The report is generally initiated by a worker at the ISFSI facility. The report prompts management to activate a process to identify causal factors and document corrective and preventative measures stemming from the initial report. The majority of the CR's are administrative in nature. Examples of some CR's written ranged from a John Deere Tractor having a flat tire to spots found leaking from the skidsteer in the snow to loose bolts on several concrete casks inlet screens to the use of a terminated procedure to a fire door not closing properly to the use of an incorrect revision form to a ¼ cup oil spill from a fire truck pump to a worker cutting their thumb to using an outdated revision of a medical form to the John Deere Tractor brakes binding to the State's TLD missing from the tree near the plant exit to errors from an electrical drawing to a key left in the manual mode in a panel to radiation protection instruments in service beyond their calibration due date to the emergency notification system phone going into constant ringing to a computer error requiring a reboot to a power cord found plugged in and submerged in water.

2.1.7.5 Other ISFSI Related Activities

In January Maine Yankee submitted an exemption request from the Nuclear Regulatory Commission's (NRC) regulations. When the designers of Maine Yankee's spent fuel storage casks received their fifth amendment to their certificate in January 2009, it compelled Maine Yankee to perform a detailed evaluation to determine if their 60 spent fuel canisters met the new standard. The assessment identified 59 canisters in compliance, but one was not. The lone canister did not meet the 600 hours limit for a filled canister to remain in a transfer cask, but did meet the original requirements of unlimited time when it was moved to the ISFSI pad. Weather conditions and Technical Specifications on temperature limitations at the time prevented the transfer. On July 14th, after evaluating the public health and safety, and environmental impacts, the NRC concluded that the lone cask would not pose an increased risk to public health and safety, and granted the exemption, effective immediately.

On June 17th Maine Yankee submitted a letter to the NRC and filed an application for consent of an indirect license transfer due to the acquisition of Maine & Maritime Corporation (parent of Maine Public Service Company) by BHE Holdings, Inc. (parent of Bangor Hydro Electric Company). Maine Public Service and Bangor Hydro own 5% and 7% interests, respectively, in Maine Yankee. The merger will not affect Maine Public Service's or Bangor Hydro's direct ownerships in Maine Yankee and both will continue their financial obligations to Maine Yankee.

On August 2nd the NRC sent a letter to Maine Yankee and other licensees on the revised security rule and its applicability to facilities undergoing decommissioning or in decommissioned status. The letter noted that some of the facilities may be out of

compliance with the NRC's current security requirements. Therefore, the NRC was giving Maine Yankee and other licensees 120 days from the date of that letter to demonstrate compliance with the revised security rule or request an exemption from the security requirements that is not applicable to their facility. On November 29th Maine Yankee submitted a letter to the NRC requesting an exemption from the new security regulations pertaining to operating reactors. Maine Yankee's intent was to maintain the current regulatory requirements until the new rulemaking revising the security requirements for ISFSIs was implemented.

On September 9th the NRC approved Maine Yankee's exemption request to not have the central alarm station within the protected area of the ISFSI. The NRC staff noted that the central alarm station building would preserve several of the attributes of a protected area boundary. The physical change will eliminate most transient camera issues due to temporary environmental conditions. "The NRC staff evaluated the public health and safety and environmental impacts of the proposed exemption and determined that granting the exemption would not result in any significant impacts." Maine Yankee had previously submitted information on this exemption request on December 22, 2009 and March 25th and July 28th of this year.

As part of the NRC's regulations, in September the State Inspector received his annual site access, security and safeguards training to maintain his security badge and personal radiation monitoring status.

2.2 Environmental

2.2.1 Radiological Environmental Monitoring Program (REMP) Description and Historical Perspective

Since 1970 the State has maintained an independent, radiological environmental monitoring program of the environs around Maine Yankee. Over the years there was an extensive quarterly sampling and analysis program that included such media as salt and fresh water, milk, crabs, lobsters, fish, fruits, vegetables, and air. Since the decommissioning the State's program has been reduced twice to accommodate decreased revenues for sample analyses at the State's Health and Environmental Testing Laboratory. Besides the media sampling, over the years the State has maintained a robust thermoluminescent dosimeter (TLD) program to measure the radiation environment. The TLDs were placed within a 10 to 20 mile radius of the plant to measure the background radiation levels and later, when the plant was operating, any potential increases in background levels due to plant operations. Over time the number of TLDs nearly doubled to address public concerns over the clam flats in Bailey Cove and the construction of the ISFSI. After the plant's decommissioning the State reduced the number of TLDs around Bailey Cove, but maintained the same number for the environmental surveillance of the ISFSI.

2.2.2 Changes to the REMP Program

In late December 2009, after 39 years, the State ceased its air sampling station at the Maine Yankee site. In reviewing the historical air data and taking into account the leak tightness of the spent fuel casks, it was determined that there was no technical basis to continue the air monitoring location at the old Bailey Farm House. Although the air sampling station at Maine Yankee was discontinued, the State still maintained an active air sampling station on the roof of the Health and Environmental Testing Laboratory that acted as a control for comparative purposes during Maine Yankee's operating and decommissioning years. The State's air sampler at HETL is also available for radioactive fallout situations from national or global events.

In June of 2010 the State performed a review of its Radiological Environmental Monitoring Program of the Maine Yankee site. The review determined that the quarterly surveillance sampling of freshwater at Ward's Brook in Wiscasset, and the seawater and seaweed at the Ferry Landing on Westport Island would be discontinued permanently after this calendar quarter after 40 years. Both sampling stations were originally set up to monitor gaseous and liquid releases from the Maine Yankee nuclear power plant. Since the ISFSI did not release gaseous or liquid radioactivity and adequate time had elapsed since the power plant was decommissioned in 2005 for statistical comparisons, there is no further technical justification for the continued sampling of the media at these stations. In addition, six of the nine thermoluminescent dosimeters (TLDs) within the environs of the Maine Yankee site were also permanently discontinued after the second quarter's field replacement. The remaining three TLDs consisted of two controls, (one locally at the Edgecomb Fire Station and one further away on the roof of the State's Health and Environmental Testing Laboratory), and one near the site at the Ferry Landing on Westport Island. This left 27 TLDs for the Maine Yankee site and Bailey Cove.

The final assessment to consolidate the number of TLDS monitoring the ambient radiation levels near the ISFSI was performed in late December. Eight of the fourteen TLDs locations from Bailey Cove were removed from the REMP program. Of the remaining six Bailey Cove TLDs, four were reassigned as ISFSI TLDs to ensure coverage for the sixteen points of the compass. The four new stations were identified as N, O, P, and Q. The last two Bailey Cove stations were co-located with the State's solar powered environmental radiation monitors on the Maine Yankee site. A review of whether or not these solar powered units should continue to operate will be assessed in the fall of 2011. The TLD changes would go into effect with the first quarter field replacement in January of 2011.

2.2.3 REMP Media Results

Through June, the State monitored on a quarterly basis one freshwater location and one saltwater and seaweed location. Table 1 on the next page shows the quarterly sampling results for the year. The State's Health and Environmental Testing Laboratory analyzed the samples and employed various analytical methods to measure specific radioactive elements. All the positive results reported highlight naturally occurring background levels and ranges. There were some seasonal variations, but these would be difficult to point out with only two data points.

Tritium (Hydrogen-3 or H-3) 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 considered 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.

Table 1 – REMP Media Results

Media Type	Positive Results	Quarterly Sampling Period 1st Quarter 2010	2nd Quarter2010
Freshwater	Gross Beta [2]	0.91 pCi/L[3]	2.21 pCi/L
	Tritium (Hydrogen-3 or H-3)	140 pCi/L	147 pCi/L
Seawater	Tritium (H-3)	134 pCi/L	154 pCi/L
	Potassium-40 (K-40)	117 pCi/kg[4]	245 pCi/L
Seaweed	Beryllium-7 (Be-7)	355 pCi/kg	293 pCi/kg
	Potassium-40 (K-40)	3,210 pCi/kg	5,150 pCi/kg
Air Filters (Control)*	Gross Beta (range)	10.5 – 27.8 fCi/m^3 [5]	15.6 – 21.4 fCi/m^3
	Quarterly Composite (Be-7)	76.6 fCi/m^3	85.0 fCi/m^3

* Control located on roof of State' Health & Environmental Testing Laboratory

2.2.4 Thermoluminescent Dosimeters (TLDs)

As outlined in the historical context and as part of its independent oversight, the State has a TLD program to measure the quarterly ambient radiation levels over the years at Maine Yankee, both in the proximity of the power plant and at various locations within a 10 to 20 mile radius from the plant. At the beginning of the year the State's TLD program was focused on two areas - the ISFSI and Bailey Cove. However, as mentioned in section 2.2.2, the TLD program will cover only the ISFSI in 2010 and beyond.

2.2.4.1 Bailey Cove TLDs

The Bailey Cove surveillance is a remnant of the operating days when the public had raised questions over the radiation levels in the Cove and its impact on clam and worm diggers from the extended shutdown due to the steam generator sleeving project in 1995.

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

[3] A pCi/L is an acronym for a pico-curie per liter, which is a concentration unit that defines how much radioactivity is present in a unit volume, such as a liter. A curie, named after its discoverers Pierre and Marie Curie, is defined as the rate at which a radioactive element transforms itself into another element that is most often another radioactive element. It is mathematically equivalent to 37 billion disintegrations or transformations per second. A "pico" is a scientific prefix for an exponential term that is equivalent to one trillionth (1/1,000,000,000,000). Consequently, a picocurie is a very small unit of radioactivity that equates to only 2.22 disintegrations or transformations per minute.

[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.

[5] fCi/m^3 is another acronym for a femto-curie per cubic meter. Again it describes a concentration of how much radioactivity is present in a particular volume of air, such as a cubic meter. A "femto" is a scientific prefix that is equivalent to one quadrillionth (1/1,000,000,000,000,000).

The number of TLD locations was reduced in January of 2008 from the initial 40 that covered both sides of Bailey Cove down to 14. The TLD results for Bailey Cove for 2010 are illustrated in Table 2. To acquire statistical weighting for each location two TLDs are placed at each location. Each TLD has three plastic-like phosphors that capture the radiation. The average represents the mean of the six element phosphors and the range depicts the low and high values for the six crystals.

There is good agreement with the individual elements of the TLDs for all four quarters with a noticeable increase in variability in the fall, as evidenced by the larger spreads in some of the ranges. Normally, the higher variability is associated with the spring and summer seasons due to the outgassing of the natural Radon gas from the soils. However, last year was a year where we had very little snowfall with an unusually early spring. In addition, the TLD results were higher for the winter season then they were for the spring season, which is very unusual. Ordinarily, there would be a slight decrease in the winter results due to frozen and/or snow cover conditions inhibiting the out gassing of the Radon gas. There is a possibility that the TLDs experienced a higher than anticipated background radiation level during the shipping and storage of the devices between California and Maine in the winter season than the spring season. The variability in transit exposures and their impact on the State's TLD results will be explored in 2011.

Table 2 – Bailey Cove TLD Results

	Quarterly Exposure Period							
TLD Stations	1st Quarter (Winter) Average (Range) (mrem)[6]		2nd Quarter (Spring) Average (Range) (mrem)		3rd Quarter (Summer) Average (Range) (mrem)		4th Quarter (Fall) Average (Range) (mrem)	
1	24.8	(24-25)	23.3	(22-25)	27.8	(26-31)	24.5	(23-27)
2	22.7	(20-25)	20.8	(20-21)	26.8	(26-28)	23.7	(21-27)
3	23.8	(22-25)	22.0	(21-23)	27.3	(26-29)	27.5	(22-30)
4	22.8	(22-24)	20.8	(20-22)	25.7	(24-28)	26.2	(23-30)
5	25.5	(25-26)	24.3	(22-27)	30.2	(29-32)	26.8	(24-30)
6	23.7	(22-25)	21.5	(21-22)	28.5	(27-33)	23.2	(22-25)
7	21.4	(21-22)	20.8	(20-21)	26.7	(26-27)	21.3	(20-24)
8	25.2	(24-27)	23.2	(21-25)	29.2	(27-31)	27.2	(25-30)
9	25.8	(25-27)	25.2	(23-28)	29.7	(28-31)	27.8	(25-30)
10	23.7	(23-25)	23.0	(22-24)	27.8	(27-29)	24.8	(24-26)
11	21.8	(21-23)	20.2	(20-21)	25.3	(24-27)	22.0	(21-24)
12	24.7	(23-26)	23.5	(21-25)	28.3	(26-30)	26.8	(25-29)
13	26.3	(25-30)	23.2	(23-24)	29.2	(26-31)	25.3	(23-27)
14	23.7	(21-26)	21.5	(21-22)	27.9	(24-28)	23.3	(21-26)

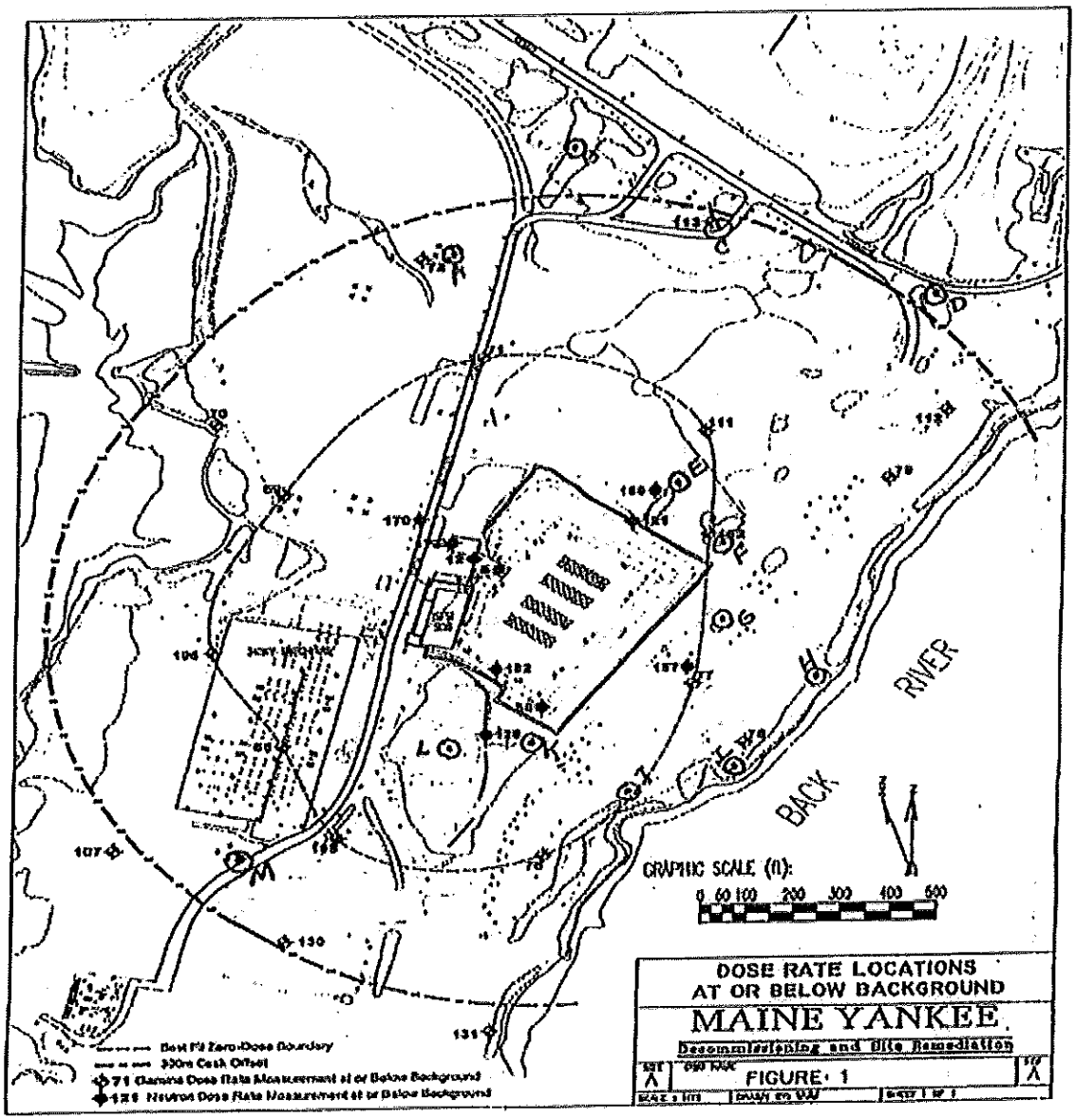
Typically the background values on the coast of Maine range from 13 to 25, with the lower values indicative of their proximity to the water's edge, especially at high tide.

[6] A mrem or millirem is one thousandth, (1/1000), of a rem. A rem is an acronym for roentgen equivalent man and is based on how much of the radiation energy is absorbed by the body multiplied by a hazard factor that depends on the type of radiation.

2.2.4.2 ISFSI TLDs

In October of 2000, in preparation for the spent nuclear fuel to be moved from the fuel pool and stored in concrete casks at the ISFSI, the State Inspector, as part of his independent oversight, established 13 TLD locations to monitor the local radiation levels from the ISFSI. The letters A through M in Figure 1 below identify the thirteen locations.

Figure 1 – State TLD Locations at ISFSI



Since the spent fuel was projected to be moved in the fall of 2001, it was necessary to perform monthly TLD field replacements as opposed to quarterly in order to gather enough field data to establish a pre-operational database. The monthly regimen was maintained until the fall of 2004 when it was converted to a quarterly frequency.

Initially, some of the state TLD locations were co-located with some of Maine Yankee's TLDs for future comparative purposes. However, Maine Yankee reconfigured its TLD

locations in 2008 and only 2 remain co-located. Table 3 lists the State's ISFSI results for the year.

As noted earlier the phenomenon experienced with the Bailey Cove TLDs also occurred with the ISFSI TLDs. The values were higher as to be expected considering their nearness to the stored spent fuel. The ISFSI TLDs continued to demonstrate three separate groupings when it came to dose, elevated, slightly elevated and normal. Again, Stations G and K continued to be high due to their proximity to the ISFSI. However, the highest quarterly reading was from Station F last summer with an exposure value of 34.2 millirems. There was no natural variance in the background or in the casks' radiation levels that would explain the increased level. The reading may be an artifact of the dosimeters and when the vendor calculates each phosphor's relative response to a known radiation exposure field, which, at times, can have a profound influence on the final results. Station F is usually in the slightly elevated grouping.

Stations E and L also showed signs of influence from the ISFSI as noted in Figure 1 by their short distances from the ISFSI. As with the Bailey Cove TLDs there were some stations that had higher variability as noted by their ranges. Even though the ISFSI TLD data had higher values, the Bailey Cove data's overall range of about 21 to 33 compared well to the ISFSI's range of about 22 to 36. It should be noted that some of the Bailey Cove TLDs can serve as both a Bailey Cove TLD and an ISFSI TLD, since their locations would fulfill one of the 16 points of the compass. As mentioned in section 2.2.2 four will be converted into ISFSI TLDs starting in 2011.

Table 3 – ISFSI TLD Results

	Quarterly Exposure Period							
TLD Stations	1st Quarter (Winter) Average (Range) (mrem)		2nd Quarter (Spring) Average (Range) (mrem)		3rd Quarter (Summer) Average (Range) (mrem)		4th Quarter (Fall) Average (Range) (mrem)	
A	22.0	(20-24)	22.3	(21-23)	27.3	(24-30)	23.5	(21-25)
B	22.0	(21-23)	21.5	(21-22)	26.0	(25-27)	24.5	(23-26)
C	23.5	(22-25)	22.7	(21-25)	*	(*)	23.5	(23-24)
D	23.3	(21-25)	22.2	(21-23)	28.0	(25-30)	24.2	(22-28)
E	25.8	(24-27)	24.7	(24-26)	29.8	(29-31)	26.5	(23-35+)
F	28.0	(27-30)	25.2	(24-26)	34.2	(31-37)	25.2	(23-30+)
G	29.3	(26-32)	27.7	(26-30)	33.5	(32-35)	30.0	(28-32)
H	21.7	(20-23)	22.5	(21-24)	26.7	(26-28)	22.7	(20-25)
I	23.7	(23-25)	22.8	(22-24)	26.8	(25-29)	23.0	(22-25)
J	25.0	(22-26)	23.7	(23-24)	29.2	(28-31)	24.3	(21-27)
K	29.3	(28-30)	26.7	(25-29)	33.5	(32-36)	29.0	(27-31)
L	25.5	(24-27)	23.5	(22-26)	29.7	(26-33)	26.8	(25-28)
M	24.2	(23-25)	23.3	(22-25)	29.0	(28-32)	24.0	(22-27)

* TLDs missing/lost

\+ Outliers rejected by processor but data accepted by State and included

2.3 Maine Yankee Decommissioning

2.3.1 Background

Maine Yankee's decommissioning was completed in the fall of 2005. At that time the State Inspector also commenced his final walk down survey of the site. Certain areas such as the transportation routes exiting the plant site were surveyed after the plant industrial area was decommissioned. It took a considerable amount of time to complete both half-mile east and west access routes and the two thirds of a mile of the railroad track. In addition, nine specific areas, including the dirt road, were also examined as part of the final site walk down survey. The State's survey of the dirt road leading to the old softball field was extended in the fall of 2007 when the State discovered three localized, elevated contaminated areas on the road. Over the next couple months extensive bounding samples were taken to determine the extent of the contamination. Based on the findings a specialized survey, keying on the radioactive element Cesium-137, was performed in June of 2008. The survey did not find any new areas of elevated contamination. The State closed the issue in October of 2008 after 18 soil samples from the Dirt Road did not reveal any increased levels of Cesium-137 beyond normal background levels. Even though some residual radioactivity remains, due to the localized nature of the contaminant and the restricted security access to the site, the contamination found did not present a public health hazard.

2.3.2 East Access Road Survey

With the closure of the Dirt Road, the only remaining walk down survey left to be performed on-site was the portion of the East Access Road adjacent to the ISFSI bermed area as depicted in Figure 2. This area remained as the background radiation levels from the ISFSI were initially found to be high, (greater than 30,000 counts per minute (cpm)), and could mask potential elevated areas. Since then the State Inspector has been monitoring the levels every spring and had observed a steady decrease in the ambient radiation levels down to 25,000 cpm.

In 2010 the State Inspector was unable to perform his yearly survey of the East Access Road and it was decided that a final survey of the road would be taken in the spring of 2011. The Inspector would then issue a formal closure letter to Maine Yankee. The State's basis to close this decommissioning objective will be six-fold:

1. There are diminished resources at the State level to perform the survey and subsequent soil analyses.
2. The probability of finding major contaminated areas was highly unlikely considering the road was initially surveyed and there were no major findings.
3. The national direction has been tending to close down the Yucca Mountain Project.
4. The Blue Ribbon Commission's Transportation and Storage Subcommittee appears poised to recommend interim storage of spent nuclear fuel (SNF) at existing or consolidated sites.
5. The Nuclear Regulatory Commission's Waste Confidence Rule adopted in the fall of 2010 implies storage of SNF for at least 120 years and is presently studying the feasibility of extended long-term storage out to 300 years
6. Until all the SNF is moved to either an interim storage facility or a geologic repository, there will be restricted security access to the site for an indefinite period.

Figure 2 - East Access Road Survey near ISFSI

2.3.3 Confirmatory Reports

Seeing that it was taking longer than expected to write the report, an effort was made in mid-October to start the report as the number one priority. Initial estimates to write the report were overly optimistic and were based on time frames associated with the Inspector's writing of his monthly reports to the Legislature, which, at that time, took about two weeks. As time passed it became very evident that this would be a major undertaking and would require much more time. In retrospect more thought should have been given to how long it took the State's technical consultant to finalize his last report, which took him eight months to produce a report covering only a third of the confirmatory work. The Confirmatory Summary Report will cover over three times as much material and will represent over four years of the decommissioning. However, with a concerted effort, after two and a half months, approximately half of the report was drafted.

2.4 Groundwater Monitoring Program

2.4.1 Background

In June of 2004, the State, through the Department of Environmental Protection's (DEP) authority under 38 MRSA §1455, signed an Agreement with Maine Yankee for a five year, post decommissioning radiological groundwater monitoring program at the site. The details of how the Agreement would be carried out relative to the quality assurance facets of the monitoring, sampling and analyses would be captured in Maine Yankee's Radiological Groundwater Monitoring Work Plan. It should also be noted that Maine Yankee, as part of its hazardous materials closure of the site for DEP, is conducting a concurrent 30-year chemical monitoring program to perform sampling of 23 wells from selected past industrialized activities on the Bailey Point Peninsula. About twenty-four years remain before the chemical monitoring is terminated.

The Agreement between the State and Maine Yankee set an administrative limit of 2 mrem per year per well as a demonstration that it had met the State's groundwater decommissioning standards of a 4 mrem dose per year above background values. If a well exceeded the 2 mrem value after the five year monitoring program ended, Maine Yankee would allow the State to continue monitoring that well. To-date fifteen of the sixteen wells sampled have not exceeded one tenth of the limit, or 0.2 mrem per year. Only well number MW-502 has come close to exceeding the 2 mrem administrative limit and that was back in March of 2006 when the dose was 1.96 mrem.

2.4.2 Resolution of Outstanding Issues

There were two major issues that were carried over into 2010 from previous years that had to be resolved promptly as this was the last year for the sampling and reporting of the radiological groundwater monitoring effort. The first issue revolved around resolving outstanding technical comments and detection capabilities with Americium-241, an element heavier than uranium. A finding of any element heavier than uranium that transforms itself by the emission of an alpha particle from its nucleus could challenge the State's decommissioning standards for a resident farmer scenario occupying the Maine Yankee site. The second involved whether there would be adequate funding for the remainder of the groundwater monitoring program.

2.4.2.1 Technical Issues and Americium-241 Issues

After nearly a year spent attempting to resolve recurrent technical issues and questions with the groundwater data the State and Maine Yankee met on January 28th to resolve these issues. The State was represented by the Departments of Environmental Protection and Health and Human Services. Each radiological concern was discussed and a mutual agreement was reached on its disposition. It was also noted at the meeting that two special groundwater data packages were missing from the third and fourth annual groundwater reports. The data packages were follow-up analyses to demonstrate the non-existence of Americium-241 and were initially identified in trace quantities through gamma spectrometry, a special finger printing process that identifies various radioactive elements through one or more of their energy peaks.

The Americium-241 is an alpha and gamma emitter. It is the gamma analysis that is not as sensitive due to the peak's position at the lower end of the energy spectrum where there are many more interferences. Therefore, when the gamma analyses alluded to potentially trace quantities of Americium-241, then it was necessary to follow-up with the alpha spectrometry technique to properly quantify and verify its existence. No Americium-241 was found in both data packages. The State, however, still had some lingering questions on its gamma detection capabilities for identifying Americium-241. In June the State's Health and Environmental Testing Laboratory performed an experimental demonstration of its ability to detect minute quantities of the alpha emitting Americium-241 via gamma spectrometry. The laboratory test indicated that the State could detect trace quantities of Americium-241 in pure distilled water at the levels that were initially in question. The State did not perform a more conclusive test by testing ground water from the Maine Yankee site and accepted Maine Yankee's earlier findings.

2.4.2.2 Groundwater Monitoring Costs

Another issue that surfaced early on in 2010 was whether or not there would be sufficient funds to carry out the groundwater monitoring program for the fifth and final year. The Post Decommissioning Agreement for Radiological Monitoring between the State and

Maine Yankee had capped the monitoring expenses to $500,000. The 2009 year end costs totaled about $375,000. The remaining work for 2010 was the March and June sampling plus the writing of the report and any resolving any concerns, comments or questions on the data. However, the more costlier of the two samplings would be the June sampling as it not only included the normal tritium and gamma counting but since it was at the end of the program Hard-To-Detect (HTD) and Transuranic (TRU) analyses would also be performed. Examples of HTDs are like Strontium-90 and Nickel-63, which are pure beta particle emitters, whereas examples of TRUs (elements heavier that uranium) would be Plutonium-239 and Americium-241. The cost for HTD/TRU analyses usually runs around $3,000 or more for each well sample. With sixteen wells that would amount to nearly $50,000. The basis for the sampling of these at the end of the cycle was predicated on Maine Yankee's License Termination Plan, which indicated that the probability of detecting these difficult to analyze radioactive species would increase with time. Therefore, performing these analyses at the very end of the program would be instrumental in verifying that the State's decommissioning standards of less than the 4 mrem for the water pathway was met.

Multiple discussions ensued as to what the State and Maine Yankee could do so as to minimize the analytical costs while still fulfilling the spirit of the Agreement. Numerous suggestions were made ranging from minimizing sample recounts to application of further screening criteria on the Transuranic Americium-241 to well abandonment techniques to minimizing comments on the remaining reports to discontinuing sampling at three wells. The initial recommendation to cease sampling at the three wells was based on the State Inspector's perception that there were no HTD/TRU findings in the wells. Upon further review of the data it was noted that the original assumption of no HTD/TRU was incorrect. After more discussions a final resolution was reached whereby the State Inspector identified to Maine Yankee which wells remained in the sampling program and which did not.

2.4.3 Sampling Reports and Annual Report

After each sampling event Maine Yankee submitted to the State Inspector a summary report of their findings. The State Inspector reviewed the report, commented on the findings and forwarded his comments to Maine Yankee for their response. The State Inspector also forwarded his comments to the Department of Environmental Protection (DEP) to apprise them of the radiological findings. At the end of the three sampling events an annual report would be generated that covered the sampling year's findings with an independent third party validation of the data from an outside vendor. All the raw data was submitted to the DEP and the State Inspector for review. The annual report was reviewed by some staff persons at DEP, whose primary focus was on the chemical sampling program and deferred to the State's Radiation Program, or the State Inspector in this case, for their expertise in radiological matters.

The State Inspector provided his comments on the fourth annual groundwater report to the DEP in May, which was later forwarded to Maine Yankee for their response. The fifth and final report was delayed due to problems that surfaced with the hasty dismantling of the AREVA Laboratory and the subsequent re-sampling and re-analysis of the well.

2.4.4 Tri-annual Sampling

The normal sampling regimen for the groundwater monitoring program is three times a year. However, since the first sampling took place in September of 2005, the annual sampling constituted the September sampling of the current calendar year and finishes with the June

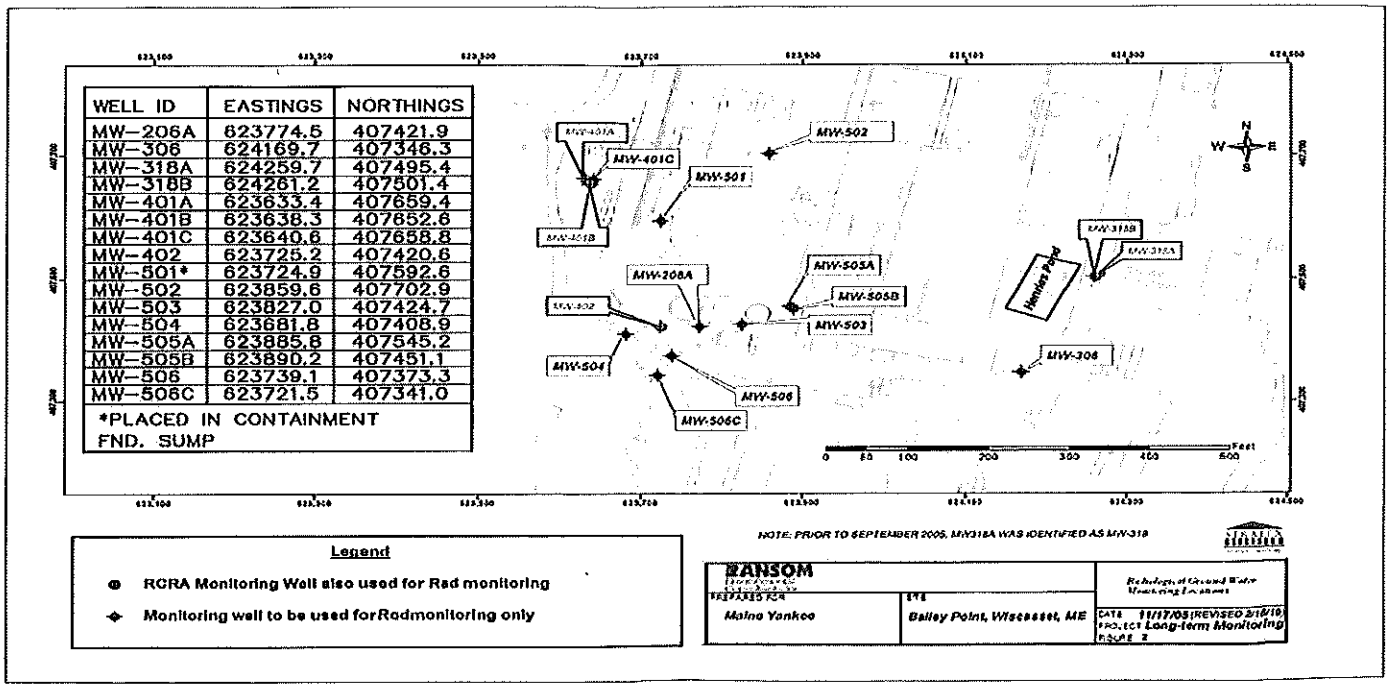
sampling of the following year. As of June 2010 the groundwater monitoring program completed its fifth year and final radiological sampling.

According to Maine Yankee's Rad Work Plan Rev 3, their environmental consultant, Ransom Environmental from Portland, sampled 16 individual wells on a tri-annual basis and shipped the well water samples to the AREVA environmental laboratory in Westborough, Massachusetts for analysis.

Figure 3 below, courtesy of Maine Yankee, illustrates the locations of the 16 sampling wells including the two that were not sampled in June. Some wells also double as chemical sampling wells. The letter 'A' signifies that it is a bedrock well, whereas the 'B' denotes a surficial or surface well.

The well water is analyzed for radioactive elements that emit gamma ray radiation, such as Cesium-137 and Cobalt-60, and for tritium, a form of heavy hydrogen that is naturally radioactive, and a pure beta particle emitter. In addition to Maine Yankee's vendor laboratory, AREVA, the State Inspector also collected annually from Maine Yankee's consultant, Ransom Environmental, groundwater samples from seven wells to conduct independent quality assurance checks on Maine Yankee's AREVA laboratory by having the State's Health and Environmental Testing Laboratory perform the same types of analyses on gamma emitting radioactive elements and the beta emitter tritium.

Figure 3 - Monitoring Well Locations



2.4.5 Analytical Results for Tritium

The State, as part of its oversight functions, analyzed seven well water samples from the June sampling event. The results from the State and Maine Yankee analyses are provided in Table 4 on the next page.

The comparisons between the two laboratories appear to be in fairly good agreement with each other. All seven wells tested by the State had positive indications for Tritium, whereas Maine Yankee had four wells, (MW-501, -502, 503, and -505A), with positive indications. (A positive indication is one where the result is greater than its statistical radiological counting uncertainty at the 95% confidence level.) However, six of the State's seven positives and three of the four Maine Yankee positive indications were less than 600 pCi/L. Although Tritium is a by-product of fission and neutron activation in an operating nuclear plant, it is also naturally occurring. Therefore, the State set the natural background limit of Tritium in a well sample to 600 pCi/L. Hence, as per the Agreement, only a well with a Tritium concentration in excess of 600 pCi/L would be included in the radiological dose assessment.

The elevated Tritium in well MW-502 has been steadily decreasing since its peak value of 59,570 pCi/L in March of 2006 as exemplified by the illustration in Figure 4 on page 20. From the graph it appears that the physical decay of the tritium along with the very low water infiltration yields a combined effect that results in the tritium losing one half of its radioactive concentration about every five years. At that rate it is expected that this well will remain above the Environmental Protection Agency's 20,000 pCi/L limit for tritium for several more years. However, it is not a public hazard as there is a deed restriction preventing groundwater use on the site in addition to the restricted security access because of the stored spent nuclear fuel.

Table 4 – Tritium Results

Well Numbers	Maine Yankee Results (pCi/L)	State Results (pCi/L)
MW-206A	140	
MW-306	-33	
MW-318A	NT	
MW-318B	NT	
MW-401A	-140	
MW-401B	0	
MW-401C	110	
MW-402	120	274
MW-501	530	521
MW-502	32,270	31,300
MW-503	300	328
MW-504	70	227
MW-505A	250	381
MW-505B	-40	
MW-506A	-10	247
MW-506C	-110	

NT – Not Tested

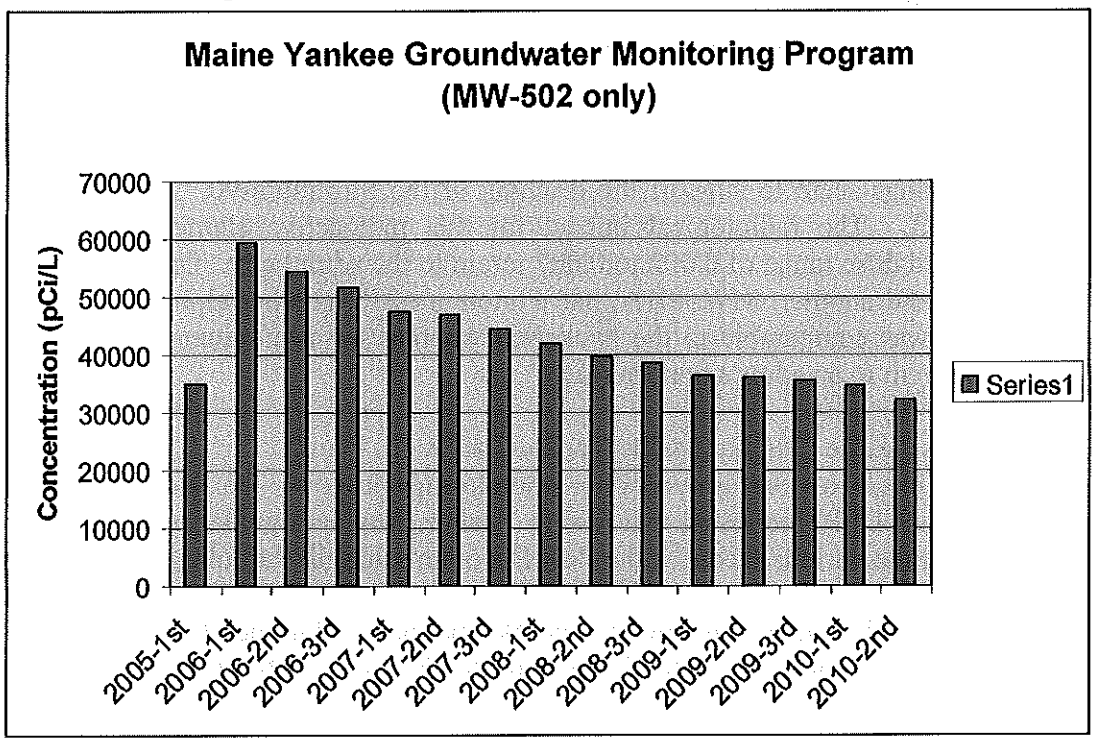
The highest Tritium well is currently calculated to give a projected annual radiation dose of 0.97 mrem above naturally occurring concentrations. In comparison the average natural background radiation dose equivalent to the United States population is estimated to be 292 millirems per

year, or 0.8 millirem per day, with 68 % of that dose coming from Radon and its subsequent decay products.

2.4.6 Positive Indications

Besides Tritium as being a recurrent detection in some of the wells, there are other radioactive elements that have had positive indications. The following radioactive elements were identified in trace quantities in four of the sixteen wells through gamma spectroscopy, which is a technique that identifies the radioactive elements by their energy fingerprints. They were Cobalt-60, Zinc-65 and Zirconium-95 in well numbers MW-306, MW-318B, MW-505B and MW-506. All the radioactive elements are normally found in a nuclear power plant environment. However, due to its short radioactive half live Zirconium-95 can not physically originate from the plant's operational days. As for the Zinc-65 its radioactive half live is longer and, therefore, even though still unlikely, the likelihood of its existence was much more probable. Except for Co-60, in both cases, only barely detectable amounts of the two radioactive elements were reported, which made it very possible that the results were false positives and probably not really there. The highest projected dose for the Co-60 was only 0.007 mrem per year as compared to the average U.S. population of 292 mrem per year.

Figure 4 – Monitoring Well MW-502 with Elevated Tritium



As part of its 2010 cost cutting efforts the State advocated that, if Americium-241 was detected through the gamma technique, there would be no need to perform an alpha spectroscopy analysis to confirm its presence since, as part of the close out of the program, all the wells would receive a final Hard-To-Detect/Transuranic analysis in June to confirm the presence of alpha emitters from radioactive elements heavier than uranium, such as Americium-241. Therefore, no effort was placed in the March sampling to pursue the presence of Americium-241.

2.4.7 Hard-To-Detect/Transuranics (HTD/TRU) Positive Indications

Most radioactive species emit gamma radiation and are therefore more readily detected and identified by their gamma energy peaks, or fingerprints. Some radioactive elements, however, are either pure alpha or beta emitters and require special instrumentation and analytical methods to chemically separate and analyze them. The more commonly known ones are Strontium-90, which is a pure beta particle emitter, and Plutonium-239, which is an alpha particle emitter.

With the final June sampling all fourteen wells were analyzed for HTD/TRU. However, in July Maine Yankee apprised the State that their vendor laboratory, AREVA, was shutting down its laboratory. AREVA assured Maine Yankee that it would complete all the required analyses. When Maine Yankee received the results in early fall it became evident that the data was suspect. There were no problems with the normal gamma and tritium analyses. However, in their haste to dismantle the laboratory, numerous HTD/TRU analyses failed the quality control criteria. Consequently, Maine Yankee informed the State that they would resample and redo all the HTD/TRU analyses but with a different national laboratory, General Engineering Laboratories out of South Carolina.

The final set of data indicated that nine of the remaining fourteen wells had HTD/TRU elements. The nine wells were MW-206, MW-306, MW-401A, MW-401C, MW-402, MW-502, MW-505B, MW-506 and MW-506C. The most prevalent finding was Strontium-90 in the nine wells with a concentration range of 2.71 to 8.35 pCi/L. The computed radiological dose for the Strontium-90 to the bone surface of an adult person ranged from a low of 0.185 to a high of 0.569 mrem. According to Maine Yankee's approved License Termination Plan the leaching out of the Strontium-90 into the groundwater would rise and peak in forty years and then decrease. The findings seem to support the leaching of the Strontium-90. Three of nine wells also had Nickel-63. The radiological impact for this radioactive element was much lower with a calculated dose range of 0.002 to 0.007 mrem to the adult body. One of the wells, MW-402, had Iron-55 and another, MW-401A, had Plutonium-238, another alpha emitter. The impact of the Iron-55 was comparable to the Nickel-63 whereas the Plutonium-238 had a computed dose of 0.236 mrem to an adult's bone surface.

2.4.8 Quality Assurance Criteria (Maine Yankee Rad Work Plan)

At the onset of the groundwater monitoring program the Department of Environmental Protection (DEP) requested that Maine Yankee provide a guidance document on how they will carry out the various facets of the Post Decommissioning Radiological Groundwater Agreement. A Work Plan was devised and it described the well and geoprobe locations, the geologic characterization, field screening for contamination, drilling depth, screen length, sampling dates and collection, analysis, internal laboratory review, data validation, usability and reporting. The development of the Work Plan commenced in 2005 and was finalized in September 2008. The reason for the lengthy delay was due to protracted discussions and clarifications involving a number of iterations on laboratory acceptance criteria for analyses, data validation and data reporting to the DEP's Environmental and Geographic Analysis Database.

2.5 Other Noteworthy Activities

2.5.1 Reports to the Legislature

2.5.1.1 Monthly

As mandated by legislation passed in the spring of 2008, the State Inspector is required to submit monthly reports to the Legislature on his oversight activities of Maine Yankee's

Independent Spent Fuel storage Installation (ISFSI) located in Wiscasset. Since the law went into effect on June 29, 2008, the State Inspector has been providing monthly reports to a distribution that includes the President of the Senate, the Speaker of the House, the U.S. Nuclear Regulatory Commission (NRC) at NRC Headquarters in Rockville, Maryland and NRC's Region I in King of Prussia, Pennsylvania, Maine Yankee, the Governor's Office, the Department of Health and Human Services, the Department of Environmental Protection, the Public Advocate and the State Police's Special Services Unit. The topics covered in the monthly reports are highlighted in sections 2.1.7, 2.2, 2.3, 2.4 and 2.6 of this report.

2.5.1.2 Annual

Under 22 MRSA §668, as enacted under Public Law, Chapter 539 the State Inspector prepares an annual accounting report of all the funds received into and all disbursements out of the Interim Spent Fuel Storage Facility Oversight Fund. The report is due the first Monday of February. In addition, the State Inspector must annually report his activities to the Department of Health and Human Services Manager of the Radiation Control Program for inclusion in the Manager's Annual Report of Oversight Activities and Funding to the Legislature. In addition to the above annual reports the Inspector also prepares an annual report by July first of every year to the Legislature of his oversight activities. This report fulfills that obligation.

2.5.2 Northeast High Level Radioactive Waste Transportation Task Force (NEHLRWTTF)

As the State's representative the State Inspector has participated in periodic conference calls on the status of Yucca Mountain and transportation issues that could impact Maine. In March the Northeast Task Force notified its membership that it had received increased funding from the Department of Energy (DOE) to monitor federal and commercial transuranic shipments to the salt domes at the Waste Isolation Pilot Project in New Mexico. The increase funding provides sufficient revenues to allow the four regional groups of which the Northeast is one to meet on an annual basis. The DOE reduced the previous funding for the regional groups two years ago. The last annual meeting of the NEHLRWTTF was in June 2008.

In May the State Inspector attended the Department of Energy's (DOE) National Transportation Stakeholders Forum (NTSF) in Chicago. The NTSF is the mechanism through which DOE communicates at a national level with states and tribes about the Department's shipments of radioactive waste and materials. The DOE Forum highlighted all the various agencies within DOE that were tasked with transportation issues, communication issues 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.

In November the State Inspector participated in a national webinar on the Department of Energy's real time tracking system demonstration of high visibility radioactive shipments through radio frequency identification and satellite monitoring.

In December the State Inspector participated in the third conference call of the Department of Energy's (DOE) Prospective Shipment Report (PSR) Ad Hoc Working Group on nuclear shipments. The purpose of the Group was to enhance the information DOE supplies to states affected by DOE's shipments. The states use the summary information in the PSR to help them

plan and prepare for shipments. Recommendations from the Group will be presented at the National Transportation Stakeholders Forum in Denver in May 2011.

The Task Force is an affiliate of the Eastern Regional Conference of the Council of State Governments. The purpose of the Task Force is to not only develop the safest and most efficient transportation route to ship spent nuclear fuel from the Northeast, but also to provide the States with direct involvement in formulating and establishing national policy in the design of the national transportation system and development of any proposed geologic repository.

2.5.3 Yankee Federal Energy Regulatory Commission (FERC) Rate Case Settlement

The State participated in the quarterly conference call briefings relevant to Yankee Rowe, Connecticut Yankee and Maine Yankee. The briefings provide updates to both state and private officials affected by the FERC settlements over the Department of Energy's (DOE) breach of contract to take possession of the spent fuel at Maine Yankee as mandated by the Nuclear Waste Policy Act of 1982, as amended. In September 2006 Maine Yankee won a $75.8 million judgment for monetary damages through 2002 in its lawsuit with the DOE in the U.S. Court of Federal Claims.

In the June briefing, the states of Connecticut, Maine and Massachusetts were apprised that the Department of Justice sent a letter in April to all the utilities litigating spent fuel storage issues and met in May with about 40 utility counsels on the possibility of considering global settlement discussions. However, this effort stalled as the settlement terms only benefitted the federal government.

In September the U.S. Court of Federal Claims issued its decision on Maine Yankee's, Connecticut Yankee's and Yankee Rowe's lawsuits against the federal government's breach of contract to take possession of their spent fuel. The Court awarded Maine Yankee $81.7 million, Connecticut Yankee $39.7 million and Yankee Rowe $21.2 million. In October 2006, the Court had initially awarded Maine Yankee $75.8 million, Connecticut Yankee $34.2 million, and Yankee Rowe $32.9 million. The ruling was appealed by the Justice Department and in August 2008 the U.S. Court of Appeals for the Federal Circuit upheld the Court of Federal Claims ruling that the three parties were due damages and remanded the case back to the Court of Federal Claims for a reassessment of the compensation package based upon a court approved fuel pick up rate. The recent ruling raised the damages initially awarded to Maine Yankee by $5.9 million over the period January 31, 1998 through 2002. In December 2007 the three Yankee companies filed a second round of damage claims that are specific to each company and are awaiting the Court of Federal Claims to set a schedule for trial dates. The litigations are expected to continue until the spent fuel is removed from their respective sites.

Besides the lawsuits, updates are also provided of other organizational activities, both on the regional and national levels, on spent fuel issues, whether it be the Yucca Mountain repository or focusing attention on local or centralized storage. These organizations include the Administration, the Department of Energy, the Blue Ribbon Commission on America's Nuclear Future, the Nuclear Regulatory Commission, Congress, the National Conference of State Legislatures, the Nuclear Waste Strategy Coalition, the Decommissioning Plant Coalition, the National Association of Regulatory Utility Regulators, the Council of State Governments, the New England Governor's Conference, the New England Council, the Coalition of Northeastern Governors, and the New England Conference of Public Utility Commissioners.

2.5.4 Nuclear Waste Strategy Coalition (NWSC)

The State participated in bi-weekly status briefings of the NWSC. The briefings provided updates on national and congressional activities related to the geologic repository at Yucca Mountain in Nevada. The NWSC is an ad hoc group of state utility regulators, state attorneys general, electric utilities and associate members representing 45 organizations from 32 states that are committed to reforming and adequately funding the U.S. civilian high-level nuclear waste transportation, storage, and disposal program in a manner that ensures timely and safe waste removal from operating and decommissioned nuclear power plants.

2.6 Some Newsworthy Items

On June 3, 2008, as mandated by Nuclear Waste Policy Act (NWPA), as amended, the Department of Energy's (DOE) submitted its license application for the construction of a high-level waste repository at Yucca Mountain in Nevada. On September 8, 2008, the Nuclear Regulatory Commission (NRC) accepted DOE's license application for technical review. Shortly after the presidential election President-Elect Obama vowed to terminate the Yucca Mountain Project in Nevada, thereby setting the stage for the ensuing conflict.

The Obama Administration's position was to discontinue disposal activities at Yucca Mountain in Nevada. Subsequently, in March 2010 the DOE submitted a motion to the Nuclear Regulatory Commission's Atomic Safety and Licensing Board to withdraw its license application to construct a geological repository at Yucca Mountain to dispose of the nation's spent nuclear fuel and high level waste. Soon thereafter the discord and battle lines were drawn. The national activity on all sides increased nearly fourfold over the previous year 2009.

The following provides a timeline of the major highlights that transpired in 2010 that produced a plethora of activity on multiple fronts.

- January 12th the U.S. Court of Appeals for the Federal Circuit ruled that the Department of Energy (DOE) can no longer claim that the lack of a federal repository or storage facility constitutes an "unavoidable delay" in failing to meet its statutory obligations to remove used nuclear fuel from commercial nuclear power plant sites. The ruling paves the way for utilities to receive compensation for costs incurred for spent fuel storage at their reactor sites.
- January 26th the Nuclear Regulatory Commission's (NRC) Atomic Safety and Licensing Board (ASLB) commenced hearings in Las Vegas on the DOE's Yucca Mountain license application.
- January 29th the Blue Ribbon Commission on America's Nuclear Future (BRC) was formed under President's Obama's directive.
- February 1st the DOE filed a motion with the NRC's ASLB to stay the proceedings on its application to construct a geologic repository at Yucca Mountain in Nevada.
- February 17th the DOE's Chief Financial Officer sent letters to Congress notifying it of the reprogramming of $115 million of the $196.8 million approved for FY 2010 to affect the closure of the Yucca Mountain Project.
- February 19th Aiken County in South Carolina filed a petition with the U.S. Circuit Court of Appeals for the District of Columbia seeking declaratory and injunctive relief from several federal government organizations on the Department of Energy's license application on Yucca Mountain.
- February 25th three local business leaders from the Tri-City area near the Hanford Reservation in Washington State filed a lawsuit with the U.S. Circuit of Court Appeals of the District of Columbia against the federal government to stop abandoning the Yucca Mountain Project.
- February 26th the State of South Carolina filed a lawsuit against President Obama, Energy Secretary Chu, and the NRC and its Chairman and its three ASLB judges with the U.S. Court of Appeals, Fourth Circuit, to stop the abandonment of the Yucca Mountain Project.

- March 3rd the DOE filed a motion with the NRC's ASLB to withdraw its pending license application on Yucca Mountain with prejudice. The prejudice portion is very significant in that if it is approved the Yucca Mountain license application could never be re-filed once it is dismissed.
- March 25th the BRC met for the first time. Energy Secretary Chu's opening remarks directed the Commission to "look to the future, not the past and not to whether Yucca was a good or bad decision, or whether it should be used as a future repository." Dr. Chu went on to say that there was no immediate crisis and dry cask storage used today is safe for decades and stated his belief that the U.S. has at least 50 years to develop a strategy, if not more.
- April 2nd the National Association of Regulatory Utility Commissioners (NARUC) filed a petition for review with the U.S. Court of Appeals for the District of Columbia Circuit over the DOE's decision in October 2009 to continue charging fees with the moving and disposing of spent nuclear fuel when the Administration's position has been to close down the geologic disposal repository at Yucca Mountain.
- April 5th the Nuclear Energy Institute and 16 nuclear utilities filed a joint petition for review with the U.S. Court of Appeals for the District of Columbia Circuit for the DOE's failure to suspend collection of the fee payments to the Nuclear Waste Fund.
- April 13th the State of Washington filed a petition for review and a motion in the U.S. Court of Appeals for the District of Columbia Circuit seeking a declaratory and injunctive relief against the DOE's termination of Yucca Mountain.
- April 22nd the Senate Budget Committee took an initial step to end funding for the Yucca Mountain Project when it approved a plan supporting the Administration's position to close Yucca Mountain.
- 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 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 DOE to continue with the Yucca Mountain shutdown.
- June 7th the DOE sent a letter to the Yucca Mountain Contractor, USA Repository Services, ordering it to cease work on the Yucca Mountain project and begin terminating employees and contracts.
- June 15th the United States Court of Appeals for the District of Columbia Circuit issued an expedited order scheduling oral arguments for September 23rd for the petitioners, Aiken County, South Carolina, the Tri-City Leaders from Hanford, Washington, the States of South Carolina and Washington, and the intervener-petitioner, NARUC.
- June 29th the NRC's ASLB denied the DOE's motion to withdraw its license application on Yucca Mountain.
- June 30th the NRC issued an order requesting the parties involved in the Yucca Mountain licensing proceeding "to file briefs with the Commission as to whether the Commission should review, and reverse or uphold, the Board's decision."
- July 2nd the NRC and the Department of Justice filed a joint motion with the U.S. Circuit Court of Appeals for the District of Columbia to vacate the briefing and oral argument schedule and hold in abeyance the cases brought forward from the petitioners until a final decision is rendered by the NRC on the withdrawal of the DOE's license application for Yucca Mountain.
- July 6th 91 members of Congress signed and sent a letter to Secretary Energy Chu requesting an immediate cessation of all actions to dismantle the Yucca Mountain Project until such time legal action is resolved by the Nuclear Regulatory Commission and the U.S. Circuit Court of Appeals for the District of Columbia. Twenty-four Senators, including Senators Snowe and Collins, and 67 Representatives of 35 states signed the petition.

- July 15th the NRC Staff sent the Safety Evaluation Report on Yucca Mountain to management for concurrence and authorization for publication.
- July 22nd the NRC Chairman issued the "Final Update of the Commission's Waste Confidence Decision" that provides a 100 year plan for on-site storage of spent nuclear fuel and directing the NRC staff to assess the possibility of "indefinite storage of spent nuclear fuel".
- July 26th the Tenth Circuit Court of Appeals ruled that a pair of decisions made by the Interior Department were arbitrary and capricious and directed the Department to reconsider the two issues involving the Utah Skull Valley Band of Goshutes' construction of an interim cask storage facility for spent nuclear fuel on their reservation.
- July 28th the U.S. Circuit Court of Appeals for the District of Columbia said it would wait until the NRC rules on the Yucca Mountain appeals before the Commission before it hears oral arguments in a combined lawsuit over the planned termination of the spent fuel repository project.
- August 10th the BRC's Transportation and Storage Subcommittee held a meeting at the Chewonki Foundation in Wiscasset.
- September 20th the Acting Principal Deputy Director of the DOE's Office of Civilian Radioactive Waste Management (OCRWM) forwarded a letter to the NRC notifying them that the new point of contact for the Yucca Mountain license application will be an outside counsel for the DOE, since OCRWM will cease to exist after September 30th.
- September 24th the Department of Interior allowed the deadline to pass without filing an appeal of the Tenth Circuit Court of Appeals July 26th ruling on the Utah Skull Valley Band of Goshutes' federally licensed interim cask storage facility for spent nuclear fuel on their reservation.
- September 27th the states of Washington and South Carolina, Aiken County, South Carolina, and the Tri-City leaders from near the Hanford site in Washington filed a motion with the U.S. Circuit Court of Appeals for the District of Columbia to lift the stay the Court imposed and set an expedited briefing schedule on the initial oral arguments for the Yucca Mountain Project.
- October 1st the NRC Chairman directed the staff to terminate all activities associated with the Yucca Mountain license proceedings.
- November 1st Energy Secretary Chu issued his determination on the adequacy of the Nuclear Waste Fund and concluded there would be no changes to the $750 million annual fee assessed to the ratepayers of nuclear utilities.
- December 10th the U.S. Court of Appeals for the District of Columbia Circuit lifted its stay that was pending while waiting for the NRC's decision of their ASLB's denial on the withdrawal of the Yucca Mountain license application. The Court also set an expedited briefing schedule in preparation for oral arguments.
- December 13th the U.S. Court of Appeals for the District of Columbia Circuit issued its judgment dismissing the NARUC litigation claim for the DOE to conduct an annual assessment of and suspend the Nuclear Waste Fund fee established under the Nuclear Waste Policy Act. The Court considered the claims moot since the DOE had just issued the assessment, but noted that NARUC could now challenge DOE's assessment.
- December 23rd the NRC published its final revision to its Waste Confidence decision allowing for the storage of used nuclear fuel at reactor sites for up to 120 years.

To provide a more comprehensive and complete depiction on all the unfolding events on this controversial subject, the newsworthy items were segregated into seven main categories to better illustrate the on-going nature of Department of Energy's activities to terminate the project, the formation of the Blue Ribbon Commission on America's Nuclear Future, the Nuclear Regulatory Commission's Yucca Mountain licensing proceedings, the Congressional response to the Administration's posture, the response from other stakeholders and interested parties, the federal court filings and actions, and finally

the significant reports that were published during the year that impacted the on-going discussions. The events and the cascading actions and reactions for each of the categories are presented in Appendices A through G.

Besides the events mentioned above Appendix H has a balance sheet on the Nuclear Waste Fund (NWF) as of the end of September 2010. The Table lists the status for each state that has or had nuclear generating facilities and their respective payments into the NWF. Please note that under the debt column, the ratepayers of Maine still owe the federal government $116.9 million dollars for nuclear fuel that was burned prior to 1983.

Finally, there are the documents that catapulted the whole debate in 2010 and beyond and are contained in three Appendices. The first is President Obama's directive to form and guide the Blue Ribbon Commission (BRC) in providing recommendations for the management of the nation's nuclear waste stockpile along with the BRC membership and Charter. These documents are provided in Appendix I. Appendix J has the Department of Energy's motion to withdraw its Yucca Mountain license application without prejudice before the Nuclear Regulatory Commission's Atomic Safety and Licensing Board, which culminated the President's promise to stop the Yucca Mountain Project. Appendix K has the Nuclear Regulatory Commission's Atomic Safety and Licensing Board's ruling denying the Department of Energy's motion to withdraw its license application.

2.7 Foreign Activities

There were a couple of newsworthy items that are worth mentioning. The first occurred in July when it was reported that Sweden is leading the way in burying its nuclear waste. At the end of the 2010 SKB, a company set up by Swedish electric utilities to manage nuclear waste, will file a formal application to construct an underground storage facility with a design life of 100,000 years in southeast Sweden that is expected to receive nuclear wastes by 2025. Compared with other countries, Sweden is building their repository in crystalline rock that is constantly dripping water. Since Sweden does not have rock formations that stop water from circulating, they adapted their approach by basing it on local conditions. They plan to encapsulate their fuel rods in copper-coated cast-iron canisters where each canister will be set into a cavity that is plugged with bentonite, a rock that swells in a moist environment and stops water from circulating.

In August the Canadian Broadcasting Association reported that some aboriginal groups in northern Saskatchewan were expressing an interest in storing nuclear waste. The provincial government had not made a decision on whether it would support such a venture. Canada's Nuclear Waste Management Organization (NWMO) was looking for communities to host a national storage facility and reported that the Metis village in Pinehouse visited the agency to gather information. NWMO did state that they have received a formal application to host a nuclear waste storage site in northern Ontario.

Appendix A

Department of Energy (DOE) Activities

1. On January 29th the DOE announced the formation of the long awaited Blue Ribbon Commission (BRC) that will be given two years to develop recommendations for managing the nation's nuclear waste stockpile with a preliminary report due in 18 months. In an interview with former Representative Hamilton, co-chair of the BRC, Hamilton stated the Commission will not be including Yucca Mountain as part of its review of alternatives to nuclear waste management. President Obama's directive to form and guide the Commission and the BRC's membership and Charter are contained in Appendix I.

2. On February 1st the DOE filed a 3 page motion before the NRC's ASLB to stay the proceeding on its license application to construct a geologic repository at Yucca Mountain.

3. On February 8th the DOE sent a letter to Nevada's State Engineer requesting that their 116 applications for groundwater usage to construct the 316 mile Caliente rail line to Yucca Mountain be withdrawn.

4. On February 17th the DOE's Chief Financial Officer sent letters to Representative Peter Visclosky and Senator Byron Dorgan, both Chairs of their respective Chamber's Subcommittee on Energy and Water Development. The purpose of the letters was to notify the respective Chambers of the reprogramming of $115 million of the $196.8 million approved for FY 2010. Since no funds are allocated in FY 2011 budget for bringing the Yucca Mountain to an orderly close, the DOE intends to affect the closure by reprogramming the DOE's FY 2010 appropriated funds.

5. On February 18th, as part of DOE restructuring of its radioactive waste program due to the Administration's position to terminate the DOE's license application for Yucca Mountain pending before the NRC's ASLB, the DOE established the National Transportation Stakeholders Forum (NTSF). "The purpose of the NTSF is to bring transparency, openness, and accountability to DOE's offsite transportation activities through collaboration with state and tribal governments, and the four regional groups operating under the

6. On March 3rd the DOE moved to end almost 30 years of trying to bury nuclear waste in Nevada by filing its motion to "withdraw its pending license application for a permanent geologic repository at Yucca Mountain, Nevada" and DOE asked "the Board (*Nuclear Regulatory Commission's Atomic Safety and Licensing Board*) to dismiss its application with prejudice and to impose no additional terms of withdrawal. The DOE motion is presented in Appendix J.

7. On May 11th the DOE 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 was effective May 24th.

8. On June 7th the DOE sent a letter to the Yucca Mountain Contractor, USA Repository Services, ordering it to cease work on the Yucca Mountain project and begin terminating employees and contracts. The DOE also directed USA Repository Services to provide them with a plan to complete the contract shutdown by September 30th.

9. On July 2nd the DOE notified all of its employees of the Office of Civilian Radioactive Waste Management working on the Yucca Mountain Project of a July 7th meeting in Las Vegas and Washington, D.C. to provide them with their specific "Reduction in Force Notice of Separation". All employees were encouraged to attend the simultaneous meetings, as it would afford them the opportunity to exercise their Interagency Career Transition Assistance Plan eligibility when applying for federal employment outside the DOE.

10. On September 20th the Acting Principal Deputy Director of the DOE's Office of Civilian Radioactive Waste Management (OCRWM) forwarded a letter to the NRC notifying them that the new point of contact for the Yucca Mountain license application will be an outside counsel for the DOE, since the OCRWM will cease to exist after September 30th. Congress created OCRWM in the Nuclear Waste Policy Act of 1982.

11. On November 1st Secretary of Energy Chu issued his determination on the adequacy of the Nuclear Waste Fund fee as per the Nuclear Waste Policy Act. Secretary Chu concluded that there was no reasonable justification to increase or decrease the fee. Therefore, there will be no proposal to Congress to adjust the fee and the fee will remain the same. Secretary Chu endorsed the determination provided by the DOE's Office of Standard Contract Management.

Appendix B

Blue Ribbon Commission on America's Nuclear Future (BRC)

1. On March 25th the BRC met for the first time. Senator's Chu opening remarks directed the Commission to "look to the future, not the past and not to whether Yucca was a good or bad decision, or whether it should be used as a future repository." Dr. Chu went on to say that there was no immediate crisis and dry cask storage used today is safe for decades and stated his belief that the U.S. has at least 50 years to develop a strategy, if not more. He urged the panel to seek outside scientific input and appealed for consideration of both civilian and military uses of nuclear energy.

2. On May 13th the BRC 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.

3. 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 BRC to ensure states have an "opportunity to participate in the reformulation of the nation's policies for managing" nuclear wastes.

4. On May 25th-26th the BRC held its second meeting in Washington, D.C. There were presentations from constituents both for and against nuclear activities.

5. On July 5th the Co-Chairs of the BRC's Transportation and Storage Committee sent a letter to Chairperson Marge Kilkelly of the Maine Yankee Community Advisory Panel (CAP) accepting the CAP's invitation to visit the site and meet with the CAP. The Co-Chairs suggested an August 10th date for their meeting.

6. July 12th the BRC's Reactor and Fuel Cycle Technologies Subcommittee held a meeting in Idaho Falls, Idaho. The meeting focused on several areas of research and development, such as reactors, fuel cycle and fuels, separation and waste forms, and transmutation, (a process by which radioactive elements with very long half-lives such as hundreds, thousands or million years are transformed into radioactive elements with shorter half lives of tens of years or less).

7. On July 14th-15th the BRC held a meeting in Kennewick, Washington near the Hanford nuclear reservation. The Commission toured numerous places on the Hanford site and received presentations from four different tribal communities, the States of Oregon and Washington, local communities, and Washington's Congressional delegation.

8. On August 10th the BRC's Transportation and Storage Subcommittee held a national meeting at the Chewonki Foundation in Wiscasset to listen to state and local officials' perspectives on the spent fuel waste stored at the Maine Yankee facility. The meeting also featured a state/regional panel on storage and transportation in the northeast. Several local residents also expressed their views during the public comment period. To appreciate the various perspectives presented at the meeting, a sampling of selected testimonies and correspondence was provided. Attached are copies of the agenda, testimonies from Marge Kilkelly, Chair of the Maine Yankee's Community Advisory Panel on Spent Nuclear Fuel Storage and Removal, Wayne Norton, President and CEO of Connecticut Yankee and Yankee Rowe, and Chief Nuclear Officer of Maine Yankee, John Kerry, Director, Governor's Office of Energy Independence and Security, State Senator Deborah Simpson, representing Maine and the National Conference of State Legislatures High Level Waste Working Group, Jay Hyland, Manager of the Maine

Radiation Control Program, Lewis Curtis, a member of the CAP, former Director of Boothbay Harbor's Emergency Services and retired Major General of the United States Air Force, Brian O'Connell, Professional Engineer representing the National Association of Regulatory Utility Commissioners, correspondence from Senators Olympia Snowe and Susan Collins, David O'Donnell, Vice-President of the New England Council, and The Lincoln County news report of the proceedings.

9. On August 19th the BRC's Transportation and Storage Subcommittee held a full meeting in Washington, D.C. that covered current storage practices and obligations, storage as part of an overall waste management strategy, technical and regulatory unknowns, and the relationship between storage and development of disposal facilities. The first presentation from the Electric Power Research Institute provided a status of the spent nuclear fuel inventories at reactor sites through the end of 2009 and noted that there were nearly 170,000 assemblies in pools and almost 52,000 assemblies in 1200 dry casks throughout the U.S.

10. On August 30th-31st the BRC's Reactor and Fuel Cycle Technology Subcommittee held a meeting in Washington, D.C. The first day focused on different opportunities in reactor technologies from several different organizations and viewpoints. The second day involved more panel discussions dealing with licensing issues from the NRC's perspective and the nation's capability readiness from different sectors of the economy. The final panel discussion focused on public safety, environment and local concerns.

11. On September 1st the BRC's Disposal Subcommittee held a meeting in Washington, D.C. The Subcommittee moderated two expert panels that focused on the essential elements for technically credible and publicly acceptable geologic disposal regulations and an institutional system for regulating their safety from the BRC's Consultant, the Environmental Protection Agency, a Consultant to the State of Nevada, University of Oklahoma, California State University, an Independent Consultant, and an informative presentation on societal challenges from Clark University.

12. On September 20th the Nuclear Waste Strategy Coalition (NWSC) submitted a letter to the BRC's Co-Chairs of the Transportation and Storage Subcommittee exhorting them to immediately recommend to the DOE to re-instate their transportation plan and remove the spent fuel marooned at decommissioned sites and operating reactors to volunteered host sites. The letter also urged the Subcommittee to recommend to the DOE construction of a centralized interim storage facility.

13. On September 21st -22nd the BRC held a meeting in Washington, D.C. The first day of the full Commission focused on international perspectives and ethical considerations with presentations from Canada, Switzerland, and Spain. The second day centered on nuclear waste governance.

14. On September 23rd the BRC's Transportation and Storage Subcommittee held a meeting in Washington, D.C. The half day meeting focused on "hardened" (designed for beyond design basis threats) on-site storage and transportation and storage risks.

15. On October 12th the BRC's Reactor and Fuel Cycle Technology Subcommittee met to discuss waste management implications of fuel cycle alternatives, advantages and disadvantages of new fuel cycles, and limiting future proliferation and security risks.

16. On October 12th the NWSC sent a letter to both co-chairs of the BRC's Reactor and Fuel Cycle Technology Subcommittee expressing concerns over the continued requirement for ratepayers to pay into the Nuclear Waste Fund when the DOE dismantled the Yucca Mountain Project, the liability the federal government is accruing from its failure to remove the spent fuel, and how ratepayers are paying up to four times for the consequences of not building a permanent repository. The NWSC is an ad hoc group of state utility regulators, state attorneys general, electric utilities and associate members

representing 47 stakeholders in 31 states, committed to reforming and adequately funding the U.S. civilian high-level nuclear waste transportation, storage, and disposal program.

17. On October 21st -22nd the BRC held a two day meeting in Helsinki, Finland to discuss the Finnish approach to regulatory issues, site selection, public opinion, finance and economics, and non-government organizations' perspectives, such as Greenpeace and the Finnish Association for Nature Conservation.

18. On October 23rd and October 25th-26th the BRC held meetings in various locations in Sweden. The discussions centered on the local government's perspective, the repository project, concerned citizenry and the role of non-government organizations (NGO), such as the Swedish NGO Office for Nuclear Waste Review. The visit also included a site tour of the Apso Hard Rock Laboratory in Oskarshamn. The Apso Laboratory is an underground laboratory for research, development and demonstration in a realistic and undisturbed rock environment down to the same depth planned for their future deep repository.

19. On November 2nd the BRC's Transportation and Storage Subcommittee held a meeting in Chicago. The meeting was segregated into three panels. The first panel reviewed the National Academies' report on spent fuel transportation, its findings, status of its recommendations, and what the future holds for shutdown plants. The second panel dealt with specific facility siting aspects and other process issues relative to one or more interim storage facilities. The third panel discussed what steps and timelines would be necessary to plan and implement a large scale spent fuel transportation campaign in the next three to five years.

20. On November 4th the BRC's Disposal Subcommittee held a meeting to discuss the lessons learned from past site evaluation processes. Topics included the scope of scientific work and costs associated with the Waste Isolation Pilot Plant in Carlsbad, New Mexico, and the Yucca Mountain Project in Nevada.

21. On November 15-16th the BRC held a two day meeting. The first day focused on overviews from Japan's, France's, Canada's and Russia's waste disposal policies as well as an overview managing spent nuclear fuel from the RAND Corporation, American Nuclear Society, and Professor Stewart from New York's University School of Law. The second day was devoted to the Green Ribbon Commission, Dr. Jenkins-Smith from the University of Oklahoma and lessons learned from U.S. and international repository programs.

Appendix C

Nuclear Regulatory Commission's (NRC) Yucca Mountain Licensing Proceedings

1. On January 11th the NRC published its memorandum and order on how the logistics of the oral arguments on the DOE's license application to construct a repository at Yucca Mountain will proceed at the hearings scheduled for January 26th and 27th in Las Vegas.

2. On January 26th and 27th the NRC's Construction Authorization Board heard oral arguments in Las Vegas on the DOE's proposed high level waste repository at Yucca Mountain in Nevada. The hearings provide a legal basis for determining which of the contentions allowed by the Board have scientific merit. On the first day of hearings the Board heard 11 legal challenges to the license application. Two of the 11 challenges dealt with Nevada's contentions on the concept of installing 11,000 titanium drip shields to protect the emplaced storage canisters. On the second day of hearings the judge's panel expressed concerns over how defunding of the Yucca Mountain Project could jeopardize the preservation of decades of scientific inquiry and 80 million pages of supporting documents. The panel requested that the DOE deliver to the Board by February 4th what it plans to do with the millions of documents and research reports. It is estimated that DOE has generated 99% of all the millions of pages associated with the license application. Transcripts of the proceedings can be obtained from the following link: http://ehd.nrc.gov/EHD_Proceeding/home.asp.

3. On February 4th the DOE submitted its responses to the NRC's ASLB's questions posed at the January 27th Case Management Conference held in Las Vegas on the Yucca Mountain Project. The DOE provided information on its 3.65 million documents with 34 million electronic image files that it has in its licensing support collection for Yucca Mountain. The submittal also included the DOE's FY 2011 Congressional Budget Request for nuclear energy and defense and civilian nuclear waste disposal.

4. On February 16th the NRC's ASLB issued an order granting the stay of proceeding on the Yucca Mountain license application. The panel of three judges noted that none of the parties that are taking part in the license hearings opposed DOE's motion to stay the proceedings.

5. On February 19th the DOE filed a status report on its archiving plan with the Atomic Safety and Licensing Board's Construction Authorization Board (CAB). The DOE response was in reply to the CAB's January 27th Case Management Conference request. The DOE had filed on February 4th its initial response to the request and stated within that filing it would provide a status report on its archiving plan. The status report relates how it will maintain its licensing support network website until a final order terminating the Yucca Mountain proceedings and how it will work with National Archives and Records Administration to receive its documents once the license application proceedings are terminated.

6. On February 26th the State of South Carolina filed a 48 page petition to intervene in the NRC's ASLB's ruling on the anticipated DOE's motion to withdraw, with prejudice, its license application to construct a nuclear waste repository at Yucca Mountain in Nevada. The "with prejudice" is very significant in that, if the NRC approves the ruling, the Yucca Mountain license application could never be re-filed once it is dismissed.

7. On February 26th the State of South Carolina filed an 81 page lawsuit with the U.S. Court of Appeals, Fourth Circuit, against President Barack Obama, Energy Secretary Steven Chu, the NRC and its Chairman, Gregory Jaczko, and the NRC's ASLB and the Board's three judges involved in the Yucca

Mountain proceedings, Thomas Moore, Paul Ryerson, and Richard Wardwell. The petition seeks to stop the Administration from abandoning the Yucca Mountain Project. The State of South Carolina is home of the defense site, the Savannah River Site, which is undergoing clean-up activities with the waste headed for Yucca Mountain as part of a legally binding agreement between the State and the federal government.

8. On March 3rd the State of Washington filed a petition with the NRC's ASLB to intervene in DOE's motion to withdraw with prejudice its pending license application "for a construction authorization to proceed with a deep geologic repository for high level waste and spent nuclear fuel at Yucca Mountain, Nevada."

9. On March 5th the NRC's ASLB issued an order concerning the scheduling of petitions it received from the States of Washington and South Carolina, and Aiken County, South Carolina to intervene on DOE's motion to withdraw its license application for Yucca Mountain and how they will be processed.

10. On March 15th the Prairie Island Indian Community of Red Wing, Minnesota, filed a petition with the NRC opposing DOE's request to withdraw its license application on Yucca Mountain with prejudice, which means the DOE could never go back and resubmit its application.

11. On March 15th the National Association of Regulatory Utility Commissioners (NARUC) also filed a petition with the NRC contesting DOE's motion to withdraw its construction license application for the nuclear waste repository at Yucca Mountain.

12. On March 16th, after receiving two new petitions from the NARUC and the Prairie Island Indian Community to intervene in DOE's motion to withdraw its Yucca Mountain license application, the NRC ASLB issued a second order citing the section of the NRC's regulations that will govern the filing times and replies, inclusive of any new petitions.

13. On March 16th the legal counsel for the Prairie Island Indian Community forwarded a letter to the Attorney General's Offices throughout the U.S. suggesting that it was not to late to still intervene on the Yucca Mountain license proceeding. Counsel based his opinion on the March 5th ASLB Order indicating that there may be an opportunity for others to present motions to intervene on the Yucca Mountain license withdrawal.

14. On March 26th Nye County from Nevada answers to the petitions to intervene filed by the States of South Carolina and Washington, Aiken County, South Carolina, the NARUC and the Prairie Island Indian Community. Nye County did not oppose the petitions to intervene from the five petitioners to the NRC's ASLB.

15. On March 29th the DOE responded to the NRC's ASLB on the five petitions to intervene on their license application withdrawal to construct a geologic repository at Yucca Mountain. The five petitioners are the State of Washington, the State of South Carolina, Aiken County South Carolina, NARUC, and the Prairie Island Indian Community. The DOE did not oppose the five petitioners provided the petitioners agreed to some ground rules. Four of the five petitioners agreed to the ground rules, but NARUC did not.

16. On April 6th the NRC's ASLB suspended briefings on the proposed DOE's motion to withdraw its Yucca Mountain license application pending before the NRC until a federal court rules on the legal challenges to DOE's authority to withdraw its application.

17. On April 12th the DOE filed a petition for interlocutory review by the NRC on the NRC's ASLB's Memorandum and Order suspending the briefing and consideration of DOE's motion to withdraw its Yucca Mountain license application pending before the NRC. The petition would force the ASLB judges to resume its deliberations on DOE's motion to withdraw its license application or the NRC Commissioners would take over the review.

18. On April 16th the DOE filed a notice of deferral with the NRC's ASLB relative to its plans for archiving its Yucca Mountain document collection with the National Archives.

19. On April 23rd the NRC issued a "Memorandum and Order" vacating the NRC's ASLB'S decision on April 6th "suspending briefing, suspending its consideration of the five new intervention petitions and DOE's motion to withdraw, and extending the stay of the proceeding it had entered previously." The Commissioners remanded the matter to the ASLB "for prompt resolution of DOE's motion to withdraw." The Commission based their decision on their belief that a judicial review may benefit from their consideration of the DOE motion.

20. On April 27th the NRC's ASLB extended the June 1st deadline imposed on April 23rd by the NRC Commissioners to June 30th. The ASLB stated the June 1st deadline was infeasible due to the complexity of the issue, its desire to hold a legal hearing, and how to preserve the project's documents.

21. On May 14th Lincoln County, Nevada responded to the NRC's ASLB's April 21st order on how it will preserve its document collection on the Yucca Mountain Project.

22. On May 14th the Florida Public Service Commission filed a motion for leave to participate as a friend of the court on DOE's motion to withdraw. According to the amicus brief the Commission believes that the ASLB's decision may affect its interests when it comes to passing on just and reasonable costs to its ratepayers.

23. On May 17th several parties were required by the NRC's ASLB's April 27th order to file their positions on DOE's 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 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 DOE and Nevada. The states of Washington and South Carolina, the Nuclear Energy Institute, NARUC 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 NRC 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 terms and conditions be applied to the Board's order to safeguard the County's interests.

24. On May 17th the NRC' staff's responded to the DOE's 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 ASLB that DOE's motion should be granted without prejudice, as the DOE had not demonstrated that withdrawal with prejudice was justified.

25. On May 19th the State of Nevada responded in opposition to NARUC's amendment 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.

26. On May 19th the NRC's Licensing Support Network (LSN) Administrator responded to the NRC's ASLB'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.

27. On May 20th the NRC issued a news release stating that the ASLB will convene in Las Vegas on June 3rd to hear oral arguments on DOE'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.

28. On May 21st the NRC staff replied to the NARUC's 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.

29. On May 24th the DOE responded to the NRC's ASLB'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.

30. On May 27th the DOE filed its reply to the NRC's ASLB 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.

31. On June 1st Nye County, Nevada, submitted its comments to the NRC's ASLB's April 27th Order regarding the DOE's Licensing Support Network preservation plan for its Yucca Mountain documents. The Nye County filing requested that all the technical information, records, documents, physical samples and scientific data be preserved, as it constitutes "a critical national resource". On June 1st the State of Nevada also filed a similar petition requesting that the DOE comply with its May 24th commitments on the preservation and accessibility of its documentary material in full and retrievable text.

32. On June 3rd the NRC's ASLB heard arguments on whether it should allow the DOE to withdraw its Yucca Mountain license application. On June 4th the Board had a case management conference to discuss how DOE would preserve the documents from the Yucca Mountain project. At that hearing DOE proposed to preserve the Yucca Mountain documents for 100 years and the physical core samples for 25 years.

33. On June 7th, based on discussions at the hearing on June 4th, the NRC's ASLB issued an order directing the parties, interested government participants and petitioners to confer with the DOE to come up with a proposed set of conditions on DOE's Licensing Support Network document collection on Yucca Mountain. The Board also directed the State of Nevada to take the lead on this consult and file the proposed conditions by June 18th.

34. On June 14th State of Nevada filed without any prior notice a petition for relief with respect to the possible issuance of a partial Safety Evaluation Report for Yucca Mountain with the NRC. The petition also requested that the Commission direct the presiding ASLB to prepare an opinion on Nevada's ten pending legal issues.

35. On June 18th the State of Nevada filed its response to the NRC's ASLB June 7th Order requiring the parties, interested government participants and petitioners for intervention to reach an agreement regarding the DOE's Licensing Support Network document collection. The results of the groups' discussions yielded two separate parts with Part I listing the twenty-two conditions agreed upon and Part II expressing the different positions regarding the thirteen proposed conditions on which agreement was not reached.

36. On June 22nd the County of White Pine, Nevada, filed a response with the Commission to the State of Nevada's petition to seek relief from the NRC's staff publication of Volume 3 of the Safety Evaluation Report (SER). White Pine County asserted that the Commission should reject Nevada's demand for immediate termination of the Staff's SER as it is untimely and not warranted. However, White Pine did request that the Commission grant Nevada's request to direct the "ASLB to issue an order on each of the ten pending legal issues raised by Nevada. On the same day Lincoln County, Nevada also filed a very similar petition with the Commission making the same requests that White Pine County did for denial of Nevada's petition, but support for the legal issues raised by Nevada. Lincoln County expressed concerns that, if the Commission becomes "subject to the same political decision-making that appears to be driving DOE's efforts to terminate the Yucca Mountain project", then "suppressing important Staff evaluations and conclusions regarding the extent to which Yucca Mountain may or may not be able to operate safely, the Commission may lose the respect and confidence of the very public it seeks to protect."

37. On June 23rd Nye County, Nevada, the host county for the proposed Yucca Mountain repository, filed a petition with the NRC requesting that it deny the State of Nevada's petition for relief from the issuance of the NRC staff's Volume 3 of the SER since it has "no basis in law or fact". Nye County countered the assertion by Nevada that the SER will benefit no one is untenable, since "it ignores the value that all scientific and engineering endeavors have in common, which is to shed light and understanding on processes and systems that had not been studied previously. Nevada can no more predict the usefulness of that data and analysis than the Nation could have predicted the numerous scientific and engineering developments from the Apollo project."

38. On June 24th the NRC staff responded to the State of Nevada's petition for relief with respect to possible issuance of a partial SER and stated that it would comply with the Commission's direction.

39. On June 24th Nevada's Clark and Eureka counties filed a petition with the NRC in support of the State of Nevada's petition to seek relief with the possible issuance of Volume 3 of the NRC staff's SER on Yucca Mountain. On the same day the Joint Timbisha Shoshone Tribal Group, the County of Inyo, California, and the Native Community Action Council also filed a similar petition with the Commission joining with and supporting the State of Nevada's petition seeking relief from the possible issuance of the NRC staff's SER.

40. On June 29th the NRC's ASLB issued its ruling denying the DOE's motion to withdraw its license application on Yucca Mountain. The Board issued the following statement in support of its denial: "We do so because the Nuclear Waste Policy Act (NWPA) of 1982, as amended, does not permit the Secretary to withdraw the Application that the NWPA mandates the Secretary file. Specifically, the NWPA does not give the Secretary the discretion to substitute his policy for the one established by Congress in the NWPA that, at this point, mandates progress toward a merits decision by the Nuclear

Regulatory Commission on the construction permit." The Board's ruling denying DOE's motion is available in Appendix K.

41. On June 30th the NRC issued an order requesting the parties involved in the Yucca Mountain licensing proceeding "to file briefs with the Commission as to whether the Commission should review, and reverse or uphold, the Board's decision." The initial briefs are due July 9th followed by response briefs due July 16th.

42. On July 8th Aiken County, South Carolina, filed a motion with the Nuclear Regulatory Commission opposing the Commission's review of the ASLB Order denying DOE's motion to withdraw its license application to construct a geologic repository at Yuccas Mountain in Nevada. Aiken County further stipulates that if the Commission does review the Order, it should uphold the Order.

43. On July 9th the State of Nevada filed a brief with the NRC supporting the review and reversal of the ASLB's decision denying DOE's motion to withdraw its license application with prejudice on Yucca Mountain.

44. On July 9th the NRC staff responded to the Secretary of the Commission's June 30th Order requesting briefs as to whether the Commission should review and reverse or uphold the ASLB Order denying DOE's motion to withdraw its license application. The NRC staff position is for the Commission to review and reverse the Board's Order.

45. On July 9th NARUC filed a brief with the NRC supporting the June 29th decision by the ASLB's denying DOE's motion to withdraw its license application on Yucca Mountain. Should the Commission review the Board's decision, then NARUC requested that the Board Order be upheld.

46. On July 9th the County of Inyo, California filed a response with the NRC on the ASLB's Order denying DOE's motion to withdraw its license application. The County did not take any position on whether the Commission should review and reverse or uphold the Board Order. However, the County did urge the Commission, should it review and reverse the Board's decision and grant's DOE's motion to withdraw its license application, make three findings and two conditions pertinent to Inyo's case of ten admitted contentions in the licensing process.

47. On July 9th the Prairie Island Indian Community filed its brief with the NRC requesting that it affirms the ASLB's Order to deny DOE's motion to withdraw its license application for a nuclear waste repository at Yucca Mountain.

48. On July 9th the State of South Carolina filed a brief with the NRC requesting that the Commission refuse the review of the ASLB's Order to deny DOE's motion to withdraw its license application on Yucca Mountain. If the Commission does choose to review the Board's Order, the State requested the Commission to uphold the Board's ruling. In addition, as part of its brief the State also filed a motion for Commissioners Apostolakis, Ostendorf and Magwood to recuse themselves from the Yucca Mountain proceedings.

49. On July 9th the States of Washington and South Carolina, Aiken County, South Carolina, and White Pine County, Nevada filed a joint motion requesting the recusal of Commissioners Magwood, Apostolakis, and Ostendorf for their responses during a February 9th confirmation hearing before the Senate's Committee on Environment and Public Works. Each Commission nominee at the time stated that they would not second guess DOE's decision to withdraw its license application for Yucca Mountain from the Commission's review.

50. On July 9th the Four Nevada Counties of Churchill, Esmeralda, Lander, and Mineral submitted their joint brief to the NRC agreeing with the ASLB's Order denying DOE's motion to withdraw its license application for Yucca Mountain. The four counties requested the Commission not to review the Board's decision and, if the Commission does choose to review it, to uphold the Board's ruling.

51. On July 9th Nye County, Nevada filed its brief with the NRC supporting the ASLB's decision denying DOE's motion to withdraw with prejudice its license application for the Yucca Mountain repository. Nye County requested that the Commission refuse to review the Board's Order, or if it does review it to uphold it. The brief also requested that the States of Washington and South Carolina, Aiken County, South Carolina, and the Prairie Island Indian Community be granted intervention status in the proceedings.

52. On July 9th the State of California filed a brief with the NRC noting that it supported DOE's motion to withdraw its license application. California urged the Commission should it review and overturn the ASLB's denial of DOE's motion to withdraw its license application to do so only with conditions that do not foreclose California's 22 admitted contentions regarding DOE's or NRC's compliance with the National Environmental Policy Act to be litigated by California in any future licensing proceeding.

53. On July 9th the DOE filed its brief with the NRC in support of the Commission's review and reversal of the ASLB's ruling denying DOE's motion to withdraw its license application. The DOE also requested that the Commission impose no other conditions on them.

54. On July 9th the Nuclear Energy Institute (NEI) filed a brief with the NRC stating their opposition to the Commission's review of the ASLB's Order denying DOE's motion to withdraw its license application. Should the Commission decide to review the Order NEI requested that the Commission uphold the Order.

55. On July 9th the State of Washington filed a brief with the NRC in opposition to the Commission reviewing the ASLB Order denying DOE's motion to withdraw its license application for the Yucca Mountain repository. If the Commission does review the Order, the State of Washington argued that the Commission should uphold the Order in its entirety.

56. On July 14th the Secretary of the NRC noted that there were problems with the NRC's Electronic Information Exchange that delayed notifications to filers of briefs and issued an order extending until July 19th when response briefs would need to be submitted.

57. On July 15th Nuclear Regulatory Commissioner Apostolakis recused himself from participating in DOE's license application proceedings with the NRC due to his past chairing of an independent panel that reviewed the "adequacy of the long-term performance assessment for the proposed Yucca Mountain repository."

58. On July 19th the NEI responded to the motion filed by the States of Washington and South Carolina, Aiken County, South Carolina and White Pine County, Nevada requesting that Commissioners Apostokalis, Magwood, and Ostendorf recuse themselves and be disqualified from the NRC's review of the ASLB's decision to refuse DOE's motion to withdraw its license application for Yucca Mountain. The rationale for the request is based on the February 9th Senate confirmation hearing for all three then Commissioner nominees that they may have pre-judged the merits when they responded to Chairman Senator Boxer's question: "If confirmed, would you second guess DOE's decision to withdraw the license application for Yucca Mountain from NRC's review?" All three nominees responded "no" without any further discussion or clarification of what the question might mean. Until the NRC decides to review the ASLB decision and in what context, the NEI position is that the motion is premature.

59. On July 19th the DOE filed a reply brief with the U.S. NRC in support of review and reversal of the ASLB's ruling to refuse DOE's request to withdraw its license application for Yucca Mountain.

60. On July 19th the DOE filed a response with the NRC on the disqualification of Commissioners Magwood and Ostendorf on any issue associated with the appeal of DOE's motion to withdraw its license application. The DOE requested that the motion for recusal be denied, as there was no basis in law for the motion.

61. On July 19th the NRC staff responded to the Commission's June 30th order on whether the Commission should review, and reverse or uphold, the ASLB's Order denying DOE's motion to withdraw its license application to construct a high-level geologic waste repository at Yucca Mountain in Nevada. The NRC staff's position is that the Commission should review and reverse in part the ASLB's ruling.

62. On July 19th the NRC staff also responded in opposition to the States of Washington and South Carolina, Aiken County, South Carolina, and White Pine County, Nevada July 9th joint motion seeking the recusal of Commissioners Apostolakis, Magwood, and Ostendorf from the ASLB's denial of DOE's motion to withdraw its license application for a high-level waste repository at Yucca Mountain.

63. On July 19th the NARUC filed a reply brief to the NRC on the briefs filed by the State of Nevada, the Department of Energy, and NRC staff supporting the Commission's review. NARUC'S position is that the Commission declines the review of the ASLB's June 29th denial. However, if the Commission chooses to review the Board's denial Order, NARUC requests that the Commission upholds the Board's Order in all aspects.

64. On July 19th the State of Nevada, the Joint Timbisha Shoshone Tribal Group, the Native Community Action Council, and Clark County, Nevada filed a joint response brief to the NRC supporting the Commission's review and reversal of the Licensing Board's decision to deny DOE's motion to withdraw its license application with prejudice. The brief was in response to briefs from other parties opposing the Commission's review and reversal of the Board's June 29th Order.

65. On July 19th Nye County, Nevada filed its response brief to the NRC supporting the ASLB's Order denying DOE's motion to withdraw with prejudice its license application for the Yucca Mountain repository. The brief was in response to other briefs filed by the DOE, the State of Nevada, and the NRC staff. The Nye County brief requested that the Commission either refuse to review the Board's Order, or review and affirm the Board's Order.

66. On July 19th the State of Nevada filed a response with the NRC in opposition to the motion that Commissioners Magwood and Ostendorf recuse themselves from reviewing the ASLB Order denying DOE's motion to withdraw its license application.

67. On July 19th the State of Washington filed a brief with the NRC in response to briefs filed by the DOE, the State of Nevada and the NRC staff requesting review and reversal of the June 29th ASLB ruling to deny DOE's motion to withdraw its license application. The State of Washington maintained its position that the Commission should not review the Board's Order.

68. On July 19th the State of South Carolina filed a brief with NRC in response to briefs filed by the DOE, the State of Nevada and the NRC staff requesting review and reversal of the June 29th ASLB ruling to deny DOE's motion to withdraw its license application. The State of South Carolina maintained that the Board's Order be affirmed in its entirety.

69. On July 19th the NEI filed a brief with the NRC responding to other briefs and maintaining that the Commission should uphold the Board's Order to deny DOE's motion to withdraw its license application.

70. On July 19th the Prairie Island Indian Community (PIIC) filed a response brief with the NRC addressing separately the initial replies of the DOE, the State of Nevada (and allied parties), and the NRC staff. The PIIC requested that the Commission affirm the June 29th ASLB memorandum and order denying DOE's motion to withdraw its license application.

71. On July 19th Aiken County, South Carolina, file a reply brief with the NRC outlining and reaffirming its arguments as to why the Commission must allow the Licensing Board's Order denying DOE's motion to withdraw to stand.

72. On July 22nd NRC Chairman issued the "Final Update of the Commission's Waste Confidence Decision" that provides a 100 year plan for on-site storage of spent nuclear fuel and directing the NRC staff to assess the possibility of "indefinite storage of spent nuclear fuel". Chairman Jaczko proposed that the staff "prepare an update to the Waste Confidence Findings and Proposed Rule to account for storage at onsite storage facilities, offsite storage facilities, or both, for more than 100years, but no longer than 300 years, from the end of licensed operations of any nuclear power plant, which may include the term of a revised or renewed license."

73. On August 9th Nuclear Regulatory Commissioner Svinicki issued her approval in part and disproval in part on the "Final Update of the Commission's Waste Confidence Rule" as recommended by Chairman Jaczko on July 22nd. Commissioner Svinicki's took issue with Chairman Jaczko's terminology "in the foreseeable future" as applied to the regulations and the second finding of the Waste Confidence Rule. Her recommendation was to delete the Chairman's terminology and replace it with "when necessary". Commissioner Svinicki also proposed that the on-site storage should be at least 300 years up to 500 or more years.

74. On August 10th Nuclear Regulatory Commissioner Ostendorff issued his approval of the "Final Update of the Commission's Waste Confidence Rule" as modified by his recommendations. Commissioner Ostendorff agreed with Commissioner Svinicki's terminology.

75. On August 11th Nuclear Regulatory Commissioners Magwood and Ostendorff both refused to recuse themselves from the motions by the States of Washington and South Carolina, Aiken County, South Carolina, and White Pine County, Nevada to disqualify themselves from the ASLB's denial of DOE's motion to withdraw its Yucca Mountain application. The motions to recuse were based on their responses at their Senate Confirmation hearing that they would not second guess DOE's decision to withdraw their license application.

76. On August 13th Nuclear Regulatory Commissioner Apostolakis issued his approval of the "Final Update of the Commission's Waste Confidence Rule" as modified by his recommendations. Commissioner Apostolakis agreed with Commissioner Svinicki on the use of when necessary, but did provide specifics to the regulation by adding, "to dispose of commercial high-level waste and spent fuel".

77. On August 13th Nuclear Regulatory Commissioner Magwood issued his approval of the "Final Update of the Commission's Waste Confidence Rule" as modified by his recommendations. Commissioner Magwood's modifications agree with Commissioner Apostolakis' revisions.

78. On August 23rd the NRC staff informed the ASLB that Volume I of its SER on Yucca Mountain was complete and provided the Board with a copy. The first volume of the SER does not address the safety

issues associated with the proposed repository, but rather states that the DOE has met the five NRC requirements for the proposed geologic repository at Yucca Mountain.

79. On September 9th the State of Nevada issued a letter to the NRC staff evaluating the Yucca Mountain license application. The letter expressed disappointment over the depth of Volume I that was issued on August 23rd and dissatisfaction on the NRC staff's handling of obvious errors in the report.

80. On September 15th the NRC issued a news release stating that they had approved the final version of their Waste Confidence Rule, which will allow for on-site storage of spent nuclear fuel for at least 60 years beyond the license life of any reactor. The approval also directed the staff to start a long term rulemaking for storage facilities for extended periods. The rule will be published in the federal Register in 60 days.

81. On October 4th the NRC released a memorandum from their Chief Financial Officer and Executive Director of Operations on the guidance office directors and regional administrators should heed under a FY 2011 continuing resolution.

82. On October 6th the Assistant Attorney General of Washington sent a letter to the counsels representing the Department of Justice and the NRC requesting information confirming the validity of the NRC staff's cessation of work on the Yucca Mountain Project based on a directive from the NRC Chairman.

83. On October 7th Aiken County, South Carolina and the states of Washington and South Carolina filed a motion with the NRC for a Commission order to restore the technical review of the Yucca Mountain license application. The motion was introduced when the Chairman of the Commission was perceived to unilaterally halt the NRC's staff review of the Yucca Mountain license application.

84. On October 8th Nuclear Regulatory Commissioner William Ostendorff issued a memorandum to his fellow Commissioners on his dissension with the staff budget guidance under FY 2011 continuing resolution. The memorandum delineates in detail his rationale for disagreeing with the guidance and why the NRC should continue with its Yucca Mountain review.

85. On October 13th the Senior Counsel for the NRC responded to Washington State's Assistant Attorney General's letter dated October 6th. The Senior Counsel points to the NRC's Chief Financial Officer's October 4th memorandum and the Commission's proposed FY 2011 budget under NUREG -1100, Volume 26 as a basis for discontinuing the Yucca Mountain review.

86. On October 14th the Sustainable Fuel Cycle Task Force sent a letter to the NRC Chairman Jaczko and the four other Commissioners requesting the reversal of the Chairman's directive to halt work on DOE's Yucca Mountain license application.

87. On October 14th Nuclear Regulatory Commissioner Kristine Svinicki affirmed Commissioner Ostendorff's proposal on Commission direction on the staff budget guidance under FY 2011 continuing resolution.

88. On October 14th the Secretary of the NRC issued a memorandum to Commissioner William Ostendorff notifying him that a majority of the Commissioners declined to participate in the matter of the Commission direction on staff budget guidance under the FY 2011 continuing resolution. Therefore, his proposal was not approved.

89. On October 18th the NRC staff responded to a motion filed with the Commission for an order to restore the technical review of the Yucca Mountain license application. The staff asserted that the motion

should be denied, as there is no basis to grant the relief requested. Likewise, the State of Nevada also filed with the Commission on the same day their contention that the motion should be denied since it did not include the proper certification as mandated by the NRC's regulations. The Native Action Community Council concurred and joined Nevada in their opposition to the motion.

90. On October 19th the State of Nevada filed with the NRC's ASLB its third witness update on the Yucca Mountain application. Nevada indicated there were no additional witnesses.

91. On October 19th the State of Nevada filed a corrected answer with the NRC on their contention that a motion to restore the technical review of the Yucca Mountain license application be denied.

92. On November 18th the Attorneys representing Nevada sent a letter to the Chair of the NRC'S ASLB inquiring on the status of Nevada's eleven legal issues pending before the Board. On behalf of Nevada, the letter requested the Board to issue a schedule for deciding these legal issues.

93. On November 23rd the NRC's ASLB ordered that Nevada's November 18th letter will be accepted as a motion before the Board and notified the other parties that they have ten days to respond to Nevada's motion.

94. On November 29th the NRC staff notified the NRC's ASLB that it will not be issuing its Volume 3 of the SER on the Yucca Mountain Project this month and that a revised schedule for its publication is uncertain at this time.

95. On December 2nd the NRC staff responded to the NRC's ASLB's Order to move on Nevada's legal issues which were raised during the Yucca Mountain proceedings. The Staff did not oppose Nevada's motion.

96. On December 8th the NRC's ASLB's issued an Order directing the NRC staff to file an explanation of why it can not issue Volume 3 of the SER on Yucca Mountain. On the same day the ASLB also ruled that the parties involved in the Yucca Mountain proceedings need to move forward on the State of Nevada's motion to pursue a ruling on its legal contentions to the Yucca Mountain license application.

97. On December 14th the NRC's ASLB issued its 37 page ruling essentially denying all eleven of Nevada's legal challenges to the Yucca Mountain license application. However, it did acknowledge that even though the legal issues were denied Nevada could still raise the safety implications of some of those legal issues.

98. On December 15th the Governor-Elect from Nevada issued a statement on the NRC's ASLB Ruling rejecting Nevada's eleven legal contentions raised in the initial filing with the Board. The Governor-Elect renewed Nevada's opposition to the storage of high level nuclear waste at Yucca Mountain, but was willing to consider other non-nuclear options.

99. On December 16th the Executive Director of the Agency for Nuclear Projects issued a response to the recent NRC's ASLBs judicial order rejecting Nevada's legal contentions.

100. On December 22nd the NRC staff filed with the NRC's ASLB its response to the ASLB's December 8th Order on the issuance of the staff's SER Volume 4 on Yucca Mountain. With the halting of the Yucca Mountain Project review, the Staff related it would not issue Volume 4 of the SER in December 2010 as originally planned and the schedule for issuing Volume 4 is indeterminate.

101. On December 23rd the NRC published its final revision to its Waste Confidence decision allowing for the storage of used nuclear fuel at reactor sites up to 120 years. In arriving at that conclusion the Commission deemed there was reasonable assurance that a mined geologic disposal would be available in the future when necessary.

Appendix D

Congressional Reactions and Responses

1. On February 2nd Senate Majority Leader Harry Reid requested the Government Accountability Office (GAO) to begin discussions with the State of Nevada and federal agencies on exploring alternative uses for Yucca Mountain. Senator Reid's alternatives focused on national security and clean energy efforts, such as "the development and testing of renewable energy technology, training grounds for the military, arms control activities, a lab for underground experiments or a hide away for the government in case of an emergency".

2. On February 3rd Representatives Hall from Texas and Broun from Georgia wrote a letter to Energy Secretary Chu expressing their concerns over the Secretary's unwillingness to respond to their queries from their May 7, 2009 letter.

3. On February 9th Senator Barbara Boxer of California, chairwoman of the Senate Environment and Public Works Committee, posed a question she received from Senator Harry Reid at the hearing for three new nominees to be members of the NRC. Senator Boxer asked each nominee, "If confirmed, would you second guess DOE's decision to withdraw the license application for Yucca Mountain from the NRC's review?" All three nominees responded "No". The nominees, if confirmed, would fill the three vacancies on the NRC.

4. On February 26th Representative John Kline from Minnesota sent a letter to the Co-Chairs of the BRC congratulating them on their appointments and to express his concerns over the Administration's defunding of the Yucca Mountain Project and the potential billions in liability that taxpayers will face. He urged the BRC to "not take the Yucca Mountain Nuclear Waste Repository off the table as a viable storage site for radioactive waste management."

5. On March 18th five lawmakers from the States of Washington and South Carolina, including House Majority Whip James Clyburn and Budget Committee Chairman John Spratt, sent a letter to Energy Secretary Chu protesting the reallocation of $115 million appropriated for the Yucca Mountain license proceedings and requested that funding be restored for the Yucca Program.

6. On March 19th the U.S. Senate confirmed three new Commissioners for the U.S NRC. The nominees were confirmed by unanimous consent, rather than a role call vote.

7. On March 23rd a bipartisan group of House Representatives introduced a resolution opposing the Obama Administration's position to end the nuclear waste repository at Yucca Mountain in Nevada. The resolution was aimed at stopping the DOE from using appropriated funds to end the project and to preserve all scientific and site specific file and data related to Yucca Mountain.

8. On March 24th in an Appropriations Subcommittee meeting, Representative Rodney Frelinghuysen from New Jersey told Energy Secretary Chu that he did not have the authority to close the Yucca Mountain repository. The remark was made in opposition to DOE's reprogramming of $115 million in current fiscal year revenues to shutdown the Yucca Mountain Project in Nevada. Other lawmakers also charged that the Administration was violating the Nuclear Waste Policy Act and had no right to shift money away from the purpose for which Congress appropriated it.

9. On March 24th Representative Fred Upton from Michigan, Ranking Member of the House Appropriations Subcommittee on Energy and Environment, forwarded a letter to Energy Secretary Chu expressing his concerns and fears over the accelerated pace to shutdown the Yucca Mountain Project by the end of this fiscal year could cause the irreparable loss of scientific and technical records.

10. On March 26th Energy Secretary Chu responded in a letter to the House Appropriations Energy and Water Subcommittee that, contrary to what lawmakers said on March 24th, he has the legal authority to reprogram the remaining funds in FY 2010 to terminate the Yucca Mountain project. The Subcommittee will be the first body on Capitol Hill to weigh the Department of Energy's request to zero out the Yucca Mountain program when it writes a FY 2011 energy spending bill this summer.

11. On April 12th six congressional Representatives from California, Connecticut, Maine, Massachusetts and Wisconsin sent a letter to the Co-Chairs of the newly formed BRC requesting the BRC to "reach out to those in our representative states that are currently responsible for these decommissioned (single unit) sites to assist with your review and ensure the unique challenges faced by decommissioned plants can be addressed in your final recommendations." Both of Maine's Representatives, Mr. Mike Michaud and Ms. Chellie Pingree, signed the letter.

12. On April 22nd the Senate Budget Committee took an initial step to end funding for the Yucca Mountain Project when it approved a plan supporting the Administration's position to close Yucca Mountain. The budget resolution (S. Con. Res. 13) is a broad blueprint on how the Senate might prioritize its spending for the upcoming fiscal year and serves as a guideline for appropriations subcommittees to write spending bills over the summer.

13. On April 26th Senator Sue Collins sent a letter to the BRC Co-Chairs of the requesting on behalf of the Maine Yankee Community Advisory Panel to hold a meeting in Wiscasset.

14. 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 DOE in managing the nation's nuclear waste stockpile. The bill was referred to the Senate's Committee on Environment and Public Works.

15. 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".

16. 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. The next day House Democrats blocked the Spratt and Hastings amendment in the House defense bill that would keep the Yucca Mountain Project going forward.

17. 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.

18. On June 2nd House Democrats blocked a bipartisan amendment to the National Defense Authorization bill by preventing it from being considered on the House floor. The bipartisan amendment, authored by Congressman Doc Hastings from Washington and John Spratt of South Carolina, was aimed at stopping defense nuclear wastes from being stranded in their states indefinitely and instead stored at the designated repository at Yucca Mountain.

19. On June 22nd Congressman James Sensenbrenner from Wisconsin submitted House Resolution 1466 requesting documents from the President and Secretary of Energy relevant to the foreclosure of the Yucca Mountain project.

20. On June 23rd Senator James Inhofe from Oklahoma wrote a letter to Dr. Gregory Jaczko, NRC Chairman, requesting a response by June 30th on an updated status of the NRC's technical staff review of DOE's Yucca Mountain license application.

21. On June 30th House Budget Chairman John Spratt of South Carolina released a statement saying that the decision by the Board to deny the motion "confirms the policy established by Congress on Yucca Mountain."

22. On July 6th 91 members of Congress signed and sent a letter to Secretary Energy Chu requesting an immediate cessation of all actions to dismantle the Yucca Mountain Project until such time legal action is resolved by the NRC and the U.S. Circuit Court of Appeals for the District of Columbia. Twenty-four Senators, including Senators Snowe and Collins, and 67 Representatives signed the petition. In all representatives of 35 states signed the letter.

23. On July 7th Energy Secretary Chu sent a letter to Representative Ralph Hall, the Ranking Member on the House's Committee on Science and Technology, responding to Representative Hall's February 3rd letter seeking further explanation on the bases for the Administration's decision to terminate the Yucca Mountain Project. Although Dr. Chu did not specifically address Representative Hall's concerns, he did provide an April 12th letter from the DOE's General Counsel on the Department's legal basis for discontinuing the Office of Civilian Waste Management and reprogramming its funds.

24. On July 15th fourteen members of Congress signed and forwarded a letter to the NRC Chairman, Dr. Gregory Jaczko, urging the NRC to follow their ASLB ruling denying DOE's motion to withdraw its license application for Yucca Mountain.

25. On July 15th the House Subcommittee on Energy rejected an amendment from Representative Rodney Frelinghuysen from New Jersey that would have redirected $100 million from DOE's energy efficiency and renewable energy program to the NRC to continue its consideration of the Yucca Mountain repository's license application.

26. On July 20th three prominent Republican members of the House Science and Technology Committee sent a letter to Secretary Energy Chu expressing their concerns over the lack of scientific or technical justification regarding DOE's decision to cease operations at the Yucca Mountain facility.

27. On July 22nd Senator Patty Murray from Washington introduced an amendment to restore $200 million to continue the licensing of the Yucca Mountain repository. On the very same day the Senate Appropriations Committee voted 16 to 13 not to approve the amendment.

28. On July 27th Michael Hertz, Deputy Assistant Attorney General of the Justice Department, testified before the House Committee on the Budget. His testimony dealt with the budget implications of closing Yucca Mountain. According to Hertz's testimony the litigation has been expensive for the government.

The Justice Department has spent thus far $29 million in attorney costs, $111 million on experts and $52 million in litigation support costs, with no end in sight as eight trials are expected in 2011. A total of 72 lawsuits have been filed, 22 of which reached judgment, and 11 have settled. The government's liability so far is $2 billion. Mr. Hertz also added that Department of Justice officials are exploring an administrative claims process that would be more efficient and less expensive than litigation with about the same results.

29. On July 27th South Carolina Public Service Commissioner David Wright testified before the House Committee on the Budget expressing his concerns over the multiplicity of times ratepayers and taxpayers are being forced to pay for the federal government's failure to build a permanent repository at Yucca Mountain. First, as mandated by the Nuclear Waste Policy Act (NWPA), ratepayers pay through their electricity rates from utilities that use nuclear power. Second, since DOE did not take possession of the nation's spent fuel in 1998 as mandated by the NWPA, ratepayers have been compelled to pay for dry cask storage facilities. Third, as the Office of Homeland Security increases security requirements the security costs for dry cask storage also increase at ratepayers' expense. Fourth, since the federal courts have deemed the federal government in breach of the spent fuel contracts and therefore, liable for added storage costs, not only ratepayers but all taxpayers have to pay for the judgments and settlements. Finally, with the termination of the Yucca Mountain Project ratepayers and all taxpayers will eventually be compelled to pay for the significant financial penalties incurred by the federal government's breach of Agreements with the States of South Carolina, Idaho, and Washington for failure to take possession for the defense related wastes housed within their borders.

30. On August 17th Representative Doc Hastings from the State of Washington sent a letter to the NRC Chairman, Dr. Jaczko, expressing his concerns on the Commission's delay to issue its decision on the NRC's ASLB's denial of DOE's motion to withdraw its license application for Yucca Mountain.

31. On September 24th The House Science Committee approved an amendment to the Nuclear Energy Research and Development Act of 2010 that reinforces the federal government's responsibility to store spent nuclear fuel at the proposed Yucca Mountain repository in Nevada.

32. On October 11th Representative Spratt from South Carolina, Chairman of the House's Committee on the Budget sent a letter to the NRC Chairman expressing his deep concerns over the NRC's direction to cease its Yucca Mountain license application review.

33. On October 13th four members of the House of Representatives from the states of Wisconsin, Texas and Washington, sent a letter to NRC Chairman Jaczko expressing their concerns over the Chairman's decision to terminate the staff's review of the Yucca Mountain license application. The Representatives detailed a number of reasons why the Chairman's directive was alarming and requested a response to six questions that ranged from the Chairman's legal authority for his decision to specific communications with the White House.

34. On October 19th two members of the House of Representatives from Michigan and Kentucky sent a letter to the NRC's Inspector General requesting a "formal investigation into the Chairman's recent actions to shut down the (Yucca Mountain) project".

35. On October 20th seven members of the House of Representatives, representing Georgia, Tennessee, New Jersey, Idaho, California, Louisiana, and Montana, sent a letter to the NRC Chairman protesting the "premature and partisan closure of the NRC's consideration of the Yucca Mountain license application." The representatives went on to say that the NRC's FY2011 "budget request is irrelevant under the CR" (continuing resolution).

36. On October 27th Nuclear Regulatory Commissioner William Ostendorff responded to Representative Doc Hastings' October 21st letter inquiring about NRC's decision to halt the work on Yucca Mountain and the status of Volume III of the Yucca Mountain's SER. The Commissioner reiterated his position that he disagreed with Chairman Jaczko's decision to close out the NRC's High-Level Waste Repository Program. As for the status of Volume III of the SER, the Commissioner noted that the SER was sent to the Director of Nuclear Material Safety and Safeguards for "concurrence and authorization to publish" as early as July 15, 2010.

37. On October 27th NRC Chairman Jaczko responded to Representative Sensenbrenner's October 13th letter stating that his actions are "consistent with the terms of the Continuing Resolution, the Commission's Fiscal Year 2011 budget request, the general principles of appropriations law, and past NRC practice". Chairman Jaczko addressed each of the questions posed in the Representative's October 13th letter.

38. On November 1st Nuclear Regulatory Commissioner Svinicki responded to the NRC Chairman's October 27th response to the House of Representative Sensenbrenner's October 13th letter. Commissioner Svinicki disagrees with the Chairman's position that based on the FY 2011 budget request the Chairman commenced the orderly closure of the Yucca Mountain Project. Commissioner Svinicki points to the FY 2011 budget request language stipulating that closure would commence "upon the withdrawal or suspension of the licensing review", which has not occurred.

39. On November 1st Senator Inhofe from Oklahoma sent a letter to all five Nuclear Regulatory Commissioners requesting they respond to questions relative to the Commissioners voting on the ASLB's ruling to deny DOE's motion to withdraw their license application on Yucca Mountain.

40. On November 4th Nuclear Regulatory Commissioners Ostendorff and Svinicki separately responded to Senator Inhofe's November 1st letter on when they voted on the Yucca Mountain ruling.

41. On November 5th NRC Chairman Jaczko responded to Senator Inhofe's November 1st letter stating that he did vote twice on the NRC's ASLB's ruling denying DOE's motion to withdraw its Yucca Mountain license application. However, he did not inform the Senator how he voted. Commissioner Magwood also responded on the 5th as to when he voted.

42. On November 15th Representative Mike Simpson from Idaho introduced a House Resolution condemning the NRC Chairman for unilaterally ceasing NRC's review of the Yucca Mountain license application and calling on the NRC to resume their licensing activities on the geologic repository.

43. On November 16th three members of the U.S. House of Representatives sent a letter to the White House's Acting Director of the Office of Management and Budget requesting an explanation of the legal budget authority that the NRC Chairman has to cease the review of the Yucca Mountain Project. In addition, the Representatives requested a list of other federal agencies operating under similar guidance from their FY 2011 budget requests.

44. On November 19th three Representatives from Washington, California and New Jersey, sent a letter to the NRC Chairman requesting to release the Commission's decision on DOE's motion to withdraw its Yucca Mountain license application.

45. On December 6th the Secretary of the NRC responded to Representative Doc Hastings' November 19th letter requesting a finality to the NRC's deliberations on the ASLB's ruling denying DOE's motion to withdraw its Yucca Mountain license application. The Secretary noted that the issue was still under deliberation with no date for its completion.

46. On December 22nd the NRC Chairman responded to Representative John Spratt's October 11th letter expressing deep concerns over the NRC's Yucca Mountain license application cessation. In the letter Chairman Jaczko assured Representative Spratt that the actions he initiated were in conformance with appropriations law. On the same day he sent a similar letter to Representative Michael Simpson also reassuring him of his actions while providing additional insight on his justification to close the Yucca Mountain Project. Identical letters were sent to five other Representatives.

Appendix E

Other Stakeholder and Interested Party Responses

1. On January 8th the Minnesota House of Representatives introduced a bill, H.F. No. 2440, requiring fees paid by Minnesota ratepayers for nuclear power generation be redirected from DOE's Nuclear Waste Fund for the construction and operation of a geologic repository for spent nuclear fuel to their Commissioner of homeland security and emergency management.

2. On January 29th the Sustainable Fuel Cycle Task Force issued a press release on the formation of the DOE's announcement of the BRC. The Task Force urged the Commission to include Yucca Mountain as part of its deliberation and stated that Congress should oppose the defunding of Yucca Mountain and restore funding for the NRC's review of DOE's license application.

3. On February 2nd the Georgia Public Service Commission issued a news release stating it "unanimously passed a motion calling for Georgia ratepayers to stop paying monies into the Yucca Mountain Nuclear Waste Fund....and called for the return of all Georgia ratepayers' monies paid in since the fund's inception in 1982." The motion did not mention escrowing funds or any intent to initiate a lawsuit.

4. On February 7th the Las Vegas Sun reported that the restoration of Yucca Mountain will offer unprecedented challenges to desert ecologists as there never has been a desert reclamation of this size and scope. The DOE has been working on a Reclamation Implementation Plan for more than 17 years. Even though re-contouring and planting areas will likely hasten the recovery time, it is estimated that it will take at least 30 years before the land starts to look like it did before the DOE started drilling. Returning the entire ecosystem to its original state could take even longer as desert soils and vegetation are fragile, and once severely disturbed, can take anywhere from several decades to millennia to recover. Without massive reclamation efforts, it can take at least 100 years for a plant community to begin to recover.

5. On February 9th the Nuclear Waste Strategy Coalition (NWSC) sent a letter to the Chairmen and Ranking Members of the Senate and House Appropriations Committee pointing out eight ramifications of the Administration's FY 2011 Budget Request and the withdrawal of the Yucca Mountain license application. The letter highlights DOE's intent to continue collecting fees even though a substantial reserve of $22 billion exists in the Nuclear Waste Fund to continue any DOE activities.

6. On February 11th Governor Mark Stanford requested South Carolina's Attorney General to pursue all legal options to prod the Administration and Congress to complete Yucca Mountain. In a similar letter to South Carolina's Senior Senator, Lindsey Graham, Governor Stanford urged Senator Graham to push "the Obama Administration and Congress to complete the permanent repository that Congress taxed our citizens to build."

7. On February 12th the Sustainable Fuel Cycle Task Force sent a letter to Energy Secretary Chu expressing their concerns over "the potential loss of significant scientific information being caused by the rapid and unplanned termination of the Yucca Mountain program." The Task Force raised concerns over the shutting down of scientific facilities and the storage of thousands of physical samples. The Task Force advocated for the "preservation of this knowledge and associated physical records" as extremely important for future waste management activities and assisting future repository development.

8. On February 17th NARUC adopted a resolution requesting Energy Secretary Chu not to withdraw the Yucca Mountain license application, to forge ahead on a central interim storage site for used nuclear fuel

and to suspend fees to the Nuclear Waste Fund until there is a revised program or that Yucca Mountain is restarted.

9. On February 17th the South Carolina state senate unanimously signed a bill that would require the state's electric utilities to put funds earmarked for a national repository into a state fund until a federal site begins operating. The following day the state's utilities warned that it could lose federal nuclear power operating permits. The utilities' concerns prompted a slowdown from senators who expected to send their bill to the House by that weekend.

10. On February 19th Governor Mark Stanford wrote to Governor Baldacci requesting his help "in pushing the Obama Administration and Congress to complete the permanent repository that Congress taxed our citizens to build." Governor Stanford also advocated "returning funds drawn from the states for this (*Yucca Mountain*) project".

11. On February 24th South Carolina's Attorney General Henry McMaster issued a news release indicating that the State will weigh in on the Yucca Mountain licensing proceedings by filing "a petition to intervene with the Nuclear Regulatory Commission....and will take additional legal action in the Fourth Circuit Court of Appeals."

12. On February 25th the Energy Communities Alliance sent a letter to Secretary Energy Chu expressing their concerns on the "risks and impacts of leaving the waste in place". The letter also expressed frustration with DOE's lack of communications and unwillingness to address these issues. The Alliance called on the DOE to evaluate the safety and environmental impact of indefinite storage and to provide funds to local governments to acquire independent expertise "to analyze the impacts and monitor the storage of high-level waste and spent fuel".

13. On March 4th the U.S. Nuclear Infrastructure Council issued a statement saying the public would be better served by continuing with the Yucca Mountain licensing process in concert with the BRC's review of nuclear waste management strategies.

14. On March 5th Xcel Energy sent a letter to Energy Secretary Chu requesting that the 1 mill per kilowatt-hour fee to the Nuclear Waste Fund be suspended in light of DOE's recent motion to withdraw with prejudice its license application on Yucca Mountain.

15. On March 9th the NWSC sent a letter to DOE's Inspector General requesting an investigation into "the willful failure on the part of the DOE to preserve key records associated with the proposed geologic repository at Yucca Mountain.

16. On March 10th the Manager of the Radiation Control Program in consultation with the State Nuclear Safety Inspector recommended to their senior management, the Public Utilities Commission Chair and the Governor's Office that the State should join a Joint Intervention Petition with other states, local governments, and Indian nations to the NRC's ASLB contesting the DOE's recent motion to withdraw with prejudice its Yucca Mountain license application before the NRC. The filing deadline for the petition was March 12th.

17. On March 10th Marge Kilkelley, Chair of the Maine Yankee Community Advisory Panel, sent an invitation letter to the Co-Chairs of the recently formed BRC inviting them to hold a meeting at the Chewonki Foundation in Wiscasset to discuss the unique issues related to single unit decommissioned sites.

18. On March 17th the U.S. Chamber of Commerce and 17 other business groups sent a letter to the leaders of the House and Senate Appropriations Subcommittees requesting the restoration of funds for the Yucca Mountain repository. The letter was sent under the logo of the Sustainable Fuel Cycle Task Force. The letter lists five repercussions from the DOE's motion to withdraw its license application and six suggestions for the Appropriations Committees to consider.

19. On or about March 19th Wayne Norton, Chairman of the Decommissioning Plant Coalition (DPC), and President and CEO of Connecticut Yankee and Yankee Rowe and Chief Nuclear Officer of Maine Yankee, submitted for the record his testimony to the House Appropriations Energy and Water Development Subcommittee, which held a hearing on March 24th on DOE's FY 2011 budget. In his remarks Mr. Norton requested that the "appropriation bill contain direction to the Secretary of Energy and the recently established BRC for the development of specific recommendations that will facilitate the prompt removal of legacy spent fuel and waste material stored at permanently shut-down, single unit civilian nuclear plant sites throughout the United States." The DPC is a consortium of owners of single unit decommissioned nuclear plants that includes Big Rock Point in Michigan, Connecticut Yankee, LaCrosse in Wisconsin, Maine Yankee, Rancho Seco in California, and Yankee Rowe in Massachusetts.

20. On March 22nd the Skull Valley Band of Goshutes from Utah asked a federal judge to throw out two U. S. Interior Department rulings that stopped their proposal to use their reservation as an interim high level waste storage site. The Goshutes had received a NRC storage license 2005 for 44,000 metric tons of used nuclear fuel. The Interior Department's rulings dismissed the right-of-way and lease agreement that the Goshutes needed to construct the temporary storage facility.

21. On March 24th the Sustainable Fuel Cycle Task Force Science Panel posted an informational paper explaining some of the controversial issues raised on Yucca Mountain water infiltration, fractures, and the role of drip shields.

22. On March 25th Lake Barrett, who previously ran DOE's Office of Civilian Radioactive Waste Management overseeing the Yucca Mountain Project, advocated in his remarks to the BRC for "one or more regional interim storage facilities to bridge between the present undesirable onsite storage situation and a new geologic disposal facility."

23. On April 26th the Sustainable Fuel Cycle Task Force Science Panel sent a letter to the BRC Co-Chairs stressing their several hundreds years worth of collective scientific and managerial experience in geologic disposal of high level waste. The Panel members expressed that the NRC's scientific conclusions on the Yucca Mountain license application would be of significant value to the entire geologic disposal issue and further recommended that should an alternative disposal site be more workable than Yucca Mountain, the defense high level waste should receive first priority.

24. On April 28th Governor Baldacci received a letter from the DOE thanking the Governor as Chair of the New England Governor's Conference for his December 16, 2009, letter. The DOE letter was non-committal on the specific requests outlined in the Governor's original December 16th letter.

25. On April 28th three dozen leaders from South Carolina and Georgia, members of the Savannah River Site Community Reuse Organization (SRSCRO), held a press conference on Capitol Hill to protest the planned shutdown of the Yucca Mountain program and said that, if the BRC's deliberations do not include Yucca Mountain, then their report would lack credibility. The community leaders delivered 19 Pro-Yucca Mountain Resolutions to the Secretary of Energy and the Congressional delegations from South Carolina and Georgia. The SRSCRO is a non-profit regional group supporting job creation near DOE's Savannah River Site.

26. On May 12th the Yankee Rowe Spent Fuel Storage and Removal Community Advisory Board wrote a letter to BRC 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.

27. On May 19th the U.S. Nuclear Waste Technical Review Board (NWTRB) 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.

28. 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 BRC to ensure states have an "opportunity to participate in the reformulation of the nation's policies for managing" nuclear wastes.

29. On May 25th NARUC issued a press release on Greg White's comments to the BRC'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.

30. On June 15th representatives of 29 community organizations, who participated in a National Grassroots Summit on Radioactive Waste Policy held in Chicago on June 4th-6th, sent a letter to the BRC Co-Chairs expressing their concerns and requesting representation on the Commission to balance its membership.

31. On June 23rd-24th the NRC held a Spent Fuel Storage and Transportation Licensing Process Conference. The purpose of the conference was to have an open discussion on ideas for improving the effectiveness and efficiency of the NRC's licensing process, besides sharing the lessons learned from the existing licensing processes. A historical perspective of the licensing process was provided along with its current status and its direction over the next three to five years.

32. On June 29th the NWTRB met in Idaho Falls, Idaho, to conduct its summer meeting on DOE's plans for managing spent nuclear fuel and high level waste. The DOE operates the Idaho National Laboratory, which, along with the Savannah River Site in South Carolina, houses defense nuclear wastes, especially from the U.S. Navy.

33. On June 30th the Sustainable Fuel Cycle Task Force issued a statement expressing its gratification that the Department of Energy's motion to withdraw its license application was denied by the NRC's ASLB. The Task Force agreed with the ASLB's ruling that the DOE did not have the authority to withdraw its license application and that the withdrawal was not based on the technical unsuitability of the Yucca Mountain Project.

34. On June 30th Governor Chris Gregoire of Washington issued a statement expressing her gratification of the NRC's ASLB's decision to deny DOE's motion to withdraw its Yucca Mountain license application. She considered the ruling as being in favor of Washington and the other states.

35. On July 28th the NWSC issued a press release on the DOE's Inspector General July 21st report highlighting the DOE's "failure to conduct an orderly project shutdown of the Yucca Mountain Project." Some $2 million in equipment, desks, cubicles, printers and supplies were removed from 900 offices in Las Vegas and the Yucca site and transferred to the Hanford reservation in Washington. Other equipment was also transferred to the Nevada Test Site, the Waste Isolation Pilot Project in Carlsbad, New Mexico and the Tonopah Test Range. Surplus emergency vehicles were sent to Nye County.

While computers were being erased and redistributed to other Department of Energy programs, some of the computers were being donated to schools in Clark, Nye, and Lincoln Counties in Nevada. The most troublesome aspect was the Inspector General Office's decision not to pursue their audit findings to safeguard the national interests, including the interest of the ratepayers and taxpayers who funded the Project.

36. On August 2nd the NRC issued a public notice on a potential rulemaking for spent nuclear fuel reprocessing facilities. The NRC plans to conduct two public workshops to solicit input from interested parties on major issues associated with the development of a regulatory basis document for the reprocessing facilities. The public is invited to provide written comments on the issues. The first workshop will be held in Rockville, Maryland on September 7-8, with the second held during the week of October 4th in Albuquerque, New Mexico. The focus of the workshops will be on four main areas - reprocessing waste issues, physical protection and materials control, risks, and licensing issues.

37. On August 3rd Utah leaders urged Interior Secretary Ken Salazar to appeal a July 26th ruling from the Tenth Circuit Court of Appeals ordering the Department of Interior (DOI) to re-evaluate its 2006 decisions to deny federal permits for the construction of an interim storage facility already licensed by the Nuclear Regulatory Commission for spent fuel on the Skull Valley Band of Goshute Indians' reservation in Toole County. DOI has 60 days from the ruling to appeal.

38. On September 2nd Governor Jodi Rell of Connecticut sent a letter to Energy Secretary Chu requesting that he halt the dismantlement of the Yucca Mountain project until the NRC and the U.S. Circuit Court of Appeals for the District of Columbia resolve legal actions on the withdrawal of the license application.

39. On September 16th the Sustainable Fuel Cycle Task Force sent a letter to Energy Secretary Chu expressing their dissatisfaction over DOE's handling of the scientific records accumulated over 25 years on Yucca Mountain by DOE's abrupt termination of the electronic access systems to retrieve this information.

40. On September 24th the DOI allowed the deadline to pass without filing an appeal of the Tenth Circuit Court of Appeals July 26th ruling ordering the Department to reconsider two issues involving the Utah Skull Valley Band of Goshutes' construction of an interim cask storage facility for spent nuclear fuel on their reservation. The NRC licensed the storage site in 2006. Utah leaders had urged the DOI to contest the ruling. The Tenth Circuit Court ruled the DOI's decisions were arbitrary and capricious.

41. On October 8th Dr. Kenneth Rogers, a former Nuclear Regulatory Commissioner from 1987-1997, sent a letter to the NRC's Inspector General requesting that the recent actions by NRC Chairman Jaczko to cease NRC activities associated with the Yucca Mountain review be investigated for any legal or other improprieties. Dr. Rogers also included in his letter to the Inspector General a letter he wrote to Chairman Jaczko expressing his concerns on the independence of the Commission and urging Dr. Jaczko to commit to the principle of independence adopted by the Commission in 1991.

42. On October 16th the NWTRB sent a letter to the DOE's Assistant Secretary for Nuclear Energy as a follow-up to the NWTRB's public meeting in June recommending that studies should be undertaken to prevent future problems with extended dry cask storage. The letter also advocated for a strong program in scientific research and technology development in waste management. A similar letter was sent to the DOE's Assistant Secretary for Environmental Management. The NWTRB was created as part of the 1987 amendments to the Nuclear Waste Policy Act (NWPA) and was charged with reviewing the Department of Energy's technical activities under the NWPA.

43. On October 26th the NWTRB held a fall meeting to discuss the technical experience gained during the development of the Yucca Mountain Repository Program. Three panels were created with each providing separate perspectives from within the Yucca Project, from state and local governments and from other countries.

44. On October 29th former NRC Chairman, Dr Dale Klein, took exception to NRC Chairman Jaczko's assertion that the decision to terminate the NRC staff's work on the Yucca Mountain license application was consistent with the Commission's FY 2011 budget proposal. Dr. Klein stated that he was intimately involved in the deliberations of the FY 2011 budget in the summer and fall of 2009 as the Chairman of the NRC. The FY 2011 budget that he was instrumental in developing did not include provisions for the discontinuation of the staff's work on Yucca Mountain. He further asserts, since three current Commissioners did not vote on the budget guidance he helped develop then his budget remains in force, which opposed Chairman Jaczko's position.

45. On December 14th the Nevada Commission on Nuclear Projects released its annual report and recommendations to the Governor and Legislature. The report details the developments that took place in 2010, such as the Yucca Mountain Project, the Department of Energy's High-Level Waste Program, the key lessons learned from the Yucca Mountain Project and the failed federal program. The report also speculated on what the future holds and provided its recommendations. The Commission recommended that the Governor and Legislature continue rejecting the site as a geologic used fuel repository, as a reprocessing facility and as a centralized interim storage facility.

Appendix F

Federal Court Proceedings

1. On January 12th the U.S. Court of Appeals for the Federal Circuit ruled that DOE can no longer claim that the lack of a federal repository or storage facility constitutes an "unavoidable delay" in failing to meet its statutory obligations to remove used nuclear fuel from commercial nuclear power plant sites. The ruling paves the way for utilities to receive compensation for costs incurred for spent fuel storage at their reactor sites. Since 1998 71 breach of contract claims were filed by nuclear utilities against DOE. By the end of 2008 $1.2 billion in damages was awarded with $400 million of it being paid out. With the impending closure of Yucca Mountain it is estimated that the spent fuel storage liabilities for taxpayers will amount to $12.3 billion by the year 2020 and continue to grow at a rate of $0.5 billion for each year of delay beyond that.

2. On February 19th Aiken County in South Carolina filed a 60 page petition with the U.S. Circuit Court of Appeals for the District of Columbia seeking declaratory and injunctive relief from the Department of Energy and Secretary Energy Chu, the NRC and its Chairman, Gregory Jaczko, and the NRC ASLB and the three judges, Thomas Moore, Paul Ryerson, and Richard Wardwell, on the Construction Authorization Board overseeing DOE's license application on Yucca Mountain.

3. On February 25th three local business leaders from the Tri-City area near the Hanford Reservation in Washington State filed a 29 page lawsuit with the U.S. Circuit of Court Appeals of the District of Columbia against President Barack Obama, Secretary Energy Chu and the DOE to stop the Administration from abandoning the Yucca Mountain Project. The State of Washington is in the process of cleaning up the waste from the nation's nuclear weapons program at the Hanford complex. As part of a legally binding agreement between the State and the federal government, the waste from the clean-up was designated to go to Yucca Mountain.

4. On February 26th the State of South Carolina filed an 81 page lawsuit with the U.S. Court of Appeals, Fourth Circuit, against President Barack Obama, Energy Secretary Steven Chu, the NRC and its Chairman, Gregory Jaczko, and the NRC's ASLB and the Board's three judges involved in the Yucca Mountain proceedings, Thomas Moore, Paul Ryerson, and Richard Wardwell. The petition seeks to stop the Administration from abandoning the Yucca Mountain Project. The State of South Carolina is home of the defense site, the Savannah River Site, which is undergoing clean-up activities with the waste headed for Yucca Mountain as part of a legally binding agreement between the State and the federal government.

5. On March 25th the State of South Carolina petition filing in the Fourth Circuit challenging the Yucca Mountain license application withdrawal was transferred to the District of Columbia Circuit where the Aiken County, South Carolina petition was filed and is undergoing briefing.

6. On April 2nd NARUC filed a petition for review with the U.S. Court of Appeals for the District of Columbia Circuit over DOE's decision last October to continue charging fees with the moving and disposing of spent nuclear fuel when the Administration's position has been to close down the geologic disposal repository at Yucca Mountain. NARUC's contention was that with over $20 billion in the Nuclear Waste Fund there is no pressing need to assess fees, especially when there is no idea what solutions the newly appointed BRC would recommend and whether any of those recommendations would be implemented.

7. On April 5th the Nuclear Energy Institute and 16 nuclear utilities filed a joint petition for review with the U.S. Court of Appeals for the District of Columbia Circuit for DOE's failure to suspend collection of the fee payments to the Nuclear Waste Fund.

8. On April 8th the Department of Justice notified the U.S. Court of Appeals for the District of Columbia Circuit of the Aiken County's citation of the NRC's ASLB's stay on DOE's motion to withdraw its Yucca Mountain license application.

9. On April 8th the U.S. Circuit Court of Appeals for the District of Columbia Circuit ordered that the three lawsuits against the DOE from Aiken County, South Carolina, the three business leaders from Tri-City in Washington, and the State of South Carolina be consolidated.

10. On April 13th the State of Washington filed a petition for review and a motion in the U.S. Court of Appeals for the District of Columbia Circuit seeking a declaratory and injunctive relief against DOE's termination of Yucca Mountain.

11. On April 14th the DOE submitted its response to the State of Washington's petition for injunctive relief. The DOE requested until April 23rd to respond to the Washington request for injunction and agreed to a 21 day stay in the DOE's actions to terminate the Yucca Mountain program.

12. On April 14th the U.S. Court of Appeals for the District of Columbia issued an Order "to extend the time to file a response to the motion for preliminary injunction."

13. On April 23rd the State of Washington filed their reply in support of their motion for preliminary injunction against the DOE's continued termination and dismantling of the Yucca Mountain Project.

14. On April 23rd the Department of Justice notified the U.S. Court of Appeals for the District of Columbia Circuit of the NRC's ruling vacating their ASLB's stay on DOE's motion to withdraw its Yucca Mountain license application.

15. On April 28th the State of Washington filed a 10 page reply in the U.S. Court of Appeals for the District of Columbia Circuit in support of their motion for preliminary injunctive relief from DOE's on-going dismantlement of the Yucca Mountain project. The filing claims it will suffer irreparable harm before the Court reaches the merits of Washington's petition for review.

16. 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 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 DOE to continue with the Yucca Mountain shutdown.

17. 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 NARUC and the Nuclear Energy Institute (NEI).

18. On June 15th the United States Court of Appeals for the District of Columbia issued an order establishing the briefing schedule in NARUC's petition to suspend the Nuclear Waste Fund fee paid by ratepayers to construct a repository at Yucca Mountain. A similar petition by NEI was consolidated with the NARUC petition.

19. On June 15th the United States Court of Appeals for the District of Columbia Circuit issued an expedited order scheduling oral arguments for September 23rd for the petitioners, Aiken County, South Carolina, the Tri-City Leaders from Hanford, Washington, the States of South Carolina and Washington, and the intervener-petitioner, NARUC.

20. On June 18th Aiken County, South Carolina, the Tri-City Leaders from Hanford, Washington, the States of South Carolina and Washington, and NARUC filed their consolidated brief with the United States Court of Appeals for the District of Columbia Circuit. The brief outlines the parties and rulings under review, the statements of issues, case and facts, the argument, the standard of review, the merits, and the remedies and reliefs.

21. On June 25th a 384 page addendum to the consolidated brief of petitioners from Aiken County, South Carolina, Robert Ferguson and others from the Tri-City area encompassing Hanford, Washington, the States of South Carolina and Washington, and NARUC was filed with the United States Court of Appeals for the District of Columbia Circuit. The schedule for oral arguments was set for September 23rd.

22. On June 28th NEI filed an amicus brief with the United States Court of Appeals for the District of Columbia Circuit in support of the brief filed by the petitioners, (refer to numbers 12 and 24 above), on their petitions for review and relief from the decisions of the President, the Secretary of Energy, the DOE, and the NRC.

23. On July 2nd the NRC and the Department of Justice (DOJ) filed a joint motion with the U.S. Circuit Court of Appeals for the District of Columbia to vacate the briefing and oral argument schedule and hold in abeyance the cases brought forward from Aiken County, South Carolina, the States of Washington and South Carolina, the three business leaders from the Tri-County area near Hanford, Washington, and the NARUC until a final decision is rendered by the NRC on the merits of the same petitions before the NRC on the withdrawal of DOE's license application for Yucca Mountain.

24. On July 7th the States of South Carolina and Washington, Aiken County, South Carolina, and Robert Ferguson of the Tri-City business leaders near Hanford, Washington filed a response with the U.S. Circuit Court of Appeals for the District of Columbia opposing the NRC and the DOJ's July 2nd motion to vacate briefing and oral argument schedule and hold their cases in abeyance.

25. On July 12th the NRC and the DOJ filed a reply with the U.S. Circuit Court of Appeals over petitioner's opposition to the motion to vacate briefing and oral argument schedule and hold cases in abeyance pending a final Commission decision on the ASLB's Order to deny DOE's motion to withdraw its license application with the Commission.

26. On July 26th Judge David Ebel of the Tenth Circuit Court of Appeals ruled that a pair of decisions made by the Interior Department were arbitrary and capricious and directed DOI to reconsider two key interests from the Utah Skull Valley Band of Goshute Indians and the electric utility consortium Private Fuel Storage LLC. The first interest was for a right-of-way for a rail to truck transfer center and the second was the approval of a lease by the Bureau of Indian Affairs that already had been tentatively approved years earlier but denied in 2006 by DOI. Both approvals were necessary for the spent fuel storage site, which was licensed by the NRC in 2006 to store up to 44,000 tons of spent fuel in dry casks, or nearly 63% of the legal storage capacity at Yucca Mountain.

27. On July 28th the U.S. Circuit Court of Appeals for the District of Columbia said it would wait until the NRC rules on the Yucca Mountain appeals before the Commission before it hears oral arguments in a combined lawsuit over the planned termination of the spent fuel repository project. Initially, the Court

had expedited the schedule oral arguments for September 23rd. The Court granted the NRC's and DOJ's July 2nd motion to vacate the briefing and oral argument schedules and to place the case on hold pending the outcome of the Commission's decision. The Court did direct all affected parties to file status reports every 30 days and to file motions within 10 days after the Commission's ruling.

28. On August 3rd Utah leaders urged Interior Secretary Ken Salazar to appeal a July 26th ruling from the Tenth Circuit Court of Appeals ordering the DOI to re-evaluate its 2006 decisions to deny federal permits for the construction of an interim storage facility already licensed by the NRC for spent fuel on the Skull Valley Band of Goshute Indians' reservation in Toole County. DOI has 60 days from the ruling to appeal.

29. On August 26th the legal firm of Haynsworth Sinkler Boyd, P.A., filed with the U.S. Court of Appeals for the D.C. Circuit as counsel representing Aiken County, South Carolina's petition against DOE's motion to withdraw its license application on the Yucca Mountain Project before the NRC.

30. On August 27th the NRC, the DOE, the DOJ, and the State of Nevada filed a joint report as mandated on July 28th by the U.S. Court of Appeals for the District of Columbia Circuit on the status of the NRC's license proceedings on the Yucca Mountain application.

31. On September 24th the DOI allowed the deadline to pass without filing an appeal of the Tenth Circuit Court of Appeals July 26th ruling ordering the Department to reconsider two issues involving the Utah Skull Valley Band of Goshutes' construction of an interim cask storage facility for spent nuclear fuel on their reservation. NRC licensed the storage site in 2006. Utah leaders had urged the DOI to contest the ruling. The Tenth Circuit Court ruled the DOI's decisions were arbitrary and capricious.

32. On September 27th the NRC, the DOJ, and the State of Nevada filed their status report with the U.S. Court of Appeals for the District of Columbia Circuit as ordered by the Court on July 28th. The filing noted that the NRC had not issued a decision on the twenty-three briefs submitted by thirteen parties on the ASLB's denial of DOE's motion to withdraw its license application on Yucca Mountain.

33. On September 27th the states of Washington and South Carolina, Aiken County, South Carolina, and the Tri-City leaders from near the Hanford site in Washington filed their status report with the U.S. Court of Appeals for the District of Columbia Circuit as ordered by the Court on July 28th. The status report indicated no change with respect to the briefs before the NRC.

34. On September 27th the states of Washington and South Carolina, Aiken County, South Carolina, and the Tri-City leaders from near the Hanford site in Washington filed a motion with the U.S. Circuit Court of Appeals for the District of Columbia to lift the stay the Court imposed and set an expedited briefing schedule on the initial oral arguments for the Yucca Mountain Project. The petitioners argue that the reason the Court imposed the stay was that it presumed an early decision from the NRC on the ASLB's decision to deny DOE's motion to withdraw their Yucca Mountain license application.

35. On September 28th the states of Washington and South Carolina, Aiken County, South Carolina, and the Tri-City Leaders from Washington State filed a notice with the U.S. Court of Appeals for the District of Columbia Circuit on their one editorial and two typographical corrections to the motion they filed a day earlier to lift the stay and set an expedited briefing schedule.

36. On October 12th the State of Nevada and the respondents, (the President, the Secretary of Energy, the DOE, the NRC, the NRC Commissioners, and the NRC Licensing Board Judges), filed a response with the U.S. Court of Appeals for the District of Columbia opposing the motion to lift the Court ordered stay and set an expedited schedule.

37. On October 15th the petitioners Aiken County, South Carolina, the states of Washington and South Carolina, the Tri-City Leaders from Hanford, Washington, and NARUC filed a response with the U.S. Court of Appeals for the District of Columbia Circuit on DOE's opposition to a motion filed earlier by the petitioners to lift the Court's stay and set an expedited schedule. The petitioners' motion was prompted based on the NRC Chairman's unilateral decision to halt the NRC staff review of DOE's Yucca Mountain license application and the continued inaction of the Commission with respect to their ASLB's ruling denying DOE's motion to withdraw its license.

38. On October 25th Aiken County South Carolina, the states of Washington and South Carolina, and the Tri-City Leaders from Hanford, Washington, filed with the U.S. Court of Appeals for the District of Columbia Circuit a supplemental filing regarding the motion to lift the Court's stay on the Yucca Mountain license application and set an expedited schedule. The supplemental information provided new evidence that a decision to terminate the NRC's staff review of the Yucca Mountain license application was made without the Commission's deliberation.

39. On October 27th Aiken County South Carolina, the states of Washington and South Carolina, and the Tri-City Leaders from Hanford, Washington filed with the U.S. Court of Appeals for the District of Columbia Circuit a status report as required by Court Order on July 28th on the initial filing of the motion to lift the stay. On the same day the DOJ and the NRC also filed with the U.S. Court of Appeals their status report.

40. On October 27th the DOJ and the NRC filed a response with the U.S. Court of Appeals for the District of Columbia Circuit opposing the October 25th filing of the petitioners' supplemental filing motion to lift the stay and set an expedited schedule.

41. On October 28th the State of Nevada filed their response with the U.S. Court of Appeals for the District of Columbia Circuit on the October 25th filing of the petitioners' supplemental filing motion to lift the stay contending that the supplemental filing is unauthorized, misdirected and misleading.

42. On November 29th Aiken County, South Carolina, the states of Washington and South Carolina, and the three business leaders near the Hanford Reservation in Washington filed a status report with the U.S. Court of Appeals for the District of Columbia Circuit requesting the Court to grant their motion to lift the Court ordered stay that was issued on the pending NRC's decision on the ASLB's ruling to deny DOE's motion to withdraw its license application on Yucca Mountain. The petitioners base their contention on the Commission's inactivity on this issue and that the Court's stay was predicated on the Commission's imminent resolution, which is still outstanding.

43. On December 7th Senior Counsel for the State of Washington's Attorney General Office sent a letter to the Clerk of the D.C. Circuit Court of Appeals expressing concern that they had not received an order from the Court on their September 28th motion to lift the stay and set an expedited briefing schedule.

44. On December 10th the U.S. Court of Appeals for the District of Columbia Circuit lifted its stay that was pending while waiting for the NRC's decision of their ASLB's denial on the withdrawal of the Yucca Mountain license application. The Court also set an expedited briefing schedule in preparation for oral arguments.

45. On December 13th the U.S. Court of Appeals for the District of Columbia Circuit issued its judgment dismissing NARUC's litigation claim for the DOE to conduct an annual assessment of and suspend the Nuclear Waste Fund fee established under the Nuclear Waste Policy Act. The Court considered the

claims moot since the DOE had just issued the assessment, but noted that NARUC could now challenge DOE's assessment.

Appendix G

Notable Reports and Documents

1. On April 12th Chief Deputy Attorney General for Nevada published a paper in the Idaho Law Review, entitled "Yucca Mountain – Nevada's Perspective". The document provides some insight to Nevada's viewpoint on being chosen for a federal geologic repository, the pending legal challenges to the Environmental Protection Agency and NRC rules for Yucca Mountain, and the NRC's licensing proceeding.

2. On July 29th the Inspector General for the DOE issued a second report on the Yucca Mountain Project, entitled "Resolution of Questioned, Unresolved and Potentially Unallowable Costs Incurred in Support of the Yucca Mountain Project". As the DOE is preparing to close its books on Yucca Mountain, auditors identified specific costs totaling nearly $179 million that need to be resolved as part of the Yucca Mountain shut down. Of the $179 million nearly $160 million is attributable to subcontractor costs that remain unresolved until audited. The Inspector General urged settlement of the outstanding financial issues so that all disallowed costs are settled and funds recouped.

3. In September the fall edition of the Issues in Science and Technology, the Journal of the National Academy of Sciences and Engineering, published a feature article, entitled "Nuclear Waste Disposal - Showdown at Yucca Mountain". The article provides some historical basis to structure arguments on what's at stake, the potential risks for the BRC's agenda, the evolution of the Waste Confidence Rule adopted by previous Nuclear Regulatory Commissions and its current membership, redefining Yucca Mountain as a staged repository and suggestions on how to be fair and equitable to Nevada.

4. In September the European Commission published a document, entitled "Implementing Geological Disposal of Radioactive Waste Technology Platform". The document was prepared by representatives from Sweden, Finland, France and Germany. The 43 page report provides the ground work for implementing deep geological disposal. The platform manuscript is a vision document that includes the signatories of not only the preparers from the four European countries but also Belgium, Spain, Switzerland, and the United Kingdom. This document is part of a three stage platform process. The second stage is already in progress and defines a strategic research agenda to specify the necessary medium to long term objectives of the disposal program. The final stage implements the strategic research agenda with the mobilization of significant human and financial resources. The platforms are viewed as tools that provide a forum for discussing research, development and demonstration (RD&D) issues and priorities, a means for sharing the RD&D information and results, and a mechanism for coordinating RD&D on topics of shared interests.

5. On September 16th a Massachusetts Institute of Technology task force released a report, entitled "The Future of the Nuclear Fuel Cycle". The summary report focused on the concept that encompasses both the kind of fuel used and what happens to the fuel after it has been used. The key messages of the report are that options for fuel cycle choices remain open. This would be accomplished by continuing with the current once-through fuel cycle, implementing a system for managing spent fuel storage for 100 years through centralized interim storage facilities starting with reactor sites that have been decommissioned, developing a geologic repository, and researching technology alternatives appropriate to a range of nuclear energy futures. The study also challenges the idea that uranium supplies will be limited in the future and supports the creation of a new quasi-government organization to manage the nation's nuclear waste.

6. In December the U.S. NWTRB issued a document, entitled "Evaluation of the Technical Basis for Extended Dry Storage and Transportation of Used Nuclear Fuel." The report listed nine areas where information was lacking, such as in corrosion and degradation mechanisms in the sleeves containing the used fuel. Based on this review the Board recommended six areas for further research and development. The report is timely in light of the Administration's termination of the Yucca Mountain Project, the NRC's final Waste Confidence Rule allowing storage of used nuclear fuel at reactor sites up to 120 years, and the NRC's directive to its staff to evaluate on-site storage for periods upwards of 300 years. The NWTRB was created in 1987 by amendments to the Nuclear Waste Policy Act of 1982 and was charged to independently assess the Department of Energy's technical activities relative to the spent nuclear fuel and high level radioactive wastes.

7. In December the Massachusetts Institute of Technology's Center for Advanced Nuclear Energy Systems issued a report entitled" Key Issues Associated with Interim Storage of Used Nuclear Fuel". The report identifies and examines in more detail six key factors that may impact future decisions for interim storage facilities. They are:
    a. Whether the Yucca Mountain Project continues or is terminated,
    b. Will the U.S. change its policy to allow reprocessing or recycling,
    c. How long will it really take to site one or a few interim storage sites,
    d. Political implications of letting used fuel mount up at operating plants and how that affects current operations and future construction of new plants,
    e. Technically, how long can used fuel be stored wet or dry to ensure future shipments to a disposal, reprocessing or storage site occur without damaging the fuel,
    f. Costs comparisons between shipping used fuel to interim storage sites and eventually to a disposal site versus leaving the used fuel on-site until policy decisions are made.

Appendix H

Nuclear Waste Fund Balance

NUCLEAR WASTE FUND
RATEPAYER PAYMENTS BY STATE
THROUGH 9-30-10 (MILLIONS OF DOLLARS)

STATE	PAYMENTS 1 mill/kwh, One Time+Int	RETURN ON INVESTMENTS as of 9/30/10	TOTAL (PAY+RETURN)	DEBT*	FUND ASSETS** (TOTAL + DEBT)
AL	533.9	425.7	959.6	0.0	959.6
AR	358.2	285.6	643.8	175.6	819.4
AZ	266.3	212.4	478.7	0.0	478.7
CA	1,020.3	813.6	1,833.9	0.0	1,833.9
CO	0.2	0.2	0.4	0.0	0.4
CT	295.9	236.0	531.9	358.5	890.4
DE	46.6	37.2	83.8	0.0	83.8
FL	842.4	671.8	1,514.2	0.0	1,514.2
GA	685.5	546.6	1,232.1	0.0	1,232.1
IA	249.4	198.9	448.3	45.1	493.4
IL	1,880.1	1,499.2	3,379.3	972.6	4,351.9
IN	252.1	201.0	453.1	229.9	683.0
KS	133.3	106.3	239.6	0.0	239.6
KY	152.1	121.3	273.4	0.0	273.4
LA	324.2	258.5	582.7	0.0	582.7
MA	356.1	284.0	640.1	163.4	803.5
MD	390.6	311.5	702.1	0.0	702.1
ME	48.5	38.7	87.2	116.9	204.1
MI	314.2	250.6	564.8	198.2	763.0
MN	316.6	252.5	569.1	0.0	569.1
MO	250.7	199.9	450.6	5.1	455.7
MS	161.7	128.9	290.6	0.0	290.6
NC	1,538.0	1,226.4	2,764.4	0.0	2,764.4
ND	18.0	14.4	32.4	0.0	32.4
NE	190.0	151.5	341.5	0.0	341.5
NH	82.2	65.5	147.7	23.8	171.5
NJ	732.3	584.0	1,316.3	196.8	1,513.1
NM	77.4	61.7	139.1	0.0	139.1
NY	850.8	678.4	1,529.2	505.3	2,034.5
OH	461.9	368.3	830.2	32.6	862.8
OR	75.1	59.9	135.0	0.0	135.0
PA	1,378.3	1,099.1	2,477.4	66.6	2,544.0
RI	5.3	4.2	9.5	6.1	15.6
SC	689.4	549.7	1,239.1	0.0	1,239.1
SD	7.1	5.7	12.8	0.0	12.8
TN	580.1	462.6	1,042.7	0.0	1,042.7
TX	801.1	638.8	1,439.9	0.0	1,439.9
VA	698.9	557.3	1,256.2	0.0	1,256.2
VT	100.2	79.9	180.1	141.6	321.7
WA	170.6	136.0	306.6	0.0	306.6
WI	428.2	341.5	769.7	0.0	769.7
SUBTOTAL	17,763.8	14,165.3	31,929.1	3,238.1	35,167.2
FEDERAL	19.8	15.8	35.6	0.0	35.6
INDUSTRY	16.8	13.4	30.2	0.0	30.2
TOTAL	17,800.4	14,194.5	31,994.9	3,238.1	35,233.0

* 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

Appendix I

President Obama's Directive and Blue Ribbon Commission Charter

THE WHITE HOUSE

Office of the Press Secretary

For Immediate Release January 29, 2010

January 29, 2010

MEMORANDUM FOR THE SECRETARY OF ENERGY

SUBJECT: Blue Ribbon Commission on America's Nuclear Future

Expanding our Nation's capacity to generate clean nuclear energy is crucial to our ability to combat climate change, enhance energy security, and increase economic prosperity. My Administration is undertaking substantial steps to expand the safe, secure, and responsible use of nuclear energy. These efforts are critical to accomplishing many of my Administration's most significant goals.

An important part of a sound, comprehensive, and long-term domestic nuclear energy strategy is a well-considered policy for managing used nuclear fuel and other aspects of the back end of the nuclear fuel cycle. Yet the Nation's approach, developed more than 20 years ago, to managing materials derived from nuclear activities, including nuclear fuel and nuclear waste, has not proven effective. Fortunately, over the past two decades scientists and engineers in our country and abroad have learned a great deal about effective strategies for managing nuclear material. My Administration is committed to using this advanced knowledge to meet the Government's obligation to dispose of our Nation's used nuclear material.

Accordingly, I request that you establish a Blue Ribbon Commission on America's Nuclear Future (Commission) and appoint its members. Those members should include recognized representatives and experts from a range of disciplines and with a range of perspectives, and may include participation of appropriate Federal officials. The Commission's business should be conducted in an open and transparent manner.

The Commission should conduct a comprehensive review of policies for managing the back end of the nuclear fuel cycle, including all alternatives for the storage, processing, and disposal of civilian and defense used nuclear fuel and nuclear waste. This review should include an evaluation of advanced fuel cycle technologies that would optimize energy recovery, resource utilization, and the minimization of materials derived from nuclear activities in a manner consistent with U.S. nonproliferation goals.

more

(OVER)

In performing its functions, the Commission should consider a broad range of technological and policy alternatives, and should analyze the scientific, environmental, budgetary, economic, financial, and management issues, among others, surrounding each alternative it considers. Where appropriate, the Commission may also identify potential statutory changes.

The Commission should provide an interim report to you within 18 months of the date of this memorandum, and that report should be made available for public comment. The Commission should provide a final report to you within 24 months of the date of this memorandum. The Department of Energy shall provide funding and administrative support for the Commission, as you determine appropriate, so that it can complete its functions within these time periods. Additionally, all executive departments and agencies shall provide such information and assistance to the Commission as you or the Commission may request for purposes of carrying out the Commission's functions, to the extent permitted by law. Nothing in this memorandum shall be construed to require the disclosure of classified, proprietary, law enforcement sensitive, or other information protected under governing law. This memorandum shall be implemented consistent with applicable law and subject to the availability of appropriations. This memorandum is not intended to, and does not, create any right or benefit, substantive or procedural, enforceable at law or in equity by any party against the United States, its departments, agencies, or entities, its officers, employees, or agents, or any other person.

You are hereby authorized and directed to publish this memorandum in the *Federal Register*.

BARACK OBAMA

# # #

U.S. DEPARTMENT OF ENERGY

January 29, 2010

Secretary Chu Announces Blue Ribbon Commission on America's Nuclear Future

The Commission, led by Lee Hamilton and Brent Scowcroft, will provide recommendations on managing used fuel and nuclear waste

Washington, D.C. – As part of the Obama Administration's commitment to restarting America's nuclear industry, U.S. Secretary of Energy Steven Chu today announced the formation of a Blue Ribbon Commission on America's Nuclear Future to provide recommendations for developing a safe, long-term solution to managing the Nation's used nuclear fuel and nuclear waste. The Commission is being co-chaired by former Congressman Lee Hamilton and former National Security Advisor Brent Scowcroft.

In light of the Administration's decision not to proceed with the Yucca Mountain nuclear waste repository, President Obama has directed Secretary Chu to establish the Commission to conduct a comprehensive review of policies for managing the back end of the nuclear fuel cycle. The Commission will provide advice and make recommendations on issues including alternatives for the storage, processing, and disposal of civilian and defense spent nuclear fuel and nuclear waste.

"Nuclear energy provides clean, safe, reliable power and has an important role to play as we build a low-carbon future. The Administration is committed to promoting nuclear power in the United States and developing a safe, long-term solution for the management of used nuclear fuel and nuclear waste. The work of the Blue Ribbon Commission will be invaluable to this process. I want to thank Congressman Hamilton and General Scowcroft for leading the Commission and I look forward to receiving their recommendations," said Secretary Chu.

"As the world moves to tackle climate change and diversify our national energy portfolio, nuclear energy will play a vital role," said Carol Browner, Assistant to the President for Energy and Climate Change. "Today, the Obama Administration has taken an important step. With the creation of the Blue Ribbon Commission, we are bringing together leading experts from around the country to ensure a safe and sustainable nuclear energy future."

"Finding an acceptable long-term solution to our used nuclear fuel and nuclear waste storage needs is vital to the economic, environmental and security interests of the United States," said Congressman Hamilton. "This will be a thorough, comprehensive review based on the best available science. I'm looking forward to working with the many distinguished experts on this panel to achieve a consensus on the best path forward."

"As the United States responds to climate change and moves forward with a long overdue expansion of nuclear energy, we also need to work together to find a responsible, long-term strategy to deal with the leftover fuel and nuclear waste," said General Scowcroft. "I'm pleased to be part of that effort along with Congressman Hamilton and such an impressive group of scientific and industry experts."

The Commission is made up of 15 members who have a range of expertise and experience in nuclear issues, including scientists, industry representatives, and respected former elected officials. The Commission's co-chairs have a record of tackling tough challenges in a thoughtful, comprehensive manner and building consensus among an array of interests.

The Commission will produce an interim report within 18 months and a final report within 24 months.

The members of the Blue Ribbon Commission are:

- Lee Hamilton, Co-Chair
  Lee Hamilton represented Indiana's 9th congressional district from January 1965-January 1999. During his time in Congress, Hamilton served as the ranking member of the House Committee on Foreign Affairs, and chaired the Permanent Select Committee on Intelligence. He is currently president and director of the Woodrow Wilson International Center for Scholars, and director of The Center on Congress at Indiana University.

  He is a member of the President's Intelligence Advisory Board and the President's Homeland Security Advisory Council. Previously, Hamilton served as Vice Chairman of the National Commission on Terrorist Attacks Upon the United States (the 9/11 Commission).
- Brent Scowcroft, Co-Chair
  Brent Scowcroft is President of The Scowcroft Group, an international business advisory firm. He has served as the National Security Advisor to both Presidents Gerald Ford and George H.W. Bush. From 1982 to 1989, he was Vice Chairman of Kissinger Associates, Inc., an international consulting firm.

  Scowcroft served in the military for 29 years, and concluded at the rank of Lieutenant General following service as the Deputy National Security Advisor. Out of uniform, he continued in a public policy capacity by serving on the President's Advisory Committee on Arms Control, the Commission on Strategic Forces, and the President's Special Review Board, also known as the Tower Commission.
- Mark Ayers, President, Building and Construction Trades Department, AFL-CIO
- Vicky Bailey, Former Commissioner, Federal Energy Regulatory Commission; Former IN PUC Commissioner; Former Department of Energy Assistant Secretary for Policy and International Affairs
- Albert Carnesale, Chancellor Emeritus and Professor, UCLA
- Pete V. Domenici, Senior Fellow, Bipartisan Policy Center; former U.S. Senator (R-NM)
- Susan Eisenhower, President, Eisenhower Group, Inc.
- Chuck Hagel, Former U.S. Senator (R-NE)

- Jonathan Lash, President, World Resources Institute
- Allison Macfarlane, Associate Professor of Environmental Science and Policy, George Mason University
- Richard A. Meserve, President, Carnegie Institution for Science, and former Chairman, U.S. Nuclear Regulatory Commission
- Ernie Moniz, Professor of Physics and Cecil & Ida Green Distinguished Professor, Massachusetts Institute of Technology
- Per Peterson, Professor and Chair, Department of Nuclear Engineering, University of California – Berkeley
- John Rowe, Chairman and Chief Executive Officer, Exelon Corporation
- Phil Sharp, President, Resources for the Future

Presidential Memorandum on the Blue Ribbon Commission (/news/documents/2010nuclearfuture_memo.pdf) (pdf – 10k)

1 (/news/documents/DOE_Motion_to_Withdraw.pdf)

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Department of Energy
Washington, DC 20585

Blue Ribbon Commission on America's Nuclear Future
U.S. Department of Energy

Advisory Committee Charter

1. **Committee's Official Designation.** Blue Ribbon Commission on America's Nuclear Future (the Commission).

2. **Authority.** The Commission is being established in accordance with the provisions of the Federal Advisory Committee Act (FACA), as amended, 5 U.S.C. App. 2, and as directed by the President's Memorandum for the Secretary of Energy dated January 20, 2010: Blue Ribbon Commission on America's Nuclear Future. This charter establishes the Commission under the authority of the U.S. Department of Energy (DOE).

3. **Objectives and Scope of Activities.** The Secretary of Energy, acting at the direction of the President, is establishing the Commission to conduct a comprehensive review of policies for managing the back end of the nuclear fuel cycle, including all alternatives for the storage, processing, and disposal of civilian and defense used nuclear fuel, high-level waste, and materials derived from nuclear activities. Specifically, the Commission will provide advice, evaluate alternatives, and make recommendations for a new plan to address these issues, including:

   a) Evaluation of existing fuel cycle technologies and R&D programs. Criteria for evaluation should include cost, safety, resource utilization and sustainability, and the promotion of nuclear nonproliferation and counter-terrorism goals.

   b) Options for safe storage of used nuclear fuel while final disposition pathways are selected and deployed;

   c) Options for permanent disposal of used fuel and/or high-level nuclear waste, including deep geological disposal;

   d) Options to make legal and commercial arrangements for the management of used nuclear fuel and nuclear waste in a manner that takes the current and potential full fuel cycles into account;

   e) Options for decision-making processes for management and disposal that are flexible, adaptive, and responsive;

   f) Options to ensure that decisions on management of used nuclear fuel and nuclear waste are open and transparent, with broad participation;

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g) The possible need for additional legislation or amendments to existing laws, including the Nuclear Waste Policy Act of 1982, as amended; and

h) Any such additional matters as the Secretary determines to be appropriate for consideration.

The Commission will produce a draft report to the Secretary and a final report within the time frames contained in paragraph 4.

4. **Description of Duties.** The duties of the Commission are solely advisory and are as stated in Paragraph 3 above.

   A draft report shall be submitted within 18 months of the date of the Presidential memorandum directing establishment of this Commission; a final report shall be submitted within 24 months of the date of that memorandum. The reports shall include:

   a) Consideration of a wide range of technological and policy alternatives, and should analyze the scientific, environmental, budgetary, financial, and management issues, among others, surrounding each alternative it considers. The reports will also include a set of recommendations regarding policy and management, and any advisable changes in law.

   b) Recommendations on the fees currently being charged to nuclear energy ratepayers and the recommended disposition of the available balances consistent with the recommendations of the Commission regarding the management of used nuclear fuel; and

   c) Such other matters as the Secretary determines to be appropriate.

5. **Official to Whom the Committee Reports.** The Commission reports to the Secretary of Energy.

6. **Agency Responsible for Providing the Necessary Support.** DOE will be responsible for financial and administrative support. Within DOE, this support will be provided by the Office of the Assistant Secretary for Nuclear Energy or other Departmental element as required. The Commission will draw on the expertise of other federal agencies as appropriate.

7. **Estimated Annual Operating Cost and Staff Years.** The estimated annual operating cost of direct support to, including travel of, the Commission and its subcommittees is $5,000,000 and requires approximately 8.0 full-time employees.

8. **Designated Federal Officer.** A full-time DOE employee, appointed in accordance with agency procedures, will serve as the Designated Federal Officer

(DFO). The DFO will approve or call all of the Commission and subcommittee meetings, approve all meeting agendas, attend all Commission and subcommittee meetings, adjourn any meeting when the DFO determines adjournment to be in the public interest. Subcommittee directors who are full-time Department of Energy employees, as appointed by the DFO, may serve as DFOs for subcommittee meetings.

9. **Estimated Number and Frequency of Meetings.** The Commission is expected to meet as frequently as needed and approved by the DFO, but not less than twice a year.

   The Commission will hold open meetings unless the Secretary of Energy, or his designee, determines that a meeting or a portion of a meeting may be closed to the public as permitted by law. Interested persons may attend meetings of, and file comments with, the Commission, and, within time constraints and Commission procedures, may appear before the Commission.

   Members of the Commission serve without compensation. However, each appointed non-Federal member may be reimbursed for per diem and travel expenses incurred while attending Commission meetings in accordance with the Federal Travel Regulations.

10. **Duration and Termination.** The Commission is subject to biennial review and will terminate 24 months from the date of the Presidential memorandum discussed above, unless, prior to that time, the charter is renewed in accordance with Section 14 of the FACA.

11. **Membership and Designation.** Commission members shall be experts in their respective fields and appointed as special Government employees based on their knowledge and expertise of the topics expected to be addressed by the Commission, or representatives of entities including, among others, research facilities, academic and policy-centered institutions, industry, labor organizations, environmental organizations, and others, should the Commission's task require such representation. Members shall be appointed by the Secretary of Energy. The approximate number of Commission members will be 15 persons. The Chair or Co-Chairs shall be appointed by the Secretary of Energy.

12. **Subcommittees.**

    a) To facilitate functioning of the Commission, both standing and ad hoc subcommittees may be formed.

    b) The objectives of the subcommittees are to undertake fact-finding and analysis on specific topics and to provide appropriate information and recommendations to the Commission.

c) The Secretary or his designee, in consultation with the Chair or Co-Chairs, will appoint members of subcommittees. Members from outside the Commission may be appointed to any subcommittee to assure the expertise necessary to conduct subcommittee business.

d) The Secretary or his designee, in consultation with the Chair or co-Chairs will appoint Subcommittees.

e) The DOE Committee Management Officer (CMO) will be notified upon establishment of each subcommittee.

13. **Recordkeeping.** The records of the Commission and any subcommittee shall be handled in accordance with General Records Schedule 26, Item 2 and approved agency records disposition schedule. These records shall be available for public inspection and copying, subject to the Freedom of Information Act, 5 U.S.C. 552.

14. **Filing Date.**

Date filed with Congress: March 1, 2010

Signed

Carol A. Matthews
Committee Management Officer

Appendix J

Department of Energy's Motion to Withdraw it's
Yucca Mountain License Application

March 3, 2010

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

Atomic Safety and Licensing Board

Before Administrative Judges:
Thomas S. Moore, Chairman
Paul S. Ryerson
Richard E. Wardwell

In the Matter of	)	Docket No. 63-001
U.S. DEPARTMENT OF ENERGY	)	ASLBP No. 09-892-HLW-CAB04
(High-Level Waste Repository)	)	

U.S. DEPARTMENT OF ENERGY'S MOTION TO WITHDRAW

The United States Department of Energy ("DOE") hereby moves, pursuant to 10 C.F.R. § 2.107, to withdraw its pending license application for a permanent geologic repository at Yucca Mountain, Nevada. DOE asks the Board to dismiss its application with prejudice and to impose no additional terms of withdrawal.

While DOE reaffirms its obligation to take possession and dispose of the nation's spent nuclear fuel and high-level nuclear waste, the Secretary of Energy has decided that a geologic repository at Yucca Mountain is not a workable option for long-term disposition of these materials. Additionally, at the direction of the President, the Secretary has established the Blue Ribbon Commission on America's Nuclear Future, which will conduct a comprehensive review

and consider alternatives for such disposition.[1] And Congress has already appropriated $5 million for the Blue Ribbon Commission to evaluate and recommend such "alternatives." Energy and Water Development and Related Agencies Appropriations Act, 2010, Pub. L. No. 111-85, 123 Stat. 2845, 2864-65 (2009). In accord with those decisions, and to avoid further expenditure of funds on a licensing proceeding for a project that is being terminated, DOE has decided to discontinue the pending application in this docket,[2] and hereby moves to withdraw that application with prejudice.

Under the Nuclear Waste Policy Act of 1982, as amended, 42 U.S.C. §§ 10101 *et seq.* ("NWPA"), this licensing proceeding must be conducted "in accordance with the laws applicable to such applications . . . ." NWPA § 114(d), 42 U.S.C. § 10134(d). Those laws necessarily include the NRC's regulations governing license applications, including, as this Board has already recognized, 10 C.F.R. § 2.107(a). *See* CAB Order (Concerning LSNA Memorandum), ASLBP No. 09-892-HLW-CAB04, at 2 (Dec. 22, 2009) (stating that "the parties are reminded that, pursuant to 10 C.F.R. § 2.107, withdrawal shall be on such terms as the Board may prescribe."). That section provides in relevant part that "[w]ithdrawal of an application after the

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1 *See* Presidential Memorandum -- Blue Ribbon Commission on America's Nuclear Future (Jan. 29, 2010) ("Presidential Memorandum"), *available at* http://www.whitehouse.gov/the-press-office/presidential-memorandum-blue-ribbon-commission-americas-nuclear-future; Department of Energy Press Release, Secretary Chu Announces Blue Ribbon Commission on America's Nuclear Future (January 29, 2010), *available at* http://www.energy.gov/news/8584.htm; Charter, Blue Ribbon Commission on America's Nuclear Future (filed March 1, 2010), *available at* http://www.energy.gov/news/documents/BRC_Charter.pdf. The Commission will conduct a comprehensive review of policies for managing the back end of the nuclear fuel cycle, including all alternatives for the storage, processing, and disposal of civilian and defense used nuclear fuel and materials derived from nuclear activities. *See id.*

2 This decision was announced in the Administration's Fiscal Year 2011 Budget, which states that "[i]n 2010, the Department will discontinue its application to the Nuclear Regulatory Commission (NRC) for a license to construct a high-level waste geologic repository at Yucca Mountain, Nevada." Budget of the U.S. Government, Fiscal Year 2011: Terminations, Reductions, and Savings, at 62 (Feb. 1, 2010). The Department of Energy's Fiscal Year 2011 Congressional Budget Request similarly states that "in 2010, Department will discontinue its application to the U.S. Nuclear Regulatory Commission for a license to construct a high-level waste geologic repository at Yucca Mountain." Department of Energy, FY 2011 Congressional Budget Request, Vol. 7, at 163 (Feb. 2010).

issuance of a notice of hearing shall be on such terms as the presiding officer may prescribe." 10 C.F.R. § 2.107(a).

Thus, applicable Commission regulations empower this Board to regulate the terms and conditions of withdrawal. *Philadelphia Electric Company* (Fulton Generating Station, Units 1 and 2), ALAB-657, 14 N.R.C. 967, 974 (1981). Any terms imposed for withdrawal must bear a rational relationship to the conduct and legal harm at issue. *Id.* And the record must support any findings concerning the conduct and harm in question to impose a term. *Id.*, citing *LeCompte v. Mr. Chip, Inc.*, 528 F.2d 601, 604-05 (5th Cir. 1976); 5 Moore's Federal Practice ¶ 41.05[1] at 41–58.

A. The Board Should Grant Dismissal With Prejudice

In this instance, the Board should prescribe only one term of withdrawal—that the pending application for a permanent geologic repository at the Yucca Mountain site shall be dismissed with prejudice.[3]

That action will provide finality in ending the Yucca Mountain project for a permanent geologic repository and will enable the Blue Ribbon Commission, as established by the Department and funded by Congress, to focus on alternative methods of meeting the federal government's obligation to take high-level waste and spent nuclear fuel. It is the Secretary of Energy'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. *See also* Presidential Memorandum at 1. Future proposals for the disposition of such materials should thus be based on a comprehensive and

[3] DOE seeks this form of dismissal because 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.

careful evaluation of options supported by that knowledge, as well as other relevant factors, including the ability to secure broad public support, not on an approach that "has not proven effective" over several decades. *Id.*

The Board should defer to the Secretary's judgment that dismissal of the pending application with prejudice is appropriate here. Settled law in this area directs the NRC to defer to the judgment of policymakers within the Executive Branch.[4] And whether the public interest would be served by dismissing this application with prejudice is a matter within the purview of the Secretary.[5] From public statements already made, we of course understand that some will nevertheless argue that dismissing this application is contrary to the NWPA. Although it is impossible to anticipate exactly what parties will argue at this point, at least one litigant seeking to raise these issues in federal court has said the NWPA obligation to file the pending application is inconsistent with the decision to withdraw the application. This is simply wrong.

Nothing in the text of the NWPA strips the Secretary of an applicant's ordinary right to seek dismissal. In fact, the text of the statute cuts sharply in favor of the Secretary's right to seek

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4 *U.S. Department Of Energy* (Plutonium Export License), CLI-04-17, 59 N.R.C. 357, 374 (2004) (deferring, upon "balanc[ing] our statutory role in export licensing with the conduct of United States foreign relations, which is the responsibility of the Executive Branch," to Executive Branch determination on an export license application). *See also Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-03-30, 58 N.R.C. 454, 472 (2003) (expressing "considerable doubt" about the NRC's authority to "second-guess" the Bureau of Land Management on an issue relating to recommendations as to the wilderness status of land, and declining an invitation to do so); *see also Environmental Radiation Protection Standards for Nuclear Power Operations, 40 CFR 190*, CLI-81-4, 13 N.R.C. 298, 301 (1981) (deferring to EPA standards for radiation protection: "This agency does not sit as a reviewing court for a sister agency's regulations...."). *See generally Pacific Gas & Electric Company* (Stanislaus Nuclear Project, Unit 1), LBP-83-2 , 17 N.R.C. 45, 52 (1983) ("The law on withdrawal does not require a determination of whether [the applicant's] decision [to withdraw] is sound.").

5 The Atomic Energy Act ("AEA" or "Act") gives the Secretary broad authority to carry out the Act's purposes, including the authority to direct the Government's "control of the possession, use, and production of atomic energy and special nuclear material, whether owned by the Government or others, so directed as to make the maximum contribution to the common defense and security and the national welfare." AEA § 3(c), 42 U.S.C. § 2013(c). Indeed, as the D.C. Circuit has recognized, the AEA established "a regulatory scheme which is virtually unique in the degree to which broad responsibility is reposed in the administering agency, free of close prescription in its charter as to how it shall proceed in achieving the statutory objectives." *Siegel v. AEC*, 400 F.2d 778, 783 (D.C. Cir. 1968). While *Siegel* concerned directly the branch of the then-Atomic Energy Commission that later became the NRC, its recognition that broad discretion is to be given to the governmental agencies charged with administering the AEA's objectives applies equally to the Department of Energy, the other lineal descendant of the AEC.

dismissal. The statute simply requires that the Secretary "shall submit . . . an application for a construction authorization." NWPA § 114(b), 42 U.S.C. § 10134(b). It neither directs nor circumscribes the Secretary's actions on the application after that submission.[6]

Indeed, far from imposing special limitations on DOE after the submission, the NWPA expressly requires that the application be considered "in accordance with the laws applicable to such applications." NWPA § 114(d), 42 U.S.C. § 10134(d). Those laws include 10 C.F.R. § 2.107, which, as this Board has recognized, authorizes withdrawals on terms the Board prescribes. Congress, when it enacted the NWPA in 1982, could have dictated that special rules applied to this proceeding to prevent withdrawal motions, or could have prescribed duties by DOE with respect to prosecution of the application after filing, but it chose not to do so.

Nor does the structure of the NWPA somehow override the plain textual indication in the statute that ordinary NRC rules govern here or dictate that the Secretary must continue with an application he has decided is contrary to the public interest. The NWPA does not prescribe a step-by-step process that leads inexorably to the opening of a repository at Yucca Mountain. Indeed, even if the NRC granted the pending application today, the Secretary would not have the authority to create an operational repository. That would require further action by DOE, other agencies, and Congress itself, yet none of those actions is either mandated or even mentioned by the NWPA. The NWPA does not require the Secretary to undertake the actions necessary to obtain the license to receive and possess materials that would be necessary to open a repository. 10 C.F.R. §§ 63.3, 63.32(d). Rather, the NWPA refers only to the need for a "construction

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[6] After filing the application, the only NWPA mandate imposed on the Secretary is a *reporting* requirement to Congress to note the "project decision schedule that portrays the optimum way to attain the operation of the repository, within the time periods specified in this part." NWPA § 114(e)(1), 42 U.S.C. §10134(e)(1).

authorization," NWPA § 114(b), 42 U.S.C. § 10134(b) – and even there, as discussed, it mandates only the submission of an application. To open a facility, moreover, the Department would be required to obtain water rights, rights of way from the Bureau of Land Management for utilities and access roads, and Clean Water Act § 404 permits for repository construction, as well as all the state and federal approvals necessary for an approximately 300-mile rail line, among many other things. None of those actions is mandated by the NWPA. At least as important, as the prior Administration stressed, *Congress* would need to take further action not contained in the NWPA before any such repository could be opened.[7] In short, there are many acts between the filing of the application and the actual use of the repository that the NWPA does not require.

Where, even if the NRC granted the pending application, Congress has not authorized the Secretary to make the Yucca Mountain site operational, or even mandated that he take the many required steps to make it operational, it would be bizarre to read the statute to impose a non-discretionary duty to continue with any particular intermediate step (here, prosecuting the application), absent clear statutory language mandating that result. More generally, it has not been the NRC's practice to require any litigant to maintain a license application that the litigant does not wish to pursue. That deference to an applicant's decisions should apply more strongly where a government official has decided not to pursue a license application because he believes that other courses would better serve the public interest.

Finally, the fact that Congress has approved Yucca Mountain as the site of a repository, *see* Pub. L. No. 107-200, 116 Stat. 735 (2002) ("there hereby is approved the site at Yucca Mountain, Nevada, for a repository, with respect to which a notice of disapproval was submitted

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7 *See* January 2009 Project Decision Schedule at 1 ("This schedule is predicated upon the enactment of legislation ... [regarding] land withdrawal."). *See also, e.g.*, Nuclear Fuel Management and Disposal Act, S.2589, 109th Congress, 2d Sess. § 3 (2006) (proposed legislation authorizing the withdrawal of lands necessary for the Yucca Mountain repository).

by the Governor of the State of Nevada on April 8, 2002"), means, in the D.C. Circuit's words, simply that the Secretary is "permitted" to seek authority to open such a site and that challenges to the prior process to select that site are moot. *Nuclear Energy Institute, Inc. v. EPA*, 373 F.3d 1251, 1309-10 (D.C. Cir. 2004). It does *not* require the Secretary to continue with an application proceeding if the Secretary decides that action is contrary to the public interest. *See, e.g.*, S. Rep. No. 107-159, at 13 (2002) ("It bears repeating that enactment of the joint resolution will not authorize construction of the repository or allow DOE to put any radioactive waste or spent nuclear fuel in it or even allow DOE to begin transporting waste to it. Enactment of the joint resolution will only allow DOE to take the next step in the process laid out by the Nuclear Waste Policy Act and apply to the NRC for authorization to construct the repository at Yucca Mountain."); H.R. Rep. No. 107-425, at 7 (2002) ("In accordance with the Nuclear Waste Policy Act (NWPA), such approval would allow the Department of Energy (DOE) to apply for a license with the Nuclear Regulatory Commission to construct a nuclear waste storage facility on the approved site.").[8] That conclusion is even more strongly compelled now, in light of Congress's recent decision to provide funding to a Blue Ribbon Commission, whose explicit purpose is to propose "alternatives" for the disposal of high-level waste and spent nuclear fuel.

Even if there were any ambiguity on these points, the Secretary's interpretation of the NWPA would be entitled to deference. *See Chevron, U.S.A., Inc. v. Natural Resources Defense Council, Inc.*, 467 U.S. 837 (1984); *Gen. Elec. Uranium Mgmt. Corp. v. DOE*, 764 F.2d 896, 907 (D.C. Cir. 1985) (applying *Chevron* deference to uphold DOE's interpretation of the NWPA); *see also Skidmore v Swift Co.*, 323 U.S. 65 (1944); *Auer v. Robbins*, 519 U.S. 452 (1977); *Coeur*

[8] *See also* 148 Cong. Rec. 7155 (2002) (Rep. Dingell) (stating that Yucca Mountain Site Approval Act "is just about a step in a process"); *id.* at 7166 (Rep. Norwood) ("The vote today does not lock us in forever and we are not committed forever to Yucca Mountain."); *id.* at 12340 (Sen. Crapo) ("[T]his debate is not about whether to open the Yucca Mountain facility so much as it is about allowing the process of permitting to begin to take place.").

Alaska, Inc. v. Southeastern Alaska Conservation Council, 129 S. Ct. 2458 (2009). Simply put, the text of the NWPA does not specify actions the Secretary can or must take once the application is filed. Accordingly, while some may disagree with the wisdom of the Secretary's underlying policy decision, the Secretary may fill this statutory "gap." The Secretary's interpretation is a reasonable one that should be given great weight and sustained. *See, e.g.*, *Tennessee v. Herrington*, 806 F.2d 642, 653 (6th Cir. 1986) ("[W]e are mindful of the Supreme Court's statement in *Chevron, supra*, that: 'When a challenge to an agency construction of a statutory provision, fairly conceptualized, really centers on the wisdom of the agency's policy, rather than whether it is a reasonable choice within a gap left open by Congress, the challenge must fail.'").

B. No Conditions Are Necessary As to the Licensing Support Network

Finally, there is no reason to impose conditions relating to the Licensing Support Network ("LSN") as a term of withdrawal. As DOE's prior filings with this Board explain, DOE will, at a minimum, maintain the LSN throughout this proceeding, including any appeals, and then archive the LSN materials in accordance with the Federal Records Act and other relevant law. *See* Department of Energy's Answers to the Board's Questions at the January 27, 2010 Case Management Conference (filed Feb. 4, 2010); Department of Energy's Status Report on Its Archiving Plan (filed Feb. 19, 2010). Thus, DOE will retain the full LSN functionality throughout this proceeding, including appeal, and then follow well established legal requirements that already govern DOE's obligations regarding these documents. DOE is also considering whether sound public and fiscal policy, and the goal of preserving the knowledge gained both inside and outside of this proceeding, suggest going even further than those legal

requirements. There is thus no need for this Board to impose additional conditions concerning the preservation of records.

* * *

DOE counsel has communicated with counsel for the other parties commencing on February 24, 2010, in an effort to resolve any issues raised by them prior to filing this Motion, per 10 C.F.R. § 2.323(b). The State of Nevada and the State of California have stated that they agree with the relief requested here. The Nuclear Regulatory Commission Staff has stated that it takes no position at this time. The Nuclear Energy Institute has stated that it does not consent to the relief requested and will file its position in a response. All other parties that have responded have stated that they reserve their positions until they see the final text of the motion.[9]

[9] These parties include: Clark County, Eureka County, Four Counties (Esmeralda, Lavender, Churchill, Mineral), Inyo County, Lincoln County, Native Community Action Council, Nye County, Timbisha Shoshone Tribal Group, White Pine County.

Respectfully submitted,

U.S. DEPARTMENT OF ENERGY
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Appendix K

Nuclear Regulatory Commission's Atomic Safety and Licensing Board's Ruling Denying the Department of Energy's Motion to Withdraw

LBP-10-11

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Thomas S. Moore, Chairman
Paul S. Ryerson
Richard E. Wardwell

In the Matter of	Docket No. 63-001-HLW
U.S. DEPARTMENT OF ENERGY	ASLBP No. 09-892-HLW-CAB04
(High Level Waste Repository)	June 29, 2010

MEMORANDUM AND ORDER
(Granting Intervention to Petitioners and Denying Withdrawal Motion)

I. Introduction

The Commission has variously described the adjudicatory portion of the proceeding on the application of the Department of Energy (DOE) for authorization to construct a national high-level nuclear waste repository at Yucca Mountain, Nevada, as "unusual," "extensive," and "unique."[1] Ensuring that these labels remain current and valid, we now have before us DOE's motion to withdraw with prejudice its 17-volume, 8600-page construction authorization application (Application), an application submitted just a little over 24 months ago, but over two

[1] U.S. Dep't of Energy (High-Level Waste Repository), CLI-09-14, 69 NRC 580, 582, 609 (2009). The adjudicatory portion of the proceeding is only part of the agency's extensive review process. The technical staff of the NRC reviews the entirety of the application and produces a safety evaluation report on the safety and technical merits of the application, while the adjudicatory process involves only the admitted contentions (i.e., issues) put forth by those petitioners accepted as parties.

decades in the making and undergirded by millions of pages of studies, reports, and related materials at a reported cost of over 10 billion dollars.[2]

Conceding that the Application is not flawed nor the site unsafe, the Secretary of Energy seeks to withdraw the Application with prejudice as a "matter of policy"[3] because the Nevada site "is not a workable option."[4] In response to the Secretary's action, we also have before us five new petitions to intervene in the ongoing proceeding filed by the State of Washington (Washington), the State of South Carolina (South Carolina), Aiken County, South Carolina (Aiken County), the Prairie Island Indian Community (PIIC), and the National Association of Regulatory Utility Commissioners (NARUC), as well as the amicus curiae filing of the Florida Public Service Commission.[5] In addition to DOE and the NRC Staff, which are regulatorily designated parties, there are currently ten admitted parties and two interested governmental participants in the ongoing high-level waste (HLW) proceeding.[6]

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[2] Department of Energy, Office of Civilian Radioactive Waste Management, Office of Business Management, Summary of Program Financial & Budget Information 9 (Jan. 31, 2010), available at http://www.energy.gov/media/ocrwm-budget-summary.pdf.

[3] U.S. Department of Energy's Reply to the Responses to the Motion to Withdraw (May 27, 2010) at 1 [hereinafter DOE Reply].

[4] U.S. Department of Energy's Motion to Withdraw (Mar. 3, 2010) at 1 [hereinafter DOE Motion].

[5] See State of Washington's Petition for Leave to Intervene and Request for Hearing (Mar. 3, 2010) [hereinafter Washington Petition]; Petition of the State of South Carolina to Intervene (Feb. 26, 2010) [hereinafter South Carolina Petition]; Petition of Aiken County, South Carolina, to Intervene (Mar. 4, 2010) [hereinafter Aiken County Petition]; Petition to Intervene of the Prairie Island Indian Community (Mar. 15, 2010) [hereinafter PIIC Petition]; National Association of Regulatory Utility Commissioners Petition to Intervene (Mar. 15, 2010) [hereinafter NARUC Petition]. The Florida Public Service Commission timely filed an unopposed motion for leave to file a memorandum opposing DOE's withdrawal motion with its memorandum attached. See Motion of the Florida Public Service Commission for Leave to Participate as Amicus Curiae and File Memorandum (May 14, 2010). The Florida Commission's motion is granted.

[6] The history of the proceeding dating back to 2004 can be found in numerous memoranda and orders of the Pre-License Application Presiding Officer (PAPO) Board, the Advisory Pre-License

As detailed in Part II, we deny DOE's motion to withdraw the Application. We do so because the Nuclear Waste Policy Act of 1982, as amended (NWPA),[7] does not permit the Secretary to withdraw the Application that the NWPA mandates the Secretary file. Specifically, the NWPA does not give the Secretary the discretion to substitute his policy for the one established by Congress in the NWPA that, at this point, mandates progress toward a merits decision by the Nuclear Regulatory Commission on the construction permit.

As set forth in Part III, we grant the intervention petitions of all five petitioners because we conclude that each has established standing, addressed the timeliness of its petition, demonstrated compliance with the Licensing Support Network (LSN) requirements, and set forth at least one admissible contention.

II. DOE Motion to Withdraw

DOE's motion to withdraw the construction authorization application raises two issues. First, does DOE have authority to withdraw the Application before the NRC reviews it? Second, if DOE has such authority, what if any requirements should the Board impose as conditions of withdrawal?

Application Presiding Officer (APAPO) Board, the Construction Authorization Boards (CABs), and the Commission, and that background need not be repeated here. See, e.g., U.S. Dep't of Energy (High-Level Waste Repository), LBP-09-6, 69 NRC 367, aff'd in part, rev'd in part, CLI-09-14, 69 NRC 580 (2009); U.S. Dep't of Energy (High-Level Waste Repository: Pre-Application Matters, Advisory PAPO Board), LBP-08-10, 67 NRC 450 (2008); U.S. Dep't of Energy (High-Level Waste Repository: Pre-Application Matters), LBP-08-5, 67 NRC 205 (2008); PAPO Board Revised Second Case Management Order (Pre-License Application Phase Document Discovery and Dispute Resolution) (July 6, 2007) (unpublished) [hereinafter RSCMO]; U.S. Dep't of Energy (High-Level Waste Repository: Pre-Application Matters), LBP-04-20, 60 NRC 300 (2004); U.S. Dep't of Energy (High-Level Waste Repository: Pre-Application Matters), CLI-04-32, 60 NRC 469 (2004).

[7] Pub. L. No. 97-425, 96 Stat. 2201 (1982) (codified as amended at 42 U.S.C. §§ 10101-10270 (2009)).

The Commission has directed the Board to consider both issues. In accordance with the Commission's April 23, 2010 order, the Board will address "DOE's authority to withdraw the application in the first instance" as well as "the terms of DOE's requested withdrawal."[8]

The five new petitioners, i.e., Washington, South Carolina, Aiken County, PIIC, and NARUC, along with four existing parties including the Nuclear Energy Institute (NEI) and the six Nevada counties of Nye, White Pine, Churchill, Esmeralda, Lander, and Mineral,[9] all oppose DOE's motion to withdraw with prejudice, as does the Florida Public Service Commission as amicus curiae. The State of Nevada (Nevada)—joined by Clark County, Nevada (Clark County), the Joint Timbisha Shoshone Tribal Group (JTS), and the Native Community Action Council (NCAC)—supports DOE's motion to withdraw with prejudice. The NRC Staff advocates for withdrawal without prejudice, and the State of California (California) supports the motion to withdraw but takes no position on the issue of prejudice. The remaining party and the interested governmental participants take no position on DOE's motion.

A. DOE's Authority to Withdraw

In moving to withdraw the Application with prejudice, DOE makes clear that "the Secretary's judgment here is not that Yucca Mountain is unsafe or that there are flaws in the [Application], but rather that it is not a workable option and that alternatives will better serve the public interest."[10] DOE also acknowledges, however, that it cannot withdraw the Application if that would be contrary to the statutes passed by Congress.[11]

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[8] U.S. Dep't of Energy (High-Level Waste Repository), CLI-10-13, 71 NRC __, __ (slip op. at 4) (Apr. 23, 2010).

[9] The counties of Churchill, Esmeralda, Lander, and Mineral sought intervention and were admitted as a single party (Nevada 4 Counties). See Dep't of Energy, LBP-09-6, 69 NRC at 377-78, 483.

[10] DOE Reply at 31 n.102.

[11] Id. at 23.

Section 114(d) of the NWPA provides that the NRC "shall consider" the Application and "issue a final decision approving or disapproving the issuance of a construction authorization."[12] The key question is therefore whether DOE retains discretion to decide, by withdrawing the Application, that the NRC should not consider it and issue a final decision. Having filed the Application with the NRC pursuant to a process mandated by Congress, can DOE unilaterally decide, on policy grounds, that the Yucca Mountain repository is not a "workable option" and that the NRC should proceed no further? Or, under the legislative scheme enacted by Congress, has responsibility for determining the technical merits of the Application at this stage necessarily passed to the NRC?

For the reasons explained below, we conclude that Congress directed both that DOE file the Application (as DOE concedes) and that the NRC consider the Application and issue a final, merits-based decision approving or disapproving the construction authorization application. Unless Congress directs otherwise, DOE may not single-handedly derail the legislated decision-making process by withdrawing the Application. DOE's motion must therefore be denied.[13]

We look first to the statute. Congress enacted the NWPA in 1982 for the purpose of establishing a "definite Federal policy" for the disposal of high-level radioactive waste and spent nuclear fuel.[14] In section 111, entitled "Findings and Purposes," Congress found that "[f]ederal efforts during the past 30 years to devise a permanent solution to the problems of civilian radioactive waste disposal have not been adequate."[15] Congress' solution was to establish,

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[12] 42 U.S.C. § 10134(d).

[13] Because we conclude that DOE's motion clearly must be denied under the NWPA, the Board does not address objections that have been raised on other grounds, such as DOE's alleged failure to comply with the National Environmental Policy Act of 1969 (NEPA).

[14] 42 U.S.C. § 10131(b)(2).

[15] Id. § 10131(a)(3).

through the NWPA, "a schedule for the siting, construction, and operation of repositories that will provide a reasonable assurance" of safe disposal of these materials.[16] To that end, the NWPA set out a detailed, specific procedure for site selection and review by the Secretary of Energy, the President, and the Congress, followed by submission of the Application for a construction permit, review, and final decision thereon by the NRC.[17]

In 1987, Congress adopted an amendment to the NWPA that directed DOE to limit its site selection efforts to Yucca Mountain and to "provide for an orderly phase-out of site specific activities at all candidate sites other than the Yucca Mountain site."[18] In February 2002, following a comprehensive site evaluation, the Secretary of Energy concluded that Yucca Mountain was "likely to meet applicable radiation protection standards"[19] and recommended to the President that Yucca Mountain be developed as a nuclear waste repository.[20] The President then recommended the Yucca Mountain site to Congress.[21] Pursuant to section 116, Nevada filed a notice of disapproval.[22] Congress responded—pursuant to section 115 (a

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[16] Id. § 10131(b)(1).

[17] See id. §§ 10132-10135.

[18] Id. § 10172(a); see also id. § 10134(f)(6).

[19] 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 at 26 (Feb. 2002), available at http://www.energy.gov/media/Secretary_s_Recommendation_Report.pdf [hereinafter Secretary's Recommendation].

[20] Id. at 6.

[21] Letter from President George W. Bush to Congress (Feb. 15, 2002), available at http://georgewbush-whitehouse.archives.gov/news/releases/2002/02/20020215-10.html.

[22] See Guinn, Kenny C., Statement of Reasons Supporting the Governor of Nevada's Notice of Disapproval of the Proposed Yucca Mountain Project (Apr. 8, 2002), available at http://www.yuccamountain.org/pdf/govveto0402.pdf [hereinafter Nevada Notice of Disapproval].

special expedited procedure that prevented delay and limited debate)—with a joint resolution in July 2002 approving the development of a repository at Yucca Mountain.[23]

As DOE agrees,[24] this official site designation then required DOE to submit an application to construct a high-level waste geologic repository at Yucca Mountain pursuant to section 114(b) ("the Secretary shall submit to the Commission an application for a construction authorization for a repository at such site").[25] Likewise, submission of the Application triggered a duty on the NRC's part to consider and to render a decision on the Application pursuant to section 114(d) of the NWPA ("[t]he 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 the submission of such application, except that the Commission may extend such deadlines by not more than 12 months").[26]

Given the stated purposes of the NWPA and the detailed structure of that legislation, it would be illogical to allow DOE to withdraw the Application without any examination of the merits. For instance, under the NWPA, ultimate authority to make a siting decision is not committed to the discretion of either the Secretary of Energy or the President, but instead rests

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[23] See Pub. L. No. 107-200, 116 Stat. 735 (2002) (codified at 42 U.S.C. § 10135). Although not required by the NWPA, the joint resolution was presented to the President and signed into law. See Nuclear Energy Inst. v. Envtl. Prot. Agency, 373 F.3d 1251, 1302 (D.C. Cir. 2004) (holding that "Congress has settled the matter" of Yucca Mountain's approval for development because "Congress's enactment of the Resolution . . . was a final legislative action once it was signed into law by the President").

[24] DOE Motion at 5.

[25] 42 U.S.C. § 10134(b).

[26] Id. § 10134(d).

with Congress. Why would Congress have specified in detail the steps that the Secretary, the President, the State of Nevada, and even Congress itself had to take to permit the Yucca Mountain Application to be filed, and included provisions mandating that the Application be filed with and considered by the NRC, if DOE could simply withdraw it at a later time or in the same breath if the Secretary so desired?[27]

Allowing withdrawal would also ignore the distinction that Congress drew between the site characterization phase and the Application phase. Congress expressly contemplated that, during site characterization, DOE might determine the Yucca Mountain site to be "unsuitable" for development as a repository.[28] In section 113 of the NWPA, Congress specified numerous steps that DOE must undertake in that event, such as reporting to Congress "the Secretary's recommendations for further action," including "the need for new legislative authority."[29] Clearly, when Congress wished to permit DOE to terminate activities, it knew how to do so (while keeping control of what might happen next).[30] In contrast, the absence of any similar provision in section 114 of the NWPA, which spells out what is to transpire after DOE has submitted its Application to the NRC, strongly implies that Congress never contemplated that DOE could withdraw the Application before the NRC considered its merits in accordance with

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[27] Indeed, it would appear that, until DOE filed the instant motion, DOE claimed no such authority. In May 2009, Secretary Chu testified before Congress that DOE would "continue participation in the Nuclear Regulatory Commission (NRC) license application process, consistent with the provisions of the Nuclear Waste Policy Act." FY 2010 Appropriations Hearing Before the Subcomm. on Energy and Water Development, and Related Agencies of the S. Comm. on Appropriations, 111th Cong. (2009) [hereinafter FY 2010 Appropriations Hearing].

[28] 42 U.S.C. § 10133(c)(3). DOE promulgated detailed site suitability guidelines. See 10 C.F.R. Part 963; Secretary's Recommendation at 12-18.

[29] 42 U.S.C. § 10133(c)(3)(F).

[30] See, e.g., id. § 10172a(a) (prohibiting DOE from characterizing a second repository site "unless Congress has specifically authorized and appropriated funds for such activities").

section 114(d). "[W]here Congress includes particular language in one section of a statute but omits it in another section of the same Act, it is generally presumed that Congress acts intentionally and purposely in the disparate inclusion or exclusion."[31]

Finally, allowing DOE to withdraw the Application at this stage in the process would be contrary to congressional intent, as reflected in the legislative history of the NWPA. Well aware of the failed efforts to address nuclear waste disposal prior to the NWPA, Congress believed it "necessary, therefore, to provide close Congressional control and public and state participation in the program to assure that the political and programmatic errors of our past experience will not be repeated."[32] In enacting the NWPA, Congress stated that "there is a solid consensus on major elements of the Federal program, and on the need for legislation to solidify a program and keep it on track."[33]

Did Congress, which so carefully preserved ultimate control over the multi-stage process that it crafted, intend—without ever saying so—that DOE could unilaterally withdraw the Application and prevent the NRC from considering it? We think not. When Congress selected the Yucca Mountain site over Nevada's objection in 2002, it reinforced the expectation in the 1982 Act that the project would be removed from the political process and that the NRC would complete an evaluation of the technical merits:

> If this resolution is approved, a license application will be submitted by the Department of Energy for Yucca Mountain and over the next several years, the Nuclear Regulatory Commission will go through all of the scientific and

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[31] KP Permanent Make-Up, Inc. v. Lasting Impression I, Inc., 543 U.S. 111, 118 (2004) (internal quotations omitted).

[32] H.R. REP. NO. 97-491(I), at 29-30 (1982), as reprinted in 1982 U.S.C.C.A.N. 3792, 3796.

[33] Id. at 29.

> environmental data and look at the design of the repository to make sure that it can meet environmental and safety standards. This will be done by scientists and technical experts.[34]

DOE's arguments to the contrary are not persuasive.

First, DOE contends that its conclusion that Yucca Mountain is not a "workable option" and that "alternatives will better serve the public interest" constitutes a policy judgment with which the NRC should not interfere.[35] Insofar as relevant, however, the pertinent policy—that DOE's Yucca Mountain Application should be decided on the merits by the NRC—is footed on controlling provisions of the Nuclear Waste Policy Act that DOE lacks authority to override. Regardless of whether DOE thinks the congressional scheme is wise, it is beyond dispute that DOE and the NRC are each bound to follow it. In section 115 Congress clearly stated that Congress itself was to decide the policy question as to whether the Yucca Mountain project was to move forward by reserving final review authority of site selection. By overruling Nevada's disapproval of the Yucca Mountain site, Congress was commanding, as a matter of policy, that Yucca Mountain was to move forward and its acceptability as a possible repository site was to be decided based on its technical merits.

Moreover, this congressional withdrawal of DOE authority is not unique within the NWPA, in which Congress undisputedly took numerous other policy determinations out of DOE's hands. For example, section 113(a) of the NWPA directed DOE to carry out site characterization activities only at Yucca Mountain, section 114(b) required DOE to submit an application for a construction authorization, and section 114(f)(6) directed that DOE's environmental impact statement not consider the "need for the repository, the time of initial

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[34] 148 CONG. REC. S6476 (2002) (statement of Sen. Levin). For an extensive discussion of the structure and legislative background of the NWPA, see generally Nuclear Energy Inst., 373 F.3d at 1258-62.

[35] DOE Motion at 4.

availability of a repository, alternative sites to the Yucca Mountain site, or nongeologic alternatives to such site." Surely Congress did not contemplate that, by withdrawing the Application, DOE might unilaterally terminate the Yucca Mountain review process in favor of DOE's independent policy determination that "alternatives will better serve the public interest."[36] As the United States Court of Appeals for the District of Columbia Circuit has stated, "[i]t is not for this or any other court to examine the strength of the evidence upon which Congress based its judgment" to approve the Yucca Mountain site.[37] Nor, at this point in the process created by Congress, is it for DOE to do so.

Second, DOE contends that, by enacting the NWPA, Congress did not expressly take away the broad powers that DOE otherwise enjoys under the Atomic Energy Act of 1954 (AEA).[38] The NWPA, however, is a subsequently-enacted, much more specific statute that directly addresses the matters at hand.[39] As the Supreme Court has stated, "'a specific policy

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[36] We rule as a matter of law that DOE lacks discretion to withdraw the Application, and do not evaluate the grounds on which it purports to rely. See DOE Reply at 28-33. We must express surprise, however, that DOE invokes the assertion that "many Nevadans oppose the Yucca Mountain project" (DOE Reply at 32 n.104)—surely something of which Congress was aware when it rejected Nevada's disapproval of the site in 2002. Indeed, most of the developments cited by DOE in support of its motion to withdraw predate Congress' selection of the Yucca Mountain site, over Nevada's objection, in 2002. Almost all of these developments were cited by Nevada before Congress and were rejected by Congress when it selected the Yucca Mountain site. See Nevada Notice of Disapproval, supra note 22.

[37] Nuclear Energy Inst., 373 F.3d at 1304.

[38] See DOE Reply at 5. DOE contended at argument (Tr. at 11 (June 3, 2010)) that the Secretary's authority to withdraw the Application is footed on section 161(p) of the AEA which authorizes DOE to "make, promulgate, issue, rescind, and amend such rules and regulations as may be necessary to carry out the purposes of this Act." 42 U.S.C. § 2201(p). In seeking to withdraw the Application, however, DOE has not taken any of the actions (i.e., made, promulgated, issued, rescinded or amended rules and regulations) authorized in section 161(p) to carry out the purposes of the AEA. See also AEA section 161(b), id. § 2201(b), to like effect.

[39] See Food & Drug Admin. v. Brown & Williamson Tobacco Corp., 529 U.S. 120, 143 (2000).

embodied in a later federal statute should control our construction of the [earlier] statute, even though it ha[s] not been expressly amended.'"[40]

Although the NWPA does not expressly repeal the AEA—indeed, it specifically refers to it[41]—it would be erroneous to interpret the AEA in a manner that would contravene the statutory scheme that Congress specifically adopted in the NWPA. "An inference drawn from congressional silence certainly cannot be credited when it is contrary to all other textual and contextual evidence of congressional intent."[42] As explained above, the language, structure, and legislative history of the NWPA all contravene the notion that Congress intended to allow DOE to terminate the NRC's consideration of the Application.[43] The meaning—or absence—of statutory language cannot be considered in isolation. It is a "fundamental canon of statutory construction that the words of a statute must be read in their context and with a view to their place in the overall statutory scheme."[44] As the Court of Appeals explained concerning the relationship between the NRC's own authority before and after enactment of the NWPA: "That Congress may have authorized NRC to regulate DOE's disposal of radioactive waste before it enacted the NWPA . . . hardly negates the fact that in the NWPA Congress specifically directed

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[40] Id. at 143 (quoting United States v. Estate of Romani, 523 U.S. 517, 530-31 (1998)).

[41] See, e.g., 42 U.S.C. §§ 10134, 10141.

[42] Burns v. United States, 501 U.S. 129, 136 (1991).

[43] DOE relies on Siegel v. Atomic Energy Comm'n, 400 F.2d 778 (D.C. Cir. 1968), for the proposition that the AEA's statutory scheme is "virtually unique in the degree to which broad responsibility is reposed in the administering agency, free of close prescription in its charter as to how it shall proceed in achieving the statutory objectives." Id. at 783. But Siegel was decided before Congress enacted the NWPA, which specifically narrows DOE's discretionary authority in the area of high-level waste disposal, thereby overriding the AEA's broad grant of authority.

[44] Brown & Williamson, 529 U.S. at 133 (internal citation omitted).

NRC to issue 'requirements and criteria' for evaluating repository-related applications and, not insignificantly, how to do so."[45]

Third, DOE argues that, because the NWPA requires the NRC to consider the Application "in accordance with the laws applicable to such applications," Congress necessarily intended to incorporate 10 C.F.R. § 2.107, an NRC regulation that DOE claims "authorizes" withdrawals.[46] This argument fails on several grounds. In the first place, section 2.107 does not "authorize" withdrawals. It states, in relevant part, that "[w]ithdrawal of an application after the issuance of a notice of hearing shall be on such terms as the presiding officer may prescribe."[47] In the absence of section 2.107, most license applicants, whose applications are filed voluntarily, presumably might seek to abandon their applications at any time. Fairly characterized, section 2.107 does not "authorize" withdrawal here, but rather clarifies that licensing boards have authority to impose reasonable conditions upon voluntary withdrawals in appropriate circumstances.[48] In effect, section 2.107 authorizes licensing boards to deny unconditioned withdrawals. Nothing in section 2.107 gives any applicant the presumptive permission to unilaterally withdraw its application. Furthermore, the Commission's case law is not helpful in this circumstance because no previous case involved an applicant that was mandated by statute to submit its application, as is the case here with DOE's Application under the NWPA.

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[45] Nuclear Energy Inst., 373 F.3d at 1288 (emphasis in original).

[46] DOE Motion at 5.

[47] 10 C.F.R. § 2.107(a).

[48] Indeed, in the statement of considerations accompanying the final rule, the Commission did not characterize section 2.107 as providing the authority for withdrawal. On the contrary, the Commission explained, "This section describes how the Commission will process a withdrawal of an application by an applicant." Changes to Adjudicatory Process, 69 Fed. Reg. 2182, 2216 (Jan. 14, 2004) (emphasis added).

DOE's reliance on section 2.107 is also misplaced for an entirely separate and independent reason. Congress "does not alter the fundamental details of a regulatory scheme in vague terms or ancillary provisions—it does not, one might say, hide elephants in mouseholes."[49] It would require a strained and tortured reading of the NWPA to conclude that Congress intended that its explicit mandate to the NRC—to consider and decide the merits of the Application—might be nullified by a nonspecific reference to an obscure NRC procedural regulation as being among the "laws" to be applied.[50] As the Supreme Court has admonished, "we must be guided to a degree by common sense as to the manner in which Congress is likely to delegate a policy decision of such economic and political magnitude to an administrative agency."[51] Here, "we are confident that Congress could not have intended to delegate a decision of such economic and political significance to an agency in so cryptic a fashion."[52]

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[49] Whitman v. Am. Trucking Ass'n, 531 U.S. 457, 468 (2001).

[50] DOE finds an inconsistency between its opponents' reading of section 114(b)—that section 114(b) precludes withdrawal after submittal of the Application—and its own reading of section 114(d)—that 10 C.F.R. § 2.107 is among the "laws applicable" to the Application and plainly authorizes DOE to withdraw. Noting that "[a] reading that causes an internal inconsistency in a statute should be rejected," DOE therefore rejects its opponents' reading of section 114(b). DOE Reply at 10. But any perceived inconsistency between sections 114(b) and (d) flows entirely from DOE's misreading of the NWPA.

[51] Brown & Williamson, 529 U.S. at 133.

[52] Id. at 160. The three cases and one dissent DOE cites do not advance its position that we should presume Congress was aware of 10 C.F.R. § 2.107 when enacting the NWPA. In Newark Morning Ledger Co. v. United States, 507 U.S. 546, 575 (1993), the dissent presumed that Congress understood the IRS interpretation of "goodwill" in a tax code regulation only because the regulation was sixty-five years old, Congress re-enacted the tax code not less than six times without substantial change, and the legislative history indicated Congress was specifically aware of the IRS definition of goodwill. In Goodyear Atomic Corp. v. Miller, 486 U.S. 174, 184-85 (1988), the Court attributed to Congress only a general awareness that state workers' compensation laws provided a variety of compensation schemes. In Bowen v. Massachusetts, 487 U.S. 879, 896-98 (1988), the Court presumed that Congress was aware of the definition of "monetary damages" when it selected the language for a statute, in part, because "monetary damages" was explicitly addressed in the legislative history. Similarly, in Bullcreek v. Nuclear Regulatory Comm'n, 359 F.3d 536, 542 (D.C. Cir. 2004), the court

The better reading of the language of the NWPA consistent with the content and detailed legislative scheme is to the contrary. The NRC is directed by section 114(d) to consider the Application in accordance with existing laws "except that the Commission shall issue a final decision approving or disapproving the issuance of a construction authorization" within the prescribed time period.[53] Insofar as application of section 2.107 might possibly be construed to interfere with that prime directive, by the terms of the statute it cannot apply.

Additional support for this conclusion is found in the legislative history. During the floor debate on S. 1662—which contained a provision that was substantially identical to section 114(d) of the NWPA in its current form[54]—the bill's sponsor, Senator McClure, explained:

> The Nuclear Regulatory Commission has been established as an independent body to check upon whether or not the administrative bodies are functioning according to the statutes and policies that have been already enacted. The Nuclear Regulatory Commission will have that same function with respect to determining whether this program is being administered correctly or not.[55]

As this explanation plainly suggests, "the laws applicable to such applications" was primarily intended as a blanket reference to the substantive standards that the NRC applies in judging applications. There is no suggestion in the legislative history that Congress had in mind the

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presumed (to the extent it applied such presumption at all) that Congress was aware of the NRC's regulations for licensing private away-from-reactor storage facilities because the substantive regulations were specifically discussed in the legislative history. In none of these cases did the court presume that Congress was aware of one specific agency rule when that rule was not expressly discussed in the legislative history. DOE points to no such legislative history addressing section 2.107.

[53] 42 U.S.C. § 10134(d) (emphasis added).

[54] Section 405(e) of S. 1662, as amended, read as follows:

> (e) The Commission shall consider an application for authorization to construct a repository in accordance with the laws applicable to such applications, except that the Commission shall issue a final decision approving or disapproving the first such application not later than December 31, 1989, and the second such application not later than December 31, 1992.

[55] 128 CONG. REC. S4128 (1982).

relatively obscure procedural regulation that DOE seeks to invoke here to nullify the otherwise unambiguous command of Congress, in section 114(d) of the NWPA, that the NRC "shall consider" the Application and "shall issue a final decision approving or disapproving the issuance of a construction authorization."[56]

Fourth, DOE claims that its decision to seek to withdraw the Application is entitled to deference.[57] But where the statute is clear on its face, or is clear in light of its statutory scheme and legislative history, deference is inappropriate: "If the intent of Congress is clear, that is the end of the matter; for the court, as well as the agency, must give effect to the unambiguously expressed intent of Congress."[58] This is especially so where, as here, DOE's interpretation is reflected in nothing more formal than a motion before this Board—and not, for example in a formal agency adjudication or notice-and-comment rulemaking.[59] Moreover, as DOE's counsel appeared to concede at argument,[60] the NRC does not owe deference to DOE's understanding

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[56] DOE advances a further argument in this regard. As DOE points out, the NRC has interpreted the three-year deadline in section 114(d) to commence with the docketing, rather than the submission, of the Application. See Licensing Proceedings for the Receipt of High-Level Radioactive Waste at a Geologic Repository: Licensing Support Network, Design Standards for Participating in Websites, 66 Fed. Reg. 29,453, 29,453 n.1 (2001). DOE suggests, therefore, that the NRC's requirement to reach a merits decision on the Application "pertains only while an application is docketed before the NRC." DOE Reply at 11. If the NRC grants DOE's motion to withdraw, thereby removing the Application from the docket, DOE contends that the NRC is relieved of its obligation to render a decision within three years. But the Commission's decision to define the term "submission" as "docketing" is relevant only to the statutory deadline, not to the NRC's mandate to reach a merits decision on the Application. Surely, Congress did not intend that the NRC could unilaterally nullify its statutory duty to consider the Application by simply removing that Application from the docket.

[57] DOE Motion at 7.

[58] Chevron U.S.A., Inc. v. Natural Res. Def. Council, 467 U.S. 837, 842-43 (1984). Thus, contrary to DOE's arguments (DOE Motion at 8), there is no legislative "gap" in the NWPA.

[59] See Christensen v. Harris County, 529 U.S. 576, 587 (2000).

[60] Tr. at 77 (June 3, 2010).

of the NRC's own responsibilities under section 114(d). Once DOE has applied for a construction authorization, the NRC—not DOE—is charged with granting or denying the construction permit application under the sequential process prescribed by the NWPA.[61]

Fifth, DOE claims that Congress intended that DOE be treated just like any private applicant, including the right to seek freely to withdraw its application.[62] Under the framework of the NWPA, however, DOE's application is not like any other application, and DOE is not just "any litigant," because its policy discretion is clearly limited by the NWPA. The obvious difference is that Congress has never imposed a duty on private NRC applicants to pursue license applications, nor has Congress required that the Commission reach a decision on a private licensing application that the applicant chooses to withdraw. In contrast, Congress here required DOE to file the Application. Statutes should not be interpreted so as to create internal inconsistencies, an absurd result, or an interpretation inconsistent with congressional intent.[63] DOE claims that the "law on withdrawal does not require a determination of whether [the applicant's] decision [to withdraw] is sound,"[64] but neglects to note that the rationale for the decision from which it quotes was that the applicant's filing was "wholly voluntary" in the first place.[65]

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[61] See Nuclear Energy Inst., 373 F.3d at 1289 ("We defer to NRC's interpretation of the NWPA under Chevron" in promulgating regulations to be applied in administering the licensing stage).

[62] Tr. at 297 (June 3, 2010).

[63] See United States v. Turkette, 452 U.S. 576, 580 (1981); United States v. Raynor, 302 U.S. 540, 547 (1938).

[64] DOE Reply at 28.

[65] Pac. Gas & Elec. Co. (Stanislaus Nuclear Project, Unit 1), LBP-83-2, 17 NRC 45, 51 (1983).

Sixth, DOE claims significance in the fact that the NWPA does not mandate construction and operation of the repository, even if the NRC should approve a construction authorization.[66] We find that fact insignificant. Congress crafted a multi-stage process for consideration of the Yucca Mountain repository, including the requirements that DOE file the Application and that the NRC consider it and issue a "final decision" approving or disapproving construction. That further steps must take place before a repository might actually be constructed and become operational does not entitle DOE to ignore the process that Congress created. The Board is mindful that the NWPA does not compel the NRC to grant a construction authorization for a repository at Yucca Mountain. But the possibility that the Application might not be granted—or, if granted, that the repository might ultimately not be constructed and become operational for any number of reasons—does not entitle DOE to terminate a statutorily prescribed review process.

Seventh, DOE claims that Congress' funding of a Blue Ribbon Commission on America's Nuclear Future (Blue Ribbon Commission) to review federal policy on spent nuclear fuel management and disposal and to examine alternatives to Yucca Mountain is inconsistent with continuing to process the Yucca Mountain Application.[67] We disagree. In including funding for the Blue Ribbon Commission in the 2010 Appropriations Bill,[68] Congress did not repeal the NWPA or declare that the Yucca Mountain site is inappropriate, as DOE concedes in its reply.[69]

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[66] DOE Motion at 5.

[67] Id. at 7.

[68] See Energy and Water Development and Related Agencies Appropriations Act, 2010, Pub. L. No. 111-85, 123 Stat. 2845, 2864-65 (2009) [hereinafter Appropriations Act].

[69] See DOE Reply at 20. In appropriating funds for the Blue Ribbon Commission, Congress instructed the Commission to "consider all alternatives for nuclear waste disposal," necessarily including a geologic repository at Yucca Mountain. Appropriations Act at 2865 (emphasis added). In the House Committee Report accompanying the appropriations bill, the Committee

Unless and until Congress does so, both DOE and the NRC are bound to follow the existing law.

Finally, DOE says that it would be "absurd and unreasonable" to require DOE to proceed with an application that it no longer favors on policy grounds.[70] Where the law is declared to require it, however, DOE and other agencies within the Executive Branch are often required to implement legislative directives in a manner with which they do not necessarily agree.[71] The Board is confident that DOE can and will prosecute the Application before the NRC in good

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conditioned its funding of the Blue Ribbon Commission, "provided that Yucca Mountain is considered in the review." See H.R. REP. NO. 111-203 at 85 (2009). The Conference Report contains a reconciliation provision directing that "[r]eport language included by the House which is not contradicted by the report of the Senate or the conference, and Senate report language which is not contradicted by the report of the House or the conference is approved by the committee of conference." See H.R. REP. NO. 111-278 at 39 (2009). There appears to be no express contradiction of the House Report language, which requires the Blue Ribbon Commission to consider Yucca Mountain, in either the Conference Report or the Senate Report and thus the language in the House Report appears to be the law. See S. REP. NO. 111-45 (2009); H.R. REP. NO. 111-278. See also Blue Ribbon Commission on America's Nuclear Future Advisory Committee Charter (Mar. 1, 2010), available at http://www.energy.gov/news/documents/BRC_Charter.pdf (requiring the Commission to evaluate all alternatives for permanent disposal of HLW, including deep geologic disposal). Thus, Congress' decision to fund the Blue Ribbon Commission—and to keep Yucca Mountain as an alternative to be considered—does not indicate any congressional intent to disrupt the process mandated by the NWPA. Indeed, in the same Appropriations Act, Congress also appropriated $93,400,000 for "nuclear waste disposal activities to carry out the purposes of the [NWPA]," i.e., for Yucca Mountain licensing activities. Appropriations Act at 2864. But see Steven Chu, Sec'y, Dep't of Energy, Remarks at the Meeting of the Blue Ribbon Commission on America's Nuclear Future 27 (Mar. 25, 2010) (transcript available at http://brc.gov/pdfFiles/0325scur.pdf), where the Secretary stated, "I don't want the committee . . . spending time and saying by looking at past history was Yucca Mountain a good decision or a bad decision and whether it can be used as a future repository."

[70] DOE Reply at 18.

[71] See, e.g., Massachusetts v. Envtl. Prot. Agency, 549 U.S. 497 (2007) (requiring EPA to include greenhouse gases within its regulatory purview under the Clean Air Act); N. States Power Co. v. U.S. Dep't of Energy, 128 F.3d 754 (D.C. Cir. 1997) (granting a partial mandamus against DOE to enforce its prior holding in Ind. Mich. Power Co. v. U.S. Dep't of Energy, 88 F.3d 1272 (D.C. Cir. 1996), that the NWPA creates an obligation for DOE to dispose of spent nuclear fuel by January 31, 1998); see also U.S. Const. art. II, § 3, cl. 4 (the President shall "take Care that the Laws be faithfully executed").

faith,[72] as we believe the NWPA requires. Moreover, DOE has acknowledged that its decision to seek to withdraw the Application is not based on a judgment that Yucca Mountain is unsafe or on flaws in the Application. It should be able to proceed with an evaluation of the technical merits, as directed by the NWPA, without undue discomfort.

If Congress does not wish to see the Yucca Mountain project go forward, it can of course change the law or decide not to fund the proposed repository. Likewise, this Board's decision does not in any way bear upon whether, after considering the merits, the NRC will ultimately authorize construction. As directed by the Commission, we merely decide whether DOE's motion to withdraw the Application from the NRC's consideration should be granted. We conclude that, under the statutory process Congress created in the NWPA, which remains in effect, DOE lacks authority to seek to withdraw the Application. DOE's motion must therefore be denied.

B. Conditions of Withdrawal

Because the Board concludes that DOE lacks discretion to withdraw the Application at this time, the question of appropriate conditions is moot. The Commission apparently contemplated, however, that the Board would address "the terms of DOE's requested withdrawal, as well as DOE's authority to withdraw the application in the first instance."[73] Accordingly, we briefly address the conditions that the Board concludes should apply if DOE were permitted to withdraw.

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[72] As counsel for DOE stated at argument, "[w]e will do what we're ordered to do." Tr. at 78 (June 3, 2010).

[73] Dep't of Energy, CLI-10-13, 71 NRC at __ (slip op. at 4).

1. Dismissal without Prejudice

DOE seeks dismissal of the Application with prejudice "because 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."[74] According to DOE, dismissal with prejudice "will provide finality in ending the Yucca Mountain project for a permanent geologic repository and will enable the Blue Ribbon Commission, as established by the Department and funded by Congress, to focus on alternative methods of meeting the federal government's obligation to take high-level waste and spent nuclear fuel."[75]

Contrary to DOE's request, if dismissal were allowed at all it should be without prejudice. The Board is not aware, in previous NRC practice, of any applicant voluntarily seeking dismissal with prejudice of its own application. Moreover, no aspect of the Application has been adjudicated on the merits. In NRC practice, "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."[76]

While the current Secretary may have no intention of refiling, his judgment should not tie the hands of future Administrations for all time.[77] Rather, "the public interest would best be served by leaving the . . . option open to the applicant should changed conditions warrant its

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[74] DOE Motion at 3 n.3.

[75] Id. at 3.

[76] P.R. Elec. Power Auth. (North Coast Nuclear Plant, Unit 1), ALAB-662, 14 NRC 1125, 1133 (1981) (emphasis in original).

[77] To date, since 1982, the repository process has moved forward through five Administrations and the leadership of nine different DOE Secretaries. See Opposition of the Nuclear Energy Institute to the Department of Energy's Motion for Withdrawal (May 17, 2010) at 4 n.8.

pursuit."[78] The Board appreciates that Nevada and other opponents of the Yucca Mountain repository have expended substantial resources, but, as the Commission has stated, "it is well settled that the prospect of a second lawsuit [with its expenses and uncertainties] . . . or . . . another application . . . does not provide the requisite quantum of legal harm to warrant dismissal with prejudice."[79]

2. Preservation of LSN Document Collection

For similar reasons, if DOE were permitted to withdraw the Application, it should be required to preserve, in usable form, the millions of documents that DOE has placed in its LSN document collection (LSNdc).

On December 17, 2009, the LSN Administrator (LSNA) submitted a memorandum concerning potential impacts on the LSN should DOE be allowed to withdraw the Application.[80] In response, this Board issued various orders and held case management conferences with the parties, the interested governmental participants, and the petitioners[81] concerning how DOE's potential withdrawal would affect the LSN and to propose withdrawal conditions necessary to assure DOE meets its commitment to: (1) maintain its LSN website until final appellate review of any order terminating this proceeding,[82] and (2) "preserve and archive its project records

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[78] North Coast, ALAB-662, 14 NRC at 1132.

[79] Yankee Atomic Elec. Co. (Yankee Nuclear Power Station), CLI-99-24, 50 NRC 219, 222 n.3 (1999) (quoting Philadelphia Elec. Co. (Fulton Generating Station, Units 1 and 2), ALAB-657, 14 NRC 967, 979 (1981)).

[80] Memorandum from Daniel J. Graser, LSNA, to Administrative Judges (Dec. 17, 2009).

[81] See CAB Order (Concerning LSNA Memorandum) (Dec. 22, 2009) (unpublished); Tr. at 345-405 (Jan. 27, 2010); CAB Order (Questions for Several Parties and LSNA) (Apr. 21, 2010) (unpublished); Tr. at 316-447 (June 4, 2010).

[82] The Department of Energy's Status Report on Its Archiving Plan (Feb. 19, 2010) at 2.

thereafter in compliance with federal requirements and consistent with DOE's objective of preserving the core scientific knowledge from the Yucca Mountain project."[83]

As part of this process, the Board submitted written questions to DOE to provide a better understanding of the structure of DOE's document collection and its archiving plans, so that the Board might fashion appropriate conditions if DOE's motion to withdraw the Application were to be granted.[84] DOE submitted its answers to these questions on May 24, 2010. On June 1, 2010, Nevada and Nye County exercised the option provided to all parties, interested governmental participants, and petitioners to respond to DOE's answers. These responses and comments from other parties, interested governmental participants, and petitioners were discussed at the case management conference held on June 4, 2010.[85]

Based on the foregoing, it was apparent that all were in close agreement regarding the conditions necessary to preserve LSN documentary material. Subsequently, the Board directed the parties, the interested governmental participants, and the petitioners to confer with DOE and to submit agreed-upon proposed conditions.[86]

A set of proposed conditions regarding DOE's LSNdc, based in substantial part on the submitted agreement,[87] is set forth in the Appendix. In the Board's view, these conditions would assure that DOE's LSNdc is appropriately preserved and archived. Therefore, the Board

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[83] The Department of Energy's Answers to the Board's Questions at the January 27, 2010 Case Management Conference (Feb. 4, 2010) at 2.

[84] See CAB Order (Questions for Several Parties and LSNA) (Apr. 21, 2010) (unpublished).

[85] See Tr. at 316-447 (June 4, 2010).

[86] CAB Order (June 7, 2010) at 1 (unpublished).

[87] Joint Report Concerning Conditions Regarding DOE LSN Document Collection (June 18, 2010) [hereinafter Joint Report].

concludes that, in the event DOE's motion to withdraw the Application for the Yucca Mountain geologic repository were granted, the conditions set forth in the Appendix should be imposed.

III. Intervention Petitions

To attain party status in this one-of-a-kind proceeding, each of the five new petitioners (Washington, South Carolina, Aiken County, PIIC, and NARUC) must establish standing, address the timeliness of its petition, demonstrate compliance with the LSN requirements, and set forth at least one admissible contention. DOE, the movant and applicant, does not oppose the intervention of the five petitioners. Nye County, Nevada, the host county of the proposed repository, filed a brief answer supporting the five intervention petitions, as did the party comprised of the four Nevada counties of Churchill, Esmeralda, Lander, and Mineral. The NRC Staff and Nevada each filed answers opposing the petitions on various grounds, with NCAC, JTS, and Clark County joining Nevada's answers.[88]

In the sections that follow, we conclude that all five petitioners have met the applicable requirements. Accordingly, we grant each of the intervention petitions. We also conclude that Washington, South Carolina, Aiken County and PIIC meet the lesser requirements for participation as interested governmental participants under 10 C.F.R. § 2.315(c).

A. Standing

In determining whether an individual or organization should be granted party status "as of right," the NRC applies judicial standing concepts that require a petitioner to establish: (1) a

[88] Clark County's answer also included a brief argument regarding the timeliness of the five petitions. See infra text accompanying note 127. Additionally, the County of Inyo, California, and Eureka County, Nevada, an interested governmental participant, each filed brief responses stating they took no position regarding the five petitions. The other parties to the proceeding, California, White Pine County, Nevada, and NEI, filed no answers to the petitions.

distinct and palpable harm that constitutes injury-in-fact; (2) the harm is fairly traceable to the challenged action; and (3) the harm is likely to be redressed by a favorable decision.[89]

1. Washington, South Carolina, Aiken County, and PIIC

Petitioners Washington, South Carolina, Aiken County, and PIIC assert similar injuries as a basis for standing. All four petitioners either have within their boundaries temporary HLW storage facilities or represent communities located adjacent to such facilities. Washington is home to the Hanford Nuclear Reservation (Hanford), where, Washington asserts, millions of gallons of highly toxic radioactive weapons program waste and foreign reactor waste are stored in aging underground tanks.[90] South Carolina declares that it is home to seven commercial reactors that store HLW onsite, as well as the Savannah River Site (SRS), where, similar to Hanford, weapons program waste is currently housed.[91] Aiken County points out that it is the county in which the SRS is found,[92] and PIIC states that its reservation is located close to a

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[89] See Dep't of Energy, LBP-09-6, 69 NRC at 381-82. The NRC requirements for standing, which generally track judicial concepts, are set forth at 10 C.F.R. § 2.309(d).

[90] Washington Petition at 2.

[91] South Carolina Petition at 4.

[92] Aiken County Petition at 2. Aiken County's petition incorporates South Carolina's petition by reference, necessarily including South Carolina's contentions, as well as its timeliness and standing arguments. No party objects to this incorporation, except for the NRC Staff, which argues that "[t]he Commission's strict pleading requirements disfavor incorporation by reference in an intervention petition." NRC Staff Answer to Petition of Aiken County, South Carolina, to Intervene (Mar. 29, 2010) at 5. In support of this position, the Staff quotes dicta in a Commission decision suggesting that the NRC would not accept "incorporation by reference of another petitioner's issues" in an instance where the petitioner has not submitted "at least one admissible issue of its own." Id. at 6 (quoting Consol. Edison Co. of N.Y. (Indian Point, Units 1 and 2), CLI-01-19, 54 NRC 109, 133 (2001)). In the instant case, where Aiken County is a subsidiary governmental unit, whose standing is based upon the same injury as that of South Carolina, in which it is located, we find incorporation appropriate. Moreover, where Aiken County relies on precisely the same legal arguments as South Carolina—arguments that do not require any factual support—we see no reason to prohibit its adoption of South Carolina's contentions. Similarly, where, as here, Aiken County's contentions are based on the same triggering event as those of South Carolina—namely, DOE's decision to seek withdrawal—we accept Aiken County's incorporation of South Carolina's timeliness arguments.

nuclear reactor and immediately adjacent to an independent spent fuel storage installation (ISFSI), where spent nuclear fuel is currently stored.[93] According to petitioners, DOE's decision to abandon Yucca Mountain leaves this nation without the permanent disposal solution mandated by the NWPA, and thus without a federally promised process and timetable for removal of HLW from temporary storage facilities. As a result, petitioners assert they will be forced to bear the associated health and safety risks indefinitely,[94] or at least until Congress legislates an alternative method of disposal—a prospect that, if achievable at all, would mean decades of delay. The petitioners are correct. This prolonged risk of harm, and the cessation of the legislatively established process looking to alleviate it, constitute injury-in-fact.

The second and third requirements for standing—causation and redressability—necessarily follow from petitioners' injury. With respect to causation, DOE's decision to abandon the Yucca Mountain project, in the absence of any ongoing alternative solution, will delay indefinitely any possible removal of HLW from the temporary storage sites affecting petitioners, thereby prolonging the associated risks. With regard to redressability, a decision to reject DOE's withdrawal motion will require that DOE continue to follow the licensing process established by the NWPA, along the path toward the prospect of a permanent HLW repository.

As previously indicated, DOE does not challenge the standing of any petitioner. Only Nevada particularizes arguments that petitioners lack standing, while Clark County, NCAC, and

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[93] PIIC Petition at 2.

[94] For example, Washington describes the ongoing leakage of radioactive waste from underground tanks at Hanford as threatening to inflict "irreversible environmental harm within Washington, and beyond." Washington Petition at 3. Additionally, Washington contends that abandoning Yucca Mountain will require the redesign and reconstruction of a costly and 52-percent-finished Waste Treatment Plant, which serves as "the linchpin for completing Hanford's tank waste mission." Id. at 4-5.

JTS join those arguments.[95] Nevada tailors its objections to the circumstances of each petitioner, but its arguments are essentially the same. First, Nevada characterizes the alleged injury as too "general" to support standing and faults petitioners for failing "to explain how abandoning Yucca Mountain would give rise to impacts beyond those already present."[96] Citing the Licensing Board's ruling in White Mesa, Nevada argues that petitioners fail to explain "how the alleged impacts would arise from the proposed . . . activities as opposed to past activities not in issue."[97] But White Mesa was a license amendment case, where the Board found no "larger risk of injury" flowing from the processing and storage activities sought to be authorized by the amendment. In the instant case, petitioners have clearly established a larger risk of injury, flowing from DOE's attempt to abandon its responsibilities under the NWPA, thereby virtually insuring that the risks associated with temporary storage of HLW will continue to impact

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[95] NRC Staff opposes only Aiken County's standing on the grounds that that it "does not explain how its injury can be redressed by a favorable decision in this proceeding." NRC Staff Answer to Aiken County at 5. Because we accept Aiken County's incorporation of South Carolina's petition, see supra note 92, and the Staff does not object to South Carolina's standing, its argument necessarily fails.

[96] See, e.g., Answer of the State of Nevada to the State of South Carolina's Petition to Intervene (Mar. 29, 2010) at 2 [hereinafter Nevada Answer to South Carolina].

[97] Id. (citing Int'l Uranium (USA) Corp. (White Mesa Uranium Mill), LBP-01-15, 53 NRC 344, aff'd, CLI-01-21, 54 NRC 247 (2001)). In its answer to PIIC's petition, Nevada cites two additional license amendment cases for the same proposition. State of Nevada's Answer to Prairie Island Indian Community's Petition to Intervene (May 4, 2010) at 4 [hereinafter Nevada Answer to PIIC]. In Commonwealth Edison Co. (Zion Nuclear Power Station, Units 1 and 2), CLI-99-4, 49 NRC 185 (1999), the Commission upheld the Licensing Board's denial of standing, where the petitioner failed to "indicate how [the alleged] harms might result from the license amendments, particularly given not only the shutdown status of the facility, but also the continued applicability of the NRC's safety-oriented regulations governing defueled nuclear plants." Id. at 192. In Atlas Corp. (Moab, Utah Facility), LBP-97-9, 45 NRC 414 (1997), the Board held that petitioner failed to specify any radiological contacts "with enough concreteness to establish some impact on him that is sufficient to provide him with standing." Id. at 426. Neither case bears any similarity to the case at hand, where petitioners establish quite clearly how a denial of DOE's motion would prolong their exposure to health and safety risks.

petitioners indefinitely (i.e., beyond "temporary" storage). Thus, petitioners' injury is sufficiently "distinct and palpable" to give rise to standing.[98]

Second, Nevada challenges what it characterizes as petitioners' attempts to assert purely procedural rights (i.e., the right to have DOE's application be considered on its merits) without concrete interests in the outcome of the proceeding.[99] Nevada relies upon the Supreme Court's ruling in Lujan, which allows petitioners to enforce procedural rights only if "the procedures in question are designed to protect some threatened concrete interest of [theirs] that is the ultimate basis of [their] standing."[100] But here, petitioners do assert a concrete interest—

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[98] With respect to PIIC, Nevada advances two related arguments. First, it argues that PIIC's asserted injury is "indistinguishable" from a "generalized concern" about the destruction of scenery and wildlife in a national forest, which the Supreme Court found insufficient to confer standing upon a national environmental group, the Sierra Club. Nevada Answer to PIIC at 2 (citing Sierra Club v. Morton, 405 U.S. 727, 739 (1972)). Second, Nevada argues that PIIC "bears a special obligation . . . to identify the approximate times when contamination and exposures may occur," in light of the NRC's generic "waste confidence" rulemaking determination that spent fuel can be stored safely onsite for at least 30 years. Neither argument defeats petitioners' standing. As to the first, PIIC—unlike the Sierra Club—is an Indian Tribe whose reservation is adjacent to facilities where spent nuclear fuel is currently stored. PIIC asserts harm to the health and safety of its members, the nearest of which resides just 600 yards from an ISFSI. PIIC Petition at 3. Thus, the alleged impacts amount to more than a "mere interest in a problem," as Nevada would have it. Nevada Answer to PIIC at 2 (citing Morton, 405 U.S. at 739). As to Nevada's second argument, Nevada cites no support for such a claimed "special obligation," and there is none. As should be obvious, there is no requirement that a petitioner identify the time at which the asserted harm will occur when the subject is the storage of HLW any more than a petitioner must identify the moment an asserted accident might happen in a reactor proceeding.

[99] See, e.g., Nevada Answer to PIIC at 5-6.

[100] Lujan v. Defenders of Wildlife, 504 U.S. 555, 573 n.8 (1992). Nevada cites two additional circuit court cases for this proposition. In Elec. Power Supply Ass'n v. Fed. Energy Regulatory Comm'n, 391 F.3d 1255 (D.C. Cir. 2004), in which the petitioner challenged a FERC rule permitting certain ex parte communications in agency hearings, Nevada suggests that the court granted standing only "because [petitioner's] members had concrete financial interests at stake and were participating as parties in the hearings where the rule applied." See, e.g., Nevada Answer to PIIC at 5. Nevada overlooks, however, the court's unequivocal statement that "[petitioner's] standing is not defeated by the fact that it cannot show, with any certainty, that its or its members' financial interests will be damaged by the operation of [FERC's rule]." Elec. Power Supply, 391 F.3d at 1262. Thus, the Elec. Power Supply holding actually supports

namely, the interest in removal of HLW from temporary storage facilities, in accordance with the process mandated by the NWPA.[101] Moreover, Nevada's suggestion that petitioners will "disappear from the scene" once their procedural right is vindicated (i.e., DOE's motion is denied), thus leaving their interests "at the mercy of other parties,"[102] is wholly unfounded. None of the petitioners affirmatively asserts that denial of DOE's motion will terminate its participation. Indeed, as PIIC states,[103] given DOE's recent reversal of position, the petitioners have every reason to remain active participants as proponents of the Application in this proceeding.

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petitioners' bids for standing here, where the petitioners have established a concrete risk of harm, albeit without absolute certainty that it will come to pass. Nevada cites Guerrero v. Clinton, 157 F.3d 1190 (9th Cir. 1998), also to no avail. In that case, the court explicitly declined to decide whether petitioners' "concrete interests" were affected, because it found "there is nothing that can be done by way of judicial review to redress the adverse consequences . . . that they say they are suffering." Id. at 1194. The instant circumstances hardly fit that mold. Thus, Guerrero does nothing to bar the petitioners' "concrete interests" from establishing standing.

[101] Under the Supreme Court's ruling in Lujan, one who asserts a procedural right to protect a concrete interest "can assert that right without meeting all the normal standards for redressability and immediacy." 504 U.S. at 572 n.7. Nevada states, however, that in the event we decline to treat this as a procedural rights case, petitioners fail to meet the "normal standards for redressability." Specifically, Nevada submits that petitioners' injury can only be redressed if Yucca Mountain is ultimately licensed—an outcome that is far from certain. See, e.g., Nevada Answer to PIIC at 5 n.2. But Nevada misapprehends the petitioners' statement of redressability. Redress will occur not if and when Yucca Mountain is ultimately licensed, but rather upon resumption of the licensing process, which is designed to move the nation further along the path to a geologic repository. This form of redress, as articulated by petitioners, is absolutely certain to result from the denial of DOE's motion. But even if we were to accept Nevada's formulation of redress, petitioners need not demonstrate a "substantial likelihood" of redressability. See, e.g., id. (citing Duke Power Co. v. Carolina Envtl. Study Group, 438 U.S. 59, 78 (1978)). Rather, petitioners need only show that redress is "likely," as opposed to "speculative." See Lujan, 504 U.S. at 561. Although it did not make the licensing of Yucca Mountain a certitude, DOE's filing of an 8600-page application, after the expenditure of many billions of dollars and more than two decades of study, certainly moved the likelihood of licensure out of the realm of what reasonably can be labeled "speculative."

[102] See, e.g., Nevada Answer to South Carolina at 3.

[103] Reply of the Prairie Island Indian Community to Answers to Petition to Intervene (May 11, 2010) at 7 [hereinafter PIIC Reply].

Having rejected Nevada's objections, we conclude that petitioners Washington, South Carolina, Aiken County, and PIIC have all established standing pursuant to 10 C.F.R. § 2.309(d). Accordingly, we need not address their respective bids for discretionary intervention under 10 C.F.R. § 2.309(e). We do find, however, that, if not admitted as parties, these petitioners would qualify for participation under 10 C.F.R. § 2.315(c) as interested governmental participants.[104]

2. NARUC

To establish representational standing, an organization must: (1) demonstrate that the licensing action will affect at least one of its members; (2) identify that member by name and address; and (3) show it is authorized by that member to request a hearing on his or her behalf.[105]

NARUC is a national organization comprised of state public utility commissioners charged with the duty to protect the health, safety, and economic interests of ratepayers. In its petition to intervene, as amended,[106] NARUC seeks to demonstrate representational standing

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[104] We reject Nevada's argument that "PIIC has not designated a single representative" as is required under 10 C.F.R. § 2.315(c). Nevada Answer to PIIC at 7. Nevada apparently overlooks page four of PIIC's petition, where PIIC explicitly identifies its General Counsel, Philip R. Mahowald. PIIC Petition at 4. Indeed, PIIC's designation of its General Counsel is no different than Nevada's designation of its Attorney General in its intervention petition. See State of Nevada's Petition to Intervene as a Full Party (Dec. 19, 2008) at 1.

[105] Vt. Yankee Nuclear Power Corp. (Vermont Yankee Nuclear Power Station), CLI-00-20, 52 NRC 151, 163 (2000).

[106] NARUC filed an amendment to its intervention petition on May 11, 2010, in which it named one of the Commissioners of Minnesota as an additional member to demonstrate representational standing. Supplement/Amendment to Petition of the National Association of Regulatory Utility Commissioners to Intervene (May 11, 2010) at *1 [hereinafter NARUC Petition Amendment]. Both the Staff and Nevada characterize the amendment as an unauthorized filing, which the Board should reject. See State of Nevada's Answer in Opposition to Supplement/Amendment to Petition of [NARUC] to Intervene (May 19, 2010) at 2; NRC Staff Answer to Supplemental/Amendment to Petition of [NARUC] to Intervene (May 21, 2010) at 4. In the unique circumstances of this proceeding, we find it appropriate to accept NARUC's

by submitting the affidavits of two member state Commissioners—a Commissioner with the Minnesota Public Utilities Commission and a Commissioner with the South Carolina Public Service Commission.[107]

NARUC characterizes the injury to its members as follows: DOE's withdrawal of the Application will delay indefinitely the federal government taking title to and disposing of HLW pursuant to the NWPA, which will increase the costs to regulated utilities of interim storage and security measures.[108] NARUC states that ratepayers, via the pass-throughs of regulated utilities, have contributed over seventeen billion dollars to the Nuclear Waste Fund (NWF) established under the NWPA, and will continue to pay into the NWF, even if DOE is permitted to abandon Yucca Mountain.[109] We agree with NARUC that, because state utility commissioners are responsible for protecting ratepayers' interests and overseeing the operations of regulated electric utilities, these economic harms constitute its members' injury-in-fact.

The causation and redressability requirements for standing follow from NARUC's alleged injury. With respect to causation, DOE's abandonment of the Application will delay the removal of wastes from interim storage sites nationwide, increasing costs to regulated utilities and fees paid by ratepayers. In regard to redressability, a decision to reject DOE's motion to withdraw will substantially diminish the economic harms alleged by NARUC by maintaining the NWPA

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amendment to its petition. In similar fashion, because of the significance of the issues at hand, we permitted DOE to reply to the answers to its motion to withdraw, a right to which it is not entitled under the regulations. See 10 C.F.R. § 2.323(c). Further, in accepting DOE's forty-page reply, we have allowed DOE great latitude to make and to respond to arguments that could have been reasonably anticipated in its initial nine-page motion to withdraw. Having allowed DOE such leeway, basic fairness requires us to allow NARUC to amend its petition and permit a like treatment of all participants' filings.

[107] See NARUC Petition at 9-10; NARUC Petition Amendment at *1.

[108] NARUC Petition at 11.

[109] Id.

licensing process and continuing along the legislatively established course toward a possible permanent repository for HLW.

Both Nevada and the Staff challenge NARUC's standing. The Staff concedes that NARUC's claimed injury is similar to the economic harm asserted by NEI, which a previous Construction Authorization Board held was sufficient to establish standing.[110] The Staff, however, distinguishes NARUC's economic harm from NEI's, stating that the intended beneficiaries of the NWPA are the nuclear utilities, not ratepayers.[111] We find this distinction neither meaningful nor persuasive. The fact that nuclear utilities are the "intended beneficiaries" of the NWPA is irrelevant to NARUC's standing.[112] On the contrary, the economic harms alleged by NEI and NARUC are indistinguishable because the fees required to be paid into the NWF, pursuant to the NWPA, by nuclear utilities regulated by NARUC members are directly passed through to ratepayers.[113]

Nevada objects to NARUC's standing on the grounds that the Commissioner of the South Carolina Public Service Commission cannot establish standing as of right because the

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[110] Dep't of Energy, LBP-09-6, 69 NRC at 433.

[111] NRC Staff Answer to National Association of Regulatory Utility Commissioners' Petition to Intervene (May 4, 2010) at 7 [hereinafter NRC Staff Answer to NARUC].

[112] The Staff relies solely upon Roedler v. U.S. Dep't of Energy, 255 F.3d 1347 (Fed. Cir. 2001), asserting that only nuclear utilities are the intended beneficiaries of the NWPA. But Roedler involved a class action suit brought by ratepayers seeking damages based on the established breach of the Standard Contract. Id. at 1350. The court held that ratepayers were not third-party beneficiaries of the Standard Contract and therefore could not sue for breach of contract when the DOE failed to dispose of nuclear waste by the statutory deadline. Id. at 1353. No question of standing was involved in Roedler. Nor is "third-party beneficiary" status, a contract law concept, relevant to any element of the standing analysis in this instance. Thus, Roedler is not pertinent to NARUC's claim of economic injury as the basis for its standing.

[113] We need not linger on the Staff's argument that an economic harm is insufficient to establish standing under the AEA. See NRC Staff Answer to NARUC at 7. As we explained above, economic harm itself has been held sufficient to establish standing under the NWPA in the circumstances of this proceeding. Dep't of Energy, LBP-09-6, 69 NRC at 433.

State of South Carolina is also petitioning to intervene in this proceeding.[114] Under 10 C.F.R. § 2.309(d)(2)(ii), Nevada argues, only a "single designated representative" of a state may be admitted as a party. Nevada's argument is without merit. The Commissioner of the South Carolina Public Service Commission is not seeking to be admitted as a party to represent the State of South Carolina. Rather, NARUC names the Commission member for the purpose of establishing representational standing, so that NARUC may be admitted as a party. In any event, while NARUC's initial intervention petition named only a South Carolina Commissioner, NARUC amended its petition with an affidavit prepared by a Commissioner of the Minnesota Public Utilities Commission, another one of NARUC's members.[115] Accordingly, we conclude that NARUC has sufficiently demonstrated representational standing.[116]

B. Timeliness

Before the Board can grant an intervention petition filed outside the time set forth in the hearing notice,[117] the eight factors of 10 C.F.R. § 2.309(c)(1) must be addressed by the petitioners and balanced by the Board.[118] Factor (i), good cause, is the most significant of the

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[114] State of Nevada's Answer to the National Association of Regulatory Utility Commissioners' Petition to Intervene (May 4, 2010) at 1-2 [hereinafter Nevada Answer to NARUC].

[115] See supra note 106, accepting NARUC's amendment to its petition.

[116] Nevada also argues that NARUC's alleged injury is "purely procedural" and insufficient to demonstrate standing—the same argument Nevada asserts with respect to the other four petitioners. See Nevada Answer to NARUC at 2-3. For the same reasons stated above, this argument lacks merit. See supra text accompanying notes 99-103.

[117] 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 Construct a Geologic Repository at a Geologic Repository Operations Area at Yucca Mountain, 73 Fed. Reg. 63,029 (Oct. 22, 2008).

[118] The Board need not detour to discuss the applicability of 10 C.F.R. § 2.309(c) rather than section 2.309(f)(2) in evaluating the timeliness of the petitions to intervene, as all petitioners agree that section 2.309(c) is applicable here.

late-filing factors.[119] Absent a showing of good cause, the Board will not entertain a petition filed after the deadline established in the hearing notice unless the petitioner makes a compelling showing on the remaining factors.[120] Further, the availability of new information is central to determining whether a petitioner has good cause for late filing. A petitioner must show that the information on which its new contention is based was not reasonably available to the public previously and that it filed its intervention petition promptly after learning of such new information.[121]

1. Good cause: 10 C.F.R. § 2.309(c)(1)(i)

With respect to the five petitions before the Board, as all but Nevada (joined by JTS, NCAC, and Clark County) do not contest, there is good cause for the nontimely filings. The petitioners filed their intervention petitions in response to DOE's decision to withdraw the Application with prejudice.[122] We agree that DOE's motion to withdraw could not have been reasonably anticipated prior to its filing. For nearly two years, DOE has supported and actively prosecuted the Application, therein fully participating in the NWPA process, as mandated by Congress. Never, during that time, did DOE articulate that it would seek to withdraw the Application or claim that it had discretion to do so. Moreover, DOE never wavered in its defense

[119] Tenn. Valley Auth. (Watts Bar Nuclear Plant, Unit 2), CLI-10-12, 71 NRC __, __ (slip op. at 4) (Mar. 26, 2010); Amergen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-09-7, 69 NRC 235, 261 (2009).

[120] Dominion Nuclear Conn., Inc. (Millstone Nuclear Power Station, Units 2 and 3), CLI-05-24, 62 NRC 551, 565 (2005).

[121] Id. at 564-65.

[122] See Washington Petition at 1; South Carolina Petition at 2; Aiken County Petition at 3; PIIC Petition at 2; NARUC Petition at 3.

of the technical, safety, and environmental merits of the Application.[123] Thus, DOE's decision to withdraw is an unforeseeable change in DOE's posture in this proceeding constituting new information that was not reasonably available to the public, and each petitioner filed promptly after receiving notice of DOE's decision.[124] In the circumstances presented, petitioners clearly have established good cause for not filing their intervention petitions by December 22, 2008, the deadline set in the notice of hearing.[125]

In arguing that none of the petitioners has shown good cause, Nevada asserts that they should have sought to intervene in support of the Application at the outset of the proceeding, rather than be "lulled into inaction" by the petitions of the other participants.[126] In a similar vein, Clark County chastises petitioners for presuming that this proceeding will inevitably result in approval of the Application and claims it would have been prudent for petitioners to seek

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[123] DOE opposed every prior intervention petition, including all 318 proffered contentions challenging the Application. See Dep't of Energy, LBP-09-6, 69 NRC at 375. DOE also opposed all but one new contention subsequently proffered by the parties. See U.S. Dep't of Energy, LBP-09-29, 70 NRC __, __ (slip op. at 3-12) (Dec. 9, 2009).

[124] See Millstone, CLI-05-24, 62 NRC at 564-65; Dominion Nuclear Conn., Inc., (Millstone Nuclear Power Station, Unit 3), CLI-09-5, 69 NRC 115, 126 (2009) ("To show good cause, a petitioner must show that the information on which the new contention is based was not reasonably available to the public . . ." (emphasis in original)); Tex. Utils. Elec. Co. (Comanche Peak Steam Electric Station, Units 1 and 2), CLI-92-12, 36 NRC 62, 69-70 (1992) (explaining that new information may constitute good cause for late intervention if petitioners file promptly thereafter).

[125] See 73 Fed. Reg. at 63,030.

[126] See e.g., Nevada Answer to South Carolina at 7. The cases Nevada relies upon for the proposition that a petitioner may not justify intervening after the established deadline by claiming it was "lulled into inaction" by the participation of other parties are completely inapposite to the unique circumstances at hand. Unlike the petitioners in those cases, the five instant petitioners seek neither to re-enter an ongoing proceeding nor to litigate a withdrawing intervenor's admitted contentions. Here, each petitioner seeks to intervene for the first time to litigate a newly raised legal issue, which was prompted by DOE's unforeseen motion to withdraw.

intervention in December 2008.[127] These arguments misapprehend the requirements for intervention. Under the Commission's rules of practice, a petitioner cannot base an intervention petition on an unforeseeable "possibility" that an applicant might later withdraw an application, or on the possibility that the Commission might ultimately deny an application. At the outset of this proceeding the five petitioners were justifiably satisfied that the Application would be fully and fairly adjudicated on the merits without their intervention. With no challenge to the Application, they could not, for example, have set forth contentions that demonstrate a "genuine dispute with the applicant/licensee on a material issue of law or fact," as required by 10 C.F.R. § 2.309(f)(1)(vi). Indeed, as long as DOE continued to prosecute the Application, the five instant petitioners could not have satisfied the Commission's strict requirements for intervention in a licensing proceeding, and any attempt to intervene would have been denied.

Nevada also insists that, based upon the President's campaign promises to abandon Yucca Mountain, which were made prior to the original filing deadline, the petitioners were on notice that DOE would withdraw the Application. According to Nevada, they should have anticipated DOE's motion to withdraw and sought to intervene, if not before the original deadline lapsed, then shortly thereafter.[128] We disagree. Campaign promises of a political candidate on the stump in no way equate to notice that DOE would seek to withdraw the Application with prejudice and cannot form the basis for filing a petition in advance of the motion to withdraw. In fact, subsequent to such campaign statements and to any press speculation that DOE would seek withdrawal, DOE's own lawyers in this proceeding stated unequivocally that DOE's policy

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[127] See, e.g., Answer of Clark County, Nevada to Petitions to Intervene of the State of South Carolina, Aiken County, South Carolina and the State of Washington (Mar. 29, 2010) at 2-3.

[128] See, e.g., Nevada Answer to South Carolina at 5-7.

toward Yucca Mountain had not been changed by the election.[129] Moreover, the Secretary of Energy requested and received funding for DOE "to continue participation in the [NRC] license application process, consistent with the provisions of the Nuclear Waste Policy Act" during the 2010 fiscal year.[130] Thus, DOE gave no indication it would reverse course and discontinue prosecuting the Application until the eve of its filing a motion to withdraw the Application, with prejudice, and petitioners could not have had cause to file any sooner.

Remaining nontimely factors: 10 C.F.R. § 2.309(c)(1)(ii)-(viii)

Factors (ii) through (iv) of section 2.309(c)(1) largely mirror the requirements for standing,[131] and as such, the petitioners' arguments, with one exception,[132] simply reference or mirror their standing arguments.[133] Similarly, the positions of the Staff and Nevada as to whether the petitioners satisfy these three nontimely factors are identical to their positions with

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[129] Tr. at 76-77 (Mar. 31, 2009).

[130] FY 2010 Appropriations Hearing, supra note 27, at 10-11.

[131] 10 C.F.R. § 2.309(c)(1)(ii)-(iv) (concerning the petitioners' right to be made parties, their interest in this proceeding, and the possible effect on them of any Board order).

[132] Regarding factor (iv)—the effect of any NRC order on the petitioners' interests—South Carolina asserts that if it is not made a party to this proceeding, it might be held not to have a right to petition for review in the Court of Appeals any NRC decision on DOE's motion to withdraw. See South Carolina Petition at 11. In response, the NRC Staff claims that a grant of an intervention petition is not a prerequisite for judicial review. See NRC Staff Answer to South Carolina Petition to Intervene and Supplement (Mar. 29, 2010) at 8 [hereinafter NRC Staff Answer to South Carolina]. However, given the uncertain state of the law on the judicial review provision, section 119 of the NWPA, the Staff can in no way be the guarantor of South Carolina's appellate rights. See Nuclear Energy Inst., 373 F.3d at 1287. For its part, Nevada asserts that South Carolina's argument warrants an "A+ for chutzpah" because "[w]hy, on earth, would the NRC 'shoot itself in the foot' by exercising its discretion to grant party status to a petitioner just to enable the petitioner to sue the agency." Nevada Answer to South Carolina at 10. We reject outright Nevada's specious claim that the possibility of an appeal is a reason to deny South Carolina's petition.

[133] See Washington Petition at 11; NARUC Petition at 16; PIIC Petition at 11; South Carolina Petition at 7-12. As stated supra note 92, we accept Aiken County's incorporation of South Carolina's timeliness arguments.

respect to petitioners' standing.[134] Accordingly, because the Board has concluded that all petitioners have standing,[135] so too do these three nontimely factors weigh in favor of the petitioners.[136]

With respect to factor (v)—the availability of other means to protect the petitioners' interests[137]—as the Staff concedes, intervention in this proceeding is the most direct and adequate remedy for the petitioners to challenge DOE's motion.[138] Furthermore, the Staff does not dispute that factor (vi)—the extent to which other parties represent the petitioners' interests[139]—weighs in favor of each petitioner, except with respect to NARUC, whose interests, the Staff claims, are adequately represented by NEI.[140] Nevada also concedes that Washington has unique interests in this proceeding;[141] however, it insists that the other petitioners' interests

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[134] See, e.g., Nevada Answer to South Carolina at 8-10; NRC Staff Answer to State of Washington's Petition for Leave to Intervene and Request for Hearing (Mar. 29, 2010) at 7 [hereinafter NRC Staff Answer to Washington].

[135] See supra section III.A.

[136] See Watts Bar, CLI-10-12, 71 NRC at __ (slip op. at 7) (declining to overturn the Licensing Board's decision to use the petitioners' demonstration of standing as "the basis for [its] conclusion that these [three] factors weighed in Petitioners' favor").

[137] 10 C.F.R. § 2.309(c)(1)(v).

[138] Nevada asserts that factor (v) weighs against the petitioners because each seeks to raise legal issues and may participate effectively before the NRC by filing an amicus brief. See, e.g., Nevada Answer to NARUC at 9-10. We disagree. A petitioner always has the option to seek to file an amicus brief, and following Nevada's reasoning, this factor therefore could never weigh in favor of any petitioner's interest, a result at odds with the regulation's call for a "balancing" of the 10 C.F.R. § 2.309(c)(1) factors. Moreover, amicus curiae participation does not provide the same rights of participation as party status and cannot be considered a substitute means to protect a petitioner's interest or to preserve a petitioner's appellate rights.

[139] 10 C.F.R. § 2.309(c)(1)(vi).

[140] See NRC Staff Answer to NARUC at 14.

[141] See Answer of the State of Nevada to the State of Washington's Petition to Intervene (Mar. 29, 2010) at 7 [hereinafter Nevada Answer to Washington].

are represented by NEI.[142] We disagree. Notwithstanding Nevada's and the Staff's arguments to the contrary, the interests of each petitioner are sufficiently special and will not be represented by NEI, a policy organization (i.e., a trade association) with a diverse membership representing the nuclear industry.[143] Thus, both factors (v) and (vi) weigh in favor of the petitioners.

Further, as to factor (vii), admitting the petitioners as parties will not broaden or delay the proceeding, as Nevada argues.[144] On the contrary, it was DOE, not the petitioners, that broadened the proceeding by submitting its motion to withdraw, thereby putting into issue DOE's authority to request withdrawal. Moreover, entertaining petitioners' legal issue contentions will not cause further delay because existing parties have raised the same issues in briefing DOE's motion to withdraw, and, in any event, the Board has already stayed discovery and the prosecution of all other admitted contentions in this proceeding.

Finally, as to factor (viii), the petitioners' participation will assist in developing a sound record.[145] In arguing otherwise,[146] Nevada interprets the relevant record as the evidentiary

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[142] Nevada also claims that if South Carolina's intervention petition is granted, NARUC's interests will be represented by South Carolina. This argument fails, however, because factor (vi) instructs the Board to consider the extent a petitioner's interests are represented by existing parties, not potential parties. See 10 C.F.R. § 2.309(c)(1)(vi).

[143] See Dep't of Energy, LBP-09-6, 69 NRC at 429; The Nuclear Energy Institute's Petition to Intervene (Dec. 19, 2008) at 1-2.

[144] 10 C.F.R. § 2.309(c)(1)(vii). The NRC Staff points out that South Carolina, and Aiken County by reference, did not address whether their participation might broaden the issues in this proceeding. NRC Staff Answer to South Carolina at 7. Still, the Staff concludes that this factor does not weigh for or against these petitioners, and we agree.

[145] 10 C.F.R. § 2.309(c)(1)(viii).

[146] Warranting only brief mention, the Staff asserts that no petitioner can contribute to the record because none has proffered an admissible contention. See, e.g., NRC Staff Answer to NARUC at 13. This Board will evaluate the admissibility of the petitioners' proffered contentions only after it decides whether to entertain the nontimely petitions at all, which it determines by

record and asserts that, because the petitioners proffer legal issue contentions, their legal arguments will contribute no evidence.[147] Nevada's narrow reading of the word "record" in the regulation not only overlooks that the regulation contains no such limitation, but also fails to account for the uniqueness of this proceeding.[148] The Commission has recognized that the record of this proceeding includes legal arguments, explaining in its remand decision that DOE's motion raises fundamental legal questions, both before this Board and before the United States Court of Appeals for the District of Columbia Circuit.[149] The Commission specifically noted the importance of the Board's decision, and hence necessarily the record, in informing the Court of Appeals' consideration of DOE's motion to withdraw.[150] Thus, the participation of the five

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balancing the section 2.309(c)(1) factors. Thus, the Staff's argument that somehow an admissible contention is relevant to analyzing whether a nontimely factor weighs in favor of a petitioner, an analysis that is a prerequisite to determining contention admissibility, is without merit.

[147] See, e.g., Nevada Answer to Washington at 8.

[148] Nevada cites Portland Gen. Elec. Co. (Pebble Springs Nuclear Plant, Units 1 and 2), CLI-76-27, 4 NRC 610 (1979) to support its narrow interpretation of the record; that case does not, however, actually support Nevada's position. In fact, in Pebble Springs, the Commission explained that the relevant record includes legal issues and necessarily legal arguments. Id. at 617 ("Permission to intervene should prove more readily available where petitioners show significant ability to contribute on substantial issues of law or fact which will not otherwise be properly raised or presented . . ." (emphasis added)). Likewise, the other two cases Nevada relies upon do not support Nevada's interpretation of the regulatory term "record." In Houston Lighting & Power Co. (Allens Creek Nuclear Generating Station, Unit 1), ALAB-671, 15 NRC 508 (1982), the petitioner sought to intervene well after the commencement of the evidentiary hearing and raised an evidentiary matter. Similarly, in Kan. Gas & Elec. Co. (Wolf Creek Generating Station, Unit 1), LBP-84-17, 19 NRC 878 (1984), the petitioner sought intervention during the evidentiary hearing and proffered a factual contention. Neither case involved legal issue contentions, and thus both cases are actually consistent with Pebble Springs, in that the relevant record encompasses issues of both law and fact.

[149] Dep't of Energy, CLI-10-13, 71 NRC at __ (slip op. at 3-4).

[150] Id. (slip op. at 4).

petitioners will ensure full briefing and argument on the DOE motion before us and the Commission, thereby assisting the development of the judicially reviewable record.

In sum, because each of the petitioners has demonstrated good cause, and because the remaining factors weigh in favor of petitioners, or are neutral at worst, on balance we conclude that we must entertain all five petitioners' intervention petitions.

LSN Compliance

Before a petitioner can be granted party status in the HLW proceeding, it must be able to demonstrate substantial and timely compliance with the LSN requirements.[151] As part of compliance, each petitioner must identify all its documentary material[152] required by 10 C.F.R. § 2.1003 and designate a responsible LSN official, who can certify that "to the best of his or her knowledge" all such material has been made electronically available.[153] The certification requirement embodies a good faith standard, meaning that a petitioner need only make a reasonable effort to produce all of its documentary material.[154] Further, as the PAPO Board determined, what constitutes a "reasonable effort" depends on the following factors: the time

[151] 10 C.F.R. § 2.1012(b)(1). If a petitioner fails to make such a demonstration, it may later request party status upon a showing of "subsequent compliance." Id. § 2.1012(b)(2).

[152] "Documentary material" is defined as (1) "[a]ny information upon which a party, potential party, or interested governmental participant intends to rely and/or to cite in support of its position in the proceeding . . ."; (2) "[a]ny information that is known to, and in the possession of, or developed by the party that is relevant to, but does not support, that information or that party's position"; and (3) "[a]ll reports and studies, prepared by or on behalf of the potential party, interested governmental participant, or party, including all related 'circulated drafts,' relevant to both the license application and the issues set forth in the Topical Guidelines in Regulatory Guide 3.69, regardless of whether they will be relied upon and/or cited by a party." Id. § 2.1001.

[153] Id. § 2.1009.

[154] Dep't of Energy, LBP-09-6, 69 NRC at 387.

petitioner has to assemble its collection, the extent of petitioner's control over the certification deadline, the importance of petitioner's obligation, and petitioner's status and financial ability.[155]

All five petitioners have filed initial certifications of LSN compliance[156] and subsequent monthly certifications. DOE does not challenge any of those certifications. Only the NRC Staff and Nevada (with Clark County and NCAC joining Nevada's answer) raise objections, insisting that some petitioners have failed to satisfy the requirements of 10 C.F.R. § 2.1009 and to compile fully their document collections.[157] It is apparent that petitioners have struggled to meet the requirements of Subpart J, but as previously stated, a petitioner or party is not held to a standard of perfection.[158] Unlike Nevada and the Staff, who compiled their respective document collections over the course of many years, these five petitioners have been forced to achieve compliance in just a few months—a timeframe thrust upon them by DOE's sudden reversal of position in this proceeding. In these circumstances, we find that petitioners "have made every reasonable effort to produce all of their documentary material."[159] While we expect that

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[155] Dep't of Energy, LBP-04-20, 60 NRC at 314-15.

[156] Aiken County Certification of Electronically Available Documentary Material (Mar. 15, 2010); State of South Carolina's Initial Certification and Certification of Licensing Support Network Supplementation (Apr. 1, 2010); National Association of Regulatory Utility Commissioners Designation of Responsible Person, Initial Certification, and Certification of Licensing Support Network Supplementation (Apr. 1, 2010); State of Washington Licensing Support Network Initial Certification (Apr. 2, 2010); Prairie Island Indian Community's Initial and Supplemental Certification of Licensing Support Network, and Designation of Responsible Person (Apr. 30, 2010).

[157] Nevada raises objections to South Carolina, Washington, PIIC, and Aiken County, while the NRC Staff objects to the compliance of South Carolina, Washington, and PIIC. No party objects to NARUC's compliance with the LSN requirements.

[158] See, e.g., Dep't of Energy, LBP-09-6, 69 NRC at 387-88; Dep't of Energy, LBP-04-20, 60 NRC at 313.

[159] Dep't of Energy, LBP-09-6, 69 NRC at 387 (citing Dep't of Energy, LBP-04-20, 60 NRC at 313).

petitioners will update their collections "as promptly as possible in each monthly supplementation,"[160] we credit the good-faith efforts they have expended thus far and find sufficient their respective demonstrations of compliance with the standards of 10 C.F.R. § 2.1003.

Moreover, none of the newly proffered contentions raises a factual dispute. Rather, all five petitioners advance legal issue contentions—contentions which, as the Commission has affirmed, do not require any supporting facts.[161] Nevada insists that petitioners rely upon a "vast array of factual information" that should be made publicly available, including a transcript of a DOE press conference, a waste management report, and expert affidavits, together with their underlying source documents.[162] Apparently, Nevada interprets "documentary material" to mean any document attached to an intervention petition.[163] But many of these documents set forth undisputed facts (i.e., DOE's decision to abandon Yucca Mountain), and some do not even relate to petitioners' contentions (e.g., affidavits setting forth a basis for standing). Such information hardly constitutes "documentary material" as the regulations define it.[164]

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[160] RSCMO, supra note 6, at 21.

[161] See Dep't of Energy, CLI-09-14, 69 NRC at 590, aff'g LBP-09-6, 69 NRC at 422.

[162] See, e.g., Nevada Answer to Washington at 11; Nevada Answer to South Carolina at 14.

[163] Petitioners do not in the first instance rely upon these attachments as factual support for their contentions. They note them only out of an abundance of caution. For example, PIIC cites to the Affidavit of Ronald C. Callen only "[t]o the degree factual matters are involved" in its contentions. PIIC Petition at 21. In fact, the Callen Affidavit speaks more to PIIC's standing than to its contentions. No factual support is required for PIIC's purely legal contentions.

[164] It would appear that none of the remaining documents that Nevada alleges to be missing are subject to production under 10 C.F.R. § 2.1005. Section 2.1005 specifically excludes such material as "[p]ress clippings and press releases" and "[r]eadily available references."

Given the unique circumstances described above, we find that all five petitioners have demonstrated substantial and timely compliance with the LSN requirements.[165] Accordingly, nothing about their LSN collections bars them being granted party status in this proceeding.[166]

C. Contention Admissibility

All five petitioners proffer virtually identical contentions, which advance claims under the NWPA, NEPA, the Administrative Procedure Act (APA), and certain constitutional provisions. Because only one admissible contention is required for each petitioner to intervene,[167] and given the exceptional circumstances of this proceeding, the Board finds it unnecessary to determine whether all of their contentions meet the admissibility criteria.[168] Instead, we conclude that each petitioner's first proffered contention is admissible, and we reserve judgment on the admissibility of the remaining contentions until a later date, as appropriate.[169] The contention we admit,

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[165] PIIC's reply, filed on May 11, 2010, indicates that testing of its LSN arrangements "revealed a glitch in URL's or other connectivity that unexpectedly delayed the interconnection." PIIC Reply at 29. This "glitch" was promptly resolved, and PIIC's LSN document collection came into operation on May 13, 2010. See Corrected Memorandum from Daniel J. Graser, LSNA, to the Administrative Judges (June 22, 2010).

[166] As stated in the initial order admitting the original parties to this proceeding, the failure of any petitioner to participate in the pre-license application phase—which the Board is instructed to consider under 10 C.F.R. § 2.309(a)—did not, in the circumstances presented, preclude the grant of any petition. Dep't of Energy, LBP-09-6, 69 NRC at 389. The same circumstances obviously also attend here.

[167] 10 C.F.R. § 2.309(a).

[168] See Dep't of Energy, LBP-09-6, 69 NRC at 389-91 for an explanation of the six contention admissibility requirements, which can be found at 10 C.F.R. § 2.309(f)(1).

[169] As the Commission held in affirming the Licensing Board's action in admitting only one of many proffered contentions in Shieldalloy Metallurgical Corp. (License Amendment Request for Decommissioning of the Newfield, New Jersey Facility), CLI-07-20, 65 NRC 499, 501 (2007), it is appropriate for a licensing board to defer the consideration of all but one contention in some limited and exceptional circumstances. If ever there were such circumstances, they are plainly present here.

although worded slightly differently by each of the petitioners, generally provides as follows:

DOE lacks the authority under the NWPA to withdraw the Application.

As noted previously, DOE does not object to the admissibility of this contention, or any of petitioners' other contentions.

Only the NRC Staff raises objections to this contention's admissibility.[170] Specifically, the Staff argues that it falls outside the scope of the proceeding, is immaterial to the findings the NRC must make to support the licensing action, and does not raise a genuine dispute with the applicant on a material issue of law or fact.[171] The Staff defines the scope of the proceeding according to the Commission's initial hearing notice: whether DOE's application "satisfies applicable safety, security and technical standards and whether the applicable requirements of NEPA and NRC's NEPA regulations have been met."[172] By this logic, the Staff claims, a contention challenging DOE's authority to withdraw the Application falls outside the scope of the proceeding because it does not raise a safety, security, technical, or environmental issue. Moreover, the Staff argues that the contention is not material to the merits of the Application, because it does not directly controvert or allege any omission from the Application.[173] Thus, according to the Staff, it must be rejected.

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[170] With respect to PIIC, Nevada (joined by Clark County, NCAC, and JTS) does object to this contention insofar as it questions DOE's compliance with the Standard Contract. Nevada Answer to PIIC at 19. However, Nevada does not challenge PIIC's claims under the NWPA, as expressed in our formulation of the contention. We need not consider the breadth of PIIC's contention at this stage, given that we find it to be admissible at least in part.

[171] 10 C.F.R. § 2.309(f)(1)(iii), (iv), (vi).

[172] See, e.g., NRC Staff Answer to Washington at 12 (citing 73 Fed. Reg. 63,029).

[173] See, e.g., NRC Staff Answer to Washington at 14-15.

We disagree. Unlike the Staff, the Board does not read the Commission's initial hearing notice without regard for the Commission's subsequent pronouncements. The Commission emphatically broadened the scope of the proceeding on April 23, 2010 when it directed the Board to rule on DOE's motion to withdraw. In its order, the Commission recognized that

> [f]undamental issues have been raised, both before us and before the D.C. Circuit, regarding the terms of DOE's requested withdrawal, as well as DOE's authority to withdraw the application in the first instance. Interpretation of the statutes at issue and the regulations governing their implementation falls within our province.[174]

We can imagine no clearer expansion of this proceeding's scope. Namely, the Commission has ordered us to consider the merits of DOE's withdrawal motion—a purely legal question, unrelated to the technical merits of the Application. Just as DOE offers no merits-based justification for its motion to withdraw, petitioners need not identify any safety, security, technical, or environmental concerns in support of their legal issue contention.

Because we conclude that the petitioners' contention is now clearly within the scope of the proceeding, the legal issue contention is certainly material to this Board's decision on DOE's motion to withdraw. Moreover, the contention raises a genuine dispute with the DOE on a material issue of law—specifically, its authority to withdraw the Yucca Mountain Application. Accordingly, we find that petitioners have all proffered at least one admissible contention.[175]

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[174] Dep't of Energy, CLI-10-13, 71 NRC at __ (slip op. at 3-4).

[175] Because the contention is purely legal in nature, we also note that petitioners need not satisfy all of the contention admissibility requirements applicable to a factual contention. The Commission has confirmed, for example, that a proponent of a legal issue contention need not provide supporting facts or expert opinion, as required by 10 C.F.R. § 2.309. Dep't of Energy, CLI-09-14, 69 NRC at 590. In the instant case, because petitioners' contention responds to a motion that is purely legal in nature, anything more than merely stating the legal issue and providing the foundational explanation for the issue is not required. Moreover, motion practice is part and parcel to any proceeding, and any procedural motion by an applicant necessarily falls within the scope. A contention based on such a motion is material because procedural issues must be addressed before reaching the merits issues of the proceeding.

IV. Conclusion

For the foregoing reasons:

1. The petitions to intervene of Washington, South Carolina, Aiken County, PIIC, and NARUC are granted.

2. As to each such petitioner, the following contention is admitted: DOE lacks the authority under the NWPA to withdraw the Application.

3. Judgment on the admissibility of all other contentions proffered by the foregoing five petitioners is reserved.

4. The motion of the Florida Public Service Commission for leave to participate as amicus curiae and to file a memorandum opposing DOE's withdrawal motion is granted.

5. DOE's motion to withdraw the Application is denied.

It is so ORDERED.

THE ATOMIC SAFETY
AND LICENSING BOARD

/RA/

Thomas S. Moore, Chairman
ADMINISTRATIVE JUDGE

/RA/

Paul S. Ryerson
ADMINISTRATIVE JUDGE

/RA/

Richard E. Wardwell
ADMINISTRATIVE JUDGE

Rockville, Maryland
June 29, 2010

Appendix

Proposed License Conditions Should DOE's Motion to Withdraw be Granted

Proposed conditions are set forth herein to help preserve the Department of Energy's (DOE) documentary material should DOE's motion to withdraw the construction authorization application for the Yucca Mountain geologic repository (Application) be granted.[1] These conditions are based in substantial part on previous DOE representations[2] and the joint report from the parties, the interested governmental participants (IGPs), and the petitioners.[3]

These conditions include: (1) those applicable prior to the conclusion of final appellate review (including resolution of any petitions for certiorari to the United States Supreme Court) of an order granting or denying DOE's motion to withdraw the Application (Final Termination); and (2) conditions for the period after Final Termination, including conditions applicable should DOE ever attempt to renew the Application or file a new application seeking authority to establish a facility at Yucca Mountain for the disposal or storage of spent nuclear fuel or other high-level nuclear waste (HLW).

In the Board's view, these conditions would help to assure that DOE's LSN document collection (LSNdc) will be appropriately archived.[4] Therefore, the Board concludes that these

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[1] Nothing in these conditions should be considered as superseding the NRC's policy decisions on the continued operation of the Licensing Support Network (LSN) in accordance with 10 C.F.R. Part 2, Subpart J.

[2] These include DOE's representations and answers to the Board's questions during the January 27 and June 4, 2010 case management conferences and DOE's written filings of February 4, February 19, and May 24, 2010. See Tr. at 345-405 (Jan. 27, 2010); Tr. at 316-447 (June 4, 2010); The Department of Energy's Answers to the Board's Questions at the January 27, 2010 Case Management Conference (Feb. 4, 2010); The Department of Energy's Status Report on Its Archiving Plan (Feb. 19, 2010); U.S. Department of Energy Answers to ASLB Questions from Order (Questions for Several Parties and LSNA) (May 24, 2010).

[3] Joint Report Concerning Conditions Regarding DOE LSN Document Collection (June 18, 2010) [hereinafter Joint Report].

[4] The use of the phrase DOE's "LSNdc" means the entire collection of documentary material (whether in full text or header only) currently available on its LSN participant website.

conditions should be imposed in any order granting DOE's motion to withdraw the application for the Yucca Mountain geologic repository.

A. Conditions Applicable Until Final Termination

1. DOE shall not take its LSNdc offline until there is Final Termination.

2. DOE shall maintain its LSNdc such that the public shall continuously have access to it through the NRC's LSN web portal with its current functionality until Final Termination.

3. As stated in A.1 above, DOE shall maintain[5] the existing functionalities of its LSNdc via the NRC portal until Final Termination, independent of which office within DOE is assigned maintenance responsibility.

4. Unless this designation is modified by DOE, DOE's Team Leader,[6] Archives and Information Management Team at DOE's Office of Legacy Management (LM) shall: (a) serve as LM's relevant point of contact for specific questions about problems with DOE documents or images that may be reported by other parties and IGPs to the proceeding; and (b) serve as LM's point of contact for persons who wish to acquire specific documents or categories of documents from the DOE LSNdc (according to current protocol) or copies of the entire DOE LSNdc (in accordance with B.13 and B.14 below).[7]

5. Should DOE wish to designate a different organization or person to serve as the point of contact for these tasks, DOE shall notify CAB-04, or such other presiding officer as the Commission may designate, all parties, and IGPs of the replacement and schedule for the change.

6. The transfer of DOE's institutional knowledge of the program activities, its records, and HLW issues shall be facilitated by the continuing involvement of the DOE Office of General Counsel in LM's response to requests for DOE LSNdc documents.

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[5] Maintenance of existing functionalities includes: (1) adding documents to the LSNdc as any relevant documents are generated or discovered; (2) modifying documents currently on the DOE LSNdc by changing their status from full text to header only or vice versa if a privilege is claimed or waived; (3) adding redacted documents, as appropriate; (4) producing privilege logs, as appropriate; and (5) producing documents when requested in accordance with Subpart J and applicable case management orders.

[6] As confirmed by DOE, currently John V. Montgomery is serving as DOE's Team Leader, Archives and Information Management Team at LM. See Joint Report at 4.

[7] The expertise and the mission of DOE's LM is the maintenance and preservation of archived records, which shall include the maintenance of DOE's LSNdc, its preservation, and its public availability as stated herein.

7. Until Final Termination, to ensure the electronic availability of DOE's documentary material,[8] and to resolve any disputes with respect thereto during the period prior to Final Termination, CAB-04, or such other presiding officer as the Commission may designate, shall maintain continuing jurisdiction to enforce the terms of these obligations.

8. DOE shall apply previously appropriated funds, seek in good faith additional necessary appropriations, and, if funded, expend those appropriations to maintain the existing functionality of the DOE LSNdc in a manner consistent with the various conditions in this section until Final Termination.

B. Conditions Applicable After Final Termination

1. After Final Termination, the text, image, and bibliographic header files that comprise the DOE LSNdc shall be archived by LM. The archiving of the DOE LSNdc in the LM facility shall not commence until Final Termination.

2. The files that comprise the DOE LSNdc shall be on magnetic tapes that shall be maintained by DOE's LM. LM shall archive the following files that comprise each document in the DOE LSNdc: (a) text files (HTML format); (b) image files (TIFF or JPEG formats); and (c) bibliographic header files (XML format).

3. On or before the time LM loads the DOE LSNdc onto its storage area network, it shall create a compiled PDF file of each imageable document in the LSNdc and thereafter shall preserve those PDF files.[9]

4. As currently planned by DOE, the tapes shall be stored at a facility in Morgantown, West Virginia, and the data, including a PDF file of each document, shall be loaded onto a storage area network which can be electronically searched and retrieved. Consistent with the period before Final Termination, DOE shall notify CAB-04, or such other presiding officer as the Commission may designate, all parties, and IGPs to this proceeding of any change should DOE designate a different LM team leader or organization to archive the DOE LSNdc.

5. While text and image files of: (a) non-imageable documentary material;[10] (b) documents upon which DOE has asserted a legal privilege as represented on DOE's privilege log; (c) copyright documents; and (d) documents from DOE's employee concerns program will not be loaded onto the magnetic tapes and LM's storage area network, bibliographic

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[8] See 10 C.F.R. §§ 2.1001 and 2.1003 (defining the scope of documentary material).

[9] DOE asserts that the compiled PDF file will not be in a searchable PDF format. Joint Report at 7.

[10] "Non-imageable" material may include, but is not limited to, items such as data currently stored on DVDs or CDs that could not be scanned and made available on the LSN in text or image format, digital computer printouts, over-sized drawings, physical items (e.g., core samples, metallurgic specimens), and strip charts.

headers for these categories of the DOE LSNdc shall be loaded onto the LM tapes. LM shall provide copies of non-imageable documentary materials in accordance with B.13 and B.14.

6. The documentary material represented only by bibliographic headers in the LSNdc shall be archived and retained in accordance with the same records schedule as the rest of the DOE LSNdc.

7. DOE shall preserve the physical samples, specimens, and other items that are only represented on the DOE LSNdc by bibliographic headers for the same duration as the LSN collection. Upon request, DOE shall work with a requester to provide access to such items. If physical items were produced by another party to this proceeding, but were represented on the DOE LSNdc as a bibliographic header only, DOE shall consult with that party about the physical items' storage. If DOE has physical samples and specimens in its or its agents' possession that currently have no LSN headers, DOE shall work with parties and IGPs to verify whether such samples or specimens should have been represented by a header. If so, DOE shall produce a header and insert it into the LSN in the next monthly LSN update cycle. Controversies regarding whether an item is or is not documentary material shall be forwarded to CAB-04, or such other presiding officer as the Commission may designate, for resolution.

8. After Final Termination, DOE shall preserve its LSNdc for 100 years. This commitment shall be met regardless of whether the DOE LSNdc shall be deemed temporary or permanent. Upon request, the public shall be entitled to receive copies of the DOE LSNdc through DOE's LM during the 100-year period. Such requests must comply with B.13 and B.14. DOE shall likewise comply with the Federal Records Act and any requirements of the National Archives and Records Administration (NARA).

9. The archived DOE LSNdc shall be compiled into documents at the directory level with each directory containing the bibliographic header file, the text file, and all of the image files comprising a document. The directory name shall correspond to the participant accession number of the document.[11]

10. Because the compiled PDF files that shall be created and stored by LM (see B.3) will not be in a searchable PDF format, DOE shall maintain with the PDF files its existing text files that have the optical character recognition (OCR) searchability.[12]

11. After Final Termination, LM shall use a replacement search index that will allow LM to search for documents in the archived DOE LSNdc in order to conduct word searches or search for a particular document using its DOE OCR text files, identify the document, and then electronically produce the corresponding document.

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[11] This is intended to ensure that, even without a document management software system, the directory structure will define where one document ends and another begins.

[12] DOE asserts that it plans to maintain its text files created for the LSNdc because they have superior quality and searchability characteristics as compared to those generated through a standard PDF creation of a document. Joint Report at 7.

12. DOE shall ensure that the integrity and content of the LSNdc remains intact following any change in format or storage location of the LSNdc. If a problem or issue is identified with respect to the integrity or content of the LSNdc, the issue shall be brought to the attention of LM, which shall work with the requester in a good faith effort to resolve the issue.

13. DOE shall make and provide a copy on electronic media to the LSN Administrator and/or CAB-04, or such other presiding officer as the Commission may designate, of the entire DOE LSNdc, or those documents that are responsive to specific search requests, which documents were previously publicly available on the DOE LSNdc. If requested by others, DOE shall make and provide to the requester a copy on electronic media of the same DOE LSNdc. The requester shall submit all requests in writing and reimburse DOE for all of the costs of copying, including all labor costs associated with such response. DOE shall provide an itemized statement for reimbursement to the requester. Only those documents which were previously publicly available on the LSNdc shall be provided. DOE shall provide such copies after the transition of the LSNdc to LM, and after LM has created its replacement search index, activated its new search engine, and compiled PDF files.

14. After a requester receives a copy of the DOE LSNdc, or specific documents in the DOE LSNdc, and LM notifies the requester that the requested material contains privacy-protected information and identifies those documents that contain such information, DOE shall work with the requester to redact the identified privacy-protected information, or otherwise delete the copy of the document that contains such information, and provide the requester with a replacement copy of the document with the privacy information redacted. As discussed in B.5 to B.7, LM shall also provide copies of non-imageable material to the extent such information can be readily copied, the requester identifies the information with specificity, and the requester complies with the terms of paragraph B.13 and of this paragraph. Unless DOE and the requester agree otherwise, the requester shall receive the entire DOE LSNdc, or particular documents from the DOE LSNdc that are responsive to the requester's specific document request, in bibliographic header (XML file), text (HTML file), and image (PDF file) form.

15. To the extent possible, DOE shall redact unclassified but sensitive security information (e.g., unclassified Naval Nuclear Propulsion Information and Safeguards Information), proprietary information, and privacy information from documents containing such information. If such information cannot be redacted from documents in the DOE LSNdc, then a bibliographic header file for such documents, but not a text or image file, shall be contained in the LM tapes of the DOE LSNdc. The documentary material represented only by bibliographic headers in the LSN shall be transferred to LM for archiving with the DOE LSNdc, and these unredacted copies shall also be retained in accordance with the same records schedule as the rest of the DOE LSNdc.

16. Following Final Termination, DOE's LSN vendor, CACI, shall submit its then-current copy of the DOE LSNdc to LM. Such information provided by CACI shall be preserved for 100 years following Final Termination.

17. While there is currently no search engine for the DOE LSN collection outside the LSN, such a search engine shall be developed by LM (loading the data onto servers and creating a

search engine for that collection). The search engine shall function in a manner consistent with the way the LSN is currently managed relative to being able to search for and retrieve documents.

18. Since the header and text files in DOE's LSNdc are currently in a searchable format, LM shall use a replacement index utility to search for documents using those same files, and no files need to be converted for that purpose.[13]

19. Because DOE cannot represent how NARA will make the DOE LSNdc available, LM shall create a search function for DOE's LSNdc and maintain it for the 100-year period following Final Termination, regardless of whether the documents are deemed to be temporary or permanent.

20. The copy of DOE's complete LSNdc to be provided to a requester by DOE shall include any existing LM index of materials.

21. In the event the LSN needs to be re-established for whatever purpose, DOE shall work with the NRC to make all the documents presently in its LSNdc electronically available on the LSN, or whatever successor system is established.

22. While DOE does not know the specific cost of the tasks to be performed to archive and preserve its LSNdc,[14] DOE shall apply existing resources, seek in good faith additional necessary appropriations, and, if funded, expend those appropriations to meet the commitments stated herein relating to the maintenance of its LSNdc after Final Termination through the 100-year period.

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[13] The existing header files and the existing text files of the DOE LSN collection are presently in a searchable format, and LM shall create an index or spidering-type function to replace what the NRC's LSN portal now does. DOE confirms that, in using the copy which a requester would receive from DOE of its complete LSNdc, no unique proprietary DOE software will be involved and that presumably off-the-shelf software will work. Joint Report at 10.

[14] DOE does not know the specific costs because these costs are still being developed and funding of such costs is subject to congressional appropriations.