



NEVADA LEGISLATURE
LEGISLATIVE COMMITTEE ON HIGH-LEVEL
RADIOACTIVE WASTE
(Nevada Revised Statutes 459.0085)

SUMMARY MINUTES AND ACTION REPORT

The second and final meeting of the Nevada Legislature's Committee on High-Level Radioactive Waste was held on Tuesday, August 21, 2012, at 9 a.m., in Room 4401 of the Grant Sawyer State Office Building, 555 East Washington Avenue, Las Vegas, Nevada. This meeting was videoconferenced to Room 3138 of the Legislative Building, 401 South Carson Street, Carson City, Nevada. A copy of this set of "Summary Minutes and Action Report," including the "Meeting Notice and Agenda" ([Exhibit A](#)) and other substantive exhibits, is available on the Nevada Legislature's website at <http://www.leg.state.nv.us/interim/76th2011/committee/>. In addition, copies of the audio record may be purchased through the Legislative Counsel Bureau's Publications Office (e-mail: publications@lcb.state.nv.us; telephone: 775/684-6835).

COMMITTEE MEMBERS PRESENT IN LAS VEGAS:

Senator David R. Parks, Chair
Assemblyman Joseph M. Hogan, Vice Chair
Senator John J. Lee
Assemblyman Elliot T. Anderson

COMMITTEE MEMBERS PRESENT IN CARSON CITY:

Senator Greg Brower
Assemblyman Richard (Skip) Daly

COMMITTEE MEMBERS ABSENT:

Senator Mike McGinness
Assemblyman Edwin A. Goedhart

LEGISLATIVE COUNSEL BUREAU STAFF PRESENT:

Patrick Guinan, Principal Research Analyst, Research Division
Matthew S. Nichols, Principal Deputy Legislative Counsel, Legal Division
Matt Mundy, Deputy Legislative Counsel, Legal Division
Tarron L. Collins, Senior Research Secretary, Research Division

OPENING REMARKS

- Senator David R. Parks, Chair of the Legislative Committee on High-Level Radioactive Waste (HLRW), gave general meeting directions and introductions. He presented the types of recommendations the Committee received and indicated the Committee would not be recommending any bill draft requests or taking any other actions prior to the upcoming legislative session. Chair Parks touched on the federal involvement in Yucca Mountain, including the study conducted by the Blue Ribbon Commission on America's Nuclear Future and pending federal litigation; the upcoming election; and stated the Committee would continue to monitor developments closely and take appropriate action in the future should it be warranted.

PUBLIC COMMENT

- Peggy Maze Johnson, Former Executive Director, Citizen Alert, gave testimony on behalf of the Citizen Alert Board opposing the Yucca Mountain Project. She introduced a potential solution to the problem of HLRW storage developed by a Cambridge University professor known as Hardened On-Site Storage (HOSS), which reportedly can store nuclear waste safely for up to 200 years.
- Terry Robertson, League of Women Voters of the Las Vegas Valley gave testimony opposing the Yucca Mountain Project.
- Ian Zabarte, Principal Man, Western Shoshone Government, stated that the United States Department of Energy (DOE) does not own the land on which Yucca Mountain sits and indicated that the Western Shoshone will continue to oppose the transfer of their property into the boundaries or jurisdiction of any state or territory for the purpose of the Yucca Mountain Project.
- Mary Lou Anderson gave testimony supporting HOSS for the Yucca Mountain site and referenced two draft Environmental Impact Statements in print that identify and discuss the HOSS system for nuclear waste disposal.

Discussion among Senator John J. Lee, Ms. Anderson, and Ms. Johnson confirmed that HOSS is for high-level radioactive waste, specifically spent commercial nuclear fuel.

- Jane Feldman, Conservation Chair, Sierra Club, and Energy Chair, Toiyabe Chapter of the Sierra Club, gave favorable testimony for HOSS. She stated that the Sierra Club has long been opposed to Yucca Mountain, and Nevada's best choice for storage of nuclear waste is temporary storage. The Sierra Club supports moving to the HOSS system nationally. (Please see [Exhibit B.](#))
- Bob Fulkerson, State Director, Progressive Leadership Alliance of Nevada, gave testimony opposing Yucca Mountain. (Please see [Exhibit C.](#))

- Buck Sampson, Reno citizen, gave testimony opposing Yucca Mountain and spoke to the rights of American Indians and past treaties.
- Robert Gonzalez, Occupy Carson City, gave testimony supporting molten salt reactors as an alternative to nuclear power. According to Mr. Gonzalez, these reactors consume nuclear waste alleviating the need for storage or transportation of nuclear waste at sites like Yucca Mountain. He stated these reactors dispose of the nuclear waste by burning it at high heat and commented that the heat generated from this process can be used to purify brackish ground water. (Please see [Exhibit D.](#))

APPROVAL OF MINUTES OF THE MARCH 16, 2012, MEETING HELD IN LAS VEGAS, NEVADA

- The Committee **APPROVED THE FOLLOWING ACTION:**

SENATOR LEE MOVED TO APPROVE THE “SUMMARY MINUTES AND ACTION REPORT” OF THE MARCH 16, 2012, MEETING HELD IN LAS VEGAS, NEVADA. THE MOTION WAS SECONDED BY ASSEMBLYMAN ELLIOT T. ANDERSON AND PASSED. (SENATOR MCGINNESS AND ASSEMBLYMAN GOEDHART WERE ABSENT FOR THE VOTE.)

THE STATE OF NEVADA’S POSITION ON YUCCA MOUNTAIN—STAY THE COURSE

- Former United States Senator Richard H. Bryan, Chair, Nevada’s Commission on Nuclear Projects, gave testimony on the background of Nevada’s opposition to the Yucca Mountain Project for the last 30 years noting the dangers of storing nuclear waste on site. He indicated that the DOE stated the location of Yucca Mountain is safe for storage but noted that no other place in the world is proposing to store nuclear waste above the water table. Chair Bryan also discussed dangers, risks, fiscal feasibilities, and health and safety concerns associated with the Yucca Mountain Project. He gave examples of why Nevada should avoid reprocessing nuclear waste and stated that, contrary to what some supporters of the project have claimed, there is no provision in federal law for Nevada to receive financial compensation for storing waste at Yucca Mountain.

OVERVIEW OF THE MISSION AND FUTURE ACTIVITIES OF THE U.S. NUCLEAR WASTE TECHNICAL REVIEW BOARD

- Nigel Mote, Executive Director, U.S. Nuclear Waste Technical Review Board (NWTRB), gave a Microsoft PowerPoint presentation describing the NWTRB’s responsibilities, its current members, and the background on the Board’s creation. He discussed: (1) the U.S. Program; (2) Goals; (3) Interactions with the Blue Ribbon Commission; (4) Activities; (5) Upcoming Reports; and (6) Future Activities. (Please see [Exhibit E.](#))

Responding to Senator Lee's inquiry regarding additional information on bore holes for nuclear storage, Mr. Mote explained that using bore holes for nuclear waste storage is not a new concept. He stated the holes are typically five kilometers deep, with the bottom two kilometers being used for storage canisters containing the nuclear waste, and the top three kilometers backfilled with rock and soil. Mr. Mote indicated that over a long period of time the containers will corrode and slowly blend into the earth. He discussed complications involved with this type of storage and expressed his optimism that technology can overcome many of the current obstacles involved.

Discussion between Senator Lee and Mr. Mote ensued regarding retrieval of the canisters and location for this type of storage. Mr. Mote assured Senator Lee that, geologically, the U.S. has many sites available for drilling bore holes but that retrieval of the waste would be complicated.

UPDATE ON THE ACTIVITIES OF NEVADA'S AGENCY FOR NUCLEAR PROJECTS

Robert J. Halstead, Executive Director, Nevada's Agency for Nuclear Projects (NANP), gave a Microsoft PowerPoint presentation regarding the four topics listed below. (Please see [Exhibit F.](#))

Status Review of the Yucca Mountain Project

Recent Developments in High-Level Radioactive Waste Transportation

Proposed Alternative Uses for the Yucca Mountain Site

Developments Regarding the U.S. Department of Energy's Classification of West Valley Radioactive Waste

- Mr. Halstead reiterated that Nevada remains firmly opposed to the current and proposed alternative uses of Yucca Mountain. (Please see [Exhibit G.](#))

Discussion between Assemblyman Anderson and Mr. Halstead ensued regarding the difference between high- and low-level radioactive waste. Mr. Halstead stated that high-level radioactive waste is spent fuel from nuclear power reactors, left over from the production of plutonium and uranium for nuclear weapons, and from the commercial fuel processed at the West Valley Reprocessing Plant, New York City, New York. High-level waste needs to be contained in disposal for 1 million years while low-level waste contains nuclides that only require 300 to 500 years for disposal. Low-level waste can be anything from resins, to water filters from nuclear power plants, to garbage that has been contaminated by nuclear fuel. The radiation dose that occurs from exposure to high-level waste is much higher than the dose from exposure to low-level radioactive waste.

Responding to Senator Lee's inquiry regarding reprocessing, Mr. Halstead stated that although reprocessing is dangerous, the reason it is not done in the U.S. is because it is not financially feasible since reprocessing is currently more expensive than mining uranium.

He also stated that mining sea water for uranium might affect the future financial feasibility of reprocessing.

In response to Mr. Halstead's comments, Mr. Mote, previously identified, said the NWTRB also feels that reprocessing is not financially feasible, but added that there are companies willing to take on nuclear waste reprocessing who believe it can be financially viable.

- Senator Lee discussed the economic challenges for the Yucca Mountain site and inquired whether there have ever been talks of tax breaks to incentivize the land to store the nuclear waste on site.
- Mr. Halstead responded that on-site nuclear waste storage has many factors to consider when evaluating the feasibility of storing the material. He stated that the rules and decisions to be followed by the U.S. Nuclear Regulatory Commission (NRC) would make on-site nuclear waste storage very difficult. Current federal law requires reactor operators to pay into the Nuclear Waste Fund and for the government to hold title to the waste. This has raised questions as to when the DOE should take title to the waste, one important consideration being the economic feasibility of doing so.

UPDATE ON LITIGATION RELATED TO THE YUCCA MOUNTAIN PROJECT

- Marta A. Adams, Chief Deputy Attorney General, Nevada's Office of the Attorney General, discussed Nevada's legal challenges to various aspects of the Yucca Mountain Repository proposal, and noted that these cases are being held in abeyance pending larger political and legal issues. Ms. Adams detailed the following three cases and how they affect Nevada: *Aiken County, South Carolina et al v. NRC*; the Waste Confidence Decision, titled *State of New York, et al v. the NRC and U.S. of America*; and *National Association of Regulatory Utility Commissioners v. DOE*.

LESSONS LEARNED AND BEST PRACTICES GOING FORWARD: SOCIOECONOMIC AND TRANSPORTATION-RELATED STUDIES

- Irene Navis, Planning Manager, Nuclear Waste Division, Department of Comprehensive Planning, Clark County, Nevada, gave a Microsoft PowerPoint presentation on the key lessons learned through her agency's involvement with the Yucca Mountain Project and on recommendations for best practices going forward. (Please see [Exhibit H.](#))

Assemblyman Anderson thanked Ms. Navis for her service to Clark County and wished her well in her future endeavors.

PUBLIC COMMENT

- Judy Treichel, Executive Director, Nevada Nuclear Waste Task Force gave testimony opposing Yucca Mountain.

- Robert Gonzalez, Occupy Carson City, stated there is a third option for nuclear power development called Liquid Fluoride Thorium Reactors (LFTR), which turns nuclear waste into nuclear fuel. He urged the Committee to learn more about LFTR.
- Connie Simkins, Coordinator, Lincoln County Nuclear Oversight Program, submitted recommendations into the record. (Please see [Exhibit I.](#))
- Mike Baughman, Ph.D., Consultant to Lincoln County on the Yucca Mountain Project, expressed the County's disappointment in the Committee's choice not to make any recommendations to the Legislature. The position of the Lincoln County Commission with regard to the Yucca Mountain Project is to understand and minimize the various risks associated with it, and to understand and maximize the potential benefits of accepting the project. He outlined three recommendations submitted to the Committee from Lincoln County. (Please see [Exhibit I.](#))

Discussion ensued between Senator Lee and Mr. Baughman regarding the inference that Nevada hasn't asked for compensation for Yucca Mountain. Senator Lee indicated that the U.S. has never offered any financial compensation to the State. Mr. Baughman opined that there had been some proposals on the table that offered financial gain, but Nevada did not entertain those proposals because the financial rewards were deemed too small in comparison to the risks posed by the Yucca Mountain Project.

ADJOURNMENT

There being no further business to come before the Committee, the meeting was adjourned at 12:17 p.m.

Respectfully submitted,

Tarron L. Collins
Senior Research Secretary

Patrick Guinan
Principal Research Analyst

APPROVED BY:

Senator David R. Parks, Chair

Date: _____

LIST OF EXHIBITS

[Exhibit A](#) is the “Meeting Notice and Agenda” provided by Patrick Guinan, Principal Research Analyst, Research Division, Legislative Counsel Bureau (LCB).

[Exhibit B](#) is an e-mail to Senator David R. Parks, Chair and members of the High Level Radioactive Waste Committee regarding radioactive waste storage submitted by Jane Feldman, Conservation Chair, Sierra Club, Las Vegas and Energy Chair, Toiyabe Chapter of the Sierra Club, Reno, which includes:

- A document titled “Principles for Safeguarding Nuclear Waste at Reactors”;
- A document titled “Sierra Club Statement on Draft Recommendations by the Blue Ribbon Commission on America’s Nuclear Future,” dated October 20, 2011; and
- A document titled “Beyond Nuclear Fact Sheet: Ten Myths About Thorium as a Nuclear Energy Solution.”

[Exhibit C](#) is a handout titled “PLAN, Progressive Leadership Alliance of Nevada,” dated August 21, 2012, submitted by Bob Fulkerson, State Director, Progressive Leadership Alliance of Nevada, Reno.

[Exhibit D](#) is a document titled “Waste-to-Energy Proposal for Yucca Mountain,” submitted by Robert Gonzalez, Occupy Carson City, Carson City.

[Exhibit E](#) is a Microsoft PowerPoint presentation titled “U.S. Nuclear Waste Technical Review Board: Mission and Future Activities,” dated August 21, 2012, submitted by Nigel Mote, Executive Director, U.S. Nuclear Waste Technical Review Board, Arlington, Virginia.

[Exhibit F](#) is a Microsoft PowerPoint presentation titled “Update on Activities of State of Nevada Agency for Nuclear Projects,” dated August 21, 2012, submitted by Robert J. Halstead, Executive Director, Nevada Agency for Nuclear Projects, Office of the Governor, Carson City.

[Exhibit G](#) is a report for the period of January 1, 2012—June 30, 2012, titled “Nevada Agency for Nuclear Projects Report to the Nevada Legislature’s Committee on High-Level Radioactive Waste” submitted to Senator David R. Parks, Chair and the Legislative Committee on High-Level Radioactive Waste by Robert J. Halstead, Executive Director, Nevada Agency for Nuclear Projects, Office of the Governor, Carson City.

[Exhibit H](#) is a Microsoft PowerPoint presentation dated August 21, 2012, titled “Clark County’s Lessons Learned and Best Practices: Socioeconomic and Transportation Related Studies,” submitted by Irene Navis, Planning Manager, Clark County Comprehensive Planning, Nuclear Waste Division.

[Exhibit I](#) is a letter dated July 2, 2012, to Patrick Guinan, Principal Research Analyst, Research Division, LCB, regarding recommendations for consideration by the Nevada Legislative Committee on High-Level Radioactive Waste submitted by George T. Rowe, Chair, Board of County Commissioners, Lincoln County, Pioche.

[Exhibit J](#) is a letter dated August 13, 2012, to Senator David R. Parks, Chair, Committee on High-Level Radioactive Waste, regarding Nevada's opposition to Yucca Mountain and comments made by Nye and Lincoln Counties in relation to Yucca Mountain from Governor Brian Sandoval.

This set of "Summary Minutes and Action Report" is supplied as an informational service. Exhibits in electronic format may not be complete. Copies of the complete exhibits, other materials distributed at the meeting, and the audio record are on file in the Research Library of the Legislative Counsel Bureau, Carson City, Nevada. You may contact the Library online at www.leg.state.nv.us/lcb/research/library/feedbackmail.cfm or telephone: 775/684-6827.