

Yucca Mountain News

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Churchill County Nuclear Waste Oversight Program

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Until Yucca Gets Licensed: Nuke Waste Staying Put

WASHINGTON -- The Energy Department does not plan to begin moving nuclear waste away from power plants around the country until it has a license in hand for a repository at Yucca Mountain, Energy Secretary Samuel Bodman said on March 3rd.

Bodman ruled out the government establishing temporary storage sites for nuclear waste while the Nevada disposal site remains on the drawing board.

"All our efforts will be going into the procurement of an operating license" for Yucca Mountain, Bodman said. "At that point in time we

will make a decision whether we will take advantage of interim storage opportunities or not."

At that point, which could be years, Bodman said research on nuclear waste reprocessing might guide decisions on whether the spent nuclear fuel should be moved to Yucca Mountain for disposal or sent elsewhere in interim storage to await recycling.

The Bush administration is promoting advanced reprocessing through a new Global Nuclear Energy Partnership, or GNEP.

"All of this fits together," Bodman said. "We would



Bodman: No plans to move material

be making those judgments in the future based on what we learn about GNEP and how successful we will be."

The energy secretary's comments in a meeting with reporters shed fresh light on the Bush administration's evolving strategy for handling nuclear waste.

In recent days, admini-
(Continued on page 2)

DOE: Yucca Money Won't Be Diverted

WASHINGTON - The Energy Department does not plan to divert money from Yucca Mountain in order to research other forms of nuclear waste disposal, a DOE official told senators at a hearing on the 1st of March.

While the Bush administration has linked the proposed Nevada repository to development of new reprocessing technologies for nuclear spent fuel, acting repository director Paul Golan said funding for the initiatives will remain separate.

Golan responded to a concern by Sen. James Inhofe, R-Okla., chairman of the Senate Environment and Public Works Committee, who convened the Yucca session.

Inhofe, a repository supporter, said he wanted as-

surance that a new administration reprocessing effort, the Global Nuclear Energy Partnership, or GNEP, "should not deter the forward progress of Yucca Mountain."



The idea that GNEP might tap into the nuclear waste fund set aside for Yucca Mountain has been raised in several quarters. Sen. Pete Domenici, R-N.M., has speculated publicly about the possibility.

Also this week, Rep. John Dingell, D-Mich., a repository supporter, said he was worried that GNEP would "divert managerial attention" from Yucca Mountain, as well as money that utility ratepayers have been setting aside for repository construction, more than \$20 billion so far.

The hearing before Inhofe's committee gave Yucca critics a new opportunity to point out flaws in the repository project, while Inhofe and other supporters urged DOE to keep the project moving forward. Source: the Nevada Observer

Points of interest

- Radiation Exposure Standards Lowered for Nye County (page 3).
- Bush policies revive push for Yucca dump (Page 2)
- Industry officials have said the construction of 12 to 19 new reactors is realistic in the next 20 years (Page 3)
- Bodman said nuclear waste would stay at power plants until Yucca repository licensed (page 6)

General/Statistical Information

- *Number of operating reactors: 103 (34 boiling water reactors, 69 pressurized water reactors) 14 BWR plants have 1 reactor; 10 have 2 reactors 15 PWR plants have 1 reactor; 24 have 2 reactors; 2 have 3 reactors*

- *Companies licensed to operate nuclear reactors: 32*

- *Number of states with operating reactors: 31*

- *In 7 states, nuclear makes up the largest percentage of their electricity:*

Vermont - 73.7%

South Carolina - 54.5%

Connecticut - 54.4%

New Jersey - 51.9%

Illinois - 50.1%

New Hampshire - 43%

New York - 29.8%

- *Largest U.S. nuclear plant: Palo Verde (Arizona): 3 reactors at 1,243/1,335/1,247 MWe each for a total of 3,825 MWe*

- *12th-largest nuclear plant in the world: South Texas Project (Texas): 2 reactors at 280/1,280 MWe each for a total of 2,560 MWe*

- *Smallest nuclear plant: Ft. Calhoun (Neb.): 1 reactor at 476 MWe*

- *Oldest operating nuclear plant/year: Nine Mile 1 in New York, operating since December 1969*

Until Yucca Gets Licensed (Continued)

(Continued from page 1) stration officials have outlined a plan that features continued emphasis on a Yucca repository but also a big push to explore reprocessing technologies that might wring more use out of spent fuel while making the ultimate end products less toxic for burial in Nevada.

Bush administration officials are finalizing a nuclear waste bill expected to be sent to Congress in the coming days. Bodman said it will not contain interim storage provisions. A second DOE official confirmed that later.

There had been broad speculation within the nuclear industry and on Capitol Hill that the administration might seek to establish temporary storage on federal land in Washington, South Carolina, Idaho, or at the Nevada Test Site.

Officials at the Nuclear Energy Institute were unaware of Bodman's remarks and had no immediate com-

ment, spokeswoman Trish Conrad said.

NEI, the nuclear industry's main trade association, has been among the state and industry groups lobbying for the government to move faster to remove spent fuel from plants in 39 states where it has been accumulating in pools and in "dry cask" storage containers.

DOE missed a Jan. 31, 1998, deadline to begin moving waste off reactor sites, triggering dozens of lawsuits from utilities and continuing pressure to move fuel to Yucca Mountain or elsewhere.

Steve Kraft, NEI nuclear waste director, said last week that moving nuclear waste away from power plants and onto some federal site "is our number one goal" that NEI would lobby for this year.

Under the scenario Bodman discussed, nuclear waste could remain at plant

sites for at least five years and most probably longer than that.

The Energy Department is in the midst of a repository redesign and is awaiting radiation health standards for the site. The Environmental Protection Agency has said those will not be finalized until near the end of the year.

At whatever point DOE applies for a repository license, the Nuclear Regulatory Commission has four years to evaluate it, a schedule that a number of experts say is optimistic.

The concept of interim storage has been controversial. President Clinton in 2000 vetoed legislation that sought to establish temporary waste storage at the Nevada Test Site.

Last year, however, the House passed a bill directing the administration to explore interim storage. The proposal was dropped from final legislation. Source: Las Vegas Review—Journal

Nuclear Power | Industry Recharged

WASHINGTON - Bolstered by President Bush's call for a nuclear energy renaissance, the nuclear power industry is launching what it describes as the most ambitious campaign in its history to try to shift public opinion in its favor.

At the same time, the industry's leading trade group, the Nuclear Energy Institute (NEI), is trying to persuade the Bush administration and Congress to move even more aggressively to develop Yucca Mountain as a waste repository. The institute has given the administration a list of five steps it

could take to clear hurdles to construction of Yucca.

The nuclear industry has been emboldened in recent years by the Bush administration's commitment to nuclear power. Bush has proposed using government money to help the industry construct a new generation of plants.

This year Bush went further, unveiling the Global Nuclear Energy Partnership (GNEP), with the goal of building nuclear plants not just in the United States, but around the world. At its

heart is a proposal to develop waste-recycling technology - and to keep Yucca on track.

Foes of nuclear energy, who have won many victories over the last three decades, say the industry has a long way to go to persuade Americans to support new nuclear plants.

"In polls, when you ask people if they believe we need nuclear to solve the greenhouse gas problem, they say, 'Well, yeah, I guess so,'" said Michele Boyd, legislative director for Public Citizen's energy programs.

(Continued on page 3)

Nuclear Power (continued)

"But if you ask them if they are willing to have a nuclear power plant in their back yard, they say, 'Hell, no.' "

The institute has long been an influential player on Capitol Hill, with 250 corporate members and a staff of 130.

The group is a top sponsor of lawmaker trips, including travel to Las Vegas for Yucca tours and overseas to nuclear facilities in France, Spain, Italy and England.

The institute has spent nearly \$325,000 on lawmaker trips since 2000, ranking at No. 7 on a list of more than 2,000 private groups that sponsored congressional travel. The organization's political action committee gives campaign cash to its allies on Capitol Hill - \$150,000 in the 2004 election cycle.

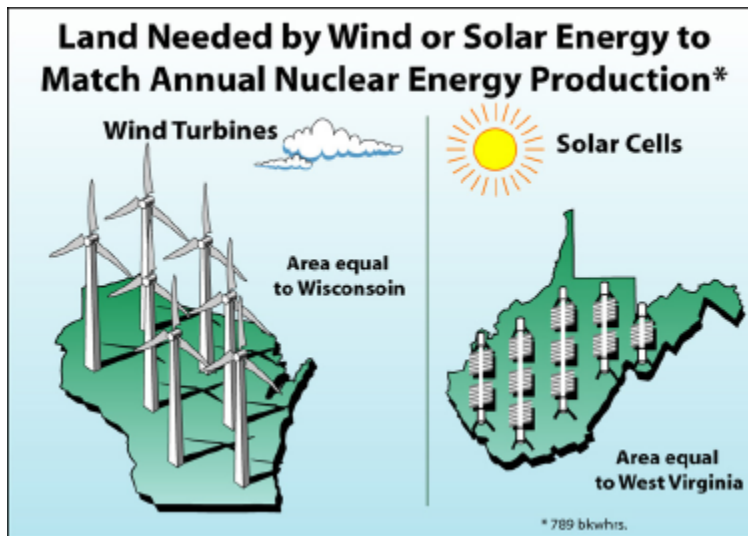
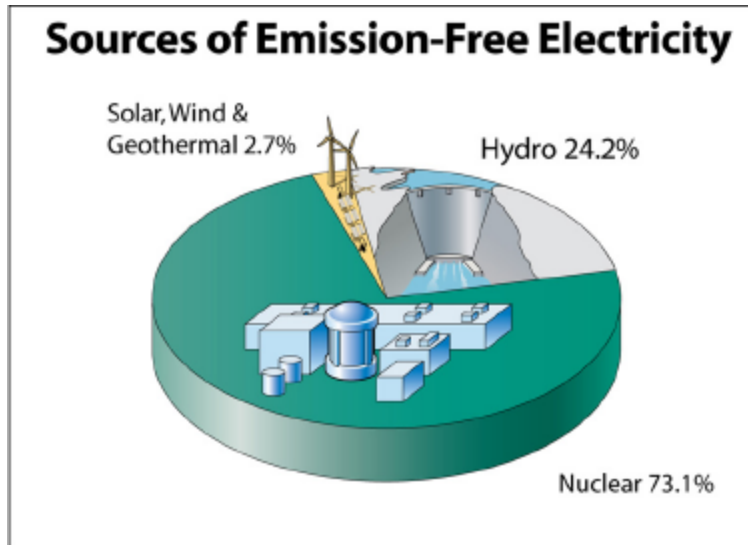
Its member corporations and executives gave nearly \$30 million to lawmakers in the 10 years prior to the 2002 up-or-down Yucca vote in Congress, according to a study by the group Common Cause.

The public relations campaign could cost roughly \$8 million, one trade publication reported, although the institute would not confirm that, critics said.

In the run-up to the 2002 Yucca vote, the institute waged an expensive, all-out lobbying assault and a media blitz.

This year, the organization's aggressive campaign includes a proposal for Congress to remove a long-standing storage limit of 77,000 tons of waste. The Energy Department has said Yucca could hold 105,000 tons, and the institute believes the capacity is even greater.

In arguing for lifting the limit, the institute's waste management director, Steve Kraft, said Congress never explicitly agreed that the nation should have more than one reposi-



Source: Nuclear Energy Institute

tory. He said Congress intended to explore other sites merely to compare geologies - the volcanic tuft of Yucca, for instance, with salt domes or granite sites, which also were examined more than 20 years ago.

Kraft said the cap at Yucca hindered plans for new U.S. plants.

"We know that nuclear energy is going to expand, so that has to be dealt with," Kraft said.

The institute is pressing the Energy Department to include the industry's top five priorities into a "fix Yucca" bill it is drafting.

Those five include an agreement to move waste off nuclear plant sites, where it is currently held - a requirement that would apply enormous

pressure to open Yucca. Kraft said the institute supports an amendment to allow creation of a temporary waste site near Yucca.

Also, the industry wants the budget process in Washington changed to guarantee a steady stream of funding, which has been curtailed by Congress, and wants rules changed that could hinder development of new plants.

Kraft also said he had no doubt Yucca would be constructed, with a possible opening by 2025.

"We've never lost our confidence," he said. "The scientific basis remains excellent."

Anti-Yucca forces do not have the money to match the institute's campaign. They have drawn their success from a nationwide network of grass-roots organizations - and they will be called upon this year, said Kevin

Kamps, a nuclear waste specialist with Nuclear Information and Resource Service.

"How do you fight a Goliath?" Kamps asked. "With everything you've got, all the time."

The industry's public relations campaign will include heavy emphasis at the grass-roots level as well, trying to create support through networks of organizations.

Industry officials have said the construction of 12 to 19 new reactors is realistic in the next 20 years, although ground hasn't been broken on a new plant in this country since 1974. Source: Las Vegas Sun

Office of the Governor of Nevada, Agency for Nuclear Projects (excerpt from the formal comments on EPA's "Public Health and Environmental Radiation Protection Standards for Yucca Mountain, Nevada; Proposed Rule")

The only scientifically and legally supportable way to bring EPA's Yucca Mountain rule into compliance with the Court's directives and the NAS recommendations is to extend the 15millirem per year maximum exposure threshold, together with the 4 millirem groundwater protection requirement, through the period of maximum projected releases for the Yucca Mountain facility. This simple and straightforward approach is the one Nevada recommended to EPA even before the current proposed standards was released. It remains the ONLY possible course of action that can result in a legally, scientifically and morally defensible radiation health protection regime for the proposed Yucca Mountain facility. Sincerely, Robert R. Loux Executive Director Entire document can be downloaded at http://www.state.nv.us/nucwaste/news2005/pdf/nv051118epa_comments.pdf



EPA: Yucca R adiation Standards to be Completed by Years End

WASHINGTON (AP) - The Environmental Protection Agency will issue a final rule by the end of the year on how much radiation can be released from the Yucca Mountain nuclear waste dump, an agency official told senators at a hearing on March 1st.

William Wehrum, acting assistant administrator of EPA's office of air and radiation, defended the agency's proposed rule against criticism from Nevada lawmakers and a Democratic senator from California who said it wouldn't adequately protect human health.

"Our job at EPA is to set standards for the Yucca Mountain repository that are fully protective of human health and safety," Wehrum said at a Senate Environment and Public Works Committee hearing.

He received strong support from the committee's chairman, Republican Sen. James Inhofe of Oklahoma, who asked whether the rule might be "too conservative" compared with approaches taken in Europe. Wehrum said the standard was consistent with international approaches.

Inhofe also said after the hearing that he'd be open to voting to increase the storage capacity of Yucca Mountain, which by law is supposed to hold 77,000 tons of radioactive waste. Because of waste

already waiting at reactor sites nationwide, the repository will be full soon after it opens.

The EPA in August proposed limiting radiation exposure near the planned dump 90 miles northwest of Las Vegas to 15 millirems a year for 10,000 years, then increasing the allowable level to 350 millirems a year for up to 1 million years.

That higher level is more than three times what is allowed from nuclear facilities today by the Nuclear Regulatory Commission. A standard

a Republican, called it "a farce."

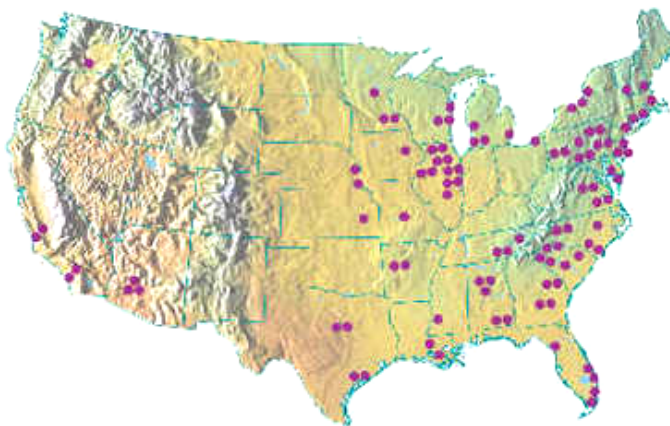
Sen. Barbara Boxer, D-Calif., cited a study that she said showed cancer risks at the 350 millirem level increasing to one in four for women and one in five for men.

"This is such a nightmare that we're abandoning ... what we consider to be an acceptable cancer risk," Boxer said.

But a scientist who testified before the committee, Dade Moeller, former president of the Health Physics Society, said his estimates show a smaller increase of cancer risk under the proposed rules - perhaps 1 percent or less. Moeller's company has done contract work for the Energy Department. The radiation issue and other problems with the project have

caused a series of delays. The Energy Department originally was supposed to submit its application for a license to operate the dump to the Nuclear Regulatory Commission by December 2004.

Paul Golan, acting director of the department's Office of Civilian Radioactive Waste Management, couldn't provide senators a new date but said the department would release a schedule this summer. Source: Las Vegas Sun



103 Commercial nuclear reactors with operating licenses at 64 sites in 31 states

chest X-ray is about 10 millirems.

The EPA issued the rule under consideration after a federal court said the agency's first standard was inadequate because it didn't establish exposure limits beyond 10,000 years. A public comment period for the rule ended Nov. 21, and the agency is reviewing comments and will finalize the rule by year's end, Wehrum said.

Nevada Sens. Harry Reid and John Ensign criticized the standard in testimony. Ensign,

NEI's Top 10 Nuclear Energy Industry Issues For the 109th Congress

- **Security of Nuclear Plants and Facilities** – NEI is working with the Nuclear Regulatory Commission and the Department of Homeland Security to support security requirements that are consistent with national homeland security plans and approaches to infrastructure protection. NEI supports legislation that will improve protection for nuclear plants, including measures to identify responsibilities of the private sector and governmental agencies, clarify use of force authority for plant security forces, expedite security reviews, and enhance training and federal funding for local government first responders.
- **Stimulating Investment in New Nuclear Energy Capacity** – To maintain reliable supplies of electricity at reasonable costs, the United States must take steps to encourage investment in critical energy infrastructure, including new electric transmission facilities and new baseload power plants, including new nuclear plants. This investment stimulus will require changes to outdated tax laws - established before the emergence of competition in the electric sector – to provide the electricity sector similar treatment to other capital-intensive industries. Maintaining nuclear energy's role as the nation's largest provider of clean, reliable, and affordable electricity will also require legislative recognition of, and credit for, the emission-free characteristics of nuclear energy.
- **Environmental Benefits of Nuclear Power and Hydrogen Economy** – Nuclear power is the only large-scale form of electricity generation that does not emit air pollutants, and nuclear's contributions to cleaner air must be recognized. A main focal point will be on nuclear energy industry

initiatives to improve air quality and ensuring that emissions prevented by nuclear energy are treated equally with other sources of prevented emissions, such as renewable energy.

- **Budget and Appropriations for Nuclear Energy** – NEI will be active on budget and appropriations issues to ensure adequate funding for the Yucca Mountain project through a change in the budget treatment for the Nuclear Waste Fund. NEI supports the president's budget request for used fuel programs. NEI also focuses on ensuring the Nuclear Regulatory Commission budget is funded at levels consistent with efficient and effective regulation, improving funding for new plant deployment and current reactor research and development, creating funding for next generation nuclear plants and hydrogen production, encouraging university funding, and eliminating dual regulation of radiation standards by the Nuclear Regulatory Commission and the Environmental Protection Agency.
- **Used Nuclear Fuel Management** – Following congressional approval of Yucca Mountain as the national permanent repository for used nuclear fuel in July 2002, NEI has continued to support adequate funding for the repository, reclassifying rate payer contributions to the Nuclear Waste Fund, address the continued legal challenges to the project, refine processes leading to federal licensing of the repository, and ensure that a national transportation plan for shipping fuel to Yucca Mountain is implemented.
- **Renewal of the Price Anderson Act** – It is essential for the future of nuclear power that this act is

renewed permanently. For nearly a half century, the Price-Anderson Act has served the nation well, providing an industry-funded insurance program that provides a no-fault, expeditious approach to responding to the unlikely occurrence of a nuclear incident.

NEI's Top 10 Nuclear Energy Industry Issues For the 109th Congress

- **Nuclear Regulatory Commission** – The industry must continue to develop a stable, safety focused regulatory process that reduces requirements not related to plant safety.
- **Emergency Preparedness** – The review and updating of emergency preparedness programs to meet reasonably perceived contingencies is critical to public safety.
- **Improving and Modernizing Current Nuclear Plants** – Through the constant upgrading of components, including the performance of fuel, the industry ensures the continuous safe, reliable and efficient operations of nuclear power plants.
- **Work Force Issues** – With the significant number of retirements facing the industry beginning in the next several years, the industry must ensure that thoroughly trained, professionally competent replacements are available.

Energy Secretary' s Statement Retracted by White House

WASHINGTON -- The Bush administration on Monday, March 7th retracted a declaration from Energy Secretary Samuel Bodman that nuclear waste will remain stored at power plants until a Nevada repository is licensed.

Bodman "simply spoke too soon" in comments he made Friday, March 3rd during a meeting with reporters, according to an official familiar with negotiations within the administration on nuclear waste policy.

Bodman told reporters the Bush administration had ruled out creating temporary storage sites where thousands of tons of highly radioactive waste could be relocated from power plants in 39 states while work continues at Yucca Mountain.

A nuclear waste bill that is being written by the Energy Department and the White House would not seek permission from Congress for interim storage, Bodman said.

But officials said that interim storage remains a possibility and the new legislation has not been finalized.

The official, who took an unusual step of calling reporters to discuss Bodman's comments, declined to be identified.

"The legislative package is not complete and discussions are ongoing, and Secretary Bodman simply spoke too soon," the official said.

Bodman had no immediate comment, but he is expected to talk about nuclear waste and interim storage during an appearance before the House energy and water subcommittee.

Bodman said that federal law prohibits the Energy Department from seeking to establish interim nuclear waste storage until a repository is licensed, and he was planning to follow that course.

"All our efforts will be going into the procurement of an operating license" for Yucca Mountain, Bodman said. "At that point in time we will make a decision whether we will take advantage of interim storage opportunities or not."

Nuclear industry officials who support the Yucca repository did a double-take at Bodman's remarks. Lobbyists for the Nuclear Energy Institute, the industry's main trade group, had declared swift relocation of nuclear waste from power plants to be their prime goal this year.

Ongoing delays within the Yucca program, coupled with a Nuclear Regulatory Commission licensing process that could stretch for years, could mean nuclear waste would not be removed from plant sites for the foreseeable future if the administration follows the course outlined by the secretary. If interim storage is not in the plans, "what is the purpose of having a bill in the first place?" said one industry official who sought a transcript of Bodman's remarks.

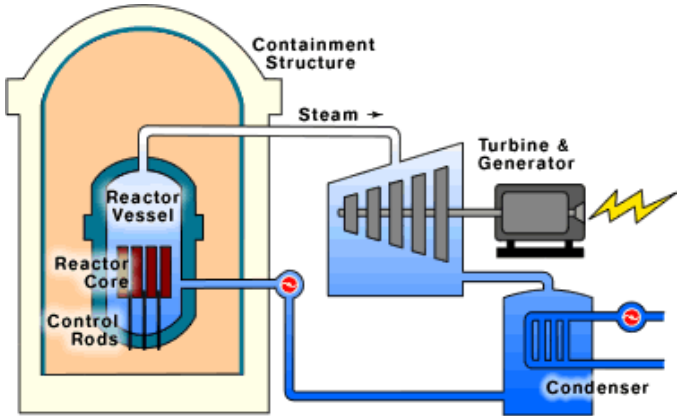
Pulling back comments from the energy secretary "is one of those things that doesn't happen very often," the official said.

There had been broad speculation that the forthcoming nuclear waste bill would seek to establish interim storage at the Savannah River site in South Carolina, the Idaho National Laboratory near Idaho Falls, or at the Nevada Test Site. Source Nuclear Energy Institute

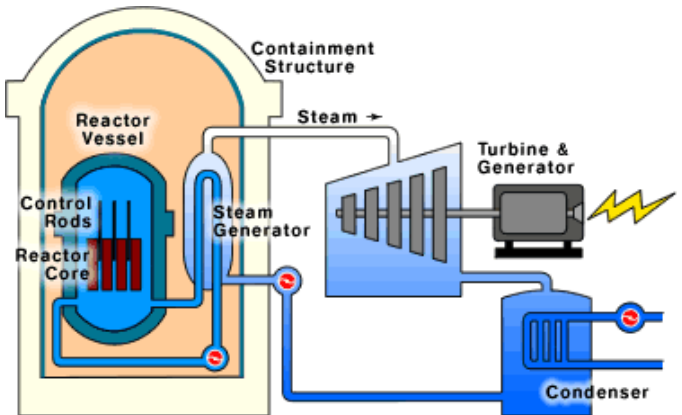
U.S. Nuclear Power Plants

There are Two Types of Reactors in the United States

Boiling Water Reactors (BWRs) boil water so that it is converted to steam. The steam drives a turbine connected to a generator before being recycled back into water by a condenser and used again in the heat process.



Pressurized Water Reactors (PWRs) keep water under pressure so that it heats up but does not boil. Water from the reactor and water in the steam generator never mix.



Source: NEI

For more information contact Churchill County Nuclear Waste Oversight Program at 85 North Taylor, Fallon, NV 89406, (775) 428-1592, Additional information on the repository program can be obtained from the U.S. Department of Energy. Yucca Mountain, Site Characterization Project Office at (702) 794-1444 or contact them at www.ymp.gov, or the Nevada Agency for Nuclear Project, Nuclear Waste Project Office, Capital Complex, Carson City, Nevada 89570, (775) 687-3744 or visit them at their web site at www.state.nv.us/nucwaste. Churchill County's Nuclear Waste Oversight Program's website address churchillcountynwop.com.