

What's News at Yucca Mountain

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**Publication of Mineral County's
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Railroad Route to Nuclear Dump in Nevada Getting Another Look

LAS VEGAS (AP) - The Energy Department is reconsidering building a rail line through western Nevada to the site of a proposed national nuclear waste repository at Yucca Mountain, officials said.

The north-south route dubbed the Mina Corridor was examined in the 1990s but shelved after the Walker River Paiute Indians refused access to their reservation. The tribe reconsidered this year.

The Energy Department has said it favored plans to build a 319-mile east-west rail line from Caliente, near the Utah border, across rural Nevada to the nuclear dump site, 90 miles northwest of Las Vegas. The so-called Caliente Corridor route could cost \$2 billion.

Department officials notified state and local leaders and members of Congress that the plan to take another look at the Mina route would be published in the Federal Register in Washington, D.C.

"The Mina corridor appears to offer potential advantages to the extent it would cross fewer mountain ranges, utilize existing rail bed and also be a shorter distance," the department said in a draft notice obtained by the Las Vegas Review-Journal.

"These potential advantages would simplify design and construction," the report said.

The Mina route would be 280 miles long and include an existing rail line between the towns of Wabuska and Hawthorne. A cost estimate has not been made public.

The Energy Department plans to continue preparing an environmental impact statement on the Caliente corridor, with informational meetings about the rail plans planned in several Nevada towns.

Draft versions of both studies would be released by the summer, department and Yucca Mountain project spokesman Allen Benson said in Las Vegas.

Walker River Indian tribal leaders reversed policy and agreed in May to let the government map a new rail line through their reservation. The tribal chairwoman said the tribe was reserving a final decision on allowing nuclear waste shipments.

The state of Nevada opposes the repository plan. However, Bob Halstead, a transportation consultant for the state, said a north-south corridor appeared to make more sense and could cost less than the Caliente route.

Source: Las Vegas—Associated Press

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"on-line survey" button, answer the
questions and submit. Your opinion will
be included in the statistics being
gathered for publication next year.



ON-LINE SURVEY

While you're there check out our
newly updated website with tons of
information about the proposed
Yucca Mountain Nuclear Waste Site

<http://mcnucprojects.com>

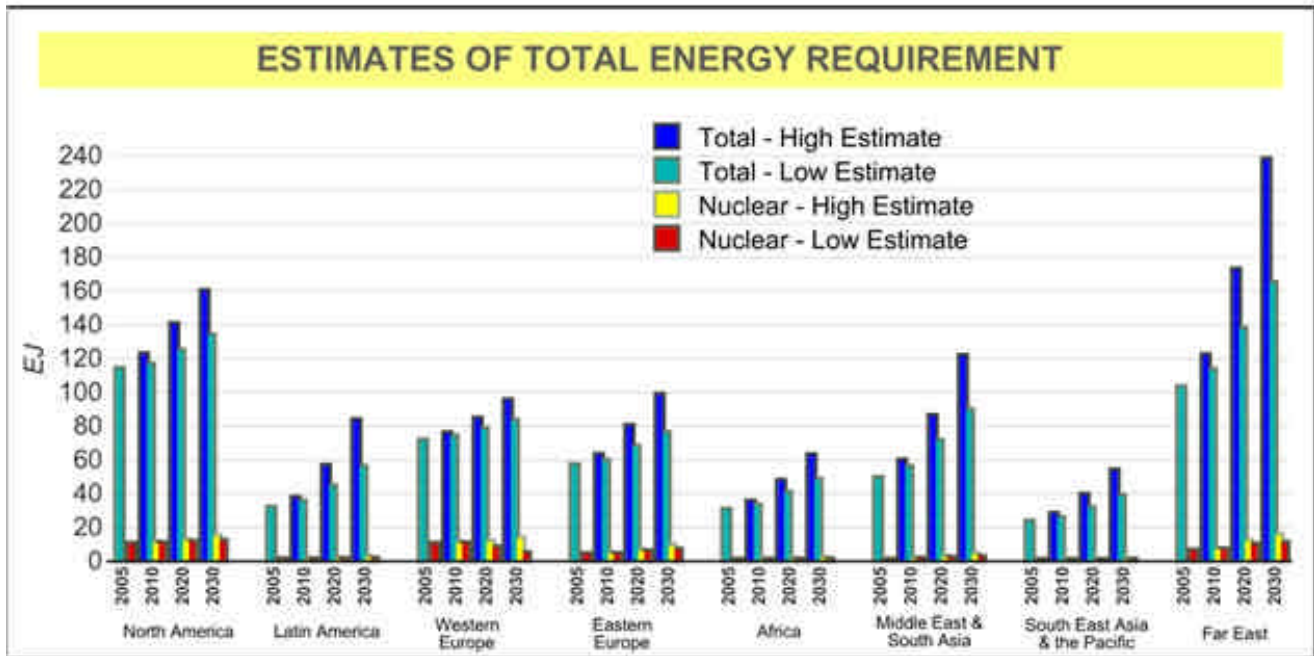
Energy Risk - Public's Perception of Nuclear

Autumn has arrived. And the country may turn a new leaf. More than a year after the energy act became law, federal regulators are following through on their congressional instructions to help design the next generation of nuclear reactors -- one that might propel the nation into a new era of electricity generation.

Proponents of nuclear energy say that future nuclear reactors will be safer, more cost effective and highly efficient. That will give nuclear energy a regulatory advantage and therefore help such producers raise capital for their projects. Several nations that include the United States have combined to come up with newer and better technologies that purport to be safer and more environmentally friendly.

The U.S. Department of Energy is responsible for conducting research and development to select an initial design for the modern nuclear reactors and to do so by

advocates of the design. And because the system relies on gravity and not mechanical tools that must constantly pump the water to cool the reactors, the cost to build them would be less. At least that's the theory. "Our reviews of the Energy Department management of other major projects have found that the project management has long been a significant challenge and (this latest reactor) is at high risk of waste and mismanagement," says a study just released by the General Accountability Office that is a congressional watchdog agency. If the project is successful, however, the watchdog agency has high hopes because such systems would not need cooling towers, redundant pumps and back-up diesel generators. That would result in a safer and more economical reactor, it says.



2011. By 2021, it is supposed to have picked a final design and construction on reactors is expected to begin. The difference between the so-called Very High Temperature Reactors and the ones used today is that the future ones will operate at 1,742 degrees Fahrenheit. That is about three times that of today's light water reactors, which results in a more efficient use of fuel and the ability to create hydrogen in the process.

The reactors are cooled by helium gas and not water. That means that the reactors rely on gravity and not on mechanical instruments to flush water through the system in the event of emergency. Therefore, the odds of any leaks and subsequent meltdowns are close to zero, say

Outreach Programs

While nuclear energy proponents are optimistic about new reactor designs and the potential role they might play in producing an increased amount of electricity, opponents remain vigilant. Those Very High Temperature Reactors might work well in the lab, they say, but they are unproven as commercial entities. Beyond that: There's still no politically viable solution over where to store the spent nuclear waste.

It's now a test of wills. No new plants have been started in a couple decades. The Tennessee Valley Authority was

(Continued on page 6)

Analysis: Nuke Waste Bill Could Set Course

WASHINGTON, Oct. 3 (UPI) -- Sen. Pete Domenici, R-N.M., has introduced legislation to fix a troubled nuclear waste repository project, setting schedules for transporting defense and civilian material to Nevada as well as a policy for interim storage and recycling.

While Domenici's bill is unlikely to move forward in this Congress, he hopes it will start the discussion in the next Congress on an issue the nuclear industry says is necessary to solve before new nuclear plants come online, and fulfills an obligation by the federal government to take control of nuclear waste.

And though the bill aims at clearing procedural and bureaucratic hurdles in opening Yucca Mountain, 90 miles northwest of Las Vegas, which the government has designated as the final resting place of the tens of thousands of highly radioactive nuclear byproducts, opponents say the legislation is no match for the unsound science of the plan.

Bob Loux, executive director of Nevada's Agency for Nuclear Projects, rejected the bill's premise that the long-delayed project could be worked out. He called the legislation, and others that have been introduced recently, "largely irrelevant," especially before this Congress and said it isn't going to get a serious look by his agency -- at the forefront of Nevada's fight against Yucca -- until next Congress.

Domenici's bill would put under the U.S. Energy Department's jurisdiction 147,000 acres of land around Yucca Mountain controlled by the U.S. Bureau of Land Management, the Air Force or Nevada Test Site, as well as land needed for the rail system to transport the waste from 131 sites around the country to Yucca Mountain.

Right now there is 13,300 metric tons of nuclear by-product being stored by the Defense Department at a handful of locations and 54,000 metric tons of civilian nuclear waste at both active and shuttered power plants. The U.S. Nuclear Regulatory Commission estimates an additional 2,000 metric tons of waste is currently produced each year.

The NRC says it expects applications for up to 30 new reactors soon that, when or if they are approved and come online, will increase that production.

The Energy Department's schedule for Yucca, if there are no legal, procedural or structural stumbling blocks along the way -- and in all likelihood there will be -- puts opening day at 2017. (Nevada alone has numerous pending legal challenges.)

There will be enough nuclear waste produced to fill the repository in a year-and-a-half, however, so the Domenici bill also removes the 70,000 metric ton cap and calls for the NRC to set a new limit.

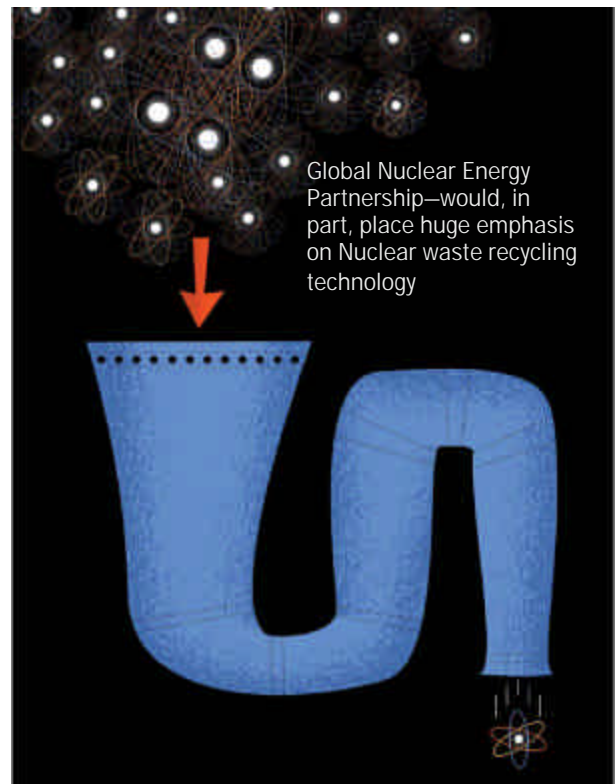
Under the bill, defense waste can begin its travels to

the site when the NRC approves an above-ground storage facility at the repository site, planned for 2010. Civilian spent fuel can make its way there when the NRC issues a construction permit for the Yucca site itself -- 2011 at the earliest (both before the NRC has given final approval to store waste).

This changes the Nuclear Waste Policy Act, which outlaws moving nuclear waste until a repository is actually licensed and allows defense waste to be moved to Nevada.

The Energy Department has tripped over its feet on the project numerous times and its latest estimate is to have an application into the NRC by 2008 -- 10 years after a repository was supposed to open.

Domenici says he hopes the bill is approved along with other interim storage and recycling plans, including one in an Energy and Water appropriations bill establishing storage sites within the state that generated the nuclear waste. Domenici is also keen on the Global Nuclear Energy Partnership that, in part, would place a huge emphasis on recycling technology in an effort to thin out the amount of waste to be eventually stored at a repository. It gives the energy secretary authority to decide what waste can be recycled and sent instead to interim storage or, if it's built, a recycling plant, and which waste cannot be recycled and heads straight to Yucca. *Source: United Press International.*



Predictions Made on Repository Performance

Scientists huddled in Las Vegas to discuss what could happen hundreds or thousands of years after dust settles on Yucca Mountain's nuclear waste containers.

While there is still much work to do, consultants to federal agencies found that corrosion on waste containers stemming from dust and water infiltrating the volcanic-rock ridge won't be significant for tens of thousands to hundreds of thousands of years.

State consultants, however, who examined 2,000-year-old mud brick ovens and 3,500-year-old tunnel deposits in Egypt's harsh desert environment say there's not enough accurate data for computer models to make such predictions. In essence, scientists for Nevada contend their federal counterparts are making too many assumptions on how ideal conditions are going to be.



After showing slides of a trip to El Hibeth, Egypt, Morgenstein said, "I don't think the question is what does dust look like now, the question really is what will dust look like in the future?"

To make predictions on how the planned repository will perform in the future in light of NRC guidelines, the scientists are attempting to answer a number of questions.

Will ingredients in the dust such as salts of chloride, nitrate, sodium and potassium, mix with water vapor to form substances in sufficient amount that corrode the metal-alloy shell surrounding the steel-encased packages of deadly, used nuclear fuel?

What role will heat generated by the decaying waste play in the process and will nitrate, for example, slow down the corrosion rate?

The answers will weigh in the NRC's review of the repository's design when the Department of Energy submits a license application that's expected before June 30, 2008.

Source: *Las Vegas Review Journal*

Questions About on Nuclear Waste

The Department of Energy on Monday, October 30th, began explaining proposed changes to the Yucca Mountain nuclear waste site. But activists and representatives for Nevada grumbled that few details were available at a public meeting.

Energy Department organizers called the event a listening session as they start environmental impact studies of the proposals. After an hour, 46 people had signed in, mostly professionals representing interest groups, federal agencies, members of Congress and potential contractors.

The department is embarking on new designs for waste-handling facilities at Yucca Mountain and on a study of a possible railroad path that would carry radioactive waste through counties in western Nevada.

Information on new designs for waste canisters and blueprints of the above-ground parts of the tunnel repository were on poster boards, with presenters standing nearby to answer questions.

The same format is to be used in public meetings scheduled in Nevada over the next two weeks. More of them will focus on the proposed Mina railroad corridor across Northern Nevada and through Lyon, Mineral and Esmeralda counties.

Critics of the Yucca program said the agency's presentation was unhelpful.

"There was not enough detail to offer an intelligent comment," said Marty Malsch, an attorney for the state. "Nobody could have a way to know whether they would be affected or not."

The information "is all scattered," said Kevin Kamps, nuclear waste specialist at the Nuclear Information and Resource Service. "We can't talk to each other, we can't hear from each other about concerns. It think it is by design."

Michele Boyd, legislative director of the Public Citizen energy program, said how the Energy Department proposed to load nuclear waste at reactors using new multi-purpose canisters was unclear.

"The pictures were completely useless," Boyd said.

Others defended what some called the low-key format and said it was designed to encourage citizens to ask questions and offer suggestions out of the spotlight. Formal public hearings will be held after the draft studies are completed, they said.

"This lets the department talk one-on-one with the public and answer questions and learn better what the concerns are," said Jane Summerson, DOE document manager for one of the impact studies. (See Notice of Intent—page 5) Source: *Las Vegas Review Journal*



Amended Notice of Intent to Expand the Scope of the Environmental Impact Statement for the Alignment, Construction, and Operation of a Rail Line to a Geologic Repository at Yucca Mountain, Nye County, NV. (October 13, 2006).

SUMMARY: The Department of Energy (DOE) is providing this Amended Notice of Intent to expand the scope of the ongoing Environmental Impact Statement for the Alignment, Construction and Operation of a Rail Line to a Geologic Repository at Yucca Mountain, Nye County, Nevada. In the ongoing Rail Alignment EIS, DOE has undertaken an analysis of alternative rail alignments in which to construct and operate a rail line within what is referred to as the Caliente corridor. Based on new information, DOE now plans to expand the Rail Alignment EIS to incorporate analysis of a new rail corridor alternative. This additional analysis will supplement the corridor analyses in the "Final Environmental Impact Statement for a Geologic Repository for the Disposal of Spent Nuclear Fuel and High-Level Radioactive Waste at Yucca Mountain, Nye County, Nevada"

The expanded analysis will consider the potential environmental impacts of a newly proposed Mina rail corridor at the same level of corridor analysis as is contained in the Yucca Mountain Final EIS, and will review the rail corridor analyses of that Final EIS, and update, as appropriate. The expanded scope will include a detailed analysis of alternative alignments within the Mina corridor. The result will be to provide the public with information concerning both the potential corridor and alignment impacts of the Mina corridor at the same time DOE presents the potential impacts for the construction and operation of a rail line within the Caliente corridor. The expanded EIS will be entitled the Supplemental Yucca Mountain Rail Corridor and Rail Alignment EIS (DOE/EIS-0250F-S2 and DOE/EIS-0369).

(Continued on page 6)

Court Awards \$143M to Reactor Companies

WASHINGTON (AFX) - The owners of three closed nuclear power plants have been awarded \$143 million because the government has failed to take away their used reactor fuel rods.

The award by the U.S. Federal Court of Claims settles a long-standing legal fight waged by operators of the three reactors in Maine, Connecticut and Massachusetts.

It also could foreshadow a series of additional financial awards to operators of reactors nationwide who have argued the federal government broke contractual agreements that promised the waste would be taken by 1998.

It gives \$32.9 million in damages to Yankee Atomic Electric Co., operator of the Yankee Rowe reactor in Massachusetts; \$34.1 million to Connecticut Yankee Atomic Power Co., operator of Connecticut Yankee reactor; and \$75.8 million to Maine Yankee Atomic Power Co.; operator of the Maine Yankee reactor.

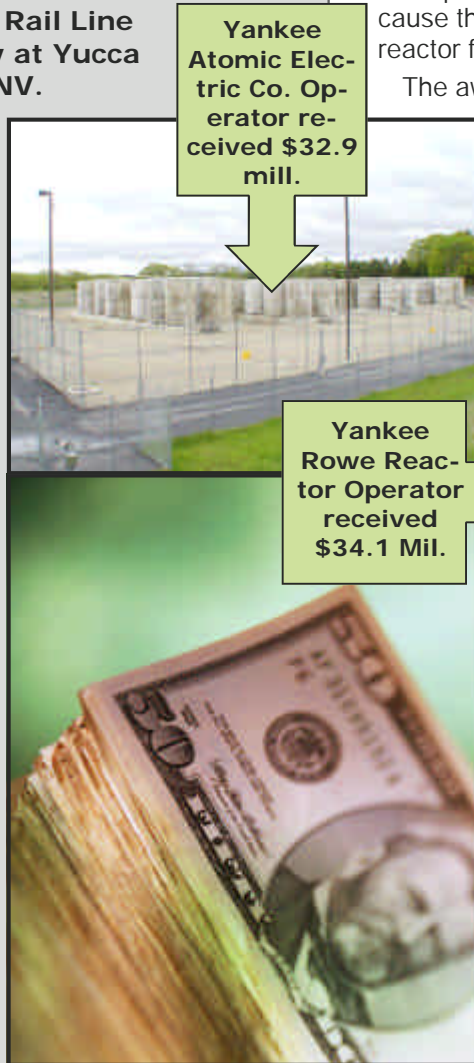
The companies had asked for \$177 million. Michael Thomas, vice president and chief financial officer of the three Yankee companies, said that while the monetary award is 'very positive ... (it) does not solve the problem of used nuclear fuel remaining at the plant sites.' We hope this ruling will spur the U.S. Department of Energy to begin fulfilling its obligation,' said Thomas.

Federal courts previously have ruled that the Energy Department was contractually obligated to begin taking used reactor fuel from commercial power plants by 1998. But the ruling was the first finding of a significant financial settlement.

The government missed the 1998 deadline because it doesn't have any place to put the spent fuel. A proposed central repository at Yucca Mountain in Nevada is way behind schedule in being completed.

Once expected to open in 2010, the Yucca waste site has yet to received a federal license and is not likely to be completed -- if licensed -- by 2018 at the earliest.

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Yankee Atomic Electric Co. Operator received \$32.9 mill.

Yankee Rowe Reactor Operator received \$34.1 Mil.

Amended Notice—continued*(Continued from page 5)*

OPPORTUNITY FOR PUBLIC COMMENT: The Department invites comments on the scope of the Supplemental Yucca Mountain Rail Corridor and Rail Alignment EIS to ensure that all relevant environmental issues and reasonable alternatives are addressed. DOE will consider all comments received during the public scoping period from October 13 through December 12th, 2006.

Requests for additional information and where to send your comments on the Supplemental Yucca Mountain Rail Corridor and Rail Alignment EIS or transportation planning in general should be directed to: Mr. M. Lee Bishop, EIS Document Manager, Office of Logistics Management, Office of Civilian Radioactive Waste Management, U.S. Department of Energy, 1551 Hillshire Drive, M/S 011, Las Vegas, NV 89134, Telephone: 1-800-967-3477, or fax to: Mr. M. Lee Bishop 1-800-967-0739, or via the Internet at: <http://www.ocrwm.doe.gov> under the caption, What's New.

You can also find more information, links to the public scoping information and to the comments form on Mineral County's Nuclear Waste Oversight website at: <http://mcnucprojects.com>. Mineral County Nuclear Projects Office has a new website <http://mcnucprojects.com>.

Energy Risk - (Continued)*(Continued from page 2)*

the last one to activate a new nuclear reactor -- Watts Bar in Spring City, Tenn. -- in 1996. That reactor ended up costing \$6 billion to build after construction and financing in a process that took 20 years.

As a result of all that, utilities lost their appetite to build nuclear plants. But, energy shortages, high prices and environmental concerns mean that policymakers, producers and consumers alike are searching for newer and cleaner fuel sources. Congress sees potential in nuclear. It authorized in last year's energy bill \$1 billion in tax credits as well as \$500 million in insurance to protect against delays in construction that are directly tied to regulatory logjams. And, finally, the first six reactors to get built in the 21st Century are promised millions in loan guarantees.

Energy Risk - continued

The International Atomic Energy Agency says nuclear energy now comprises 16 percent of the world's generation mix. But, it projects the use of such power to grow significantly over the next 30 years and mainly in Asia. In fact, 22 of the last 31 such plants have been constructed in Asia while 18 of the current 27 reactors now being built are going up there. Japan, for example, has few natural resources and limited land space while China relies heavily on coal with high sulfur content and is looking for cleaner options.

Today, energy demand is growing and some prevalent fuel sources are becoming scarce. That reality, in conjunction with global environmental concerns, means that many of the pieces are now in place for nuclear energy to make a comeback. Opposition will remain strong. But the American public is listening. *Source: Ken Silverstein, EnergyBiz Insider, Editor-in-Chief*

This newsletter is a publication of the Mineral County Repository Planning and Oversight Program. Mineral County is one of ten affected units of local government involved in the proposed Yucca Mountain Repository. Funding provided to Mineral County is paid by users of electricity generated by nuclear power plants. Under a general contract with nuclear generating utilities, the federal government collects a fee of one mill (one-tenth of a cent) per kilowatt-hour from utility companies for nuclear generated electricity. The money goes into the Nuclear Waste fund which is used to fund all program related activities. These articles may not necessarily reflect the positions or opinions of the Mineral County Board of Commissioners.

For more information on Mineral County's program contact Linda Mathias, Director of Nuclear Projects at (775) 945-2484. 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.

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Additional copies of this newsletter are available at the Mineral County Nuclear Projects Office located in the Mineral County Courthouse or you can obtain copies from the Mineral County Library.
Copies can also be downloaded from the website at <http://www.mcnucprojects.com>. Questions and/or comments are welcome.