

Yucca Mountain News

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Churchill County High School Students stand in front of the tunnel boring machine used to penetrate Yucca Mountain. Students toured the site in May of 2003 -(see story on page 6)

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Rulings Favor Nuclear Dump

The consortium that wants to store deadly nuclear reactor waste in Skull Valley has the financial wherewithal to carry out its plans safely, federal nuclear regulators said Tuesday.

The Atomic Safety and Licensing Board rejected the state of Utah's complaints that the limited liability company behind the \$3.1 billion storage site, Private Fuel Storage (PFS), has no assets and could someday abandon the waste on the Skull Valley Goshute Reservation, about 45 miles southwest of Salt Lake City.

The board -- the adjudicatory arm of the U.S. Nuclear Regulatory Commission (NRC) -- released its finding in a trio of closely related rulings. The finding was not released to the public because of the private business information it might contain, but PFS did comment on it. "We are confident our facility will satisfy a critical industry need for temporary storage," said John Parkyn, PFS chairman. "Therefore, I have no doubt we will satisfy the NRC's financial conditions year after year as long as the

facility exists, and that we will fully decommission as required."

Utah Gov. Mike Leavitt, one of the project's foremost critics, did not return calls for comment, declined to comment on the ruling. The latest rulings come on the heels of another victory for PFS -- last week's licensing-board decision that earthquakes do not pose a significant risk at the Skull Valley site.

However, PFS still faces a number of licensing hurdles.

The nuclear board has not

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Nellis Air Force Base could pose a threat to the Nevada site picked to bury the nation's radioactive waste

Government studying aircraft threat at Nevada nuke dump

Federal officials on Friday downplayed the chance that aircraft including military bombers from Nellis Air Force Base could pose a threat to the Nevada site

picked to bury the nation's radioactive waste.

"Potential plane crashes are not realistic obstacles to



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Rulings Favor Nuclear Dump *(Continued from page 2)*

weighed in on whether a rail-spur that would serve the storage facility might have a negative impact on the proposed Cedar Mountains wilderness.

Nor have federal regulators decided how to handle the company's efforts to overcome a separate, March 10 ruling, blocking the license at least temporarily, because the risk a fighter jet might crash into the casks is too great. The proposed storage site is adjacent to the Air Force's largest mainland bomb-testing and pilot-training range.

PFS needs federal approval to use Skull Valley as a way station for up to 44,000 tons of depleted-but-still-lethal reactor waste until it is permanently disposed of elsewhere, presumably in a national repository planned for Yucca Mountain. The waste would be stored in thick, steel-and-concrete casks.

The consortium's 100-acre storage site in Skull Valley would be big enough to hold all the waste produced at U.S. commercial facilities since utilities began generating electricity in nuclear reactors nearly a half century ago. Utah does not have any commercial nuclear plants.

The state of Utah began attacking PFS's financial stability shortly after the eight-utility consortium first applied for a license in 1997. Utah lawyers have said the company cannot guarantee it will have enough money to build, operate and decommission the site.

Details of the licensing board's latest rulings must be kept secret, according to federal regulations.

PFS has said its project will be paid for by the utilities that use it, not with money from the \$14 billion federal fund that nuclear ratepayers have stoked through charges on their utility bills.

The consortium said Tuesday that each time spent fuel is sent to the facility, the utility that owns it will pay into an external decommissioning fund that will be

used to return the site to its original condition.

Utilities now store their waste in pools or dry casks at each power plant.

Many of those reactor sites are expected to run out of storage capacity before Yucca Mountain opens.

Some utilities say they will be forced to shut down their plants -- and cut off the electricity they provide -- unless disposal or off-site storage is found soon.

Many reactor sites are expected to run out of storage capacity before Yucca Mountain opens

Government studying aircraft threat at Nevada nuke dump

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Yucca Mountain getting an (Nuclear Regulatory Commission) license, we believe," said Energy Department spokesman Joe Davis in Washington, D.C.

Davis said the Energy Department compiled a report last year for the NRC makes no conclusions about the danger posed by flights over the site.

"Above-surface work at the Nevada Test Site has coexisted with military training for years," Davis said. "Yucca Mountain is a below-ground facility with very limited above-ground facilities. We don't see that Yucca Mountain would make any change to that coexisting relationship."

The Nellis testing and bombing range encompasses the Nevada Test Site, where nuclear testing was conducted from 1952 to 1992. The Test Site is operated by the Energy Department's National Nuclear Security Administration.

The aircraft threat report, compiled by the department's top Yucca contractor, Bechtel SAIC Co., called for more analysis of planes flying within 30 miles of Yucca Mountain -- the site Congress picked last year for a national nuclear repository.

The Energy Department plans to apply in late 2004 for a Nuclear Regulatory Commission license to open and operate the repository beginning in 2010.

Plans call for entombing 77,000 tons of commercial, industrial and military radioactive waste 1,000 feet underground.



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The federal government in March cited the danger of military flights when it rejected an Indian tribe's plan to store nuclear waste on the Goshute Skull Valley reservation near Salt Lake City. The site is between Hill Air Force Base and the Utah Test and Training Range.

Gayle Fisher, an Energy Department spokeswoman in Las Vegas, issued a statement Friday noting that the Goshute plan was for aboveground storage, while Yucca Mountain storage would be underground.

The statement said the number of flights over Yucca Mountain were difficult to determine. It said civilian flights pass to the southwest, military training takes place to the north and a limited number of military and Energy Department aircraft fly over Yucca Mountain.

Nevada officials who oppose the Yucca Mountain project characterized the issue as a serious obstacle to opening the repository.

U.S. Rep. Jim Gibbons, R-Nev., on Thursday asked Maj. Gen. Stephen Wood, Nellis Air Warfare Center commander, to say how a Yucca repository might affect training and military exercises.

"I have grave concerns that nuclear waste storage at Yucca Mountain is going to have a dramatic impact on the training that our nation's pilots receive," Gibbons said.

The Air Force has not stated a formal objection to the Yucca project. But Pentagon officials have filed objections to any plans for nuclear waste transportation beneath Nellis airspace.

TAKING DUSTY PLANS OFF THE SHELF

America's 103 nuclear power plants produce about 20 percent of the nation's electricity. But the last one to go on line, Watt's Bar in Tennessee, turned on in 1996 after 23 years of construction and billions of dollars in cost overruns.

The biggest sign of a looming resurgence: The Senate voted 50-48 in favor of \$15 billion in federal loan guarantees for companies to build six or seven new next-generation nuclear power plants. The terms were part of broader energy legislation; the House of Representatives has voted for similar but lesser aid.

Such support from the federal government -- as well as environmental and economic problems nagging other power sources -- is prompting nuclear proponents to dust off their construction plans. Industry officials are optimistic because:

- The current Senate energy bill either would provide straight loan guarantees for half the cost of power plant construction or commit the federal government to buy much of their power. In

last week's vote, supporters beat back an attempt to defeat the nuclear subsidies.

- Last year, the Bush administration cleared the way to solving the looming nuclear waste disposal problem by approving Yucca Mountain in Nevada as an eventual dump site.

- The administration advocates a long-term switch to hydrogen as a fuel

source, especially for cars. The Senate energy bill includes funding to build a \$1.1 billion test project for a new type of nuclear power plant in Idaho that also would produce hydrogen. A similar plant was built in Colorado and closed in 1989, but engineers think they've fixed its design flaw.

- Natural gas prices are soaring, eroding that fuel's financial advantage over nuclear power.

The Senate voted 50-48 in favor of \$15 billion in federal loan guarantees for companies to build six or seven new next-generation nuclear power plants.

- Efforts to combat global warming and air pollution could make coal and natural gas power plants more expensive and nuclear power more desirable; nuclear power doesn't emit gases that pollute the air or cause global warming.

- *By Seth Borenstein—Knight Ridder Newspaper, June 2003*

Senate OKs Plan to Revive Nuclear Power

Washington -- The nation's moribund nuclear-power industry, whose last new plant was ordered in 1973, is showing signs of awakening soon, thanks to a generous jolt of federal help and promises of more to come.

Later this year, three utilities -- Entergy, Exelon and Dominion Resources -- will begin seeking licenses to build new nuclear plants, reviving a practice essentially abandoned in America after 1979's Three Mile Island near-meltdown.

Bush administration officials and nuclear industry leaders speculate that the first new nuclear power plant will be finished around 2010, probably next to an existing nuclear generator somewhere in the Southeast.

"The nuclear power industry in the United States is undergoing a renaissance," Nuclear Regulatory Commission Chairman Nils Diaz said last week. "We need to be ready if we are requested to expand our regulatory licenses to new areas, like new reactors."

Even with robust new federal help, however, iffy economics, worries about plant security in an age of terrorism and continuing fears about safety risks make some outside experts, especially economists, doubtful that nuclear power is ready for a comeback.

The last five U.S. nuclear power plants cost 11 times as much to build per kilowatt produced as do current natural gas plants. Even if new next-generation nuclear plants can be built much more cheaply, their construction costs still are

likely to be two to four times higher than natural gas, coal or wind plants, according to the U.S. Energy Information Administration.

Both the Congressional Budget Office and the investment-rating firm Standard and Poor's concluded recently that investing in loans to build large nuclear power plants is a bad risk. Some analysts think the same logic will keep nuclear power dormant.

"All that's happening right now is that the pieces are being put into the puzzle, but the puzzle hasn't been solved yet," said Geoff Rothwell, a Stanford University economist who specializes in nuclear issues. "It's closer, so there's optimism. But there's no reason to be over-optimistic right now."



The dome-shaped containment building at the Shearon Harris Nuclear Power Plant near Raleigh, NC

House group pushes for full Yucca funding

A bipartisan group of House lawmakers is pressuring House appropriators to give the Energy Department the full \$591 million it requested for Yucca Mountain next year.

The department has been frustrated in past years as Congress cut its Yucca budget. Now the proposed nuclear waste repository is in a crucial phase of development, and department officials say they need the \$591 million to avoid project delays.

Congress and President Bush last year approved the site 90 miles northwest of Las Vegas as the best place to store the nation's most radioactive nuclear waste, which for decades has been piling up at power plants and U.S. defense sites nationwide.

The department needs the money to finish a complex application for a Yucca license by next year and to continue plans to construct and ship waste to Nevada, department officials say. The department is scrambling to stay on a schedule that would allow the repository to open by 2010.

"We believe there is a broad bipartisan group in both the House and the Senate that obviously supports Yucca Mountain," department spokesman Joe Davis said. "We believe it should be fully funded and, if it's not, we'll be disappointed."

In a letter signed by 23 Republicans and nine Democrats, the House lawmakers urged two key members of the House Appropriations Committee to fully fund the project. In addition, the lawmakers requested that the \$134 million that was cut from the Yucca budget last year be restored.

Designing and constructing Yucca "represents a strong first step toward addressing the problem of safely storing spent reactor fuel and high-level radioactive wastes" the June 13 letter to Rep. Peter Visclosky, D-Ind., and Rep. David Hobson, R-Ohio, said.

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BUILDING CHEAPER PLANTS

The nuclear industry pins its hopes on a new generation of plants that are cheaper to build and more uniform in design.

"It's a different world now today, and that's been proven overseas," said Dan Keuter, vice president for nuclear business development at Entergy, a New Orleans-based utility. "They're building plants in China on budget and on schedule. They're building them in Korea and on schedule."

Entergy, the nation's second-largest nuclear power company, is going through the process of "early site permitting" for a new nuclear plant next to its Grand Gulf generator at Port Gibson, Miss. But the first new nuclear plant probably will be built by a consortium of two to five companies -- sharing the risk, up to \$2.5 billion -- perhaps in the Tennessee Valley.

The NRC has streamlined the licensing system so a company could outline plans and get permission to build and operate in just one application, Diaz said. Licensing used to take years.

Federal loan guarantees are key, Keuter said, because the nuclear power industry is in a "chicken-and-egg scenario": It can't get financing until someone proves nuclear plants can be cost-efficient, and it can't build such a next-generation facility until it gets financing.

Critics call the federal loan guarantee a whopping subsidy to a mature industry that should take the financial risk on its own. The federal government already backstops insurance for major accidents at nuclear plants. The biggest to date: 1979's breakdown of the Three Mile Island reactor outside Harrisburg, Pa., which leaked radioactivity and threatened a catastrophic meltdown that took seven days to contain.

All told, the federal government has spent more than \$66 billion "to prop up the industry," said Jill Lancelot, the president of Taxpayers for Common Sense, a liberal budget-watchdog group. "Why do we see this push? Because private investors are unwilling to support this."

The Congressional Budget Office in May estimated "the risk of default on such a loan guarantee to be very high -- well above 50 percent."

A report June 4 from Standard and Poor's said: "The industry's legacy of cost growth, technology problems, cumbersome political and regulatory oversight and the newer risks brought about by competition and terrorism concerns may keep credit risk too high for even the Senate bill to overcome."

Stanford's Rothwell said multibillion-dollar construction costs combined with a volatile electricity market make new nuclear plants unlikely.

Alan Noguee, energy program director at the Union of Concerned Scientists, an environmental advocacy group, also remains unconvinced that nuclear power is back.

"There's talk of a nuclear second coming every few years and so far, obviously, without success on their part," Noguee said.

Nuclear industry advocates say otherwise. "Their time has come," said Edward Tirello, the managing director for Berenson and Cos., an investment bank. "Sometimes the federal government has to step in, and costs will come down and it will be very viable."



Representatives from Affected Units of Government (AUG) meet with the DOE in June, 2003



Students examine the boring machine used to penetrate the 3-mile underground tunnel at Yucca mountain



Hard hat briefing before entering tunnel



Churchill County High School Students and chaperones on top of the crest of Yucca Mountain

Churchill County High School Students visit Yucca Mountain/Nevada Test Site

Churchill County High School teacher, Steve Johnson, led his students to the proposed Yucca Mountain Nuclear Waste Repository and then to the Nevada Test Site. This annual tour has enabled science students for the past several years to go on-site at the proposed nuclear waste repository. Students are guided through the 3-mile long tunnel stopping along the way for scientist to explain about the mountain and answer questions. Mr. Johnson's students are well versed about nuclear power and nuclear waste. Yucca Mountain scientist and guides have been very complimentary in regard to Churchill County high school students knowledge and their exemplary behavior. Yucca Mountain tour staff have complimented not only their teacher but the inquisitive students and the depth of their questions. While visiting Yucca Mountain and the Nevada Test Site Churchill county students stay overnight in Beatty driving down on Sunday and having one full day at each site.



Inside the tunnel at Yucca Mountain

House group pushes for full Yucca funding

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"Further, resolving this nuclear waste issue is a critical component in securing our long-term energy future," the letter said.

The House is more likely than the Senate to approve the full \$591 million. The department has not received its full budget request for Yucca in past years largely because of Sen. Harry Reid, D-Nev., a member of the Senate Appropriations Committee. Reid quietly negotiates to reduce the funding.

Nevada lawmakers said they expect the budget process to follow a similar pattern this year.

Reps. Shelley Berkley, D-Nev., and Jim Gibbons, R-Nev., said they planned to circulate letters of their own to House colleagues urging Yucca budget cuts.

Benjamin Grove—Las Vegas Sun, June 2003



Chamber of Commerce building at 85 North Taylor, also where you will find the Churchill County Yucca Mountain Oversight Program office

Yucca Mountain Public Information Room Ready to Open

The public information room is located at 85 North Taylor Street in the Chamber of Commerce Office. Information on the Yucca Mountain project is available there and the information room is open to the public during normal business hours Monday through Friday 8:00 am to 5:00 pm (closed noon to 1:00 pm). In addition to public information materials available in the office, information about Yucca Mountain can be obtained from a variety of sources upon request. Written requests can be mailed to US Department of Energy Yucca Mountain, Site Characterization Project Office at P.O. Box 364629, North Las Vegas, NV 89036-8629, or toll free at 1-(800)-225-6972 or contact them at www.ocrwm.doe.gov/contact/index.shtm, 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. Please allow one to two weeks to process any information requests you may have.



This newsletter is a publication of the Churchill County Repository Planning and Oversight Program. Churchill County is one of ten affected units of local government (AULG) involved in the proposed Yucca Mountain Repository. Funding provided to Churchill 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.

For more information on Churchill County's program contact the County Managers Office (775) 423-4365. 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