

Nuclear Waste Review

White Pine County

June 2005

DOE makes case for repository funding changes

The money-starved Yucca Mountain nuclear waste repository risks not being able to cover the long-term costs of construction and transport for the 77,000 tons of radioactive waste slated for burial there unless Congress finds a new way to fund the program, a top Energy Department official said yesterday.

The result: Spent nuclear fuel from more than 100 nuclear power plants will have to remain on site, Ted Garrish, deputy director of DOE's Office of Civilian Radioactive Waste Management, told lawmakers in separate hearings yesterday.

The cure: Find some way to reclassify the \$750 million in annual receipts to the Nuclear Waste Trust Fund, he said. That is because discretionary dollars would go directly to the Yucca Mountain program, giving the department greater access to the \$9 billion to \$10.5 billion it needs between now and the time the repository opens, which would be 2012 at the earliest, Garrish explained.

House lawmakers are open to the idea, though it is unclear how they plan to go about it.

Energy and Commerce Committee Chairman Joe Barton (R-Texas) says he will introduce legislation this year to address the problem. But at yesterday's hearing, Energy and Air Quality Subcommittee Chairman Ralph Hall (R-Texas) said he is not sure whether Barton will pursue it through a standalone bill or as part of the comprehensive energy bill that the full committee is scheduled to consider shortly after the Easter recess.

On the Democratic side of the committee, Reps. John Dingell (Mich.) and Rick Boucher (Va.) sounded warning notes that anything short of a full effort to take the entire trust fund "off budget" for direct spending will not provide the program all the money it needs and primarily will serve to mask increasing deficit spending.

When it comes to the Senate, Senate Minority Leader Harry Reid (D-Nev.), a key member of the appropriations Committee and staunch opponent of Yucca Mountain, is the roadblock to passage, with an assist from fellow Nevada Sen. John Ensign (R), who is a member of the Budget Committee and last year helped block reclassification efforts there.

Nevertheless, DOE appears to be counting on some reclassification measure to meet its goals of opening the repository sometime in the next 10 years.

Energy Department officials last month acknowledged for the first time that the legal and funding problems surrounding the repository program will force a delay in the planned 2010 opening, with some saying the new target is 2012 or 2015.

But Garrish now says the department will not give a specific target date for opening the repository. He said the timeline depends on how U.S. EPA addresses the rule change necessary to reflect last summer's court ruling that the repository's 10,000 year radiation standards was incorrectly calculated, whether the department can get through the NRC licensing process in three rather than four years, and whether Congress can change the funding mechanism so the project can get better access to the now-\$22 billion trust fund. However, getting access to the fund is difficult, and only \$6 billion of the fund has actually been spent on the program since 1982. The repository program gets caught up in the annual congressional appropriations fights over the size of the program's budget and in efforts to use the fund to count against the budget deficit.

Though ratepayers of the nation's nuclear utilities make annual contributions to the fund through their monthly bills, Congress still must make annual appropriations for the program. And with Reid as a senior member of the Appropriations Committee, he has been able to choke funding for the project for several years.

But changing the funding mechanism requires approval of congressional appropriations, budget and authorization committees. Last year, the administration's plan to reclassify the fund as part of the FY '05 budget nearly caused a shutdown of the repository program when lawmakers objected and threatened

to fund Yucca Mountain at a paltry \$131 million. The program eventually settled for \$577 million.

Garrish told the Senate Energy and Water Appropriations Committee yesterday that the proposed FY '06 budget of \$651 million for Yucca Mountain will be adequate for this year, though he warned that the program soon will need more than \$1.5 billion each year to prepare to accept waste from the nation's nuclear utilities.

Though Reid suggested the Yucca Mountain project had "really a bad year" last year because of the funding and legal problems that helped contribute to the department missing its self-imposed December 2004 deadline for filing its NRC license application, Garrish said the program is in better shape now than it has been in years.

He said the department is nearly halfway through getting its licensing support documents to NRC for required certification, has addressed 293 of the key technical issues raised in the pre-licensing process, has a draft of the license application in hand that is now being refined, and is now working on transportation activities.

Source: Environment and Energy Publishing
By Mary O'Driscall

Reid/Ensign demand halt to Yucca Mountain work **Cite scientific malpractice and on-going FBI investigation into falsified documents**

Washington, D.C.—In a harshly worded letter to Department of Energy Secretary, Sam Bodman, U.S. Senators Harry Reid and John Ensign demanded an immediate halt to work at Yucca Mountain. In recent weeks, the Department of Energy and the Department of Interior have admitted that employees at the Yucca Mountain project falsified scientific work. The FBI and U.S. Attorney's office have agreed to conduct an investigation and the serious implications of the fabricated work, Reid and Ensign are calling for work on the license application to stop.

A copy of the letter follows:

April 4, 2005

*The Honorable Samuel Bodman
Secretary of Energy
1000 Independence Avenue, S.W.
Washington, D.C. 20585*

Dear Secretary Bodman:

In light of the ongoing investigations, we write to demand that the Department of Energy and all contractors suspend all work related to the license application for Yucca Mountain nuclear waste repository project. The Department should wait until the investigations by the Federal Bureau of Investigation, the U.S. Attorney for Nevada, the Inspector Generals at the Department of Energy and the Department of the Interior into the falsified documents is completed. It is clear that scientific malpractice has occurred and fundamental questions about the quality, validity and integrity of the scientific review and quality assurance processes associated with the YMP must first be answered about the project.

Given the magnitude of human health and safety implications of the Yucca Mountain project, we hope that you will act immediately on this request. We appreciate your attention to this important matter.

Sincerely,

*Harry Reid
United States Senator*

*John Ensign
United States Senator*

Source:<http://gov.state.nv.us>

Task force supporting Yucca dump site forms

Washington — Yucca Mountain advocates created a task force Monday to try to convince the public that the nation needs to open the proposed federal nuclear waste repository in Nevada.

Yucca Mountain Task Force members want the site to open “within the shortest time frame possible — consistent with public health and safety.” They will work on a grassroots effort to get Congress to fully fund the program encourage the Energy Department to submit a license application and want a new radiation standard to be created by the Environmental Protection Agency or Congress.

The push for the project comes at the same time that Nevada’s congressional delegation is calling for an independent investigation into the alleged falsifications of scientific research that supported the nuclear dump. The Energy Department discovered the problems while reviewing e-mail messages.

In the emails U.S. Geological Survey scientists talk about making things up and about how they “fudge” data in the messages. Nevada’s congressional delegation expects the investigations into the e-mails will produce information significant enough to stop the program.

But Terry Freese, director of legislative programs for the Nuclear Energy Institute, the industry’s lobbying organization said Nevada has “overstated” the effects of the recently discovered e-mails that suggest scientific data was falsified.

Freese said the department, so far, has not found anything that affected long-term science or the site’s suitability to serve as a repository. The Interior and Energy Department and the FBI are investigating what happened.

“The industry believes it is important to keep this investigation in context,” Freese said. “We are taking about a relatively small, focused area in a broad, 20 years of research.”

Yucca Mountain Task Force Co-Chairman David Wright, a South Carolina Public Service Commissioner said this new effort was “totally unrelated” and not a counterattack.

Martez Norris, the coalition’s executive director, said the Task Force grew out of “continued frustration” about the project’s failure to move forward. Yucca supporters wanted a united voice again, as they had when working on Congress to approve the site in 2002.

“Once the resolution was recertified, it was like everybody went home and what we are trying to do is to bring everybody back to the table,” Norris said. “Part of it is to educate Congress and keep it in the forefront.”

Charles Pray, Task Force Co-Chairman and Maine’s State Nuclear Safety Advisor, said the goal is to spread the word that nuclear ratepayers have put \$24 billion toward a final storage solution they have not seen yet.

“It’s been a one-sided conversation as of recent weeks, months,” Pray said. “I don’t think there has really been an overall discussion about the alternatives. Nobody seems to put that information out to the public.”

Pray emphasized that without Yucca, nuclear waste would stay stored at nuclear power plants, which is not part of the industry’s agreement with the government. The plant’s storage containers are not designed to hold waste forever.

Sen. Harry Reid, D-Nev., plans to introduce a bill that would allow money from the Nuclear Waste Fund to be used to keep waste at the nuclear power plants. The bill would allow the government to take responsibility for the waste on-site, eliminating the need having to ship the waste across the country, spokeswoman Tessa Hafen said.

But Pray objects to Reid’s idea to keeping waste at the plants, saying the government has spent billions doing environmental studies and tests at Yucca.

“I am not sure the federal government has the money to do that same evaluation for those 35 states,” Pray said.

The Task Force wants to recruit members in all 41 states where nuclear power users pay into the Nuclear Waste Fund, the account earmarked to fund the repository. Ratepayers have put \$24 billion into the fund but Congress has shortchanged the department’s budget requests for the project by \$1 billion during the past decade.

The group wants Congress to change the budget rules so the \$750 million paid annually into the fund can go straight to the project without affecting other federal project in the energy spending bill.

“It’s a question of whether or not all these states, and all these counties, and all these cities and all

these Indian nations and all these other people who have material sitting there, who have spent the money, are going to let a small group of people focused on the state of Nevada decide what's going to happen," said Jack Edlow, president of Edlow International Co. a waste shipping company. Edlow is also in charge of the U.S. Transport Council.

Source: Las Vegas Sun
April 26, 2005

Nevada lawyer says e-mails show Yucca Mountain 'flunked' test

Las Vegas—A new set of emails written by Yucca Mountain employees shows the Energy Department knew the project "flunked" because the volcanic rock formation couldn't live up to its scientific billing, an attorney for Nevada said.

E-mails found on a public database of documents supporting the Energy Department's plan to request a license to store nuclear waste at Yucca Mountain show how scientists concluded the mountain couldn't block moisture as planned.

A 1997 message from department scientist Larry Rickertsen, titled, "Real Trouble Ahead," says "The answer is clearer than ever. Engineering has to do the job."

Egan said the messages provide details about how program managers and scientists decided to change the rules in the late 1990s, shifting the program away from what Congress had directed them to find—a repository reliant on natural rock barriers to keep water away from nuclear waste—to one that relied heavily on engineered barriers, such as high - tech metal waste containers.

"They (the e-mails) show the site not only flunked but it flunked spectacularly and there is nothing they can do to stop it," said Joe Egan, a Washington attorney representing the state in its fight against Yucca Mountain.

An Energy Department spokeswoman said the e-mails only demonstrate an ongoing collaborative scientific process.

"As part of the license application that DOE is developing and will submit to the Nuclear Regulatory Commission, we will thoroughly outline the safety basis for Yucca Mountain," department spokeswoman Anne Womack Kolton said.

Egan said his staff discovered the e-mails by searching the Energy Department's database using the word "falsification" since the department announced last month it discovered U.S. Geological Survey employees might have fabricated scientific data.

While the new e-mails are different from those written by USGS employees and now under investigation by the Energy and Interior Departments and the FBI, Egan said they are just as important and provide ammunition to the state's fight against the proposed repository.

In September 1997, one scientist urged another to stop clinging to the notion that Yucca's rock tunnel walls could isolate waste, telling him that Yucca Mountain itself "cannot do the job."

"I know you are trying to dodge the geologic disposal problem, and steering clear of fatal flaw type concerns," the scientist wrote. "But the simple fact is that the only purpose of the natural system now is to provide a benign environment for the engineering."

If the project moves into a Nuclear Regulatory Commission licensing hearing, Egan said Nevada officials will use the e-mails to resurrect arguments challenging the basis for selecting Yucca Mountain, 90 miles northwest of Las Vegas.

The commission ultimately will decide whether the site is safe, and whether to grant a license to the Energy Department.

Source: <http://www.nevadaappeal.com>
April 23, 2005

U.S. EPA expects to complete the rewrite of its radiation standards for nuclear waste storage at the Yucca Mountain, Nev., repository by September — a few months late than expected.

The target for completing the standard was included in EPA's regulatory agenda released yesterday.

A federal appellate court last summer threw out EPA's 10,000 year radiation standard for the Yucca Mountain nuclear waste repository. The standards were established in 2001, and the court said they were inconsistent with National Academy of Sciences recommendations on setting a "peak dose" standard relating to the time when the most radiation would be released from the repository site. Those recommendations were referred to in the Energy Policy Act of 1992.

The court decision put on the table the issue of when the peak dose of radiation would occur. The agencies state that peak dose would occur 10,000, maybe even 100,000 years in the future, while Nevada's attorneys contend the peak dose of radiation will occur whenever the packages within which the waste is contained actually fail — and, they say, that will happen sooner rather than later.

On a procedural basis, the court decision contributed to DOE's missing its self-imposed December 2004 deadline to file its repository site license application with the Nuclear Regulatory Commission. EPA since last December has been working to revise the standards, and earlier this year officials said they expected the new standards to be ready in late spring or early summer to accommodate DOE's plans to complete work on the license application by the end of the year.

However, a new series of problems related to falsification of scientific information regarding water flows at the repository site 90 miles northwest of Las Vegas are threatening to further delay the application process. Energy and Interior department inspectors general and the FBI are investigating the matter, and no one is saying how soon that issue will be resolved.

EPA officials were unable to comment on the process, but the agency's rewrite appears to be centering on three alternatives, according to Joe Egan, a Washington-based lawyer hired by the state of Nevada to fight the project, who said he met recently with EPA officials to discuss the matter.

The first, he said, is to simply attempt to restate for the court more clearly what the radiation standard is intended to do. "We told them it's a go-ahead-make-my-day proposition," Egan said, signaling Nevada would promptly file suit against the regulations were that to occur.

The second would be to continue with the 10,000 year standard, and develop a more lax standard for the post-10,000 year timeframe. The third alternative would impose quantitative standards before the 10,000 year cutoff and more quantitative standards thereafter.

There is some support for different standards based on the 10,000 year cutoff. The Electric Power Research Institute recently recommended that any changes to the post-10,000 year standards be made in a "stylized manner" that allows for use of a limited set of scenarios and does not introduce elements that "require arbitrary scientific assumptions to carry out the analysis."

Basically, the study asserts that any scientific analysis beyond the 10,000-year time frame is based on increased uncertainty. The 10,000-year regulations the court remanded to EPA already provide "a high degree of protection" for future human populations, EPRI says, because DOE has undertaken "a robust engineered design" for the waste package containers to ensure compliance.

"These are never easy things to challenge," he added. "We're on guard with everything. I find it disappointing that the one thing that makes scientific sense is the one thing they're not considering which is how we get to be cynical."

Source: Greenwire senior reporter,
Mary O'Driscoll
May 17, 2005