

NUCLEAR unWASTEd NEWS

A QUARTERLY SUMMARY OF GENERATION, TRANSPORTATION, STORAGE AND DISPOSAL ISSUES

OCTOBER - DECEMBER 2006

VOL. 1, No. 4

Headline

Federal Court Awards \$143 Million to New England Utilities for On-Site Storage

10/06

The U.S. Court of Federal Claims unsealed a court order on Wednesday, October 4, awarding three decommissioned nuclear power plants \$143 million for continuing to house spent fuel on-site, due to the Department of Energy's (DOE) failure to take that waste by the 1998 contractual deadline. The New England utilities involved in the lawsuit and their financial damages include: Maine Yankee Atomic Power Co., \$75.8 million; Connecticut Yankee Atomic Power Co., \$34.9 million; and Yankee Atomic Power Co. (Massachusetts), \$32.9 million.

The Justice Department is currently reviewing the court's decision, which would require payment out of the Federal Judgment Fund and not the Nuclear Waste Fund (NWF) which collects fees from utility ratepayers for final waste disposal, and is expected to appeal the ruling. Meanwhile, the utilities involved have expressed pleasure with the monetary judgment, but remain concerned with the unsettled problem of waste storage at their shutdown sites.

This court decision follows another such decision made in January on behalf of the Tennessee Valley Authority (TVA), which resulted in the first ever court-ordered DOE payout for its breach of contract to receive a utility's spent fuel. TVA received \$34.9 million in August as a form of reimbursement for the utility's out-of-pocket expenses related to the installation and operation of on-site storage (which they financed in addition to their ratepayer contributions to the NWF). Congressional concern with this trend of liability payouts has led several legislators to support federal interim waste storage efforts (see 6/30 article) until the Yucca Mountain permanent repository is ready to receive spent fuel from utilities - DOE's estimated date being March, 2017 (see 7/24 article).


The latest proposal for interim storage legislation came from Senator Pete Domenici, chair of the Energy and Natural Resources Committee and Appropriations Subcommittee on Energy and Water Development, just before the Senate adjourned for election season at the end of September. His bill, S.3962, seeks, among other waste removal acceleration provisions, the temporary storage of nuclear waste at a surface facility on Yucca Mountain prior to permanent emplacement in the repository there (see 10/2 article). Domenici hopes to push this legislation through next year in order to get the spent fuel out of utilities' hands, finally ceasing DOE's related financial liabilities to them.

[Court Decision](#)

[News Article](#)

[Domenici Bill, S.3962](#)

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Also sourced Platts Nuclear Fuel newsletter, Volume 31 / Number 21 / October 9, 2006 (subscription required)

Domenici Introduces Fuel Management Bill including Interim Surface Storage at Yucca Mountain

10/02

On September 27, Senator Pete Domenici, chair of the Energy and Natural Resources Committee and Appropriations Subcommittee on Energy and Water Development, introduced his own version of the Nuclear Fuel Management and Disposal Act, which he initially introduced for the Bush administration in April.

S.3962, the senator's new "Nuclear Waste Acceleration to Yucca" or Nu-WAY bill, would dramatically change current law regarding the management of spent nuclear fuel on its way to eventual disposal in a permanent repository at Yucca Mountain, Nevada. The bill would require the establishment of an on-site surface facility at Yucca Mountain which could potentially begin accepting commercial waste for interim storage in 2011, six years before the Department of Energy's (DOE) "best achievable" projection of 2017 for permanent waste emplacement in the mountain.

The proposal outlined in Domenici's bill would require a License Application to be submitted to the Nuclear Regulatory Commission (NRC) for the surface storage facility in 2008, along with the application for the permanent repository. The NRC would have 18 months from that date to decide on the surface facility application, and four years for the permanent repository. Domenici's legislation also contains elements addressing reprocessing of spent fuel under the Global Nuclear Energy Partnership (GNEP). DOE would determine how much waste would be sent to reprocessing plants for recycling, which Domenici believes is an integral part of waste management if a nuclear renaissance is truly to occur. If reprocessing technologies in accordance with GNEP are not available at the time Yucca Mountain is open for business, however, spent fuel would be sent to the repository for disposal.

Although S.3962 includes many provisions of the original Nuclear Fuel Management and Disposal Act, S.2589, such as: land withdrawal, authorizing DOE to begin construction of some non-nuclear related infrastructure ahead of an NRC license, Nuclear Waste Fund budgetary changes, and congressional waste confidence, several controversial provisions were omitted. In particular, Section 7 of the original bill, which would have preempted state, tribal, and in some cases Department of Transportation requirements for the shipping of nuclear waste, is not explicitly addressed in Domenici's new bill.

The urgency for such legislation has grown as utility lawsuits against DOE for breach of contract in failing to take nuclear waste from their sites are beginning to require significant payouts. Under the Nuclear Waste Policy Act of 1982, as Amended, the federal government was obligated to begin accepting commercial spent fuel from utilities by 1998, in return for utility ratepayer contributions to a Nuclear Waste Fund. Although ratepayers have fulfilled their fee obligation under the law for over 20 years, DOE's lack of receipt has required power companies to finance the installation and operation of waste storage facilities on their own commercial sites out of their own pockets. Domenici supports interim storage as a way to remove the waste from reactor sites and limit DOE's liability.

Upon introduction of S.3962, Domenici admitted that he did not expect the bill to pass this year with midterm elections requiring an early congressional recess at the end of September. Rather, introducing the bill was likely intended to set the stage for the upcoming debate on waste disposal expected to take place in earnest in the new year.

[Domenici Bill, S.3962 ..](#)

[Domenici Press Release](#)

[News Article ..](#)

Also sourced Platts Nuclear Fuel newsletter, Volume 31 / Number 21 / October 9, 2006 (subscription required)

DOE Announces 11 Recipients of GNEP Siting Grants

11/30

On Thursday, November 29, the Department of Energy (DOE) announced the selection of 11 sites across the United States that will receive grant funding to conduct siting analyses for possible integrated spent fuel recycling facilities. For fiscal year 2006, Congress appropriated up to \$20 million for these studies.

Fourteen applications were initially submitted for GNEP siting grants, of which twelve were chosen to be reviewed under criteria included in the Financial Assistance Funding Opportunity Announcement from August 2006. Two of these twelve applications were consolidated into one proposal because each was related to the Hanford facility in Washington.

Of the 11 sites chosen, six are DOE owned and operated:

1. Atomic City, ID EnergySolutions, LLC
2. Barnwell, SC EnergySolutions, LLC
3. Hanford Site, WA Tri-City Industrial Development Council/Columbia Basin Consulting Group
4. Hobbs, NM Eddy Lea Energy Alliance
5. Idaho National Laboratory, ID Regional Development Alliance, Inc.
6. Morris, IL General Electric Company
7. Oak Ridge National Laboratory, TN Community Reuse Organization of East Tennessee
8. Paducah Gaseous Diffusion Plant, KY Paducah Uranium Plant Asset Utilization, Inc.
9. Portsmouth Gaseous Diffusion Plant, OH Piketon Initiative for Nuclear Independence, LLC
10. Roswell, NM EnergySolutions, LLC
11. Savannah River National Laboratory, SC Economic Development Partnership of Aiken and Edgefield Counties

With the funding distributed by DOE, the 11 grantees will conduct site characterizations related to hosting facilities needed in the recycling of spent nuclear fuel (SNF). Information in studies of non-DOE sites will likely include analysis of site and nearby land uses; demographics; aquatic and riparian ecological communities; terrestrial plant and animal habitat; threatened or endangered species; historical, archaeological and cultural resources; geology and seismology; weather and climate; and regulatory and permitting requirements.

The development of SNF and high-level waste recycling to reduce the volume of waste requiring final disposal is an important component of the Global Nuclear Energy Partnership (GNEP), which is part of President Bush's Advanced Energy Initiative. Recycling is considered particularly critical if a nuclear energy renaissance takes root, since even at the current rate of production there will be enough waste around the country to fill the proposed repository at Yucca Mountain.

"As our economy grows, so will the need for a reliable, emissions-free energy generation," said Assistant Secretary for Nuclear Energy Dennis Spurgeon in a statement. "That is why we are pleased that so many communities across the country are interested in hosting the initial facilities necessary to support this exciting project."

The GNEP program has not been free of criticism, however. Among the chief concerns of the program's critics is the possibility that reprocessing of spent nuclear fuel will make it easier for terrorists and enemy nations to obtain the materials necessary to develop nuclear weapons. Proliferation concerns played a significant role in stopping reprocessing in the US when it was first initiated in the 1970s. Questions also loom as to the expense of the yet to be developed technology which GNEP aims to use to prevent weapons' grade byproducts.

[DOE Press Release](#)
[News Article ...](#)

WIPP to Accept Remote-Handled Waste

10/22

On Monday, October 16, Governor Bill Richardson of New Mexico and the state's Secretary of Environment, Ron Curry, signed a permit allowing the Waste Isolation Pilot Plant (WIPP) in Carlsbad to begin storing more highly radioactive waste from around the nation.

Since opening for operation in 1999, WIPP has accepted over 83,000 drums of low-level, transuranic-contaminated material (TRU waste), such as clothing and tools exposed to radiation. After years of competent reception and storage of this waste, and months of government hearings with the public and safety investigations, WIPP will now be allowed to store "remote-handled" waste, the radiation content of which is more penetrating and therefore must be handled mechanically. According to a Department of Energy (DOE) press release, the permit also includes: "alternate methods for analyzing wastes prior to shipment to WIPP, increased container storage areas aboveground, more efficient methods for monitoring volatile organic compounds in the repository, a new dispute resolution process, and an e-mail notification system to inform the public of various permit-related activities."

Proponents of WIPP's expanded responsibilities point to the fact that the site was originally characterized and designed to hold both forms of waste, and will play an integral role in the cleanup of the former nuclear weapons complex, like the nuclear facility at Hanford, Washington. "WIPP is a key element of the safe cleanup of this nation's defense waste, and the significance of this permit, which enables the department to continue its cleanup momentum, cannot be understated," explained Assistant Energy Secretary James Rispoli.

Gov. Richardson noted that the expansion of WIPP could create an additional 200 jobs for the Carlsbad area and add to New Mexico's stature in the arena of waste disposal: "This means New Mexico, technologically when it comes to waste, is one of the leaders around the world."

While the permit represented a step forward for many, others viewed the event with less optimism. The group Citizens for Alternatives to Radioactive Dumping argued that a study should have been conducted "to determine if the current health of the communities surrounding the WIPP site and along the WIPP routes can bear yet more environmental stress."

Despite these concerns, supporters felt that appropriate measures had been taken to ensure the safety of the changes. "This is the best possible permit," said Richardson. "It both allows for the safe disposal of remote handled transuranic waste and—at the request of the environmental community—creates vastly better public access to information about the waste that is accepted at WIPP."

WIPP can begin accepting remote-handled waste thirty days after the signing of the permit, but is expected to receive the first shipment in the spring of 2007.

[DOE Press Release .](#)

[Carlsbad Current-Argus Article](#)

[Seattle Post Intelligencer Article](#)

NUCLEAR unWASTEd NEWS

National Conference of State Legislatures, 7700 East First Place, Denver, Colorado 80230, (303) 364-7700.

William T. Pound, Executive Director

Funding for this newsletter is provided by the U.S. Department of Energy. Any opinions, findings or conclusions in this publication are those of NCSL staff and do not necessarily reflect the views and policies of the U.S. Department of Energy.

The purpose of this newsletter is to provide legislators, staff and interested parties with information on high-level radioactive waste and environmental management cleanup.

Articles in this newsletter have been researched by NCSL staff. Resources include *E&E News/Greenwire online*, *Nuclear Waste News*, *Nuclear Fuel*, *Platts Nuclear Fuel*, legislative research office contacts and other sources.

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Layout and design: Alise Garcia.

DOE Extends Public Comment Period and Adds Scoping Meeting for the Yucca Mountain EIS

11/8

The Department of Energy (DOE) has scheduled one additional scoping meeting to the original three, and extended the public comment period for the Supplemental Yucca Mountain Environmental Impact Statement (EIS).

The Supplemental EIS will expand on the “Final Environmental Impact Statement for a Geologic Repository for the Disposal of Spent Nuclear Fuel and High-Level Waste at Yucca Mountain, Nye County, Nevada,” which was released in February 2002.

DOE made similar adjustments to the EIS for the planned rail line connected to the Yucca Mountain repository. A sixth public scoping meeting has been planned for November 27 in Reno, Nevada.

In April 2004, DOE announced the selection of the “mostly rail scenario” for the transportation of spent nuclear fuel and high-level radioactive waste to Yucca Mountain. At the same time, the Department announced its intentions to examine the Caliente corridor for the potential construction of a rail line to the facility.

During the subsequent public scoping meetings, DOE received suggestions that the Department examine the Mina corridor as a possible alternative to Caliente because of potentially lower costs due to existing rail lines and terrain more favorable to construction. After considering the route, DOE eliminated it as a viable option because it would require crossing the Walker River Paiute Tribe’s reservation, who had informed DOE in 1991 that it would not allow the shipment of nuclear waste across their land.

In May of this year, however, the Walker River Tribal Council agreed to allow DOE to include an analysis of the Mina route in the EIS. This prompted DOE to include a detailed examination of the Mina route as an alternative to the Caliente corridor in the current Rail Alignment and Final EIS, which is currently under review and public comment.

The public comment period for each EIS has been extended by 60 days and will run through December 12, 2006.

Upcoming Rail Line EIS Scoping Meetings:

Monday, November 13, 2006
4 p.m to 7 p.m
Goldfield School Gymnasium
Hall & Euclid
Goldfield, Nevada

Tuesday, November 14, 2006
4 p.m to 7 p.m.
Hawthorne Convention Center
932 E Street
Hawthorne, Nevada

Wednesday, November 15, 2006
4 p.m. to 7 p.m.
Fallon Convention Center
100 Campus Way
Fallon, Nevada

Joint Rail line and Supplemental EIS Scoping Meeting:

Monday, November 27, 2006
4 p.m. to 7 p.m.
UNR-Lawlor Event Center
1500 North Virginia Street
Reno, Nevada

[Yucca Mountain EIS links](#)
[Caliente Corridor EIS links](#)

Report Questions Security at Oak Ridge

10/18

The Project on Government Oversight (POGO), an independent “watchdog” group founded in 1981 and based in Washington, D.C., released a report on October 16 raising serious concerns about the safety of two nuclear facilities in Oak Ridge, Tennessee. The claims were met with blunt rejection by officials at the Department of Energy (DOE), Y-12, and ORNL. DOE explained that the report reiterated prior claims about security shortfalls that the Department had already taken steps to correct.

The report describes the Oak Ridge National Laboratory (ORNL) as “the most poorly protected site in the U.S. weapons complex,” and concludes that the Y-12 uranium storage facility fails to satisfy federal security standards. POGO’s report comes to the grim conclusion that security improvements will be necessary at each location to reduce their vulnerability as prime terrorist targets.

“Currently, both Y-12 and ORNL are at high risk because their guard forces cannot meet the required security strategy that would deny a terrorist access to the fissile materials stored at these sites,” POGO explained in its report. The group’s concern is that a terrorist would be able to penetrate the two facilities and construct a highly destructive makeshift nuclear explosive. The report estimated that such an attack could kill the 18,000 employees at ORNL and Y-12, and make sick an additional 60,000 local civilians from radiation exposure.

The report’s findings were based on government documents stretching back to the 1990s, in addition to vulnerability reports assembled by security analysts. POGO also conducted trials at ORNL in which investigators would visit the site in order to measure the security response to their presence. Based on these experiments, the report concluded that the investigators would have been able to detonate a bomb resulting in an explosion comparable to the bomb dropped on Hiroshima, Japan during World War II.

Steve Wyatt, spokesman at the Y-12 site, responded to this drastic assertion by stating, “There are better odds that an asteroid would hit Oak Ridge than the likelihood that terrorists would have the access and time to build and detonate an IND (improvised nuclear device).”

[POGO Report News Article ...](#)

International Fusion Project Agreement Signed in France

12/10

An international agreement between 30 nations has been reached that aims to eventually use the process of nuclear fusion to generate energy. Under the agreement, \$12.8 billion will be devoted to the establishment of the International Thermonuclear Experimental Reactor (ITER) at Cadarache, France, outside of Marseille. The signing concluded months of friction between France and Japan over who would host the project.

ITER will attempt to replicate the process by which stars—including the Sun—generate energy, combining atoms at extremely high temperatures. Traditional nuclear power plants have instead produced energy by splitting atoms, referred to as fission. The fusion process for producing energy has not to this point been successful because scientific advances have not been able to generate the necessary heat without burning more energy than would ultimately be produced.

But with the current alarms swirling around fossil fuel use - including global climate change, foreign dependence, and pricing - many countries are now willing to take assertive steps and invest the money required to develop technology that could create energy through nuclear fusion.

Producing energy via nuclear fusion versus nuclear fission is attractive in that it has the potential to generate massive amounts of energy with lower-level, shorter-lived radioactive waste than that which results from the fission process.

“The growing shortage of resources and the battle against global warming demand a revolution in our ways of production and consumption,” explained French President Jacques Chirac. “We have the duty to start research that will prepare energy solutions for our descendants.”

United States Energy Secretary Samuel Bodman echoed these sentiments regarding the significance of the agreement, saying that the United States is “Proud to be part of this partnership, and to join in the pursuit of nuclear fusion as a source of clean, safe, renewable and commercially deployable energy for the future.”

Other observers were less enthusiastic about the signing of the ITER agreement. Critics of the project point out that construction will cost more than \$6 billion, and another \$6 billion will be required for operations over the next 20 years - with no guarantee that the project will result in viable energy-producing technology.

[Forbes Article Link](#)

[ITER Link](#)

Also referenced Nuclear Waste News, Vol. 26, No. 23, Nov. 27, 2006, pg. 224.

Nebraska State Legislature Funds Nuclear Waste Cleanup

12/14

In late 2004, the University of Nebraska signed an agreement with the US Environmental Protection Agency (EPA) to remediate radioactive and other contamination at its Agricultural Research and Development Center. The location near Mead includes a former federal weapons facility, the Nebraska Ordnance Plant, which became a Superfund site in 1990.

The US Army Corps of Engineers has spent millions of dollars for soil and groundwater remediation from the bomb-making facility the federal government operated there during World War II and the Korean War. The uni-

versity, however, is responsible for the waste it buried or exposed the land to in the 1970s and 80s, including radioactive and other hazardous wastes and pesticides.

The total cost of the university’s cleanup project could range between \$6 and \$7 million depending on which remediation option the EPA selects, removing the waste or capping it. Whatever the expense, millions of dollars would certainly have severely strained the university’s total budget, especially considering they had already spent \$1 million on a site survey.

Although Nebraska’s governor did not include funds in the budget for this cleanup project, the state legislature agreed to appropriate \$4.2 million from the general fund and transfer another \$2.7 million from the state’s Environmental Trust Fund. Both the EPA and the university’s project managers prefer the more expensive but final remediation route of excavating, packaging, and shipping the contaminated soils and materials off-site. This is a more plausible option with the state legislative funding assistance.

The first phase of the university’s cleanup project is expected to begin early in 2007. There are two other potentially contaminated areas on the site, which the university will use its own funds to research in the new year.

[News Article](#)

Also referenced Nuclear Waste News, Vol. 26, No. 23, Nov. 27, 2006, pg. 229.

NCSL Online Resources

[NCSL Nuclear Waste Cleanup Webpage](#)

<http://www.ncsl.org/programs/environ/cleanup/cleanup.htm>

[State Legislation Database on Nuclear Waste Issues](#)

<http://www.ncsl.org/programs/environ/nucwaste.cfm>

[State Legislation Database on Environmental Justice Issues](#)

<http://www.ncsl.org/programs/environ/envjustice.cfm>