



NUCLEAR unWASTEd NEWS

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

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Headline

Committee Directs DOE to Plan for Interim Storage of Decommissioned Reactor Waste

6/20

A congressional report accompanying the Energy and Water Development Appropriation bill, allocating \$494.5 million for the Yucca Mountain project in fiscal year 2008, instructed the Department of Energy (DOE) to create a plan to begin accepting spent nuclear fuel (SNF) from decommissioned commercial nuclear reactor sites across the country.

The House Appropriations Committee report stated the committee’s belief that SNF at operating reactors ought to stay in place, referencing an American Physical Society study which found that moving spent fuel twice, from a reactor to interim storage sites and then to Yucca Mountain, would be too costly. Besides, operating reactors will continue to house spent fuel, which will need to be guarded and managed. For waste at the nine decommissioned reactors however, removal of the spent fuel would allow them to close.

The Committee report directs the Department to create a plan to “take custody of spent fuel currently stored at decommissioned reactor sites to both reduce costs that are ultimately borne by the taxpayer” (due to DOE’s breach of contract to take the fuel by 1998) and to build public confidence in a federal waste management policy. The report specifies that DOE should consider consolidating the waste “either at an existing DOE site, at one or more existing operating reactor sites, or at a competitively-selected interim storage site.” The report added that the 11 sites vying for spent fuel recycling facilities under the Bush administration’s Global Nuclear Energy Partnership could be part of this competitive process.

Appropriators also used the report to express their thoughts on a bill the Bush administration proposed last year and again this session. Lawmakers stated their disapproval of language in the Nuclear Fuel Management and Disposal Act dealing with Waste Confidence, which would remove from NRC consideration the “availability of sufficient repository capacity” when licensing new nuclear reactors. Other aspects of the Administration’s bill, including removal of the statutory limit of 70,000 metric tons of waste at Yucca Mountain, were supported in the report.

[House Appropriations Committee report](#)

Also referenced: *Platts NuclearFuel*, Vol. 32 No. 13, June 18, 2007, pg. 3

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Bill Addresses GNEP Nuclear Waste Storage

5/14

Representative Jean Schmidt of Ohio introduced the Nuclear Waste Storage Prohibition Act, a bill that would set limitations on storage at proposed recycling facilities under the Bush administration's Global Nuclear Energy Partnership (GNEP).

GNEP is an international nuclear power program initially outlined by the Department of Energy (DOE) in February 2006. According to the Department, "as part of President Bush's Advanced Energy Initiative, GNEP encourages expansion of domestic and international nuclear energy production while minimizing proliferation risks, and [reducing] the volume, thermal output, and radiotoxicity of spent nuclear fuel before disposal in a geologic repository."

Eleven sites around the country were chosen in November 2006 to receive GNEP grants to conduct siting analyses for possible integrated spent fuel recycling facilities. One such site was the Portsmouth Gaseous Diffusion Plant in Piketon, Ohio, an area which Congresswoman Schmidt represents. In her re-election bid last fall, Schmidt came under fire for supporting Piketon's consideration in the GNEP program when plans for needed storage of nuclear waste at a potential recycling facility there had not yet been detailed.

Rep. Schmidt's bi-partisan bill, HR 2282, seeks to quell fears that involvement in the GNEP program will result in sites becoming permanent radioactive waste dumps, by stating that no waste may be stored at a site until a recycling facility is under construction, and that that waste may not be retained for long-term storage.

Sponsors of the bill hope Piketon will be selected as an eventual GNEP site because of the billions of dollars projected to be spent over the lifetime of the project, much of which will go to high-paying jobs in their districts. The Piketon Initiative for Nuclear Independence

received about \$674,000 this year to complete the site analysis for DOE. The group submitted a report to the Department on May 1, which is under consideration at this time.

[Bill link](#) (must insert HR2282)

Vermont Legislature May Reconsider On-site Storage of Nuclear Waste

5/22

Vermont Senate President Pro Tempore Peter Shumlin may introduce legislation next year to review a decision allowing temporary storage of spent nuclear fuel in dry casks at the Vermont Yankee Nuclear Power Station. The decision to permit construction of the storage site was made over a year ago by the Vermont Public Service Board based on the determination that such storage would not threaten public or environmental health.

Commissioner of the Vermont Department of Public Service, David O'Brien, is concerned that rehashing the storage issue will distract legislators from deciding whether to extend the facility's operating license, which expires in 2012. State law requires power plants to request license extensions at least four years before expiration, after which a series of public hearings and studies must be conducted to determine the economic and environmental effects of extending operations.

While the federal Nuclear Regulatory Commission (NRC) has authority over the site's license extension, state law allows the legislature to determine the plant's ultimate fate. Senator Shumlin wants to resolve how Vermont Yankee's nuclear waste will be handled before addressing whether to extend the site's operating license for an additional 20 years.

Supporters of on-site storage and license extension argue that the plant generates 1/3 of the state's power, which if shut down in a few short years will leave the state clamoring to provide its citizens with clean and affordable

Storage cont.

energy. Opponents say that the environmental review process should be more thorough and receive greater attention, particularly as the storage site is located about 210 feet from the Connecticut River.

On a related note, before adjourning for the year on May 12, state lawmakers passed a climate change-related bill (H.520) that would support “Efficiency Vermont,” a pro-

gram that educates homeowners and businesses on practices to conserve electricity and heating fuels. Funding for the program would come from a marked increase in Vermont Yankee’s electrical generation tax, which the governor opposes and may veto.

[VT State Law \(Extension of Nuclear Plant Operations\) News Article \(Main\)](#)
[News Article \(H.520\)](#)

Yucca Mountain

Domenici Reintroduces Legislation to Accelerate Nuclear Waste to Yucca Mountain

5/24

Senator Pete Domenici (NM) and 11 cosponsors reintroduced a bill to accelerate the movement of spent nuclear fuel (SNF) and high-level radioactive waste (HLW) to Yucca Mountain in Nevada.

The “Nuclear Waste Access to Yucca Act” (NU-WAY), S.37, is the same bill Domenici introduced last year, which never made it out of the Committee on Energy and Natural Resources that he chaired. The senator acknowledged the tough road ahead for this bill given the fact that Senate Majority Leader Harry Reid hails from Nevada and has been steadfast in his commitment to block any legislation that would lead to the development of a repository in his state. Domenici nevertheless emphasized the importance of the repository to the growth of nuclear power, which he believes could provide much greater capacity of clean and affordable energy to people across the country.

The bill addresses several components to progress action on the project which are supported by the Bush Administration and particularly the Department of Energy (DOE), who is responsible for taking ownership of SNF and HLW and disposing of them at Yucca Mountain. S.37 would dramatically change current law regarding

the management of nuclear waste by requiring the establishment of an on-site surface facility at Yucca Mountain for interim storage. This surface facility could potentially begin accepting defense waste upon completion of an environmental impact statement, and commercial waste from nuclear reactors after the Nuclear Regulatory Commission (NRC) issues a construction permit. This could occur by 2011, six years before DOE’s “best achievable” projection of 2017 for permanent waste emplacement in Yucca Mountain.

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 by 1998 are beginning to require significant payouts. Utility ratepayers have met their side of the obligation under federal law to pay fees into a Nuclear Waste Fund for over 20 years, but DOE’s lack of receipt has required power companies to personally finance the installation and operation of waste storage facilities on their own commercial sites. Domenici supports interim storage as a way to remove the waste from reactor sites and limit DOE’s liability.

The proposal outlined in Domenici’s bill would require DOE to submit a License Application to the 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

Yucca Mountain cont.

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 takes root.

Although S.37 includes many provisions of the Administration's Nuclear Fuel Management and Disposal Act, also reintroduced this year, such as: land withdrawal, dismissal of the 70,000 metric ton statutory limit for the amount of nuclear waste that may be disposed at Yucca Mountain, 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 Administration's 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 NU-WAY bill.

[Bill link .](#)

Also referenced: *Environment and Energy Daily* online; Lucy Kafanov, "[Nuclear Waste: Domenici, Craig offer bill to move Yucca project along](#)," May 24, 2007. (subscription required)

LLW Disposal

GAO Report Suggests U.S. Could Improve LLW Disposal by Following International Examples

4/13

The Government Accountability Office (GAO) released a report that examines low-level radioactive waste (LLW) disposal practices in other countries to identify ways to improve the American system. The report investigated whether other countries:

- Have databases of LLW inventories;
- Provide for "the timely removal of higher-activity LLW" from the site of generation;
- Provide disposition options for all classes of LLW; and
- Require generators of LLW to "have financial reserves to cover waste disposition costs."

Leading generators of LLW in 18 countries were studied. GAO found that most of the countries have databases of LLW inventories, provided for removal of higher-activity LLW in a timely manner, and had disposition access for all levels of waste. The report also stated that half of the countries required generators to maintain reserves to cover potential costs.

Concerns are rising that LLW disposal capacity in the United States may not be adequate in the near future as existing disposal sites begin to close, and a potential surge in nuclear reactors could significantly increase the amount of LLW generated. In the report, GAO also points out past statements by the Nuclear Regulatory Commission (NRC) that non-utility generators of LLW (such as medical facilities and universities) are ill-equipped to handle storage themselves. This may force them to cut back on use of radioactive materials, limiting the many beneficial products and services they provide.

The NRC categorizes LLW into Classes A, B, C, and Greater than Class C, in order of escalating radioactive hazard/concentration. Currently, there are three disposal sites accepting commercially-generated LLW. The EnergySolutions facility in Clive, UT accepts an overwhelming majority of the country's commercial Class A waste, while Class B and C wastes are delivered to sites at Richland, WA and Barnwell, SC. The Richland site accepts waste from only 11 western states, and Barnwell is scheduled to cut off access to states outside the Atlantic Compact, which includes South Carolina, New Jersey and Connecticut, in July 2008. Unless the current arrangement is changed, the majority of states will be without disposal access for higher-activity LLW.

LLW Disposal cont.

In the U.S., at least 15 million cubic feet of LLW were disposed of in 2005. The GAO concluded that the United States could improve its LLW disposal system by adopting the practices it observed in other countries, and presented its findings to the Senate Energy and Natural Resources Committee in its report, “Low-Level Radioac-

tive Waste Management: Approaches Used by Foreign Countries May Provide Useful Lessons for Managing U.S. Radioactive Waste.”

[GAO Report](#)
[Report Highlights](#)

Other

California Legislation to Renew Nuclear Plant Construction Fails

4/23

California Assembly Bill 719, which would have removed the state’s ban on new nuclear power plants, died in the Assembly’s Natural Resources Committee last week. AB 719, sponsored by Assemblyman Chuck DeVore of Irvine, would have rescinded the moratorium California enacted in 1976 on the construction of new nuclear power plants until the federal government identifies and approves a demonstrated technology or means for the disposal of high-level radioactive waste (HLW).

In 2002, President Bush designated and Congress approved the Yucca Mountain site in Nevada as the permanent geologic repository for HLW and spent nuclear fuel, but development has been delayed from the original 1998 deadline due to persistent legal, technical, and political obstacles. Current estimates identify 2017 as the earliest possible date the site could begin operations.

Assemblyman DeVore touted his bill as a way for California to meet growing energy demand while limiting the emission of greenhouse gasses, which contribute to global climate change. The bill’s opponents counter that radioactive waste poses a danger to the public and environment, that there is currently no operating disposal facility where nuclear plants may send their spent fuel, and that the plants could become attractive terrorist targets.

Before the Natural Resources Committee voted on the bill last week, Chairwoman Loni Hancock urged the

state to first look at “safe alternatives” before turning to nuclear, saying, “We’ve just started looking at solar energy potential, wind energy potential ... and new alternative fuel sources.”

California currently has four nuclear reactors in operation at the Diablo Canyon and San Onofre power plants. As of January 2005, the state ranked 8th among the 31 states with nuclear capacity in the U.S.

Eleven states, including California, have enacted state laws requiring that a regulatory commission make certain findings regarding the potential for disposal of spent nuclear fuel before new nuclear power plants may be constructed. Several states are currently considering whether to repeal these moratoria.

Before AB 719 was introduced this session, a group of Fresno businessmen started an investment group to build a new facility in the San Joaquin Valley in Southern California. John Hutson, leader of the Fresno Nuclear Energy Group LLC, said that the group would continue to work on the development of the new facility, and suggested they might raise an initiative that would allow state voters to repeal the ban. Following the defeat of his bill, Assemblyman DeVore said that he too would continue to push for the expansion of nuclear power in California.

[AB 719](#)
[San Francisco Chronicle Article](#)
[Energy Information Administration California Nuclear Profile](#)

Also sourced: WI Legislative Council Staff memorandum to Members of the Special Committee on Nuclear Power

NRC Licensing Requirements Differ Based on Court Jurisdiction

6/11

The U.S. Supreme Court decided earlier this year not to review a Ninth Circuit Court of Appeals ruling from June 2006 that the Nuclear Regulatory Commission (NRC) must consider the environmental impacts of terrorist attacks at a proposed spent fuel storage facility in California under the National Environmental Policy Act.

Since the high court decided not to review the ruling, the NRC complied with the lower court's requirement to complete a revised environmental study. The Draft Supplemental to the Environmental Assessment for Diablo Canyon's independent spent fuel storage installation (ISFSI) was released in May. It found no significant impact from potential terrorist attacks to the construction and operation of the ISFSI, as the security and design requirements already in place provide adequate protection against any potential attack on dry cask storage of spent fuel.

The question now becomes what impact this court decision will have on the NRC's review process for other nuclear power plant applications, including those requesting renewal of operating licenses which are set to expire in the near future. The granting of license extensions will result in increased waste and the need for expanded on-site storage while ambiguities persist as to the opening of Yucca Mountain, a federal permanent repository for the final disposition of reactor spent nuclear fuel and other high-level radioactive wastes. Historically, NRC license renewal reviews looked into how well a plant had aged (most pushing 40 years in existence) to ensure the facility was safe to continue operations, but did not consider storage or emergency planning factors related to terrorist strikes.

The NRC is currently considering an extension of New Jersey's Oyster Creek reactor license (as well as reactors in Michigan and Mississippi) and has so far determined

that the decision in the Ninth Circuit does not apply to pending requests for renewals outside of its jurisdiction.

The New Jersey Department of Environmental Protection, however, has requested that the Third Circuit Court of Appeals review jurisdictional issues. New Jersey officials favor NRC consideration of terrorist attacks when determining the fate of Oyster Creek's license renewal application, which would extend the life of the plant 20 years to 2029.

Utah officials are also using the Diablo Canyon decision to urge the U.S. Court of Appeals for the D.C. Circuit to reject an NRC license granted for interim nuclear waste storage at a Private Fuel Storage site on the Skull Valley Band of Goshute Indians reservation in their state. When the NRC reviewed this application, it did not consider the environmental impacts of a possible terrorist attack.

Uncertainty about future NRC requirements for licensing new nuclear reactors as a result of various court decisions have raised concerns for industry members planning to answer the Bush administration's call for a nuclear renaissance. If Circuit Court decisions regarding review requirements according to the National Environmental Policy Act are found to conflict in different jurisdictions, this will raise the likelihood that the Supreme Court will ultimately consider and decide on the issue.

Also referenced:

[NRC Diablo Canyon links](#)

Nuclear Waste News, "Appeals-Court Split on Storage Reviews Could Go to Supreme Court," Vol. 27 No. 11, June 4, 2007, pages 93 and 95.

Platts NuclearFuel, "Low risk of attack on casks, NRC says in updated Diablo EA," Vol. 32 No. 12, June 4, 2007, pages 11-13.

NCSL Online Resources

NCSL Nuclear Waste Webpage
www.ncsl.org/nuclearwaste

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>

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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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