



# NUCLEAR unWASTEd NEWS

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

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VOL. 1, No. 1

## Headline

### Congress Grills Energy Secretary on GNEP and Yucca Mountain

3/10

A number of budget and appropriations hearings have taken place in the nation's capital over the past month to scrutinize the Bush Administration's \$23.5 billion fiscal year 2007 budget request for the Department of Energy (DOE). The Senate Energy and Natural Resources Committee, Senate Armed Services Committee, Senate Environment and Public Works Committee, Senate and House Energy and Water Development Appropriations Subcommittees, and House Energy and Commerce Committee have all heard testimony from DOE Secretary Samuel Bodman and/or other agency officials about the new Global Nuclear Energy Partnership (GNEP) and its potential effects on the long-delayed Yucca Mountain repository project.

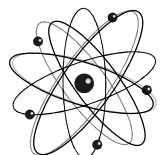
Significant bipartisan concerns have been raised regarding the actual costs and feasibility of the new GNEP proposal. Because anticipated price-tags have ranged between \$3-6 billion over five years, to \$20-40 billion over 10 years, and because the feasibility of a project funded at such levels is under question, Secretary Bodman clarified the plan this week in an interview with Environment & Energy Daily. DOE is likely to spend \$1.9 billion through fiscal year 2009, at which point it will review progress in technologies and other factors to determine viability of the international waste reprocessing component of the plan.

At many of the congressional hearing, lawmakers expressed concerns about opportunity costs of funding such an "experimental" project. In particular, to help pay for GNEP, the FY 2007 budget cuts or fully cancels spending in such areas as: gas, geothermal, hydropower, and oil research; the university nuclear reactor program; the Nuclear Power 2010 program (nuclear reactor construction and operating licenses); the Generation IV program (next generation nuclear reactors); Clean Coal Power Initiative; and the environmental management of the former nuclear weapons complex. There have also been questions about the lack of fully funding pieces of the Energy Policy Act of 2005, including areas involving energy renew-ability and efficiency, and home energy assistance.

Another prominent concern voiced often throughout the hearings deals with the consequences of GNEP's plan to reprocess spent nuclear fuel and high-level radioactive waste on the Yucca Mountain repository intended to permanently house such wastes. Specifically, legislators questioned whether a plan to begin studying the reprocessing of radioactive waste will

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further pushback the opening of Yucca Mountain, since permanently disposing of these wastes only to later retrieve and re-transport them for reprocessing makes little sense.

With GNEP's reprocessing plans and the constant legal and regulatory hurdles facing Yucca Mountain as a permanent repository, many lawmakers are now seeking legislation from DOE for interim storage to keep a nuclear renaissance on track. Secretary Bodman has announced plans to propose legislation this year to improve DOE's access to the Nuclear Waste Trust Fund, as well as to permanently withdraw land near Yucca Mountain from public use. Theories are rampant around Washington as to other potential pieces of the yet-to-be proposed DOE Yucca legislation. Aspects could include: the allowance of interim storage at Yucca or elsewhere around the country; changing the 70,000 metric ton legal limit on the amount of waste to be stored in the repository; having the U.S. Congress take over responsibility for a statement of "waste confidence" from the Nuclear

Regulatory Commission (NRC); and setting a controversial Environmental Protection Agency radiation standard for the site.

Although Energy Secretary Bodman acknowledges poor management and quality assurance at Yucca Mountain, he consistently states his department's commitment to the project. Bodman feels that the current process of redesigning both the repository and storage casks, and the decision to make Sandia National Laboratory Yucca's project leader, will smooth future progress at the site. By this summer, Bodman promises to release DOE's new schedule for acquiring a license from the NRC to begin construction of the Yucca Mountain repository.

[Senate Energy and Natural Resources Testimony](#)

[Senate Armed Services Testimony](#)

[Senate Environment and Public Works Testimony](#)

[Senate Appropriations Subcommittee Testimony](#)

[House Energy and Commerce Testimony](#)

[News Article](#)

[Upcoming Hearing on Yucca Status](#)

## GNEP & Energy Policy Act of 2005

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### **Congressman on Board for SRS Reprocessing Pilot Program**

1/26

US Representative Gresham Barrett (R-SC), whose district includes the Savannah River Site (SRS) near Aiken, SC, says he will support a demonstration reprocessing facility at the site to convert commercial spent nuclear fuel into reusable reactor fuel. He has one caveat, that the project not turn South Carolina into a "de facto national repository," referencing ongoing legal and regulatory hurdles to opening a permanent geological repository at Yucca Mountain, NV.

Reprocessing of spent nuclear fuel is expected to be one major new and controversial proposal within the Bush

administration's grander Global Nuclear Energy Partnership initiative. Sources predict the initiative, currently in developmental stages at the Department of Energy (DOE), will receive a full rollout and proposal to Congress around the time of President Bush's State of the Union address.

The reprocessing portion of the initiative is expected to involve significant R&D toward a new method for reprocessing spent fuel that would not require the separation of weapons-grade plutonium for reuse in commercial reactors - a byproduct alarming to those with proliferation concerns. This advanced reprocessing system, called "recycling" by proponents, is argued by critics to be largely untested and its expense requirements highly uncertain.

Sources recently indicated SRS a likely candidate for the new reprocessing project. The current mission of SRS includes recycling, purifying, and reloading tritium from nuclear weapons reservoirs, and converting excess weapons-usable plutonium to a form that can be used in commercial power reactors. The extent to which the community around Aiken, SC is willing to take on additional nuclear projects will influence the likelihood of SRS becoming a top candidate for the reprocessing pilot program.

[News Article](#) ..

## Two Washington State Bills Seek Inclusion in Federal Nuclear Projects

2/2

- HJM 4025 -

Washington State legislators pre-filed House Joint Memorial 4025 in December 2005, requesting that the Department of Energy (DOE) “establish a next generation nuclear plant project” at Hanford, a federal facility located along the banks of the Columbia River.

The evolution of nuclear power began in the 1950s with Generation I focusing on early prototype reactors, and has progressed through each stage with a push toward technology innovation to improve the economics, safety, and environmental health of nuclear energy. The current Generation IV Nuclear Energy Systems Initiative, a DOE project to engage worldwide involvement in the next wave of nuclear innovation, will provide R&D for a new “Next Generation Nuclear Project” established under Section 641 of the Energy Policy Act of 2005.

As part of this project, DOE Secretary Samuel Bodman will choose appropriate locations to assist the lead laboratory (Idaho National Laboratory) in the research, development, design, construction, and operation of a

nuclear prototype plant for the efficient generation of electricity and/or hydrogen.

HJM 4025 is a formal statement by the Washington legislature suggesting that Hanford, one of the DOE’s former nuclear weapons complex cleanup sites, would be an appropriate location for a nuclear pilot plant and its related technologies. The bill is currently being considered in the state’s House Technology, Energy & Communications Committee, which held a public hearing for it on January 12th.

- HJM 4026 -

On the same day HJM 4025 was pre-filed last December, the same legislative sponsors proposed House Joint Memorial 4026 requesting inclusion in another nuclear mission created under the Energy Policy Act of 2005.

HJM 4026 relates to the section of the act that requires DOE Secretary Bodman to determine whether hydrogen can be produced in a cost-effective way at existing nuclear power plants. If the Secretary advises in support of the concept, he will be granted \$100 million to establish two projects in regionally and climatically different areas of the U.S. to demonstrate commercial viability of hydrogen at nuclear plants.

The Columbia Generating Station in the southern-middle county of Benton, near Hanford, is a boiling water reactor that produces energy through heat from nuclear fission. This commercially-operated plant is licensed by the NRC through 2023 and is the candidate proposed in HJM 4026 for the hydrogen pilot project. The bill passed unanimously out of the state’s House of Representatives on January 27th and is currently being considered in the Senate Water, Energy & Environment Committee.

[Bill link, HJM 4025](#)

[Bill link, HJM 4026](#)

## **The Global Nuclear Energy Partnership: Budget, Plan, and Impact**

2/6

On Monday, February 6, the Department of Energy (DOE) highlighted the Global Nuclear Energy Partnership (GNEP) proposed in President Bush's \$23.6 billion, FY 2007 budget. The administration is seeking \$250 million for this new international nuclear power program in its first year, and according to Deputy Energy Secretary Clay Sell, could see as much as \$1 billion over Bush's term in office.

The program calls for the United States and other nuclear-producing countries to enter into a partnership to sell advanced nuclear plants and lease fuel to countries seeking nuclear power, in return for those countries' commitments not to enrich uranium themselves. When the fuel is spent, non-nuclear countries would send it back to the country of origin for reprocessing and/or disposal. The "recycling" step could hinge on whether R&D will find technologies capable of reprocessing spent fuel without the separation of weapons-grade plutonium - a byproduct alarming to those with proliferation concerns. Development of advanced burner reactors capable of creating energy from this recycled spent fuel will also need to be demonstrated.

With President Bush's attempt to tighten the overall budget, increased spending for a new nuclear program requires that other nuclear-related programs be cut. Funding reductions in FY 2007 are slated for:

- The university nuclear reactor program (complete termination)
- Environmental management of the former nuclear weapons complex (to \$5.8 billion from \$6.6 billion appropriated in FY 06)
- Nuclear Power 2010 program, which helps utilities with new combined construction and operating license applications (18% cut from FY 06)
- Generation IV program, which focuses on technical innovation of next-generation nuclear reactors (42% cut from FY 06).

Sell noted that DOE will propose to the U.S. Congress the creation of legislation providing consistent funding for a nuclear waste repository at Yucca Mountain, Nevada, still considered an integral part of the fuel cycle and overall GNEP plan.

[DOE GNEP Webpage](#)  
[Budget link](#)

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## **Yucca Mountain**

### **NAS Study Examines Nuclear Waste Transportation Feasibility**

2/10

On Thursday, February 9, The National Academy of Sciences' (NAS) Committee on the Transportation of Radioactive Waste released a report of their multi-year study to "identify technical and policy options" related to the issues and risks of transporting nuclear waste to Yucca Mountain, Nevada for permanent disposal.

At the behest of the U.S. Congress, this 16-member committee conducted an examination into the principle tech-

nical concerns, societal concerns, and physical risks of transporting spent nuclear fuel and high-level radioactive waste across state borders. By examining these areas, the committee strove to provide various options and/or recommendations for determining procedures, routes, and ways to improve communication with affected lawmakers and community members.

The report's most significant findings were:

- There are no technical barriers to safe, large-scale transport of nuclear waste, however, social and institutional challenges require attention.

- Terrorist/obstructionist acts against shipments are of concern, but were not included in the study due to information restrictions. Committee recommends an independent analysis of security issues.
- Current packaging regulations are adequate for containing nuclear contents in most transportation scenarios, however, the report recommends that the Nuclear Regulatory Commission (NRC) conduct more very-long-duration fire accident studies. The committee also supports ongoing full-scale package testing under regulatory and other credible conditions.
- Safety risks from both normal transport and accident scenarios are low. One unlikely exception would be a release occurring from “extreme accidents involving very-long-duration, fully engulfing fires.” Simple operational controls and restrictions could further reduce the chances of this type of incident and its associated dangers.
- Societal concerns will play a significant role in the successful implementation of a transportation plan. Therefore, planners should be proactive and “establish formal mechanisms for gathering high-quality and diverse advice about social risks and their management on an on-going basis.”
- Current and future transport-specific program recommendations:
  - DOE’s procedures for selecting routes is “adequate and reasonable.” Department of Transportation (DOT) routing regulations ensure safety - provided that states/tribes follow prescribed procedures. Committee recommends that DOT ensure state designations of routes are backed by sound risk assessments.
  - Committee supports DOE’s “mostly-rail, dedicated trains” decision. Recommends DOE complete construction of Nevada railway before undertaking large-scale shipments.
  - Recommends DOE make public its preferred highway and rail routes as soon as possible to ensure adequate time for state/tribal/local planning and emergency preparedness. Suggests involving states and tribes in route selection, as occurred with DOE’s foreign research reactor spent fuel transport program.
- Recommends negotiation with commercial spent fuel owners (or if necessary, legislation) to require shipment of older fuel first. Suggests setting up a pilot program of short, simple shipments to demonstrate transportation ability and safety.
- Recommends DOE immediately begin implementing its emergency preparedness duties under Section 180(c) of the Nuclear Waste Policy Act. (Suggestions detailed in report.)
- Recommends all federal agencies involved develop consistent criteria for determining and protecting sensitive information. Anything not deemed sensitive should be shared publicly.
- Suggests the Secretary of Energy and U.S. Congress study possible changes to the DOE’s organizational structure where the nuclear waste transportation program is concerned. Suggests examination of various quasi government/independent/private options.

[Report Summary](#)  
[NRC Press Release](#)

### **OCRWM Finds Water Infiltration Rates at Yucca Technically Accurate**

2/17

The Department of Energy’s (DOE) Office of Civilian Radioactive Waste Management (OCRWM) investigated US Geological Survey (USGS) estimates of water

infiltration at the proposed Yucca Mountain nuclear repository after emails from USGS employees were found to question quality assurance measures.

In preparation for OCRWM's application to the Nuclear Regulatory Commission (NRC) for a permanent federal repository in Nevada, thousands of documents related to former Secretary of Energy Spencer Abraham's recommendation of Yucca were examined for inclusion. During the document review process, DOE contractors found emails authored by USGS employees working on water infiltration models from 1998 through 2004 suggesting non-compliance with quality assurance requirements. A technical impact report was conducted thereafter to assess the accuracy of infiltration numbers and whether any differences would alter repository plans for the permanent storage of spent nuclear fuel and high-level radioactive waste at Yucca Mountain.

OCRWM released their findings on Friday, February 17 in a report titled, Evaluation of Technical Impact on the Yucca Mountain Project Technical Basis Resulting from Issues Raised by Emails of Former Project Participants. The report concluded that water infiltration rates were in fact quite accurate, specifically that:

- "The USGS net infiltration rate estimates are consistent with estimates for arid and semi-arid climates across the Western United States, with net infiltration being a small percentage of precipitation."
- "The net infiltration rate estimates used in the total system performance assessment modeling for the Site Recommendation are consistent with and corroborated by several independent data sets."

An evaluation into the programmatic impact of the emails and possible misconduct by their authors are currently underway by the OCRWM and DOE's Office of Inspector General respectively.

[OCRWM Report](#)

## **EPA to Rule on Radiation Allowances at Yucca by End of 2006**

3/3

The U.S. Senate Committee on Environment and Public Works held its first oversight hearing on the status of the Yucca Mountain Project on Wednesday, March 1.

Witness testimony came from all sides of the Yucca debate, including: Nevada Senators Harry Reid and John Ensign; the Environmental Protection Agency's (EPA) Office of Air and Radiation Acting Assistant Administrator, William Wehrum; the Department of Energy's (DOE) Office of Civilian Radioactive Waste Management Acting Director, Paul Golan; and various scientists and other interested parties.

As the Committee on Environment and Public works has the sole jurisdiction over the EPA and the Nuclear Regulatory Commission (NRC), the hearing focused on the status of the EPA's revised proposal for a radiation standard at Yucca Mountain.

A federal court determined that the EPA's initial decision on radiation allowances was insufficient since it failed to comply with NAS recommendations, required by law, to determine allowable exposure limits past the 10,000 year mark. In accordance with this order, last August the EPA suggested setting radiation exposure limits at Yucca to 15 millirems/year for 10,000 years, then allowing levels of 350 millirems/year for up to 1 million years thereafter. This post 10,000-year level is over three times what the NRC currently permits from nuclear sites around the country.

The public comment period for the EPA's revised proposal ended last November. At the hearing on Wednesday, Mr. Wehrum announced that the EPA is currently reviewing submitted comments and will determine a final radiation standard by the end of 2006.

[Hearing Statements](#)

[News Article ....](#)

## MA Lawmakers Seek Compensation for Onsite Nuclear Waste Storage

1/30

A bi-partisan group of Massachusetts state legislators filed a bill this session to require Pilgrim Nuclear Power Plant to pay \$2 million per year in compensation for increased security and public safety costs associated with on-site storage of nuclear waste. Pilgrim's owner, Entergy Corp., already pays \$5 million per year to the federal Nuclear Waste Fund, which supports the U.S. nuclear waste management program responsible for the disposal of spent nuclear fuel and defense-related high-level radioactive waste.

With Entergy seeking a 20-year operating license renewal, state legislators believe the time is right to revise the plant's financial arrangements with the Plymouth area, where it is located. The principle rationale for the annual charge is the additional security measures deemed necessary by local officials in the wake of the September 11th terrorist attacks. The bill's characterization of on-site storage as a "privilege" makes it fee-worthy in Massachusetts.

Entergy argues that they meet all federal security regulations, fund their own security force at the plant, and that any additional emergency planning needs are covered with state monies.

In addition to proposing legislation on the matter, Massachusetts lawmakers requested their U.S. senators, Edward Kennedy and John Kerry, bring this issue to the attention of federal officials in Washington.

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

## Off-site, Private Storage of Nuclear Waste Approved by NRC

2/15

The Nuclear Regulatory Commission (NRC) granted its first-ever license for the off-site, commercial storage of nuclear waste on Monday, February 13. The licensee, Private Fuel Storage (PFS), is an association of utility companies interested in creating an interim storage facility for spent nuclear fuel on the Skull Valley Band of Goshute Indians reservation, 50 miles southwest of Salt Lake City, Utah.

PFS has faced many obstacles in the years since it first applied for an NRC license back in 1997. The state's historic preservation representative has not agreed to a proposal federal agencies say would protect historic properties near a possible new rail line for waste transport to the site. The Bureau of Land Management (BLM) was unable to sign off on the proposed transport route through public land because of a federal moratorium on planning, but is currently taking public comment on the worthiness of such a project. Instead of the NRC waiting on the approval of both parties, they simply left the proposal open for resolution in the license.

Utah's Governor Jon Huntsman, Jr., U.S. Senator Orrin Hatch, and U.S. Representative Rob Bishop vociferously oppose the storage facility and vow to fight it at every turn. Rep. Bishop's bill designating 100,000 acres of land near PFS a "wilderness area," which prohibits rail use on the land, was signed into law in January. A spokeswoman for PFS suggested that trucking could replace the need for rail should it prove infeasible.

The services of PFS include shipping and storage of spent nuclear fuel, and decommissioning at the off-site location. The facility would be open to all utilities, not just the current eight PFS members, and could reach a capacity of 40,000 MTU (4,000 canisters), depending on market demand. Financial commitments from

## Storage cont.

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customers will be needed before the site can be built, at which point PFS expects to handle approximately 200 canisters per year.

The NRC license requires that PFS acquire - in addition to financial commitments - the approval of the BLM, the Bureau of Indian Affairs, and the Surface Transportation Board before construction of the facility may begin.

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

### **NRC's Nuclear Reactor Re-licensing Process Questioned**

2/16

Concerns that the Nuclear Regulatory Commission (NRC) does not take into account the dangers of on-site radioactive waste storage when determining re-licensing of nuclear reactors has many residents near the New Jersey shore up-in-arms.

Oyster Creek Generating Station, a commercial nuclear reactor run by a subsidiary of Exelon Corporation, recently applied for a 20-year extension of its operating license. Not all citizens of Ocean County are against the

plant's existence within their borders, but many express concerns about the 960 metric tons of nuclear waste that must remain on-site for an indefinite period. Until the Yucca Mountain federal repository in Nevada is ready to accept commercial spent nuclear fuel and high-level radioactive waste from national defense activities, approximately 50,000 metric tons and 22,000 canisters of waste are being stored at 122 sites in 39 states.

Many in New Jersey and around the country feel that on-site nuclear waste storage poses a terrorism risk, and therefore assurances of imminent removal should be secured before the NRC renews licenses granting more waste creation. While uncertainties remain, New Jersey's governor and former U.S. senator, Jon Corzine, and U.S. Representative H. James Saxton have both proposed legislation requiring the NRC to consider the safety of on-site radioactive waste storage when reviewing renewal applications. As for Oyster Creek, their bills propose that the National Academy of Sciences complete an independent assessment of safety performance, including recommendations, before the NRC may consider re-licensing.

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

[Corzine Bill](#)

[Saxton Bill](#)

## Cleanup

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### **Greater Role for Local Governments in Cleanup of DOE Sites**

1/31

A US District Court in the Eastern District of Washington determined in December, 2005 that Section 120(f) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) gives local officials the right to participate in the planning and selection of remedial action in the cleanup of nearby federal facilities.

The decision was made in relation to a case referenced: City of Moses Lake v. United States of America, et al. In 1988, samples from three wells on the former Larson Air Force Base in Washington state, land conveyed to the city of Moses Lake by the federal government in 1966, was found to contain trichloroethylene contaminants. When bringing an action against the government and various agencies and businesses for relief pursuant to CERCLA against all defendants, the city of Moses Lake also asked the Army Corps of Engineers and the US Environmental Protection Agency (EPA) for inclusion in

meetings regarding cleanup plans for the site. Believing they were denied this request, the city added a claim against the two for violation of CERCLA Section 120(f), which states that the administrator of a cleanup site, "...shall afford to relevant State and local officials the opportunity to participate in the planning and selection of remedial action...."

The US District Court granted the city's motion for a preliminary injunction, which prohibits the Army Corps and EPA from issuing a proposed cleanup plan until further court instruction is given. Initial findings indicate the city of Moses Lake must be provided the opportunity to study all applicable site data and participate in "decision-making" before the EPA and Army Corps may formally issue a cleanup proposal.

Prior to this case, local governments were typically relegated to environmental cleanup projects at the public involvement stages. The Moses Lake court decision now provides local governments legal standing when pursuing greater involvement in remedy selection for Department of Energy (DOE) cleanup sites. Because the court did not specify how to proceed with local involvement in remedial action decisions, local governments may work individually with their DOE sites and the EPA to develop distinct roles.

[News Article .....](#)  
[Memorandum link](#)

## **Idaho Governors take on DOE over Nuclear Waste Cleanup**

2/8

Two former Idaho governors testified before a U.S. district judge on Monday, February 6, that the Department of Energy (DOE) is renegeing on a 1995 agreement to transport all "stored" nuclear waste at the Idaho

National Laboratory (INL) out of state by 2018.

Since the 1970s, Idaho officials and the DOE have battled over the status of Cold-War era transuranic wastes, such as the contaminated rags, gloves, and other debris stored at INL both above ground and buried in unlined pits over the Snake River aquifer in southeast Idaho. Although former Idaho Governor Cecil Andrus halted shipments of nuclear waste to INL in 1988, a 1995 agreement between Idaho's new governor, Phil Batt, and the Clinton administration allowed shipments to proceed - based on an agreement to limit incoming shipments and set a 2018 date for final site cleanup.

Former Governors Andrus and Batt argued in court Monday that the agreement's wording of transporting out "stored" waste included both above-ground and buried waste. The Justice Department argued that the agreement only covered above-ground waste; there was no full inventory of underground waste in 1995, nor any study proving the safety of excavating such waste. The federal government suggested to U.S. District Judge Edward Lodge that these two very different interpretations of the same agreement essentially voids it.

Judge Lodge originally presided over this case in 2003 and sided with the state. Upon a Bush administration appeal to the 9th U.S. Circuit Court, the decision was overturned in 2004. The case is now back in the hands of Judge Lodge for a retrial this week, with instruction that any decision be based on both sides' arguments and evidence.

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

## **Experts Report on Viability of Hanford's Waste Treatment Plans**

3/28

A study into the operational reliability of designs for Hanford's Waste Treatment and Immobilization Plant (WTP) to vitrify radioactive waste into glass logs for storage and disposal was recently completed by a Department of Energy (DOE)-funded independent team of 30 engineers and scientists. Although the resulting report indicated 28 efficiency concerns with the plant's current design, it stated no real technical barriers, other than the potential clogging of flow-through pipes during the conversion of the tank farm's thicker "sludge" components.

Cost estimates for the WTP have risen significantly with every projected startup date delay. The earliest DOE could expect operations at the plant to begin would be 2015; a final cost and timing schedule will be completed this summer. Cost estimates for the entire environmental management cleanup at Hanford range between \$50-60 billion, with a completion date of 2035. The Bush administration requested \$805 million for the site in FY 2007, a four percent increase over what was appropriated the previous year. More than 20 percent of these Hanford funds are targeted for construction of the WTP.

The team of scientists conducting this DOE study found that completion of the vitrification plant and encapsulation of high-level radioactive waste for disposal are critical to the successful cleanup of Hanford, a site which experienced decades of plutonium production during the Cold War. Clogging of the plant's pipes, and all other potential obstacles noted, were not deemed insurmountable by the review team. One of the study's leaders, John Lowe, suggested fixing any problems highlighted in their report would add only about one to three percent to the overall cost of the facility.

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

[DOE-EM Budget](#)

## **DOE to Complete Single Massive Hanford EIS**

3/29

In accordance with a court settlement with the state of Washington earlier this year, DOE plans to conduct a grander, more comprehensive environmental impact statement (EIS) for the Hanford Reservation than the 2004 version limited to the solid waste program, which was deemed shoddy and incomplete. The new report will include ongoing environmental assessments in the areas of: solid waste, buried waste tanks, and the closing of the Fast Flux Test Facility reactor.

Environmental impact statements are required under Section 102(2) (C) of the National Environmental Policy Act of 1969 (PL91-190). Before any new federal program or project begins, an EIS must be conducted to consider and address the probable environmental impacts of various actions associated with that project. The 586-square-mile Hanford site includes 177 underground tanks holding 53 million gallons of high-level radioactive waste. Former EIS documents have highlighted concerns about this waste seeping into the groundwater that runs from Hanford directly to the Columbia River. Plans for Hanford to accept other DOE-site radioactive waste for temporary storage until a permanent repository is constructed in Nevada have been halted until the final comprehensive EIS now underway is completed.

The full extent of what this mega-EIS will cover has not yet been finalized. DOE's Office of River Protection at the Hanford site is taking public comments on the scope of the EIS until April 10. The Energy Department hopes to have a draft EIS document completed within one year, with the final version ready by the fall of 2008. Some interested parties approve of the comprehensive versus piecemeal approach, while others are concerned that DOE has failed in the past where much less ambitious programs were dedicated much more time. In response to many outsiders' concerns about

the feasibility of completing a quality EIS on this immense scale in the time allotted, Department officials have stated that 2008 is just a goal - and that value will not be compromised to meet any deadline.

[News Article-OR](#)  
[News Article-WA](#)  
[2004 Hanford EIS](#)

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## Other

### **Utah Bill Proposes Legislative Override on Waste Issues**

1/27

A struggle is underway in the Utah statehouse to determine whether the legislature should have the right to veto a governor's ban on waste issues. A commercial waste review process was enacted in 1990, which requires the approval of local and state environmental regulators, the legislature, and the governor to establish or expand waste facilities in the state.

When the current governor, Jon Huntsman, Jr., announced his intention to reject a proposal from Envirocare (a private facility which has treated and disposed of low-level radioactive waste for 18 years) to double its site size to two square miles, legislators took note. Although on most statute issues the legislature may override a governor's veto, the executive branch generally has control over individual licensing decisions. The 1990 review required the approval of all groups on waste issues, and therefore any change to the decision-making authority will require new policy.

This came in the form of Senate Bill 70, sponsored by Senator Howard Stephenson (R-Draper), which passed through committee on Monday, January 23, and is now headed to the full Senate floor. Two former Utah governors have spoken out against the bill, claiming it is the executive's role to determine individual licensing rights and administer the law.

Envirocare has since withdrawn its plans for expansion. Approvals already on the books for Envirocare's expansion

will not lapse until 2009, therefore some believe another proposal will be forthcoming in the next few years when a more supportive political climate exists.

[Bill link .](#)

### **New Hydroceramic Technique Found for Solidifying Liquid Nuclear Waste**

2/23

Researchers at Savannah River National Laboratory and Penn State University discovered a new process for solidifying liquid low-level radioactive waste. The study particularly focused on "supernates," the liquid portion of nuclear waste found in storage tanks above the more highly-radioactive "sludge."

The process involves a ceramic absorptive substance, which, when mixed with liquid low-level radioactive waste at low temperatures, can encapsulate nuclear materials within its structure.

The Department of Energy's (DOE) Environmental Management program is in the process of cleaning up nuclear waste storage tanks at Hanford in Richland, Washington and the Savannah River Site in Aiken, South Carolina. DOE handles the more radioactive sludge which settles at the bottom of tanks at the Savannah River location by vitrifying the substance into stable glass logs for encasement and on-site storage. Plans for a similar vitrification plant are underway at Hanford. Several alternatives for processing the lower-level supernates are still under consideration.

The hydroceramic research, published in the Journal of the American Ceramic Society, has multiple potential waste containment uses. After both supernate and sludge wastes are fully extracted from tanks and the tanks are cleaned, researchers believe this hydroceramic concrete could also be used to fill the “empty” tanks and entrap any nuclear remnants prior to decommissioning.

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

[Study Abstract](#)

## Lawmakers Propose an Independent Safety Assessment of Indian Point

3/23

U.S. Representative Maurice Hinchey of New York and a group of bi-partisan New York and Connecticut legislators introduced a bill this month to require the Nuclear Regulatory Commission (NRC) to perform a comprehensive assessment of safety at the Indian Point power plant located 35 miles north of Manhattan. The bill, HR 4891, proposes that the NRC conduct a study into the plant’s construction and operations/maintenance due in part to recent reports of tritium leakages. The bill also proposes a review of the plant’s evacuation plan in case of accident or terrorist attack. Lawmakers contend that the Federal Emergency Management Agency’s approved evacuation plan, limited to populations within a ten-mile radius, disregards the dangers posed to the approximately 20 million people living within 50 miles of Indian Point.

Elevated levels of tritium have been discovered in recent months in the groundwater near several nuclear facilities around the country, including Indian Point, as a result of equipment degradation and leakage. In high enough doses, radioactive tritium can cause cancer. Although the NRC has stated that the various releases fall well below regulated levels and do not constitute a health threat, public interest prompted them to announce on Monday the formation of a task force to study tritium issues at several sites nationwide. This group will

include 11 NRC experts and a state government representative, and is expected to complete its review by August 31, with a report due by year-end.

Although this investigation is meant to address some of the recent concerns surrounding commercial nuclear facilities, New York and Connecticut lawmakers are not backing down from their bill targeting Indian Point. They believe the plant’s unique location near large population centers demands a more thorough evaluation of the full spectrum of potential safety issues. Entergy Nuclear, owner of the Indian Point facility, has agreed to participate in any such investigation, but believes additional studies are an unnecessary drain of time and resources given their track-record of meeting all safety requirements.

[Bill link ..](#)

[NRC Press Release ..](#)

### NCSL Online Resources

[NCSL Nuclear Waste Cleanup Webpage](http://www.ncsl.org/programs/environ/cleanup/cleanup.htm)  
<http://www.ncsl.org/programs/environ/cleanup/cleanup.htm>

[State Legislation Database on Nuclear Waste Issues](http://www.ncsl.org/programs/environ/nucwaste.cfm)  
<http://www.ncsl.org/programs/environ/nucwaste.cfm>

[State Legislation Database on Environmental Justice Issues](http://www.ncsl.org/programs/environ/envjustice.cfm)  
<http://www.ncsl.org/programs/environ/envjustice.cfm>

### NUCLEAR unWASTEd NEWS

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**William T. Pound, Executive Director**

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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.

**Contributors to this issue:**  
**Christina Nelson.**

**Layout and design: Alise Garcia.**