

UNITED STATES COURT OF FEDERAL CLAIMS

SACRAMENTO MUNICIPAL UTILITY)
DISTRICT,)
)
Plaintiff,)
)
v.) No. 98-488C
) (Judge Susan G. Braden)
)
THE UNITED STATES,)
)
Defendant.)

**AMICUS BRIEF OF THE STATE OF NEVADA
ON THE COURT'S ORDER TO SHOW CAUSE**

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On April 21, 2005, this Court issued in this case a Memorandum Opinion and Order to Show Cause Why the Standard Contract Should Not Be Held Void and Restitution Awarded from the Nuclear Waste Fund, inviting “any interested entity” to file an *amicus* brief addressing the issues raised by the Court. The State of Nevada thanks the Court for this opportunity and respectfully requests consideration by the Court of this *amicus* brief.

I. NEVADA’S INTEREST IN THIS PROCEEDING

Under the Nuclear Waste Policy Act of 1982, as amended, 42 U.S.C. §§ 10101, *et seq.* (“NWPA”), the Department of Energy’s (“DOE’s”) site at Yucca Mountain, Nevada (“Yucca”) is the only site in the United States slated for potential development as a national repository for the disposal of high-level radioactive waste and spent nuclear reactor fuel, including spent fuel from the nuclear power reactor now being decommissioned by the Sacramento Municipal Utility District (“SMUD”). The NWPA, and the regulations of the U.S. Nuclear Regulatory Commission (“NRC”) that apply to the possible licensing of Yucca, afford Nevada (as the host state) special participation rights in the development and licensing of the Yucca repository. 42 U.S.C. §§ 10135 and 10136; 10 C.F.R. § 2.309(d)(2)(iii). Nevada has availed itself of all opportunities under these laws to review the activities of DOE and other agencies with respect to Yucca. Nevada is accordingly highly qualified to furnish the Court with additional material that may bear on the Court’s deliberations in this case.

The Yucca site is located only 90 miles from Las Vegas, Nevada. Led by Clark County, where Las Vegas is located, Nevada is the fastest growing state in the United States. DOE Final Environmental Impact Statement for a Geologic Repository of Spent

Fuel and High-Level Radioactive Waste at Yucca Mountain, Nye County, Nevada, February, 2002 (“Yucca FEIS”) at p. 3-86 (*see* www.ocrwm.doe/documents/feis_a/index.htm). In addition to constructing and operating Yucca, DOE proposes to build the largest new rail line in the United States in many decades, connecting the interstate rail system to the Yucca site along a new corridor within Nevada that is over 300 miles long. Yucca FEIS at pp. 2-51 to 2-53. Accordingly, Nevada has great interest in the Yucca project, and in assuring that its development, if it ever occurs, affords adequate protection of the health and safety of Nevada’s citizens and the regional environment. Because the repository project would also trigger tens of thousands of shipments of spent nuclear fuel and high-level waste over the nation’s rail system, its interstate highways, on inland waterways, and through dozens of cities (Yucca FEIS at pp. 2-42 to 2-47), the project is also a matter of substantial general public interest.

II. THE REAL YUCCA SCHEDULE

A. The Repository is Unlikely Ever to Open

Nevada strongly believes that Yucca will *never* be developed as the nation’s nuclear waste repository. This is likely to be the case because (a) DOE has demonstrated a profound unfitness to qualify as an NRC licensee for the project; (b) DOE has yet to complete the design of the repository or submit a license application to NRC and may never actually complete such an application to the degree required by NRC; (c) the proposed project cannot technically be licensed by NRC even if the application is completed; (d) if the application is completed and docketed by NRC, all of the data and analysis supporting the project must withstand expert review and cross-examination in a

formal NRC “on the record” hearing and multiple layers of NRC review; (e) the repository is no longer needed due to the widespread development and use of economical on-site interim dry storage facilities; and (f) there are legal mechanisms to resolve disputes between utilities and DOE that would prejudice neither side and save billions of dollars for ratepayers and taxpayers without Yucca. Indeed, by forestalling examination of superior waste management alternatives, Yucca presently stands as the greatest obstacle to the development of a sound national solution to the back-end of the nuclear fuel cycle.

B. DOE’s Revised Repository Schedule

It has long been DOE’s practice to announce and hold unrealistic schedule milestones for the proposed development of the Yucca repository. Though the Court cited a DOE December 2004 projected schedule for when shipment of spent fuel could commence, DOE has subsequently amended that date and is “now hoping” for 2012, though it presented Congress with cost estimates for a 2015 opening. *See* “Energy Officials Turn Shy in Talk About Yucca Schedule,” *Las Vegas Review Journal*, March 11, 2005 (Exhibit No. 1). Industry sources have surmised it may be 2015 to 2020. *Id.*

At this point, however, any projection of when the repository might ever be open for business is pure conjecture, since numerous obstacles could either delay the project or altogether terminate it, as discussed below.

C. Invalidation of EPA’s and NRC’s Yucca Rules

First, as the Court has recognized, in *Nuclear Energy Institute v. Environmental Protection Agency*, 373 F.3d 1251 (D.C. Cir. 2004), a case brought by Nevada and the Natural Resources Defense Council, the D.C. Circuit invalidated a critical part of the

radiation standard being used by DOE and NRC to assess whether disposal at Yucca would be safe. As a result, there presently is no Yucca radiation protection standard, nor is there a rule that would allow licensing of Yucca to proceed. Nearly a year following that decision, EPA has yet to issue a proposed new rule, though it has announced it may do so by the end of the summer. EPA's last rulemaking setting the first radiation standard for Yucca took over seven years to finalize. While the new rule is not expected to take that long, it is hard to imagine EPA taking less than an additional 18 months, which would still be record time for that agency's rulemaking. Then, when the EPA rule is issued, NRC must amend its Yucca licensing rules to accommodate the new EPA rule. *See* Section 801 of the Energy Policy Act of 1992, 42 U.S.C. § 10141-note. And then, DOE must assess repository performance using the new standard. Whether DOE can divine the ultimate rules and assess performance results in sufficient detail to submit an application prior to the rules being finalized is undetermined, though Nevada intends to challenge any docketing by NRC of a DOE Yucca license application prior to finalization of the new rules.

In gauging itself against the likely new rule, DOE will face a further quandary. A straight-forward application of the D.C. Circuit's decision would have EPA simply extending its present radiation dose limit out to the time of peak dose to humans from the repository, as the National Academy of Sciences recommended. However, Yucca will not be able to pass this licensing test based on what is known after years of Yucca scientific study. Every DOE performance model released to date shows that Yucca will be unable to meet such a new standard. *See, e.g.*, Yucca FEIS at p. 5-26. If, on the other

hand, EPA departs materially from what the D.C. Circuit and the Academy required, then Nevada will renew its challenge to the new rule in court.

D. Recertification of DOE's Yucca Documents

At least six months before DOE can even submit a license application, NRC's regulations at 10 C.F.R. §§ 2.1003 and 2.1009 require DOE to make a formal certification that it has made all relevant Yucca documentary material within its custody or control publicly available on an electronic, web-based data management system. DOE made such a certification last summer but, upon Nevada's motion, an NRC licensing board struck the certification on August 31, 2004 as not being in good faith. *U.S. Department of Energy (High-Level Waste Repository: Pre-Application Matters)*, LBP-04-20, August 31, 2004 (Docket No. PAPO-00) (NRC's adjudicatory materials related to Yucca are available on NRC's electronic hearing docket at www.nrc.gov/reading-rm/ehd.html). While DOE may attempt to make a new certification sometime later this year, NRC's licensing board is poised to adopt even stricter standards for document production. *See, e.g., U.S. Department of Energy (High-Level Waste Repository: Pre-Application Matters)*, First Case Management Order, January 24, 2005 (Docket No. PAPO-00). Nevada believes that DOE will be unable to meet its latest projected date of recertification. When and if DOE does recertify its documents, Nevada anticipates challenging the new certification if it remains defective.

E. Nevada's Challenge to DOE's Transportation Plan

Nevada presently has pending in the D.C. Circuit a lawsuit against DOE alleging gross violations by DOE of the National Environmental Policy Act ("NEPA") in selecting a national transportation mode for moving waste to Yucca, and in adopting a

particular corridor within Nevada within which it proposes to build a new rail line to the site. *See State of Nevada v. DOE*, No. 04-1039 (D.C. Cir. filed Sept. 8, 2004). One of the primary challenges brought by Nevada concerns DOE's adoption of a national transport mode that it had explicitly rejected in its environmental impact statement as too impracticable, too costly, and having the largest health and safety and occupational health consequences. DOE adopted this mode precisely because it believed that its proposed new rail line would not be ready in time to meet DOE's needs to ship spent fuel by rail to the repository. *See* 69 Fed. Reg. 18,557, 18,561 (April 8, 2004) (anticipated delay of six years). If Nevada prevails in this lawsuit, DOE may need to re-do its environmental analysis of transport options, opening the issue to additional public comment or transferring the project to the federal Surface Transportation Board, which Nevada alleges has primary jurisdiction.

F. Falsification of Documents at Yucca

In March 2005, DOE Secretary Bodman announced that DOE had determined that government scientists performing key water infiltration studies and hydrogeologic modeling at Yucca had been falsifying data and records. DOE Press Release "Statement From Secretary of Energy, Samuel Bodman," March 16, 2005 (Exhibit No. 2). The Secretary's announcement prompted criminal investigations by the Inspector Generals for the Department of the Interior and the Department of Energy, as well as the FBI. *See* "FBI Steps unto Yucca document investigation" Las Vegas Sun, March 31, 2005 (Exhibit No. 3). Nevada's Congressman Porter, as Chairman of the Subcommittee on the Federal Workforce and Agency Organization, Committee on Government Reform, has begun what may be a year long investigation into the allegations. (Exhibit No. 4). The

Committee has begun to subpoena Government scientists to testify before the Porter Subcommittee. (Exhibit No. 5). DOE's own investigation of the matter is expected to result in an initial report by September of this year.

These investigations go to the heart of the question of whether DOE can ever qualify as an NRC licensee because of NRC's requirement that applicants exhibit a strong "safety first" culture. *See* NRC's "Guidance for Establishing and Maintaining a Safety Conscious Work Environment," 69 Fed. Reg. 61049, October 14, 2004. NRC also has very strict quality assurance regulations in 10 C.F.R. §§ 63.141-144 that are designed to assure the integrity and traceability of safety documentation. Whether the Yucca project can ultimately survive given admitted underlying problems with its data, its records, its quality assurance program, and the veracity of its scientists is presently unknown. Nevada will further probe these issues during Yucca's licensing proceeding.

G. The Yucca Licensing Proceeding

If somehow the EPA's and NRC's rulemakings successfully conclude (litigation notwithstanding), and DOE successfully completes its license application, certifies its documents, overcomes NEPA litigation obstacles, and emerges from criminal investigations not fatally undermined, then it must survive years of litigation before the NRC to obtain a construction authorization for the repository. The first step in that process will be the application's docketing, 10 C.F.R. § 2.101(f), which can be done only if it is "complete and accurate in all material respects." 10 C.F.R. § 63.10. Presently, the application is incomplete, and Nevada believes DOE, for political and public relations purposes, may file an incomplete application in the hope that it will form a "placeholder" that can be supplemented after submission, in a process perhaps taking years. However,

unfortunately for DOE, NRC's repository licensing rules (in contrast to its rules for licensing of reactors) make no provision for the docketing of a partial application.

In any event, if and when the application is eventually docketed, the proceedings before the NRC, which will include full discovery and formal "on the record" adjudicatory hearings with cross-examination, are likely to last for many years. While the NWPA provides for a period of up to 4 years for the NRC to determine whether the repository should be granted a construction authorization, 42 U.S.C. § 10134(d), the NWPA has no penalty or other regulatory consequence for failure to meet this statutory deadline. Indeed, a similar NWPA deadline, a requirement that DOE submit the license application ninety days after the President's recommendation of the Yucca site takes effect, 42 U.S.C. § 10134 (b), elapsed over three years ago without so much as a whisper in the regulatory and political arenas.

With a team of some 30 eminent technical experts it has retained from around the globe, Nevada intends to make numerous challenges to various procedural and substantive aspects of the application – possibly filing up to hundreds of contentions. Other interest groups and government entities also expect to make challenges, including those along transport routes. Those challenges may lawfully include virtually all aspects of DOE's environmental impact statement for the project. *See NEI v. EPA*, 373 F.3d at 265-67. Accordingly, the Chairman of the NRC licensing board presiding over pre-application matters for Yucca commented recently about "the likelihood that this [licensing] proceeding will go on for an extended period of time, contrary to what's politically correct to say," even to the point where "memories fade, attorneys come and go, [and] judges come and go." *U.S. Department of Energy (High-Level Waste*

Repository: Pre-Application Matters), Case Management Conference, May 18, 2005, at p. 365 (Docket No. PAPO-00).

If a construction authorization is actually granted for the repository, and it survives appeal to the full Commission and possible court challenge, DOE must still obtain a second authorization from NRC to actually emplace high-level waste and spent nuclear fuel in the repository. 10 C.F.R. § 63.46. This proceeding, too, will be subject to litigation.

DOE may foster the untested hope that it will be able to construct a gargantuan above-ground “aging facility” at the Yucca site to be in a position to ship spent fuel to the site and store it there in dry casks years before it can actually be disposed of in the repository. Yucca FEIS at p. 2-12. But such an “aging facility” is merely a euphemism for a retrievable storage facility, which is expressly prohibited anywhere within the State of Nevada by NWPA Section 145(g), 42 U.S.C. § 10165(g). Moreover, such a facility would also have to be licensed by NRC. 42 U.S.C. § 10161(d).

H. Conclusion on the Yucca Schedule

In conclusion, DOE’s projected schedule for the development of the Yucca repository, even as revised, is sheer fantasy. The Court’s observation on the record in this litigation that “the government doesn’t appear, at least in my lifetime, to be picking up this fuel under these [standard] contracts” is, if anything, optimistic. Tr. at p. 1585. Because utilities know this only too well, they have begun to implement their own solutions to the management of their spent fuel. These solutions are eminently practical.

III. INTERIM DRY STORAGE

A. Safety and Pervasiveness of Dry Storage

In the absence of Yucca, and in the face of its accelerating delay and uncertainty, utilities have broadly developed and implemented their own “no-action” alternative to Yucca. This alternative involves the design, construction, licensing and operation of passive, dry storage facilities that are likely able to store all of the utilities’ spent fuel for centuries in a safe and fully retrievable manner.

NRC has estimated that spent nuclear fuel can be stored safely in dry storage facilities for at least 100 years. Over fifty of these facilities will be in use within the next few years, according to the agency. *See* NRC Spent Fuel Project Office Licensing Process Conference, February 8, 2005, graph of “Spent Fuel Storage” (Exhibit No. 6) and NRC “Locations of Independent Spent Fuel Storage Installations (Exhibit No. 7). In 1999, NRC testified before Congress that “we have not identified any safety or environmental issues that would preclude issuance of a [independent dry storage license] for 100 years.” NRC Statement Before the Subcommittee on Energy and Power, House Committee on Commerce, February 10, 1999. DOE’s Yucca FEIS addressed the impacts of long-term dry storage of spent fuel as part of DOE’s consideration of the so-called “no-action” alternative, required by NEPA. DOE concluded that, even in the improbable worst case of a complete loss of institutional control at reactor sites after one hundred years, with the concrete storage module and the internal spent fuel canister gradually degrading, there would be no release of any radioactive material for at least one thousand years. Yucca FEIS at pp. K-9, K-40.

In short, the days when a spent fuel “crisis” could be used to justify an accelerated rush to Yucca have long since passed, and “urgency” is no longer part of the rationale for Yucca or for spent fuel management generally. There is no crisis whatsoever in spent fuel management in this country. While spent fuel is being safely stored, a safe repository may or may not be developed, or some alternative waste management technology (such as transmutation, reprocessing, or other technologies being analyzed worldwide) may supersede the need for geologic disposal. In a study commissioned by DOE itself for the Yucca EIS, it was concluded that continued indefinite on-site dry storage of spent fuel would not be sufficiently costly to adversely impact the marginal cost of producing nuclear-generated electricity. Note to file, Jason Technologies, 6/17/97 (a DOE contractor for its Yucca FEIS) (Exhibit No. 8).

Given these realities, the Court correctly observed that the real question appears to reduce to issues of title and money.

B. The PECO Deal

In July 2000, DOE’s Secretary announced the signing of a deal with PECO Energy (now a part of Exelon Corporation) in Pennsylvania pursuant in which that utility would end its spent fuel litigation against DOE in return for DOE’s agreeing that if the spent fuel did not go to Yucca by a date certain, DOE would take title to the waste, and manage it indefinitely in dry storage casks in a safe interim facility built by the utility and financed by DOE. DOE press release, “First Agreement Reached with Utility as Nuclear Waste Acceptance,” July 20, 2000 (Exhibit No. 9). In signing the first such deal with PECO, DOE’s Secretary hailed it as a “precedent for all utilities.” *See Alabama Power v. DOE*, 307 F.3d 1300, 1306 (11th Cir. 2002) (DOE “will use the [deal] as a settlement

model on an industry-wide basis”). But because DOE chose to pay for the deal by allowing PECO to offset payments to the utilities' NWPANuclear Waste Fund, several utilities sued to block that part of the arrangement. The Eleventh Circuit in *Alabama* invalidated this element, but not its underlying terms, including the provision by which DOE would take title to the spent fuel. Moreover, this Court has observed correctly that, while *Alabama* holds that the Government may not utilize monies from the Nuclear Waste Fund to pay for the interim storage costs of the standard contract holders, *Alabama* did not address the possibility of declaring the Standard Contract void and/or awarding restitution from the Nuclear Waste Fund.

Regardless of how an arrangement like the PECO deal is paid for, it sets the predicate for one possible resolution of the entire panoply of state and utility lawsuits now facing DOE over spent nuclear fuel, including the SMUD case. Under a PECO-type arrangement instituted on an industry-wide basis, DOE would take title to all spent fuel by a date certain, and would ultimately take ownership of utilities' dry storage facilities and manage the spent fuel on site. This would permit utilities to remove spent fuel liabilities from their corporate books, allow them to safely decommission their plants, remove state utility commissions from a position of having jurisdiction over the facilities or the fuel (since those facilities would no longer be utility assets subject to state rate regulation), and would likely end the ability of states to block new reactor licensing on grounds, established in *Pacific Gas & Electric Co. v. State Energy Resources Cons. Comm'n*, 461 U.S. 190 (1983), that the availability of waste disposal is an economic issue for utilities that is appropriate for state regulation. In short, the future of nuclear power would be altogether decoupled from Yucca.

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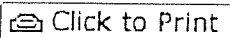
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EXHIBIT

No. 1

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Friday, March 11, 2005
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Energy officials turn shy in talk about Yucca schedule

By STEVE TETREALT
STEPHENS WASHINGTON BUREAU

WASHINGTON – Energy Department officials are displaying new caution about projecting schedules for Yucca Mountain, saying deadlines for establishing a nuclear waste repository for a large part now are out of their hands.

For years, the department had its eye firmly on 2010 to begin accepting high level nuclear waste at the Nevada site.

But after several setbacks in the past year, Yucca Mountain managers said in February that 2010 was being abandoned. Project director Margaret Chu said DOE was "hoping 2012" would emerge as the new opening date.

DOE began distancing itself from that prediction almost immediately, and its officials continue to do so.

Although saying 2012 can be achieved if everything goes their way, Yucca managers in recent public comments have mentioned 2015 as another possibility.

More often, DOE officials carefully couch any talk of deadlines, saying the project faces uncertainties ahead, including waiting for the Environmental Protection Agency to set new radiation health standards and getting enough money from Congress to build the \$57.5 billion project.

Officials also express new caution about maneuvering through a complex Nuclear Regulatory Commission licensing process that could stretch beyond three or four years as the state of Nevada challenges whether the mountain safely can contain highly radioactive material for thousands of years.

"There are a number of issues that could extend our activity, but we are attempting to do this as expeditiously as possible," Ted Garrish, Yucca Mountain acting director, said Thursday.

The Energy Department submitted a chart to Congress on Thursday that included cost estimates for both a 2012 and a 2015 repository opening. Some in private industry have said a realistic schedule would have Yucca Mountain open between 2015 and 2020.

Some DOE officials were exasperated when Chu mentioned 2012, sources said. She made her comments to a group of reporters following the department's 2006 budget announcement on Feb. 7.

Chu's resignation was announced four days later. She said her departure had been in the works for months, and there has been no indication of a connection between her departure and her references to 2012.

Chu "put a marker out there that got people uncomfortable," a DOE official said.

Another DOE executive suggested that Chu made the comment in haste to escape pressure from reporters seeking new details about the schedule.

"To tell you the truth, (reporters) were walking down the hallway with Margaret Chu during her last week, and she just put it out there," the official said.

"So that's what happened."

Nonetheless, 2012 became a new benchmark. Since then, the department has cushioned any talk of Yucca time lines.

Chu, who has moved to New Mexico, could not be contacted Thursday night.

"There is great uncertainty for (the Energy Department) as to what is going to happen politically and financially," said Bob Loux, executive director of the Nevada Agency for Nuclear Projects.

"They are not in control anymore."

The department's new caution on Yucca Mountain reflects the influence of new Energy Secretary Samuel Bodman, some say. Bodman has acknowledged to Congress in several appearances that meeting deadlines has not been DOE's strong suit in a number of areas.

"The new secretary is real concerned about doing things, making estimates of dates or financials, that we can't back up," Garrish said.

"It is possible, if circumstances all work right, for an earlier rather than a later date," Garrish said.

"I don't want to give a date that is wrong. It is important that we be careful."

A nuclear industry consultant said Yucca Mountain managers "got a lot of heat for missing the schedules," and their acknowledgement of complications ahead "is a new breath of reality."

EXHIBIT

No. 2

March 16, 2005

Statement From Secretary of Energy, Samuel Bodman

WASHINGTON, DC -- The Department of Energy has learned that certain employees of the US Geological Survey (USGS) at the Department of the Interior working on the Yucca Mountain project may have falsified documentation of their work. This documentation is required as part of the Department of Energy and Nuclear Regulatory Commission's quality assurance programs that verify the accuracy and credibility of work that has been completed. This documentation in question relates to computer modeling involving water infiltration and climate.

"During the document review process associated with the Licensing Support Network preparation for the Yucca Mountain project, DOE contractors discovered multiple emails written between May 1998 and March 2000, in which a USGS employee indicated that he had fabricated documentation of his work.

"The Department of Energy has initiated a scientific investigation of the data and documentation that was part of this modeling activity. If in the course of that review any work is found to be deficient, it will be replaced or supplemented with analysis and documentation that meets appropriate quality assurance standards to ensure that the scientific basis of the project is sound. We are conducting a thorough review of all work completed by the identified individuals to ensure that other work was not affected.

"Additionally, we have informed the US Geological Survey and the State of Nevada. We have initiated an evaluation to determine if the systematic quality assurance improvements undertaken over the last four years are sufficient to prevent the reoccurrence of a similar situation. And we plan to reemphasize to project personnel the importance of strict adherence to quality assurance procedures.

"I am greatly disturbed by the possibility that any of the work related to the Yucca Mountain Project may have been falsified. This behavior indicated in the emails is completely unacceptable, and I have referred this matter to the Department of Energy's Office of Inspector General for full investigation.

"The safe handling and disposal of nuclear waste and the sound scientific basis for the repository safety analysis are priorities for this Administration and the Department of Energy. All related decisions have been, and will continue to be, based on sound science.

"The fact remains that this country needs a permanent geological nuclear waste repository, and the Administration will continue to aggressively pursue that goal. We are committed to the safety and protection of the citizens of Nevada as we pursue the development of the Yucca Mountain project."

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Number: R-05-054

EXHIBIT

No. 3

March 31, 2005

FBI steps into Yucca document investigation

By Suzanne Struglinski

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SUN WASHINGTON BUREAU

WASHINGTON -- The FBI is examining the documents allegedly falsified by government employees working on the Yucca Mountain nuclear waste repository, a federal official says.

Chad Bungard, deputy staff director and chief counsel at a House Government Reform subcommittee, said he was told from the beginning of the inspector general investigations at the Interior and Energy departments that the FBI would also be involved.

The FBI press office would not confirm the agency's involvement or comment on the matter. The inspector general offices at each department also would not comment due to ongoing investigations.

Bungard said this will be pursued as a criminal matter until the Justice Department finds otherwise.

"That is why we are only giving our redacted information on Friday. We don't want to compromise anything," Bungard said.

The House Federal Workforce and Agency Organization Subcommittee, of which Rep. Jon Porter, R-Nev., is chairman, is to hold a hearing April 5 looking at the department's discovery earlier this month of e-mails sent by U.S. Geological Survey employees that suggest they falsified scientific information on how water moves through the mountain.

Water movement is a key issue in determining the proposed repository's safety because it can help radiation move through the mountain and possibly into the groundwater under the mountain.

Porter will review the documents today when he returns to Washington. The department handed them over on Tuesday.

"My instincts tell me this is the tip of the iceberg," Porter said.

The "sound science" argument has been used all along to convince Congress -- and the public -- that the dump plan is safe, but Porter said if the data has been tampered with, it puts the whole project in jeopardy. Porter said that at his hearing he will seek answers to such questions as how long the departments knew about these problems and why changes to data were made.

Rep. Shelley Berkely, D-Nev., said that like Porter she suspects the problems unveiled by the Energy Department go beyond what is known right now, which proves arguments for the last two decades that the project should not move forward.

She said she believes she knows the motives for the alleged falsification.

"When the science didn't match the reality, they used politics to change the science in order to match the reality," she said.

She welcomed the FBI's involvement because tampering with scientific data threatens the future health and safety of Nevadans.

"That someone or a group of people colluded to falsify the scientific data on which the entire Yucca Mountain project is based is nothing less than criminal and should be prosecuted to the fullest extent of the law. There is no excuse for it," Berkley said, adding that those responsible should be "put away for a good long time."

Jack Finn, spokesman for Sen. John Ensign, R-Nev., said Ensign was pleased the FBI was involved, since that is what the senators asked for.

Ensign and Senate Minority Leader Harry Reid, D-Nev., sent a letter to Attorney General Alberto Gonzales and FBI Director Robert Mueller a day after the Energy Department's announcement about the e-mails asking for an investigation and for protection of the documents involved.

Rep. Jim Gibbons, R-Nev., believes the FBI will be an "impartial and unbiased" investigator, said spokeswoman Amy Spanbauer. She said the issue is obviously a serious matter that brings the whole integrity of the project into question.

The investigation is the latest stumbling block for Yucca Mountain, which has hit a series of troubles with funding and its planned license application since being approved as the nation's nuclear waste repository.

A federal appeals court found that the Environmental Protection Agency did not follow the law when determining how long the mountain should hold radiation, a key scientific standard. The EPA is now reworking the standard.

Return to the referring page.

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EXHIBIT

No. 4

reform.house.gov

Government Reform

Contact: Chad Bungard 202-225-5147

Falsified Documents Regarding Yucca Mountain

Washington, Apr 1 -

COMMITTEE ON GOVERNMENT REFORM
SUBCOMMITTEE ON THE FEDERAL WORKFORCE AND AGENCY ORGANIZATION
CONGRESSMAN JON PORTER, CHAIRMAN

Press Release

FOR IMMEDIATE RELEASE: CONTACT: Chad Bungard 202-225-5147
April 1, 2005 Chad.Bungard@mail.house.gov

Chairman Jon Porter's Initial Probe into Allegations that Federal Scientists Falsified Data Used to Establish the Safety of the Yucca Mountain Nuclear Waste Repository Reveals Disturbing Results

Chairman Porter Releases Damning E-Mails

Chairman Jon Porter (R-NV) announced today that he has received and reviewed documents from the Department of Energy and the Department of Interior pursuant to his request last week that the Departments produce all documents relating to, identifying, or discussing the falsification of documents and records used in relation to the proposed Yucca Mountain nuclear waste repository. "After reviewing this first set of documents, I am appalled at the blatant misconduct by Federal employees. The information that I reviewed is damning. The legitimacy of the science surrounding the storage of nuclear waste at this facility is indeed in question. I look forward to the hearing that my subcommittee will hold on this issue to get to the bottom of this misconduct, as well as obtaining additional documents from both Departments as they continue to respond to my earlier request. Nevadans, and all Americans, deserve to know the truth when it comes to safety issues of this magnitude," said Porter.

Congressman Porter is the Chairman of the U.S. House Government Reform Subcommittee on the Federal Workforce and Agency Organization. Chairman Porter's subcommittee will be holding a hearing on April 5, 2005 in Washington, D.C. at 10:00 a.m. in Room 2247 at the Rayburn House Office Building. Representatives Shelley Berkley (D-NV) and Jim Gibbons (R-NV) are invited to sit with Chairman Porter on the panel. Due to the fact that both Departments are not cooperating with the Subcommittee in redacting documents for public release, only a portion of the documents delivered by the both Departments are being released today. Additional documents will be disseminated once they become available. "I am deeply agitated and insulted that both Departments are acting as though this is not a matter of public concern. The public has a right to this information and for the Departments to

refuse to assist the Subcommittee in redacting the documents for public release is an outrage. This begs the question: What don't they want the public to know?" said Porter.

The following witnesses will testify before the Subcommittee:

Panel 1:

The Honorable Kenny C. Guinn, Governor of Nevada;
 The Honorable Harry Reid, United States Senator (NV);
 The Honorable John Ensign, United States Senator (NV);
 The Honorable Brian Sandoval, Attorney General of Nevada.

Panel 2:

The Honorable Charles G. Groat, Director, U.S. Geological Survey, U.S. Department of the Interior;
 The Honorable Ted Garrish, Deputy Director, Office of Civilian Radioactive Waste Management, U.S. Department of Energy;
 The Honorable Earl E. Devaney, Inspector General, U.S. Department of the Interior;
 The Honorable Gregory H. Friedman, Inspector General, U.S. Department of Energy.

Panel 3:

Judy Treichel, Executive Director, Nevada Nuclear Waste Task Force;
 The Honorable B. John Garrick, Chairman, Nuclear Waste Technical Review Board;
 Joe Egan, Esquire, on behalf of Attorney General Brian Sandoval of Nevada;
 Bob Loux, Executive Director, Nevada Agency for Nuclear Projects.

Summary of the E-Mails (Key Highlights)

Undeleted internal DOE Memo states: "These e-mails describe deliberate failures to follow quality assurance procedures and irreproducible results related to the infiltration of water into the repository... Depending on the current status of the work to which he contributed, these e-mails may create a substantial vulnerability for the program."

(NOTE: This document was not included in this release due to the lack of cooperation by the DOE)

QA = quality assurance or quality assured.

E-mails Dating 1998:

- E-mail from presumed USGS employee 2 to USGS employee 1 dated 2/22/98: "You are just starting to wake to what the hell is going on in the Yucca Mountain project. I can't teach it to you. I've learned, and that's why I'm in _____. I would have liked to bring more people with me but nobody ever figured it out as much as I tried to tell you. I couldn't do it directly because you have to learn by experience. Once you learn, you learn. There is more to it than you think, that's why I'm still on the project. They won't get rid of me. You are on the verge of figuring this shit out. Good luck."
- E-mail from presumed Federal employee (PFE) to 6 PFE's dated 04/03/1998: "I have some maybe bad

and maybe good news that you should be aware of....There are some implications that I did not realize until I talked them over with PFE yesterday: basically, either our infiltration model is wrong or our ___ flow model is wrong or both.”

“(I don’t want to be too critical here--I could probably tear apart any of our models. Did somebody say seepage? And PFE did do us a great favor in helping us out for ___.)___-flow model wrong? Looking at the same analog sites, we see that flow is not ubiquitous. It is in isolated paths, typically associated with locally saturated conditions.”

“The bad news is that it might hurt our credibility. The point we probably need to make in ___ is that our modeling is conservative...”

“The unfortunate thing here is that the way we have the natural system modeled, we are probably not giving it enough credit.” (Emphasis added)

- E-mail from USGS employee 1 to presumed USGS employee 2 dated 05/11/1998: “Still don’t know quite how to handle the air temp glitch. I’m continuing to keep mum about this, but, from a scientific integrity standpoint, it is tempting to let the end users know exactly what was provided to them in terms of effectively cooler future climate simulations. Problem is, I don’t know how to do this without looking bad.”
- E-mail from USGS employee 1 to presumed USGS employee 2 dated 06/18/1998: “As far as the _____ stuff and the regional stuff goes;...We are doing the same amount of work on the regional scale whether (SIC) we get the money for _____ or not, so why not try to get the money? All we have to do is a few extra simulations in _____. Its like we’ll get paid twice for the same work (and I don’t feel bad about this considering how little we’re getting paid for the work this year...in my mind it will all even out in the end).” (Emphasis added)
- E-mail from presumed USGS employee 2 to USGS employee 1 dated 10/20/1998: “This is a gamble but I’ll take the OK and make them eat shit in the long run. The WILL NOT go into a license scenario with the model we have now, and particularly with PA demanding changes. Don’t sell out.”
- Email from USGS employee 1 to PFE dated 10/29/1998: “Leveling the top of the mountain seemed humorous but it gave me the chance to make some more cool figures. This little task is history now. Wait till they figure out that nothing I’ve provided them is QA. If they really want the stuff they’ll have to pay to do it right.” (Emphasis added)
- E-mail from USGS employee 1 to presumed USGS employee 2 dated 12/17/1998 06:57PM: “The work plan ___ has put together as a result of the meeting this week includes model hand-offs....We’re not sure how smoothly this is going to go but this is the approach. Like you’ve said all along, YMP has now reached a point where they need to have certain items work no matter what, and the infiltration maps are on that list. If USGS can’t find a way to make it work, _____ will (but for now they are definitely counting on us to do the job).” (Emphasis added)
“I can no longer wait for USGS to figure this out; I’m moving ahead according to the ___/_____ work plan we put together this week.”
- E-mail from presumed USGS employee 2 to USGS employee 1 dated 12/17/1998 11:47:08 PM: “I agree with your analysis. We only win if we get the final product out.” “The bottom line is forget about the money, we need a product or we’re screwed and will take the blame. EVERYBODY will say they told us to go ahead without a plan or budget in place (even though PFE said no hires). This is now _____ and we had better be good at it. I seem to have let this one slip a little too much in an attempt to cover all our work (and get us the hell out of the long term problem of Yucca Mountain) but now it’s clear that we have a little to no choice. In all honesty (SIC) I’ve never felt well managed or helped by the USGS YMP folks, in fact, as you know, I’ve often felt abandoned. This time it’s no different, or worse, and we

have to work together to get out of this one. I'm still overwhelmed trying to protect the rest of the program from the ravages of what's happening in _____ (funding, which we seem to be blamed for because we got funding) and the current ___ fiascoes in the ____....These are very dangerous time, (SIC) both funding wise and professionally. Mark my words on this one, it will not be long before our technical credibility with (SIC) be challenged in an attempt to discredit us and redirect funding!" (Emphasis added)

- E-mail from USGS employee 1 to presumed USGS employee 2 dated 12/18/1998: "YMP is looking for the fall guys, and we are high on the list. I got a strong feeling at the ___ meeting that high level folks are starting to pay very close attention to who they will come after when things hit the fan. Who got how much funding at what time will all be long made clear that this will be like the OJ trial, where results are completely thrown out because of minor procedural flaws or personal attacks on credibility. (Emphasis added)

E-mails Dating 1999:

- E-mail from USGS employee 1 to PFE and presumed USGS employee 2 dated 03/15/1999: "Now I'm going to give you the inside scoop: I'm going to continue the regional modeling, even if it means ignoring direct orders from YMP management. I'm also going to be working on reports, even if it means ignoring direct orders from YMP management. USGS employee 2 and I have a pretty clear vision of the type of work that needs to be done to stay alive for the long-haul, and it very definitely involves getting product out there for the users and the public to see. The _____ regional modeling work fits that bill."

"At this point, I am still working to the plan that we've all spent a significant amount of time on to make things happen for FY99. That's the insider scoop. The position we will take for the _____ planners may be much different. So delete this memo after you've read it." (Emphasis added)

- E-mail from USGS employee 1 to presumed USGS employee 2 dated 03/26/1999: "I'll admit that I have not devoted a full-time effort towards _____....Yes the _____ work is now behind schedule but so is everything else because I'm the only one doing this work, and I'll be damned if I drop everything else and work on nothing but ____....I do not need to be developing ____ hoop jumping skills. The skills I am interested in developing are ones that will benefit the ___ district and our careers....I guess this is another one of those memos that need to be destroyed." (Emphasis added)

- E-mail from presumed USGS employee 2 to USGS employee 1 dated 4/2/1999: "Science by peer pressure is dangerous but sometime [SIC] it is necessary."

- E-mail from USGS employee 1 to presumed USGS employee 2 dated 04/22/1999 03:27 PM: "The QA bullshit grows deeper. I may need to say that I did everything by hand for the data package I am submitting that you and presumed PFE reviewed. The program I wrote is not in the system and QA will be all over it like flies on &%#\$. All references to PFE are being deleted. Here's my question: When we go to start QA'ing the site-scale modeling work, will I get taken to the cleaners because I am not referencing either a tech procedure or a scientific notebook?" (Emphasis added)

- E-mail from USGS employee 2 to USGS employee 1 dated 04/22/1999 03:43 PM: "What if you just download the raw files from _____ and say you used those? Do they need to know any more than that? You don't really need to do an analysis just say this is the data I used. Maybe that would work." (Emphasis added)

- E-mail from USGS employee 1 to USGS employee 2 dated 04/22/1999 07:05:15 PM: “Not a bad idea. I am now considering it. Ideally, one would assume that the more information you proved QA, the better the QA. In reality, it seems that the opposite is true. At any rate, it’s a damn shame to be wasting time with this sort of thing.”
 - E-mail from USGS employee 1 to PFE dated 04/22/1999 9:52:39 PM: “Model simulations have been in progress but about 3 weeks ago I found a small error in the model input that was generated using the _____ data. The error was minor but would have created a QA nightmare so this was fixed and the simulations are being re-done (I’ll send you a summary of the results when I get to this point).”
 “The input files are basically re-formatted _____ export files with a minor amount of parameter estimation occurring to fill small gaps in the record (even for the high ranking sites, there are gaps all over the place). Here’s the weird news; to get this milestone through QA, I must state that I have arbitrarily selected the analog sites.
 “So for the record, seven analog sites have been arbitrarily (randomly) selected. Hopefully these sites will by coincidence match the sites you have identified.”
 “P.S. please destroy this memo” (Emphasis added)
 - E-mail from USGS employee 1 to presumed USGS employee 2 dated 4/23/99: “Dealing with this QA bullshit is really starting to make me sick.”
 - E-mail from PFE to USGS employee 1 dated 08/05/1999: “Piss on QA, how’s your recharge report (due Aug 31, 1999) coming.”
 - E-mail from PFE to USGS employee 1 dated 11/5/99: “Then is wouldn’t have been shit on time (almost) because his people in the trenches would’ve understood the scope and schedule in enough time to focus resources properly. How can we deal with a problem when we don’t know what it is? All we can do now is clean up the mess as well as we can and save his butt.”
 - E-mail from USGS employee 1 to presumed USGS employee 2 and PFE dated 11/15/1999. “Don’t look at the last 4 lines. Those lines are a mystery that I believe somehow relate to the work PFE was doing in entering the 1994 data. These lines are not used by _____ (we stop at 9/30/94). I’ve deleted the lines from the “official” QA version of the files (which do have headers). In the end I keep track of 2 sets of files, the ones that will keep QA happy and the ones that were actually used.” (Emphasis added)
- E-mails Dated 2000:
- E-mail from USGS employee 1 to presumed USGS employee 2 dated 01/06/2000: “There is of course, no scientific notebook for this work. All work is in the form of electronic files....They may be expecting to see something that at least looks like a scientific notebook documenting work in progress. I can start making something up but then the __ projects will need to go on hold.”
 I am far more concerned about the __ projects than I am about the _____. But __ will be rather unhappy, and I will need help trying to figure out a good excuse why 100% of my time did not go into the audit without revealing the __ projects.”
 - E-mail from USGS employee 1 to two PFE’s dated 02/17/2000: “I finally took the time to process your request. --- Please do not tell anyone how this was done because then we will need to get this whole thing through software QA!” (Emphasis added)

- E-mail from USGS employee 1 to presumed USGS employee 2 and two PFE's dated 03/06/2000: "_____: the topographic ID (I must assume that this was produced in _____ by PFE using the _____. Because it is only a place holder and not actually used by the model it doesn't matter but the parameter has been carried through the pre-processing and is in all the _____ files used as input for _____)"
"I can fudge the attachment for _____ for now but eventually someone may want to run _____ to see what numbers come out and at that point there will be problems, although it is my belief for now that an impact analysis would reveal that the differences are not critical to the end result."
- E-mail from USGS employee 1 to PFE dated 03/07/2000: "Believe it or not, this file is now 3.5 years old, but it is what was used. This developed record stops on day 274, 1995. The only real good thing about this file is we seem to be very close to getting it into the _____...Someday I hope to have the time to update this to include an improved pre-1987 interpolation and all the new data after 1995, which includes some interesting events.....back to QA.
P.S. Hope this email doesn't trigger a _____ input request. I'll probably get fired. (Emphasis added)
- E-mail from USGS employee 1 to three PFE's dated 03/09/2000: "The main stupid thing is that as a 1st step I ran _____ with the user 2 to create _____ from _____, the output from the _____. This setting causes a veg cover estimate to be made based on _____, which are the vegtypes defined for the regional model (data from PFE and PFE). I was desperately trying to bring vegetation into the picture (still wasn't getting what I needed from the bugs and bunny crowd) but it didn't match up as well as I had hoped, I ran out of time, and it fizzled." (Emphasis added)
"Now here is the majorly(SIC) stupid part. To create _____, which is used as input to _____, I re-ran _____ using _____ as input and set the option to _____. So the regional vegtypes made it into all the watershed files that were used in the _____. Now I can't just re-write the routine to leave out _____ because the output will never match what ended up becoming the watershed files. Had I re-run _____ using _____, I could now rewrite the code in 5 minutes, get rid of _____ all together, and all would be cool. (Emphasis added)
- "There is a bug in the top layer of the cascading bucket model, the soil ks conversion is off by a factor of 10, and even if I can re-produce the blocking ridges they're still wrong."
- E-mail from USGS employee 1 to presumed Federal employee (PFE) dated 3/30/2000: "The programs, of course, are all already installed otherwise the _____ would not exist. I don't have a clue when these programs were installed. So I've made up the dates and names (see red edits below). This is as good as its going to get. If they need more proof, I will be happy to make up more stuff, as long as its not a video recording of the software being installed." (Emphasis added)

EXHIBIT

No. 5



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Ex-Yucca scientist to face subpoena

House committee investigating e-mails wants his testimony

By STEVE TETREULT
STEPHENS WASHINGTON BUREAU

WASHINGTON -- A House committee today plans to subpoena a former Yucca Mountain scientist to testify later this month about e-mail messages that discuss document falsification on the nuclear waste project.

The Government Reform Committee will seek to compel Joseph A. Hevesi to appear and bring relevant documents to a June 29 hearing before a federal work force subcommittee headed by Rep. Jon Porter, R-Nev.

Porter, who announced the impending subpoena, said the scientist has not responded to requests to be interviewed about the e-mails.

"This is the first subpoena being issued," Porter said. "We had hoped it would not be necessary."

The subpoena and scheduled hearing could breathe new public life into a matter that has been taking place mostly behind the scenes as Porter, a Yucca opponent, seeks to ferret out flaws that might throw sand into the project.

Energy Department official John Arthur said last week that DOE is nearing the end of an internal probe and has tentatively concluded the e-mails have not compromised the project, although the work in question will be redone.

Hevesi, a hydrologist with the U.S. Geological Survey, did not immediately respond to a message left on his home phone Monday evening.

Hevesi has been identified as a principal author of e-mails written between 1998 and 2000 that discuss making up names and dates, keeping two sets of books and using "fudge factors" in documenting quality assurance on their research.

Disclosure of the provocative messages threw a new wrench into the government program that is seeking to develop Yucca Mountain, 100 miles northwest of Las Vegas, into a repository for 77,000 tons

of highly radioactive spent nuclear fuel.

Porter, a critic of the Yucca project along with most other Nevada elected leaders, initiated an investigation through the House federal work force and agency organization subcommittee he took over this year.

Two other USGS hydrologists who have been identified as e-mail authors, Alan L. Flint and Lorraine E. Flint, have been interviewed in person by subcommittee investigators, according to agency spokeswoman A.B. Wade.

Porter said he does not plan to summon the Flints to the June 29 public hearing. He declined to say whether the couple has been interviewed or to discuss other aspects of the investigation.

Inspectors general for the Energy Department and the Interior Department also are conducting ongoing investigations with help from the FBI. DOE managers are attempting to identify whether any of their decisions based on repository science may have been affected by shortcomings raised in the e-mails.

Other potential witnesses for the hearing have not yet been set, Porter said. He said the Energy Department and the USGS have yet to provide all documents the subcommittee requested for its probe.

Porter and the Energy Department have been unable to agree on a timetable for documents to be produced.

Wade said Monday that USGS on May 16 turned over 766 documents accounting for 2,878 pages on a compact disc. Asked for hard copies, Wade said the agency complied on May 23.

The subcommittee had requested all documents and records, including e-mails, "relating to, identifying, or discussing the falsification and-or fabrication of documents or records" by anyone associated with the repository.

"We have attempted to be responsive," Wade said. "USGS would be willing to provide whatever documents is being requested if we become aware of the specific document or group of documents."

Alan and Lorraine Flint and Hevesi are assigned to the USGS office in Sacramento, Calif. All worked at Yucca Mountain for periods of the 1990s, contributing research and data for computer models that predict how water might infiltrate mountain cracks and pores under varying climate conditions.

Although USGS officials have declined to describe their current projects, Wade said they are not taking part in any work related to Yucca Mountain or any other USGS activities in Nevada.

Find this article at:

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EXHIBIT

No. 6

Spent Fuel Project Office Licensing Process Conference

February 8, 2005

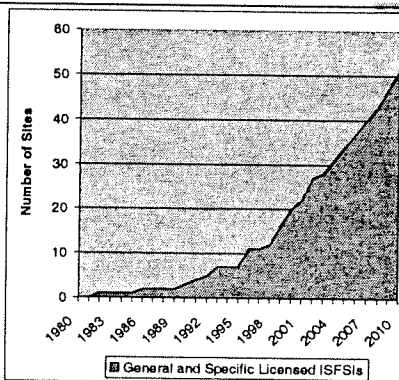
E. William Brach, Director
Spent Fuel Project Office
U.S. Nuclear Regulatory Commission



Overview

- Review the Agenda
 - Organized into three sessions
 - Focus on the licensing/certification process, not on technical issue resolution
- Expectations and Purpose
 - Role of NRC Staff and the Facilitator
 - Role of Participants
 - Outcome of the Conference
- Rules of Engagement
- Lessons Learned

Spent Fuel Storage



Transportation

- 130 Certificates of Compliance (CoC's), 31 certificate holders
- 80-100 Transportation cases each year
- New design applications expected as a result of Part 71 rule change (phase-out of old packages)
- New package designs and amendments to support High-Level Waste Repository needs

Rules of Engagement

- Provide clear expectations
- Stable and predictable process
- Fair and level field

Rules of Engagement (cont)

- Six years of experience
- Lessons learned by NRC and Industry
- RIS 2004-20 issued December 16, 2004

EXHIBIT

No. 7



U.S. Nuclear Regulatory Commission



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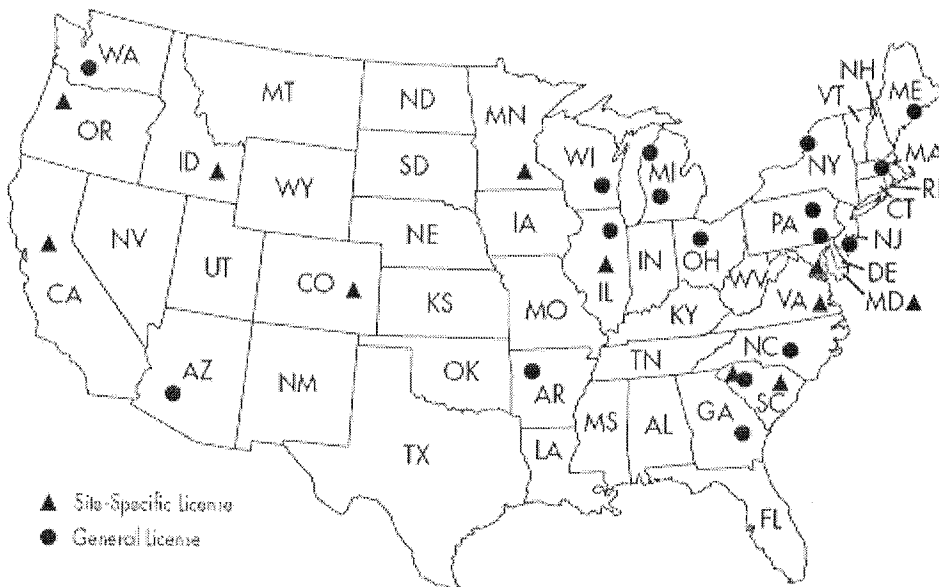
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How We Regulate

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Locations of Independent Spent Fuel Storage Installations



State and Plant	License Type
ARKANSAS Arkansas Nuclear	General ●
ARIZONA Palo Verde	General ●
CALIFORNIA Rancho Seco	Site-Specific ▲
COLORADO Fort St. Vrain	Site-Specific ▲
GEORGIA Hatch	General ●
IDAHO DOE: TMI-2 Fuel Debris	Site-Specific ▲
ILLINOIS GE Morris Dresden	Site-Specific ▲ General ●
MAINE Maine Yankee	General ●
MARYLAND Calvert Cliffs	Site-Specific ▲
MASSACHUSETTS Yankee Rowe	General ●

MICHIGAN	
Palisades	General ●
Big Rock Point	General ●
MINNESOTA	
Prairie Island	Site-Specific ▲
NEW JERSEY	
Oyster Creek	General ●
NEW YORK	
FitzPatrick	General ●
NORTH CAROLINA	
McGuire	General ●
OHIO	
Davis-Besse	General ●
OREGON	
Trojan	Site-Specific ▲
PENNSYLVANIA	
Susquehanna	General ●
Peach Bottom	General ●
SOUTH CAROLINA	
Oconee	General/Site-Specific ● ▲
H.B. Robinson	Site-Specific ▲
VIRGINIA	
Surry	Site-Specific ▲
North Anna	Site-Specific ▲
WASHINGTON	
Columbia Generating Station	General ●
WISCONSIN	
Point Beach	General ●

Data as of March 2003

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Last revised Thursday, September 25, 2003

EXHIBIT

No. 8

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EIS: AR-~~GEN~~
NA-85029

MOL.19990319.0198

Fax

NR-103301

To: Ken Skippy / Dick Holden From: Doug Vogt

Fax: _____ Pages: 3

Phone: _____ Date: 6/17/97

Re: _____ CC: _____

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• Comments:

Jennifer please copy:

Copy: Wendy - FYI AND Review
 Deb "
 Lee "
 Bonnie "

Q: for Wendy/Deb:

Should this be included
in Administrative Record

File? Y - N

After Receiving
NEPA TEAM
Comments?

06/17/97

To: File

From: Doug Vogt

Subject: Impacts from shut down of nuclear power plants

Jason has been asked whether the Yucca Mountain EIS should consider the potential shutdown of operating nuclear power plants as part of the EIS No Action Alternative.

This memorandum summarizes the benefits and disadvantages of examining nuclear power shutdown in the EIS.

1. Quantifying the economic impacts of nuclear power shutdown requires developing and running a nationwide electric utility model with utility by utility electric generating costs to determine the state-by-state change in power costs. Such models typically include the effects of conservation as power cost increases. Developing and running these models could cost several million dollars.
2. Data on emissions from new power sources would also be needed. A detailed quantitative assessment of the change in emissions would also require developing and running a state-by-state electric utility generating model to account for regional replacement fuel differences. Note that DOE-NE is performing a scoping evaluation of the impact of loss of nuclear generating capacity on air emissions. NEI has performed similar evaluations.
3. The proposed action for this EIS is the construction, operation and eventual closure of a repository at Yucca Mountain. A decision not to proceed with Yucca Mountain does not result automatically in a shutdown of all nuclear power plants. A second repository could be developed, or interim storage of spent fuel could be pursued. Including nuclear power shutdown in the no action alternative could be challenged as being outside the scope of the proposed action and alternatives.
4. The incremental storage costs of additional spent fuel at reactors is estimated to be on the order of \$ 0.0002 per kilowatt hour of electricity generated or less than a fraction of 1% of nuclear power generation costs. Some existing nuclear plants may not be competitive with other sources of power in their generating areas. Uneconomic plants may be shut down as electric utility operations are de-regulated. However, it is expected that the cost impact of extended spent fuel storage at reactors are not great enough to change the economic competitiveness of nuclear power. Plants that are competitive today will remain so; plants that are not competitive will offer the same cost penalty.
5. Deregulation of the electric utility industry may lead to the early shutdown of some nuclear units (perhaps a dozen or so) over the next 5 to 10 years. These shutdowns are not related to the proposed action at Yucca Mountain.
6. No action at Yucca Mountain does not mean that an alternative repository site will not be selected, characterized, licensed, constructed and operated. The NRC, in its waste confidence rule-making, states that it has a high level of confidence that the DOE will have a licensed and operating repository before the year 2025.

06/17/97

Summary and recommendation

We recommend not addressing the economic and environmental impacts of nuclear power shutdown as part of the no action alternative evaluation for Yucca Mountain because of the cost of such analyses and the lack of a clear tie between the proposed action at Yucca Mountain and the continued operation of nuclear power plants.

EXHIBIT

No. 9

PRESS RELEASES

First Agreement Reached with Utility on Nuclear Waste Acceptance July 20, 2000

Secretary of Energy Bill Richardson today announced that an agreement has been signed with PECO Energy Company to address the Energy Department's delay in accepting spent fuel from utilities. ■ [List](#)

The agreement, which is in the form of a contract amendment and is the first such agreement, applies only to PECO's Peach Bottom Plant in Pennsylvania, but is intended to be a framework that can be applied to other nuclear power plants. Negotiations for the other plants will be conducted on a plant-by-plant basis.

"Today's agreement demonstrates that the department and the utilities can reach a resolution regarding our delay without resorting to costly and protracted litigation, and I hope it will be a precedent for additional settlement negotiations with other utilities," said Secretary Richardson. "This administration is committed to resolving the complex, important issue of nuclear waste disposal in a timely and sensible manner and remains committed to a safe, permanent geologic repository."

The agreement allows PECO to reduce the projected charges paid into the Nuclear Waste Fund to reflect costs reasonably incurred by PECO due to the department's delay. PECO could be able to make an adjustment of their charges by up to \$80 million over the next 10 years. Under the agreement, PECO must demonstrate that the adjustments were the direct result of the department's delay in moving spent nuclear fuel from the Peach Bottom Plant.

"This contract amendment is a positive step forward that will provide for the appropriate reimbursement of costs that result from delays in siting the repository without impairing the Nuclear Waste Fund," said Corbin A. McNeill, Jr., Chairman, President and Chief Executive Officer, PECO Energy Company. "While it is unfortunate that there is not yet a permanent solution for spent nuclear fuel, we remain optimistic that the government will fulfill its long-term obligation."

Secretary Richardson has been working with the utilities on the department's 1998 contractual obligation to take spent fuel from utilities since he came to the department and intends to continue working towards additional settlement agreements.

The Secretary of Energy will make a decision next year whether to recommend Yucca Mountain, Nevada, to the President as the site for the permanent geologic repository based on scientific and technical studies done at the site.

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