

May 5, 2006

Pam Schuller,
Bureau of Land Management,
Salt Lake Field Office,
2370 S. 2300 W.,
Salt Lake City, Utah 84119

Re: Comment by Scientists for Secure Waste Storage (SSWS) on the Bureau of Land Management Notice, 71 Fed.Reg. 6286-6289 (February 7, 2006) – Right-of-Way Applications Filed by Private Fuel Storage, LLC, for an Independent Spent Fuel Storage Installation on the Reservation of the Skull Valley Band of Goshute Indians and Related Transportation Facility in Tooele County, Utah

Dear Ms. Schuller:

Enclosed please find the Comment by Scientists for Secure Waste Storage (SSWS) on the Bureau of Land Management Notice, 71 Fed.Reg. 6286-6289 (February 7, 2006) regarding the Right-of-Way Applications Filed by Private Fuel Storage, LLC, for an Independent Spent Fuel Storage Installation on the Reservation of the Skull Valley Band of Goshute Indians and Related Transportation Facility in Tooele County, Utah. Also enclosed is a copy of the Amended and Supplemental Petition of Scientists for Secure Waste Storage to Intervene filed in the licensing proceeding before the Atomic Safety and Licensing Board of the Nuclear Regulatory Commission in February 1998 which is referred to several times in the Comments; we request that the Amended and Supplemental Petition be made part of the Comments and the record.

Sincerely yours,

Martin S. Kaufman
Senior Vice President and General Counsel
Atlantic Legal Foundation
Counsel for Scientists for Secure
Waste Storage

MSK:mbs
enclosures

Comment by Scientists for Secure Waste Storage (SSWS) on the Bureau of Land Management Notice, 71 Fed.Reg. 6286-6289 (February 7, 2006) – Right-of-Way Applications Filed by Private Fuel Storage, LLC, for an Independent Spent Fuel Storage Installation on the Reservation of the Skull Valley Band of Goshute Indians and Related Transportation Facility in Tooele County, Utah
Submitted to the Bureau of Land Management, Department of the Interior

Interest and Qualifications of Scientists for Secure Waste Storage (SSWS)

Scientists for Secure Waste Storage (“SSWS”) was formed in January 1998 to support the Skull Valley Band of Goshute Indians (“Band”) in their desire to allow their reservation to be used for the temporary storage of high level nuclear waste in the form of spent fuel rods. The membership of SSWS is listed in Appendix 1.

The collective experience of these scientists in nuclear matters of all kinds, including risks associated with radiation exposure, is considerable. Its current membership includes three Nobel Prize winners in physics or chemistry, whose expertise is in nuclear radiation.¹ Other members of SSWS also have substantial expertise in physics, chemistry, radiation medicine and radiation safety. The members of SSWS have been, and are, willing to spend their own personal time on the issues, and, when appropriate or necessary, use their own personal funds to travel to Utah to explain the issues at public meetings and hearings. Because it would not be appropriate for an active member of a federal or state government department to take a position that might differ from that of his former agency, so most of the members of SSWS have retired from those official positions they held, but their experience and knowledge is often derived from their past positions in government or academia.

Although the petition of SSWS to be a formal intervener in the Nuclear Regulatory Commission licensing hearing was denied, SSWS has made “limited appearances” at several of the hearings, has written to newspapers, has posted its opinions on the world wide web, has allowed its opinions to be publicized by the Band. and has otherwise attempted to make its views known. For example, Dr. Steven Barrowes testified in Salt Lake City, as did Professor Richard Wilson on two occasions. In most cases the views of SSWS have been presented by Professor Wilson. However, in each case the testimony has been circulated to the members of SSWS for their views. In the eight (8) years since the formation of SSWS, no member has dissented and no member has withdrawn his membership, although death has reduced the membership of SSWS, as noted in Appendix 1.

SSWS has also made extensive efforts to discuss these matters informally with anyone concerned. On the evening of January 27, 1998, Professor Wilson invited each member of the Utah Congressional delegation, the then Governor, and the heads of the Church of Jesus Christ of Latter Day Saints to a reception in Salt Lake City to discuss SSWS’s positions and also invited all persons traveling on the special bus tour organized by the Nuclear Regulatory Commission on that day to meet. SSWS has offered collectively and severally to visit with the Governor or other politicians.

¹ Three other Nobel laureates in chemistry and physics who had been among the founding members of SSWS are now deceased due to the passage of time.

This invitation (which in the case of the late Professor Seaborg was also made by him personally on more than one occasion) was ignored. Professor Wilson was able to talk to Senator Bennett during a break in the hearings on April 26, 2002 in Tooele, Utah, when the Senator held a press conference to urge that waste could be stored on the reactor site where the waste was generated. At that time Senator Bennett did not contest the view Professor Wilson (on behalf of SSWS) presented to him that the safety considerations of the Senator's proposal and the Private Fuel Storage/Goshutes application were similar, and the site of Skull Valley, which is more remote from populations, was preferable.

As noted in the request for comments, the Bureau of Land Management of the Department of the Interior has been involved in the Environmental Impact Statement (EIS) for the storage facility, and the intermodal transfer facility involved therein. SSWS has been aware of the details of this from January 1998. The proposal has not appreciably changed since that time. After the January 1998 hearings, Private Fuel Storage ("PFS") suggested an alternate access procedure: a branch rail line along federal land for the 20 miles from the Union Pacific main line to the Goshute reservation. It is well known that rail travel is generally safer than road travel, so this would be superior to truck transport, and was so recognized by SSWS. However any accident in either modality would be of the nature of an ordinary traffic accident and not of a release of radioactivity, as noted further below.

In December 2005, in an "add-on" to the defense authorization bill (presented and supported by the Utah delegation in the Congress) the land for the rail line was designated a wilderness area. Section 384 of Public Law 109-163, National Defense Authorization Act for Fiscal Year 2006, 119 Stat. 3136, signed into law January 6, 2006.

SSWS believe that the Bureau of Land Management should support the use of the federal land for road access to the proposed facility.

Response to the Specific Questions of the Bureau of Land Management

SSWS respond to the six specific questions asked by BLM as follows:

- (1) The project's consistency with BLM's management of the public lands.

The Skull Valley Band of Goshute Indians has been recognized as a sovereign entity by the Treaty of Tuilla Valley, October 12, 1863, 13 Stat. 681, in which the Goshutes and the United States agreed to establish peace and friendship. *See U.S. v. Goshute Tribe of Identifiable Group*, 206 Ct.Cl. 401, 512 F.2d 1398 (Ct.Cl. 1975). The Confederated Tribes of the Goshute Reservation organized themselves in 1940 under the provisions of the Indian Reorganization Act (25 U.S.C. § 476), and adopted a Constitution and Bylaws. *See McCurdy v. Steele*, 506 F.2d 653, 654-655 (10th Cir. 1974). The Constitution and Bylaws have been federally approved pursuant to 25 U.S.C. § 476. *See Cleveland v. Andress*, 444 F.Supp. 122 (D.Nev. 1978). This sovereignty is based on the pre-existing of sovereignty of Indian tribes before first contact with Europeans and treaties and executive orders between indigenous nations and the United States, and congressional legislation. *See, e.g., Washington v. Washington State Commercial Passenger Fishing Vessel Ass'n*, 443 U.S. 658, 675 (1979) ("A treaty, including one between the United States and an Indian tribe, is essentially a contract between two sovereign nations."); *see also Choctaw Nation*, 397 U.S. at 631, 90 S.Ct. 1328

(citations omitted); *see also Oklahoma Tax Comm'n v. Chickasaw Nation*, 515 U.S. 450, 465 (1995) (“[T]reaties should be construed liberally in favor of the Indians.”) (citation omitted); *Oregon Dep't of Fish and Wildlife v. Klamath Indian Tribe*, 473 U.S. 753, 766 (1985) (“[D]oubts concerning the meaning of a treaty with an Indian tribe should be resolved in favor of the tribe.”).

It seems clear that the Skull Valley Band should be allowed to engage in commerce with the rest of the United States whenever it is appropriate. It would be contrary to the terms of the Treaty with the Goshutes, contrary to the often quoted fundamental principle that all men are born equal, and contrary to common sense, if similar consideration were not given to the Goshutes.

(2) The public interest.

SSWS has argued, and still argues, that the proposed facility is in the national interest. While construction of new nuclear electric power has been in the doldrums for some years, nuclear waste is still generated by existing plants. Moreover the increased attention given to the possibility of global climate change, caused by fossil fuel burning, has renewed interest in nuclear energy as an alternative. For example even the founder of Greenpeace is now in favor of an expansion of nuclear power, as demonstrated by his testimony in the US Congress in April 2005 and his “op ed” to the Washington Post of May 16, 2006. Some have argued that nuclear energy is not in the “national plan”, but there is no such plan agreed and approved by all stakeholders. The Bureau of Land management in its request for public comment specifically notes that:

On October 26, 2005, Secretary of Energy Samuel W. Bodman stated that the PFS facility initiative is not part of the Energy Department's overall strategy for the management of SNF and high-level radioactive waste. The Secretary noted that the Energy Department would be prohibited by statute from providing funding or financial assistance to the initiative because the PFS facility would be constructed and operated by the private sector outside the scope of the Nuclear Waste Policy Act of 1982 (NWPA). The Energy Department will continue to work toward the successful development of Yucca Mountain as a permanent geologic repository for the Nation's high-level radioactive waste. Development of Yucca Mountain would reduce, if not eliminate, the need for high-level radioactive waste to go to a private temporary storage facility in Utah, the Secretary remarked

SSWS notes that similar views were presented in the initial contentions of the State of Utah (Contentions X, Z, AA and CC), Castle Rock (contentions (13 and 15), OGD (Contention O) and Confederated Tribes (Contentions C and D). SSWS, in its amended petition of February 1998 argued, and still argues, that the contentions are without merit for the following reason:

Development of nuclear power has developed somewhat differently in the U.S.A. from some other countries. The Atomic Energy Act, as modified in the Eisenhower administration, envisaged several commercially competing alternatives whenever possible. Thus, there is more than one supplier of radionuclides for medicine. There is more than one manufacturer of nuclear power reactors (Westinghouse Electric Corporation, General Electric Company, Combustion Engineering and Babcock and Wilcox). There is more than one architect-engineer doing the construction work (Stone and Webster Corp, Ebasco Corporation, Bechtel Corporation, etc.) More than

one company began to cope with radioactive waste products. Unless specifically stated to the contrary (and the petitioners contend that it has not been and the interveners fail to prove that it has been), the plan for another permanent or temporary storage facility, or even its execution, should not inhibit the plan for an alternate, competing facility.

SSWS argued further that (statements of Secretary Bodman notwithstanding) the obligations that the United States Government undertook to dispose of high level nuclear waste have been seriously delayed and have even been the subject of major lawsuits by the nation's utilities that operate nuclear generating facilities. While Yucca Mountain may in theory be a preferable solution, the Department of Energy's past failures to provide long-term storage facilities (and even reversal of plans) suggest to any prudent person that one or more alternate temporary solutions should be pursued.

These general views have therefore been considered many times during the long NRC hearing and there is no good reason for reopening them now, and in any case BLM is not the appropriate forum.

(3) The applicant's qualifications to hold a grant.

SSWS has no specific comment upon the applicant's qualifications to hold a license; however, there seems no "a priori" reason why they should not, and SSWS submits that the requirements for this should not be greater than for other requests of land use to BLM.

(4) The project's consistency with FLPMA, other laws, or regulations.

SSWS believes that the project is consistent with FLPMA, and other laws and regulations. We note that at the first public hearing on January 27, 1998, at which SSWS was present as a guest and applicant for leave to intervene, the State of Utah argued that the Nuclear Regulatory Agency had no authority under the Atomic Energy Act to grant a license to the Band since the Band was not a state. However, SSWS submits that if the Atomic Energy act does not apply to the Band, then the restrictions in that Act do not apply and the Band can build any nuclear facility it wishes without hindrance. However that argument is unnecessary because the Band *does* accept NRC jurisdiction. SSWS urges BLM to reject any and all such contentions by the State of Utah which are precluded because the issue has been adjudicated by the NRC, the agency with primary jurisdiction and expertise to interpret the Act, are contrary to logic and common sense and, in the view of SSWS, come under the general heading of harassment.

(5) The applicant's technical or financial capability.

SSWS believes that the applicant's technical capability has been repeatedly demonstrated in the long, arduous, eight years of NRC hearings.

BLM expresses its concern about the possible financial capability of PFS by quoting correspondence dated December 7, 2005, between the Chief Executive Officer of Southern Company and Senator Hatch that indicates that "Southern Company, one of eight members of the PFS consortium, will no longer support the PFS facility, having concluded that the PFS facility

“cannot be successfully developed as a spent fuel repository in a time frame to meet Southern's needs. Southern will continue to work toward ensuring the eventual opening of Yucca Mountain, to which it is committed as the nation's spent fuel repository. Southern Company was one of six members of PFS that in July 2002 announced that they would commit no funds to construction of the PFS facility past the licensing phase so long as the Yucca Mountain project is approved by Congress and repository development proceeds in a timely fashion.”

Although the NRC hearing (in which BLM participated) was extraordinarily long, the time scale and the time slippage for Yucca mountain is worse. The PFS facility can, if BLM approval is promptly granted, be completed long before Yucca mountain can be. Whereas the PFS facility will be granted a license by NRC as soon as the BLM issue is resolved, DOE has not even applied for a license for Yucca mountain. Many experts believe that a temporary storage facility will be very useful even after the initial opening of Yucca mountain. SSWS also notes the condition in the last half of the last sentence of BLM's statement of Southern company's position: “so long as. . . repository development proceeds in a timely fashion.” SSWS notes that, within a couple of weeks after the December 7, 2005 letter, the funding for Yucca mountain was cut by Congress well below the request of DOE and some of the funding was to be diverted to state training purposes that are not necessary until the repository is complete and accepting fuel. DOE immediately was forced to postpone, *sine die*, the schedule for even applying to NRC for a license for Yucca Mountain! That by itself makes the letter of December 7, 2005 of little import because one of the assumptions of the letter has already been negated. This argument also applies to the correspondence, quoted by BLM, dated December 8, 2005, between the Chief Executive Officer of Xcel Energy and Senator Hatch, which was also conditioned on rapid progress being made on Yucca Mountain.

SSWS is appalled that private correspondence of this sort would be seriously considered in this matter. The proper place for discussion of financial qualifications was the NRC hearing in which, as noted above, BLM participated. The NRC decided that the financial qualifications of PFS were adequate. If Senator Hatch believes that the NRC decision was incorrect, or there is crucial new evidence, there are two proper causes of action open to him: (a) request that NRC reopen the hearings to discuss this point or (b) file a lawsuit after the license is awarded. SSWS suggests that BLM ignore this correspondence. SSWS submits that BLM should also ignore the final part of the correspondence with Senator Hatch, dated July 8, 2002, that quotes Secretary of Energy Spencer Abraham who “concluded that the NWPA authorizes DOE to provide funding and financial assistance only for shipments of spent fuel to a facility constructed under that act.”

The Secretary found that the PFS/Goshute facility would be constructed outside the scope of the Act, and as a result DOE would not fund or otherwise provide financial assistance for PFS, nor could DOE monitor the safety precautions that a private facility would install. All costs associated with the PFS plan would have to be covered by the members of the PFS consortium. This fact is well known and has already been considered by the NRC licensing board and this is a completely inappropriate forum in which to reopen the issue.

(6) The applicant's compliance with information requests.

SSWS is not aware of any failure of the applicant to comply legitimate information requests. The willingness of the NRC to grant a license, as stated in March 2005, suggests that all required information was in fact provided.

Additional Issues

Although BLM only requested comments on the above items (1) to (6), it raises an issue that was argued for over two years in the NRC hearing: the possibility of an aircraft crash onto a storage cask. The issue is raised on the basis of correspondence dated September 9, 2005, from the Utah Congressional delegation to Secretary of the Interior Gale Norton, which states that:

the proximity of the Goshute reservation to the Utah Test and Training Range makes it one of the most dangerous locations for the aboveground storage of high-level nuclear waste. The proposed storage site would sit within miles of the training range where 7,000 overflights of F-16s occur every year. Due to heavy commercial air traffic in the area, a principal low level approach by these F-16s passes directly over the proposed storage site. The aircraft sometimes use live ordnance, and 70 crashes of F-16s have occurred within the past 20 years at the Utah Test and Training Range, a number of these well outside the boundaries of the range.

BLM and the Utah Congressional delegation admit that NRC considered the matter, and declined to reopen its EIS, dated December 2001, to consider the threat of deliberate suicide air attacks, even though post-September 11 studies have been completed at all other facilities licensed by NRC. Moreover, the EIS does not require PFS to have any on-site means to handle damaged or breached casks. NRC staff concluded that the risk of a cask breach is so minimal that this scenario need not be considered in the EIS. At the Utah Congressional delegation's urging, the Department of Homeland Security has agreed to review the location of the proposed site to consider its national security implications.

SSWS notes that the possibility of an aircraft crash on a storage cask, whether by an errant fighter pilot from Dugway, or a terrorist, *has been* extensively considered. The nuclear power industry and SSWS did not wait until September 11, 2001 to consider terrorism, although many of the earlier studies use the word "sabotage." For example Professor Wilson, as early as 1973, raised the possibility that international terrorist organizations were becoming sophisticated and that "sabotage" should now include the possibility of a terrorist attack. This was considered by many subsequent NRC studies. In its 1998 petition to intervene SSWS stated:

It is hard to see that sabotage with anything less than an atomic bomb will have any effect on the public health and environment outside the Skull Valley reservation. Even high explosives placed close to a storage cask cannot liquefy or evaporate the material contained in the cask and therefore cannot cause immediate widespread dispersal. A spent fuel storage facility is therefore a much less attractive target for sabotage than most of the freight trains that run along the Union Pacific tracks through Rowley Junction.

This argument, which applies to international terrorism as well as local sabotage, still remains the view of SSWS.

The issue raised in the Utah Congressional delegation's letter of September 9, 2005, that further states that "the issuance of a license for a private away-from-reactor storage site has never

been done and in our view runs counter to the Nuclear Waste Policy Act, which limits the NRC to license storage sites only at federal facilities or onsite at nuclear power plants.” raises a jurisdictional issue that should have been raised before the NRC, and can now be raised in litigation pending in the United States Court of Appeals for the District of Columbia.

The Opposition Seems Politically Motivated and not Technically Grounded

For whatever reason, the proposed project has been continuously opposed by the politicians of the State of Utah for the past eight years, but it has not been opposed by technical experts in the state. There is an almost complete lack of any technical comment by Utah experts on the subject. Utah has three distinguished universities and one would normally expect that their experts in the physics and nuclear engineering departments would be discussing this issue, and be consulted by the State. This lack of scientific support for the State’s positions was already apparent in 1998, and SSWS in its request to intervene commented:

For whatever reason, the faculties of the University of Utah, Utah State University and Brigham Young University appear to have been unwilling to discuss the issue in public. This has led Utah State Senator Holmgren to suggest that there is a "gag order," a suggestion repeated in testimony to the Utah State Senate by Dr. Steven Barrowes. Whether or not there in fact is a “gag order” is irrelevant; many persons in Utah, including the university communities, believe there is. There has been no statement from the governor or university officials explicitly denying that there are serious constraints on State employees or university faculty expressing their views in this matter, and certainly there has been no encouragement by the State to the relevant members of the academic community in Utah who have expertise to stand up and say what they believe without fear of budget cuts or other reprisals. That being so, SSWS believe there is a special onus on others outside the state to help inform the citizens of the state and this licensing board. In this connection we note that the State itself does not seem to have availed itself of the expertise of the faculty of the University of Utah. On the site visit on Monday, January 26, 1998 the scientists in the state party were Dr. Nielsen, who as Secretary of the Environment has an official State of Utah government position, and a consultant, Dr. Marvin Resnikoff, from New York City. This lack of involvement and uncommunicativeness of the faculties of the universities in Utah is unusual and it was unreasonable for members of SSWS to anticipate the silence of that group. The members of SSWS only slowly became aware of it, beginning in December 1997, and filed their initial petition soon thereafter.

SSWS has not followed every detail of the long hearing. But to the best of its knowledge no faculty member of these universities has testified at the NRC hearings. The fact quoted earlier that Senator Bennett, speaking at the NRC hearing in Tooele was unable to state that the reservation of the Skull Valley Band of Goshutes was less safe than “on site” storage at a nuclear power plant underscores the fact that the Utah opposition to the Goshute Indians and Private Fuel Storage had no local technical support.

For the reasons stated above, SSWS believes that the Bureau of Land Management should approve the use of the federal land for road access to the proposed nuclear waste storage facility.

May 5, 2006

Respectfully submitted,

Martin S. Kaufman
Senior Vice President and General Counsel
Atlantic Legal Foundation
Counsel for Scientists for Secure
Waste Storage

Appendix 1

Current Members of Scientists for Secure Waste Storage²

William A. Anders, astronaut, NASA-Johnson Space Ctr., Houston, 1963-69, astronaut, Apollo 8, first lunar flight, 1968 Major General, U.S. Air Force Reserve, 1983-88. Executive Secretary, National Aeronautics and Space Council, 1963-72; Commissioner, Atomic Energy Commission, 1973-74; Chairman, Nuclear Regulatory Commission, 1975-76; U.S. Ambassador to Norway, 1976-77; Vice President, Nuclear Energy Products Division, Gen. Electric Co., 1977-80; Vice President and General Manager, Aircraft Equipment Division, General Electric Co., 1980-84; Senior Executive Vice President, Textron Inc., 1984-89; Vice Chairman, General Dynamics, 1990-91; Chairman and CEO, Gen. Dynamics; President, Apogee Group. Trustee Battelle Memorial Institute. Recipient Wright, Collier, Goddard and Arnold flight awards; co-holder several world flight records.

Dr. Steven Barrowes, 2961 South 500 East Salt Lake City, UT 84106-1365 Tel: 801 467 0354 Fax: 801 281 2414.**³

Nicolaas Bloembergen, Gerhard Gade University Professor Emeritus, Harvard University. Nobel Laureate in Physics. Resident of Arizona.

David Bodansky, Emeritus Prof. Physics and Astronomy, University of Washington, Seattle Washington.**

Max Carbon, Professor and Chairman (retired) of Nuclear Engineering University of Wisconsin at Madison.

Bruce W. Church, formerly of Desert Research Institute

Bernard L. Cohen, Professor of Physics, University of Pittsburgh.

Michael Corradini Professor and Dean, School of Engineering, University of Wisconsin at Madison. Presidential Young Investigator (1984). American Nuclear Society, Young Members Achievement Award (1990). Fellow, American Nuclear Society and National Academy of Engineering. Consultant, Sandia National Lab.**

² Due to the passage of time since SSWS was formed and first sought to intervene in the Nuclear Regulatory Commission, in 1998, the following members have died: Dr. Hans Bethe, Nobel Laureate in Physics; Dr. Allan Bromley, Dean and Stirling Professor of Engineering, Yale University; Professor Gerard Debreu; Dr. Ralph Lapp; Glenn Seaborg, Nobel Laureate in Chemistry, Chairman of the Atomic Energy Commission, and Chancellor of the University of California.

³ ** Denotes a scientist who has joined SSWS since SSWS filed its petition to intervene in the NRC licensing proceeding in 1998.

Sheldon L. Glashow, Higgins Professor of Physics, Harvard University. Nobel Laureate in Physics.

Roy J. Glauber, Mallinckrodt Professor of Physics, Harvard University.**

Dudley Herschbach, Mallinckrodt Research Professor of Chemistry, Harvard University. Nobel Laureate in Chemistry.**

Robert J. Hoffman, Radiation Safety Officer , Veterans Affairs Medical Center, Salt Lake City, Utah.**

Daniel M. Kammen, Associate Professor Energy and Society, University of California at Berkeley**.

John Landis, President of subsidiaries of Gulf Gen. Atomic Co., 1970-74, President, Power Systems Co., Gen. Atomic Partnership, 1974-75, Senior Vice President of Stone & Webster Engineering Corp., 1975-92.

Otto G. Raabe, Institute of Toxicology and Environmental Health, University of California at Davis.**

Norman F. Ramsey, Higgins Professor of Physics Emeritus, Harvard University. Nobel Laureate in Physics.

Joseph P. Ring, Radiation Safety Officer, Harvard University.**

Marcus T. Rowden, Esq., was Solicitor and Associate General Counsel, Atomic Energy Commission, 1965-74, and Commissioner and Chairman, U.S. Nuclear Regulatory Commission, 1975-77.

Allen Lee Sessoms, President, Delaware State University. Formerly Assistant Professor of Physics, Harvard University, President of Queens College of the City University of New York and various diplomatic positions with the United States Department of State.

Gary Sandquist, Professor of Nuclear Engineering and Former Director of Nuclear Engineering Program, University of Utah. Distinguished Visiting Professor, Nuclear Engineering, Department of Physics, U.S. Military Academy and Distinguished Visiting Professor Department of Civil & Mechanical Engineering, U.S. Military Academy.**

Dr. Jacob Shapiro, Radiation Protection Officer (retired), Harvard University.**

Dr. Herman Suit, Soriano Professor of Radiation Medicine, Harvard Medical School and Massachusetts General Hospital.**

John Tanner, earned a Ph.D. degree in physical chemistry from University of Wisconsin and spent 17 years at Idaho National Laboratory working on development of high pressure gas storage, followed by work as a criticality safety analyst.**

Richard Wilson, Mallinckrodt Research Professor of Physics, Harvard University.