William D (Bill) Peterson
300-year SNF disposal solution
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November 05, 2009

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
BEFORE THE ATOMIC AND SAFETY LICENSING BOARD

In the Matter of	)	PETITION SUPPLEMENT TO ENTER
	)	
U.S. DEPARTMENT OF ENERGY	)	Docket No. 63-001-HLW
License Applicant Appellant	)	
v.	)	(High-Level Waste Repository)
	)	license application speculation
U.S. NUCLEAR REGULATORY	)	
COMMISSION, Licensor Appellee	)	Before the A&SL Board
	)	
& v.	)	ASLBP Nos. 09-876-HLW-CAB01
	)	09-877-HLW-CAB02
William D Peterson, 300-year spent nuclear	)	9-878-HLW-CAB03
fuel permanent disposal solution	)	09-892-HLW-CAB04
Third Party Petitioner	)	

SUPPLEMENT TO PETITION TO ENTER

Our scientific group is concerned that no one in government is considering the concept of a 300-year spent nuclear fuel (SNF) disposal solution as a superior alternative to the current YM disposal concept. The original Congressional directive in the Nuclear Policy Act to dispose of the high-level waste (either SNF or the vitrified waste from reprocessing) did not elucidate the possibility of disposing of the waste in a manner that would eliminate the need for emplacing substantial waste deep underground in isolation for, originally,10,000 years and now, by court edict, for a million years. The 300-year solution would do that by decaying the cesium and strontium to low-level waste (LLW) in 300 years and recycling the long-lived transuranics to fast burner reactors where they would be destroyed while producing energy.

CONGRESS DELEGATED SNF RESPONSIBILITY TO EPA

It is clear in the Court's order in Nuclear Energy Institute (NEI) vs. the U.S. Environmental Protection Agency (EPA), United State Court of Appeals for the District of

Columbia Circuit Case No. 01-1258, which concluded that the Congress's directive for using YM for SNF disposal is only a starting point for EPA, who alone has all options to require how SNF will be disposed of, provided they hear opinions from the National Academy of Sciences. Then, if EPA does not somewhat align with NAS, EPA would have to go back to Congress.

FEDERAL COURT RECOGNOZES SNF DISPOSAL IS EPA RESPONSIBILITY

The Court has ordered that EPA alone is responsible for how SNF is to be disposed of. So why is not EPA in this matter? If not, maybe this whole matter needs to be appealed to the United States Court of Appeals for the District of Columbia Circuit.

In the context of the July 9, 2004, Appealate Court order in District of Columbia Circuit Case No. 01-1259 questions are raised as to ‘‘whether Congress has directly spoken to the precise question at issue,’’ for if ‘‘the intent of Congress is clear, that is the end of the matter . . . and, whether Congress’s directive that EPA issue standards ‘‘based upon and consistent with the findings and recommendations of the National Academy of Sciences’’ is clear and unambiguous.

In another place in the context of the order the court went on to say “Under the provisions of section 801, the authority and responsibility to establish the standards, pursuant to a rulemaking, would remain with the [EPA]” In that regard the Court of Appeals issued a directive to NAS to issue a recommendation to EPA. In its order the court says “Rather than answering the specific question at hand, the Court’s discretion -Conferring language supports the Court’s view that nothing in section 801(a) specifies precisely how EPA must use the NAS Report.” The court noted Congress’s instruction to EPA to promulgate its standards ‘‘pursuant to authority under other provisions of law . . . section 119 expressly authorizes judicial review of actions taken by NRC under the NWPA but does not do so for those taken by EPA.

EPA MUST CONSIDER NAS RECOMENDATIONS

In the Court’s order EPA is quoted conferring with the Court saying “That mandate, EPA stated, ‘‘does not bind us absolutely to follow the NAS Report. Instead, we used it as a starting point for this rulemaking . . . . [W]e do not believe the statute forces our rulemaking to adopt mechanically NAS’s recommendations as standards.’’”

EPA WRONGLY DENIES LEGAL PURVIEW IN SNF MATTERS, EPA IS RESPONSIBLE

In regards to this NRC hearing matter, yesterday Mr. Tom Peake of EPA wrote to Peterson saying "We are not involved in this matter because it is out of our legal purview. Our role, established by Congress, is to set the environmental standards for Yucca Mountain and it is up to NRC to implement them. We have done our part with the publication of 40 CFR 197.."

Apparently, as in the one million years storage requirement v the 10,000 years storage requirement, our 300-year storage option is not being considered because the U.S. Courts, nor the NRC Review Board, nor EPA or even DOE have requested an NAS opinion of it. The storage requirement for SNF has apparently gone from a very challenging 10,000 years to an un-comprehendible one million years; so, wouldn't it be prudent to consider a realistic 300-year storage plan, especially if the 97% part of SNF that is potential fuel could be recovered and used?

Ref: 10 C.F.R. § 2.309(c)

(c) Nontimely filings. (1) Nontimely requests and/or petitions and contentions will not be entertained absent a determination by the Commission, the presiding officer or the Atomic Safety and Licensing Board designated to rule on the request and/or petition and contentions that the request and/or petition should be granted and/or the contentions should be admitted based upon a balancing of the following factors to the extent that they apply to the particular nontimely filing:

(i) Good cause, if any, for the failure to file on time;

Petitioner William D (Bill) Peterson has been specifically instructed by the U.S. Department of Energy (DOE) that the 300-year spent nuclear fuel (SNF) he is asking DOE to consider, "cannot be considered until the congress gives relief from the order that all SNF disposal alternatives are to be discontinued except Yucca Mountain (YM). See letters to Peterson from Birdie V. Hamilton-Ray dated Aug 06, 2003 and Sep 23, 2003. So the DOE and NRC are doing nothing to help Peterson and his 300-year solution, so neither the Nuclear Regulatory Commission (NRC) or DOE told Peterson of the NRC Licensing Board hearing.

Birdie V. Hamilton-Ray's statement that "DOE will not be in a position to consider your proposals or any similar future proposal that address the disposition of spent nuclear fuel and high-level radioactive waste unless the U.S,. Congress enacts fundamental changes in the Nuclear Waste Policy Act" according to the court appears to be wrong. In a July 9, 2005, court

order in Nuclear Energy Institute (NEI) v the U.S. Environmental Protection Agency (EPA) United States Court of Appeals for the District of Columbia Circuit Case No. 01-1258 indicates that the Congress's directive for using YM for SNF disposal is only a starting point for EPA with optional directive to EPA from the National Academies of Sciences. And it may be that EPA and the National Academies of Sciences (NAS) do not even understand that the Congress has given EPA the authority to decide how SNF is to be disposed of; that is, if EPA's solution is to some degree ratified by the NAS. Otherwise, EPA must return to the Congress for further directive, but then Congress would turn back to NAS for a directive.

Peterson works on disposal of SNF. From the outside, Peterson questions why this hearing is happening without the EPA. Congress's instruction to EPA to promulgate its standards "pursuant to authority under other provisions of law . . . section 119 expressly authorizes judicial review of actions taken by NRC under the NWPA but does not do so for those taken by EPA."

So Peterson sits on the outside with maybe the only solution for SNF disposal and the DOE, NRC, and EPA Government agencies, and NAS wait for the Congress to give them directive (when directive may not be forth coming), when it's EPA's call as to how SNF is to be disposed of, taking optional directive from the NAS. SNF disposal is a scientific problem, it cannot be fixed with a political solution. But politically, they have put and kept Peterson on the outside, including not notifying him of this hearing.

(ii) The nature of the requestor's/petitioner's right under the Act to be made a party to the proceeding;

Peterson's interests will be affected by the outcome of this proceeding.

a) A majority of Peterson's life's work has been devoted to disposal of SNF, including: 17 projects at the Idaho National Laboratories' (INL's) FAST project for disposal of U.S. Navy SNF, the moving of the Vitro uranium tailings 85 miles, Peterson's project NRC Docket 72-23 Pigeon Spur storage of SNF, and Peterson's current proposal of building and operating five (5) sites for disposal of U.S. SNF and rest of world's SNF by the Global Nuclear Energy Partnership (GNEP), which site would be designed and operate by the plan of his 300-year spent nuclear fuel

(SNF) disposal solution. Peterson believes that for the U.S. to survive in its current economic situation, to fix all three problems of not having its own fuel, global climate change (GCC), and the U.S. economy, the U.S. must switch from the use of oil to nuclear-electricity-hydrogen to fix end-of-oil. YM will not work to do this, YM is designed to close (end) the nuclear power industry. YM would be the demise of the U.S. nuclear utilities, and so could be a serious impediment of the future of U.S.A. For himself and his family and friends, Peterson wants the U.S. to survive and it can with the 300-year SNF disposal solution but might not with YM and no U.S. future in nuclear power.

b) Peterson maintains his right to pursue SNF storage and disposal by virtue of his work and project of NRC Docket 72-23 as assigned by NRC, 15 years ago. One and one half decades of work has gone into licensing, to build and operate the Pigeon Spur Fuel Storage Facility (PSFSF). On two occasions license applications have been prepared and submitted. Peterson had been able to arrange for financial backing like Private Fuel Storage (PFS) has financial backing. But Peterson's financial backing was foiled by the "Peach Bottom" incident. Peterson has asked NRC for 60-day approval of a license application for Pigeon Spur. From indications from NRC Peterson believes they would try to do this where Peterson already has 10 years of work into the project. Peterson has petitions from residents of the Western Box Elder County region around Pigeon spur saying that the local people want the opportunity of the project. Town meetings have been held at both Grouse Creek and Park Valley. Both regions assembled a committee to help the pursuit of the project. In the past, the State of Utah has strongly fought against PFS and even Energy Solutions, but that negativity has softened. U.S. Federal Court Judge Teena Campbell of the District of Utah has ordered that SNF storage and disposal is a Federal issue that the State of Utah cannot regulate. Far more work has been done in Utah for intermediate storage solutions of SNF than any place else. Utah and Peterson's option is the U.S. soonest and best option for SNF disposal that can enable nuclear electric – hydrogen to happen. Until Pigeon Spur happens the growing deficit will cost the U.S. economy around three ($3) billion dollars per day.

c) Peterson's "Operations Research Model" of the U.S. Economy shows that the deficit of the U.S. Government is a consequence of America's imbalance of trade. The import of

Petroleum from 90+ other nations is the U.S.'s biggest import problem, followed by imports of goods from China and Japan. It is a prime interest of Peterson to have the U.S. economy survive and flourish. The U.S. by itself can survive and flourish, but it cannot be the consumer of the rest of the world's production. The U.S. must somehow get fuel independent. To do that, the U.S. must manufacture a fuel. Electricity and hydrogen are our best potential for power and fuel. Anything else may be little more than toys. 500 nuclear power plants are enough to enable the U.S. economy to produce electricity enough and separate hydrogen out of water to enable replacing gasoline and diesel with electric and hydrogen powered vehicles. Finishing building YM and storing away unprocessed SNF will not fix fuel. But the 300-year disposal of SNF including obtaining use of the SNF transuranics and U_{238} as potential new fuel can enable nuclear power to replace power from petroleum. This would be in the best interests of Peterson, his family, and everyone else.

(iii) The nature and extent of the requestor's/petitioner's property, financial or other interest in the proceeding;

Engineer Peterson with his company PEMCO in 17 contracts with Idaho National Engineering Laboratory (INEL) designed and built a variety of equipment associated with storage and disposal of U.S. Navy spent nuclear fuel (SNF). The work was done in Peterson's 30,000 sq ft engineering and manufacturing facility in Murray, Utah. This work was done under INEEL contracts and paid for by the Government program. In 1985 Peterson with PEMCO contracted to do the engineering and provide material handling equipment for moving the Vitro uranium tailings by railroad from the center of the Salt Lake Valley to Clive, 85 miles west. .

For five years1987-1993 the Congress maintained the office of the Nuclear Waste Negotiators to get intermediate storage of SNF. David Leroy acted under President Bush then Richard Stallings followed after him acting under President Clinton. Only two proposals resulted – Private Fuel Storage (PFS) with a site on the Goshute Indian Reservation, and Peterson with the Pigeon Spur Fuel Storage Facility (PSFSF) site partnering with the Southern Pacific RR-spur 5 miles east of Lucin, 12 miles east of the Nevada border and 45 South of the Idaho border, in Box Elder County, on the existing Pigeon Spur RR-spur. Peterson has since worked full time to develop SNF storage. In 1992 Peterson proposed to negotiator Stallings his

RR-handling system (Peterson's U.S. Patent No.5448604). By that design, Peterson proposed the Pigeon Spur SNF storage facility.

Around 1995 Private Fuel Storage (PFS) started work to license Goshute Indian reservation property in Tooele County, Utah, NRC Docket No. 72-22. A few months after PFS started its licensing program, Peterson started his Pigeon Spur SNF storage facility (PSFSF) development program in western Box Elder County, NRC Docket No. 72-23. A few years later NRC license application was submitted. PFS is now licensed. PSFSF was twice rejected for lack of Peterson's having funds. After getting necessary funding a new PSFSF license application will be submitted again for licensing. So far PFS's costs are around $50 million. But PFS needs land access and then needs to build 31 miles of RR-spur, which will cost around $31 million. With funding PSFSF could be operating sooner than PFS because of its onsite RR connection..

So Peterson now values his PSFSF develop work at around $80 million. PFS is on a 20 yr + 20 yr lease from the Goshute Indians, Peterson would own his site. Actually, Peterson's current plan is for five sites of the 300-year design for which the current investment value is substantially higher. PFS is counting on private funding from the 8 participating utilities. Peterson is looking to use part of the Nuclear Waste Deposit Fund to do 5 ea, 300-year SNF disposal sites for a total cost of around $30 billion.

Others who also have a stake with Peterson in the outcome of these proceedings include Physicist Steven C Barrowes Ph.D., and Physical Chemist Jerry D. Christian Ph.D. who have helped Peterson almost daily for nearly a decade. University of Utah Engineering Professors Gary Sandquist Ph.D. and Larry DeVries Ph.D. have helped wherever they could. University of Pittsburgh Professor Bernard Cohen, Harvard Professor Richard Wilson, and University of Wisconsin Professors Max Carbon, and John Maulder have frequently been advisors and support for this work. Nuclear Negotiator under President Bill Clinton, former Idaho Congressman Richard Stallings has helped wherever he could. Former Argonne West at INL Director John Sackett Ph.D. is a scientific supporter. Wayne Edwards P.E., Henning Hoj master crane builder, Layne Beeny CAD drawing guru, engineer Russ Brown, and project manager Bruce Shirley are

other workers. Attorney Winston Faux and Attorney Dennis Ickis have given legal counsel where needed. Peterson also gives thanks for their help to his wife Lynada, daughters Angela and Millie, and son-in-law Dr. George Nikopoulos, M.D.

(iv) The possible effect of any order that may be entered in the proceeding on the requestor's/petitioner's interest;

Peterson worked to develop Davis Canyon geological storage in Southern Utah, the forerunner of Yucca Mountain (YM). Peterson's deep geological burial work carried over into work into the YM project. Contrary to both the Davis Canyon and the YM designs Peterson strongly believes that SNF should not be put into deep geological burial, at least not until the 30-year and less half life materials have had time to convection air cool as they decay for 50 to 100 years. And Peterson takes opposition to not processing SNF for recovery of its potential fuel - the 1-2% transuranics and the 96% that is U_{238}. So it is Peterson's view that YM is not good for near term storage of SNF, and not good for storage of unprocessed SNF.

So Peterson believes that after removal from plant operation, and five years of pool storage, SNF should be processed before it goes into YM storage, but if done according to the 300-year solution with 5-9s separation, in 300 years the remaining fission waste can be disposed of as low-level waste Class-C. Transuranics can be used as fuel, and U_{238} can be stockpiled for potential future fuel.

An order for use of the 300-year SNF disposal solution can open the way for Peterson to build five 300-year SNF disposal sites that can give incentive to U.S. Congress and the U.S. Nuclear Utilities to build 1,150 nuclear power plants that can give the U.S. energy independence, enable the U.S. to balance trade, fix the U.S. economy and make a giant leap towards slowing GCC.

(v) The availability of other means whereby the requestor's/petitioner's interest will be protected;

Back in 1987 the Congress wanted intermediate storage of SNF before it would be put into deep geological storage. Peterson opposes deep geological storage wherein the intent is to

not process SNF, but to store away SNF just as it exists and then close down the nuclear power industry. PFS storage is for only 20 years + 20 years which maybe is just enough time for convection air cooling before YM geological storage, but way short the 300-years needed for 300-year SNF disposal. So actually neither YM nor PFS are "other means" whereby the requested interest type storage will be being done. So it is Peterson's opinion that the only good option available by this whole effort is Peterson's 300-year SNF disposal solution.

(vi) The extent to which the requestor's/petitioner's interests will be represented by existing parties;

Yucca Mountain is designed to take the existing SNF, and possibly more SNF that the existing 104 nuclear power will produce during the lives of the plants. There are applications being made to build more plants, and there could be options to upgrade existing plants and expand nuclear power. No clear heading for nuclear power has been set or even proposed by the Congress. Peterson believes that nuclear power must replace oil, coal, and be used to for America's new growing needs for energy. The existing parties in this matter DOE and NRC will not determine the future of nuclear power. They are not the right parties to be making that determination.

Existing parties do not have a plan to make the U.S. energy independent, discontinue use of fossil fuel, fix global climate change, and make a sound economy. But Peterson does. By adoption of Peterson's 300-year SNF disposal solution, and proceeding as fast as possible to transition from oil and coal with construction ASAP of new nuclear power plants, then transitioning to nuclear-electricity and hydrogen, would be the quickest way for the U.S. to get energy independent, slow GCC, and begin repair of the economy.

It will be the EPA who will determine the way SNF is to be stored or disposed of. As said before, this decision will have to be made in some harmony with recommendations of the National Academies of the Sciences, otherwise the matter will have to go back to the Congress, who will in turn likely go to the NAS. Politicians today have not provided clear signals as to whether nuclear power should even proceed or be closed down. Washington politics cannot deal with energy independence, GCC, or the economic situation.

(vii) The extent to which the requestor's/petitioner's participation will broaden the issues or delay the proceeding; and

The quickest way to transition from fossil fuels to nuclear-electricity and hydrogen is to fix the SNF disposal issue with the 300-year SNF disposal solution and then proceed to build and operate 1,150 new nuclear power plants. This needs to be done as soon as possible. Even if YM is to proceed and be part of the program, SNF needs to be initially stored by the 300-year solution to allow the 30-year half-life cesium and strontium to sufficiently decay so that it will not require forced air cooling. From 300-year storage silos SNF can be easily retrieved so then processing could always be an option.

(viii) The extent to which the requestor's/petitioner's participation may reasonably be expected to assist in developing a sound record.

The World's nuclear power industry began with several nations' secret development of the most fearsome weapon of war ever, with the United States leading with technology and the massive development of the Manhattan Project. In 1945 two demonstrations of its power and use quickly ended WWII. Soon after that scientists made the peaceful application of nuclear energy by reigning in the power and controlling its rate of power release to make steam to turn turbines and make electricity.

The public's first perception of the new technology was stunningly spectacular. Then fear arose as more nations developed the parallel powers of ultimate weapons and open-ended electric generation. Rightfully fear erupted and escalated with the realization that spent nuclear fuel was accumulating with no apparent way of disposing of the feared remnant. The situation stopped beneficial development of the spectacular power for nearly four decades, more than half of the time that the public has experienced its use.

Now the world is facing the approaching end-of-oil, damage done by the fast consumption and burning of fossil fuels, which is apparently causing GCC. And nations are experiencing economic collapse where nations that have not had sufficient oil have been affluently purchasing it from nations having oil, on extended credit way beyond reasonable loan

limits. So the world is now in three crisises, all permeated by oil vs nuclear energy, with the key issue stopping the needed transition being what to do with spent nuclear fuel.

Geological burial is an attempt to bury the world's biggest problem but does not actually provide a path for fixing anything. Problems are just postponed. On the other hand, the 300-year disposal of SNF does dispose of SNF in a realistic time which can enable with confidence the building of the needed nuclear power industry to enable all nations to be energy independent, have clean air, and make it possible for them to produce for their own needs, i.e. be economically independent.

For the record, 300-year disposal of SNF can enable energy independence, economic recovery, and cleaner air, slowing global warming. The Yucca Mountain deep geological burial personifies further fear of nuclear power, stopping decision making, and causing clinging to the use of fossil fuels, as it pushes the economic instability of more debt.

Letters to Peterson from Birdie V. Hamilton-Ray dated Aug 06, 2003 and Sep 23, 2003, and a ten year old business plan for developing the Pigeon Spur Fuel Storage Facility (PSFSF) accompany and support this petition amendment.

Dated this 5th day of November, 2009

William D. (Bill) Peterson

Department of Energy
Office of Civilian Radioactive Waste Management
Office of Repository Development
P.O. Box 364629
North Las Vegas, NV 89036-8629

QA:NA

AUG 06 2OO3

Mr. William D. Peterson
P&A Engineers
2127 Lincoln Lane
Holladay, UT 84124

Dear Mr. Peterson:

UNSOLICITED PROPOSALS REQUEST

References:
(1) E-mail, Peterson to Chu, dtd 07/18/03 (Yucca Mountain will be full, not usable for President Bush's new plants. Use intermediate storage in Utah, ref. NRC Dockets 72-22 and 72-23)
(2) E-mail, Peterson to Chu, dtd 07,'18/03 (Yucca Mountain will be full, not usable for newly constructed plants; use intermediate storage in Utah, ref. NRC Dockets 72-22 and 72-23
(.3) Ltr. Peterson to Weightman, dtd 06/02/03 (Storage Site License with Engineering to Build)
(4) Ltr, Barrowes to Augustine, dtd 05/08/03 (Development of hardened 300-year storage - New Application)
(5) Ltr, Barrowes to Augustine, dtd 05/07/03 (Development of hardened 300-year storage - New Application)
(6) Ltr, Peterson to Augustine, dtd 09/02/02 (Request for further consideration of our 300-year disposal process)
(7) E-mail. Peterson to Augustine, dtd 06/06/02 (300-year Disposal Solution of Spent Nuclear Fuel [SNF])
(8) Ltr, Augustine to Peterson, dtd 12/21/01 (Rejecting consideration for funding your unsolicited proposal.)
(9) E-mail, Peterson to Augustine --
dtd 09/28/01 (Abstract 1: Hardened Sub-surface Storage of Spent Nuclear Fuel):
dtd 10/02/01, (Abstract 2: More Secure Transportation of Spent Nuclear Fuel):
dtd t0/09/01. (Abstracl 3: l) Drop-Protection Cushioning for Spent Nuclear Fuel Canisters):
dtd 10/10/01, (Abstract 4: 1st Phase Operation and Demonstration of Pigeon Spur Spent Nuclear fuel Storage Facility;)
dtd 10/11/01. (Abstract 5: Demolition Plan for Decommissioning Spent Nuclear Fuel Storage Facility)

Thank you for your e-mails and letters concerning your proposal to develop a 300-year solution for dealing with spent nuclear fuel or reprocessed spent nuclear fuel.

disposal, and the U.S. Nuclear Regulatory Commission to license a permanent disposal site.

Consequently, the DOE must design a permanent disposal system that meets this regulatory framework. Your proposal for a 300-year storage period would not fulfill the Congressional directives contained in the Act. With regard to reprocessed wastes, the decisions to do so would be a matter for the nuclear industry in the United States. Currently, the industry has chosen not to be engaged in spent fuel reprocessing.

As was stated in the reference number 9 letter from John Augustine to you, DOE appreciates your interest in this important national issue and DOE's waste management program. However, at this time, we are not in a position to consider your request for funding any of the referenced unsolicited proposals.

Sincerely,

Birdie V. Hamilton-Ray
Contracting Officer

cc:
Margaret Chu, DOE/HQ (RW-I), FORS
S. A. Bokhari, DOE/HQ (RW-51E), FORS
D. K. Kim, DOE/HQ (RW-20E), FORS
John Augustine, DOE/NETL, Pittsburgh, PA
Linda Weightman, DOE/NETL, Pittsburgh, PA
The U.S. Department of Energy (DOE) takes its direction from the U.S. Congress in matters relating to the disposition of spent nuclear fuel and high-level radioactive waste. The Nuclear Waste Policy Act of 1982 (Act), as amended, directs the DOE to seek permanent disposal for such waste. The Act further directed the U.S. Environmental Protection Agency to develop standards for permanent
W. J. Boyle, DOE/ORD (RW-40W),
Las Vegas, NV
W. B. Miller, DOE/ORD (RW-31W),
Las Vegas, NV
J. D. Ziegler, DOE/ORD (RW-40W),
Las Vegas, NV

WDP notes:

In Subtitle E of Title I, of the NWPA of 1982 the Congress has stipulated that **the DOE will do an** "***orderly phase-out of site specific activities at all candidate sites other than the Yucca Mountain site***."
WDP says: "This is a policy to close down the nuclear industry. The industry requires one site for every 100 plants."

The above is a computer scan of a letter received at the 2388 East Gregson mail box on Saturday, October 25, 2003. The letter contained an envelope postmarked Aug 07 03 Las Vegas NV. The envelope is stamped - Attempted delivery, not known address. The address of the included envelope is - WILLIAM D PETERSON P&A ENGINEERS 2127 LINCOLN LN HOLLADAY UT 84124. A green sticky on the face of the letter has the following note:

10/16/03 Carla, This letter was returned, see attached envelope. Mirna

WDP File C:\p\nuc\DOE\OCRWM\BRH-B806.doc

Department of Energy
Office of Civilian Radioactive Waste Management
Office of Repository Development
P.O. Box 364629
North Las Vegas, NV 89036-8629

QA: N/A

SEP 2 3, 2003

Mr. William D. Peterson
2388 East Gregson Avenue
Salt Lake City, UT 84109

SUBJECT: Proposed 120 Storage Spots to Start, at Pigeon Spur, for $100M

Dear Mr. Peterson:

In response to your e-mail dated August 22, 2003, subject as above, the U.S. Department of Energy (DOE) would like to reiterate the same statement of our August 6, 2003, letter which states: "The U.S. Department of Energy (DOE) takes its direction from the U.S. Congress in matters relating to the disposition of spent nuclear fuel and high-level radioactive waste. The Nuclear Waste Policy Act of 1982 (Act), as amended, directs the DOE to seek permanent disposal for such waste. The Act further directed the U.S. Environmental Protection Agency to develop standards for permanent disposal, and the U.S. Nuclear Regulatory Commission to license a permanent disposal site. Consequently, the DOE must design a permanent disposal system that meets this statutory framework."

Your proposal on 120 storage spots to start, at Pigeon Spur, for $100,000,000 would not fulfill the congressional directives contained in the Act. With regard to reprocessing wastes, reprocessing produces several waste streams, which require their own waste- or resource-management technologies, including disposal of high-level radioactive wastes in a repository. Spent nuclear fuel reprocessing is not consistent with United States policy at this time.

Therefore, DOE will not be in a position to consider your proposals or any similar future proposals that address the disposition of spent nuclear fuel and high-level radioactive waste unless the U.S. Congress enacts fundamental changes in the Nuclear Waste Policy Act.

Sincerely,

Birdie V. Hamilton-Ray
Contracting Officer

Used Nuclear Fuel STORAGE, Utah, Wyoming, North Dakota
Pigeon Spur Fuel Banks
P&A Engineers
68 Malvern Ave
Salt Lake City, 84115
Tel 801-825-3123
Email paengineers@juno.com

Company Profile

P&A Engineers is a market leader in the design of privately owned temporary storage for used nuclear fuel (UNF). Beginning in the 1950's, the engineering /management staff has decades of engineering experience and completed projects that safely and successfully transported radioactive/hazardous material. A more recent notable work includes the engineering and equipment for the transportation of the Vitro Uranium tailings from the Salt Lake Valley to Clive Utah. This is now the site of Envirocare, the nation's largest facility for the storage of low level nuclear material. The Company's engineering staff, under the direction of CEO and Chief Engineer William D. Peterson II, P.E., has designed and manufactured multiple components of the FAST storage facility at INEL, high level radioactive material shipping and storage vessels, as well as select operating hardware for the research oriented nuclear reactor, situated at the University of Utah.

P&A Engineers have devoted over six years of efforts to address the local political and social issues peculiar to UNF in the State of Utah as well as solving the technical and design issues relevant to safe storage of high level nuclear material. P&A Engineers has proprietary MRS facility designs and has prepared a draft of a Nuclear Regulatory Commission (NRC) application (Docket No. 72-73) for the licensing of a short term nuclear storage facility at Pigeon Spur, Utah.

P&A Engineers and the Skull Valley Band of Goshute Indians offered the only UNF storage sites in response to the solicitations of the Nuclear Waste Negotiator, an office made under the President by the Congress to develop a UNF storage solution. P&A Engineers with the Pigeon Spur site and Private Fuel Storage (PFS) with the Goshute Reservation site are the only companies who have prepared an application and applied to license a site for UNF storage as required in each licensing agreements between the Nuclear Regulatory Commission and the 104 operating nuclear utility power plants. So for fifteen years our nations has had only these two offers for a UNF solution until the Yucca Mountain is build and operates, which is still being studied.

The Market

Demand for electricity continues to climb at over two percent per year, or 50 percent in 20 years. Recent power shortages plagued California and spurred construction of many natural-gas fired plants to meet short-term needs, but because natural gas can be used with almost three times the efficiency for space heating, it should be so reserved. Coal provides 50 percent of U.S. power but kills an estimated 30,000 each year by fine coal smoke that accumulates in the lungs.

Nuclear electric power is produced for less than 2 cents per kilowatt hour (kwh), while electricity from coal is slightly over 2 cents/kwh and oil and naturel gas are over 3 cents/kwh.

Renewable sources are about twice this expensive to produce and don't work at all when the weather isn't favorable. This leaves nuclear as the only economical, reliable, clean and healthy source for future power needs.

If the expected 50 percent growth were all supplied by nuclear, 250 new nuclear plants would be added to the current 103. Clearly this would increase the demand for storage sites for UNF, filling up another Private Fuel Storage (PFS) site every 6 years, or a new Yucca Mountain (YM) every 10 years. The need for more temporary storage sites is clear, even if both PFS and YM are licensed as expected by the NRC.

In addition, we at Pigeon Spur Fuel Bank (PSFB) plan to offer hardened near-surface storage, which would not be vulnerable to small missile attacks, airplane crashes, or violent earthquakes. In the present climate of war on terrorism, the PSFB would thus offer distinct advantages over PFS. Or we could license PFS to also use our hardened technology at its site. This technology would help Hill Air Force Base to keep full use of its Utah Test and Training Range and thus resist any coming rounds of base closures.

In addition to supplying hardened technology and new temporary storage sites, we will plan our sites to be compatible with the new methods of reprocessing, wherein the fission wastes would need to be stored for about 500 years, while the uranium, plutonium, and other transuranics would be burned up for energy in Advanced Fast Reactors. These developments will most likely eliminate the need for any more YM type storage, with Pigeon Spur ready to serve the market.

Strategy and Priorities

Our first priority is to develop, patent, and get NRC license for hardened, near-surface storage, with an eye to it also being suitable for 500-year storage of reprocessed fission waste. This storage would be hardened against small missile attacks, airplane crashes, and severe earthquakes, giving the public a much greater sense of security against any mishap that might spread radioactive material in the form or fine dust or aerosols. The storage location would be in a remote, dry, unpopulated desert region, unlikely to ever be populated in the foreseeable future. The dryness would be an advantage rather than a drawback.

Our second priority would be to quickly license a storage site at Pigeon Spur in the event that PFS is unable to proceed for some reason. This could happen if they fail to get an NRC license, are unable to get railroad access because Congressman Jim Hansen's bill is able to designate the area as wilderness, or because Goshute tribal politics change unfavorably. PSFB would provide a needed backup.

If PFS is able to proceed the second priority would still be to license Pigeon Spur within a few years for those electric utilities that would prefer a hardened storage site and the many other advantages of the PSFB site. In a decade or two as more sites become necessary, the third priority would be to seek suitable sites in Wyoming and North Dakota.

Local Political Climate

Utah has had a long history of encouraging and supporting industrial development. It is a "right to work" state. Practical expediency has usually ruled when the topic of business

success/job growth versus environmental risk has arisen. Utah has beautiful red rock mountains, a frequently used state park system as well as an economic history that includes oil refineries, uranium and copper mining, steel production, aerospace-rocket manufacturing and other industries. As a result, Utah actively manages low level radioactive material, hazardous material, chemical weapons, military biologic material and other industrial byproducts.

Despite this background, Utah's current Governor has been a vocal opponent to the storage of spent nuclear fuel rods. This has placed Governor Michael O. Leavitt in the unusual position of being allies with the state's environmental lobby. In his state of the state address, January 18, 1999, Governor Leavitt said that he has a "vehement opposition to the storage of nuclear material on lands controlled by the Goshute Indians in Utah's west desert." He currently has made every effort available to him to thwart that project, including an attempt at federal legislation and passage of five oppressive, targeted state laws, which were recently struck down by the 10th Circuit Court of Appeals in Denver. The state has appealed to be heard by all the judges at the 10th Circuit, instead of the usual three.

Utah's lame-duck congressman Jim Hansen is also trying to stop the PFS project by designating land on the West Cedar Mountains as wilderness, to thwart railroad access for the Goshutes. That effort seems likely to fail. It is probable that the NRC will license PFS by December 5th, unless they deem it too hazardous due to its proximity to the flight paths of Air Force planes.

Despite state opposition, Utah's Box Elder County has been favorable to our PSFB plans to store UNF. Even the Utah House of Representatives has demonstrated their industrial pragmatism by passing a resolution ridiculing the Governor's "moat" strategy. Since Pigeon Spur is at an existing railroad spur, no "moat" can isolate the site from the railroad, and the 10th Circuit will probably deny the state's pending appeals, leaving the state no further means to fight UNF progress.

Local Political Efforts

In the last seven years we have worked with local and county government to educate and encourage support for our UNF site in Utah. CEO Peterson first approached Utah with the Pigeon Spur project in 1995. At that time, one of Utah's most powerful politician's was former speaker Melvin Brown. Speaker Brown lived in Midvale, the host city of the Sharon Steel Tailings, and he had no difficulties with accepting nuclear fuel storage in the state of Utah. He saw it as "good business" and an opportunity. At his suggestion, we approached the Box Elder County Commission who showed no opposition to the idea and were encouraged by the economic boon that it would bring to this rural county. The commission arranged for Peterson to display the proposed project at the Box Elder County Fair in 1996. We note that they provided the very best display location. We now have completed five consecutive years at the fair, and we still continue our presentation at the fair and in county government. In our presentation, we have shown a scale model of our project and videos of cask storage at other plants, videos of crash tests and the science of nuclear material. We have also educated the fair goers on how common radioactivity is in the environment. The local population's reaction has been very positive, with the vast majority of patrons signing on as supportive of our project. We have solid local support in Box Elder County.

Proposed Facilities

The PSFB, when complete, will store 4080 storage canisters of UNF. The facility is located at the "Pigeon Spur" of the transcontinental railroad in Box Elder County, Utah. The facility will consist of a Transfer Building and a field of 1020 concrete storage pads, each having 4 storage spots. For hardened storage convection air will supplied by concrete tunnels, which support the storage silos which are surrounded by gravel or road base fill. Above each storage silo will be massive concrete lids designed to absorb any impact, with proper accommodation with convective air flow. The field is accessed by a rail connection from the transfer building via a transfer table which indexes to each of the 34 parallel tracks that access the individual concrete storage pads. The entire storage field is surrounded by a twenty foot high earthen berm. A building is located beyond the berm where operations are controlled remotely (please refer to diagram in appendix). The entire site will be fenced and remotely monitored for security.

Since 9/11 we are offering near-surface designs where the casks are stored underground but near the surface to enable convection air cooling (cooling without fan power). Rail-side locations will be sought in Wyoming and North Dakota, and similar facilities will be built and operated there.

Phase One

The first phase of the construction will be completed soon after licensing with the initial investment capital. It will consist of the transfer building and one direct track (without the transfer table), to a string of 30 concrete pads. These pads will store the initial 120 storage canisters. Minimal berm construction is planned for this phase. Part of the first phase will be near-surface casks.

The Storage Process

UNF canisters arrive by rail, encased horizontally in a transportation cask loaded on the railroad car. They are first brought by the railroad carrier into the *Transfer Building* for reconfiguration in preparation for storage. An overhead crane picks the transporting cask and carries it to the exchange wells or silos. In the silo cavity will be placed an inert granular material to support the cask in the event that it is dropped. As the cask is lowered, the buffering material is siphoned out to maintain a continuous 18" clearance under the cask. The crane is remotely controlled. The crane then lifts the UNF canister out of the transporting cask, as buffering material is pumped into the cavity of the shipping cask. The unshielded spent fuel canister is then carried to the second exchange well, and lowered into a concrete storage cask for above ground storage or an on-site transfer cask for hardened storage. The buffering material is likewise removed in this maneuver. The loaded concrete cask or on-site transfer cask is then lifted from this transfer well with buffering material chasing the UNF up the well and then crane carried to the field delivery railroad car. The remote operated rail car proceeds out of the transfer building to a transfer table in the phase two facility and then transversely to the appropriate row of concrete pads or subsurface casks. Once adjacent to the designated pad or hole, the mobile, remote controlled gantry crane transfers the cask to its storage place. This completes the

placement operation. In the first phase of the project, no transfer table will be required, as the rail car will simply go from the *canister Transfer Building* to the single string of storage pads or holes. Ongoing monitoring of the casks and canister conditions will be done for the life of the facility.

Product

PSFB offers a centralized, secure temporary storage site[s] for our nation's used nuclear fuel. PSFB will supply storage casks, storage sites and ongoing monitoring and maintenance to insure the integrity of the storage containers.

The hardened storage casks will safely withstand small missile attacks, airplane crashes, and violent earthquakes. They will also be designed to withstand five centuries of weather without degrading.

Revenue

The ownership of the used nuclear fuel shall remain that of the individual Utility company or Federal Government. Revenues will be generated by the Company from the following fees: *storage site reservation fee*, *shipping and container cask fee* and ongoing *storage/monitoring fee*. Customers of nuclear power pay one mill per kWhr for disposing of UNF, this is now over three million dollars per day. As more nuclear plants are built, replacing coal power and use of fossil fuels in transportation, in twenty years revenues could possibly increase up to six fold. It is from these revenues that Pigeon Spur will get its revenues. The PFS Goshute project and YM will also share in this.

Storage Site Reservation Fee: The storage facility will be constructed over a 10 year period, with the gradual increase from 120 storage sites at the end of the second year, to a total of 4080 sites at the end of ten years, with subsequent similar development in two more facilities. The reservation fee is scaled to increase from $200,000 per container in the first two years to $400,000 per container at 10 years. Storage will require a reservation fee. The participants of Phase 1 (i.e., participation within the first two years or first 120 storage sites) will be asked to reserve a minimum of 10 sites each.
Cask Fee: This fee will purchase the rail transportation and transfer to an on-site concrete storage cask. This fee will be $800,000 per container.
Storage and Monitoring Fee: This fee will be initially $100 per day per container. It will purchase the daily monitoring and the security of the container.

Regulatory and Licensing Activities

P&A Engineers submitted its application for licensing of the Pigeon Spur Storage Facility with the NRC and was assigned docket number 72-23. The Company's application was received on October 19,1998. Mr. Mark Delligatti, within the NRC, was assigned as the Senior Project Manager of the PSFB. P&A Engineers' application underwent an initial review and the following deficiencies were noted by the NRC (1/8/99):

- submit a Quality Assurance (QA) Program
- provide a financial summary of our corporation, including a 20 year cash flow analysis, capital structure and all sources of assets/liabilities
- provide information regarding a decommissioning fund
- supply updated versions of SAR's for the storage cask system.

The Company is currently addressing the QA and SAR deficiencies, and once funded can properly address the required financial information and the Licensing Review Fee. The Company has informed the Utah Radiation Control Board of our project. P&A Engineers has received verbal support from the Box Elder County Commission and has applied for appropriate building permits for the PSFB. After obtaining the funding now being sought, our existing license application will be updated and resubmitted. Our previous submittal may be continued or started again new. These options have been discussed with NRC and will be finalized with the new submittal.

Proprietary Technology

Engineer Peterson has a long history of developing technology in the field of handling demanding materials. He has applied for over two dozen patents and half have been issued. When rail transported shipping casks first enter the Pigeon Spur site, they are initially processed in a canister Transfer Building. In this building, canisters are moved from shipping casks to storage casks or onsite transfer casks utilizing technology of patent No. 5862195, "Canister, Transport, Storage, Monitoring, and Retrieval System." Briefly and simply put, during the vertical lifting the spent fuel rods in container configurations, an inert surface material is pumped or siphoned to keep clearance with the bottom of the container at no more than 18". Relevant to Nuclear storage, US patent Serial No. 5448604 utilizes and adapts the railroads' most time-proven and basic transport methods along with remote controlled, rail guided gantry cranes to facilitate the simple and secure transfer of nuclear storage casks from rail car to storage pad. Safety in preventing potential mishaps is gained by limiting the net clearance of the storage canisters to 18" or less in all portions of the transfer process. A modified transformer railroad car is used on site that would have a 3-5% tilt in the unlikely event of car derailment. These two patented technologies will bring a new and higher standard to the current definition of the "ALARA" (As Low As Reasonably Achievable) standard for radiation safety in the industry.

Decommissioning

At the end of the useful life of the PSFB, the Company will decommission the pads, casks, silos, and structures as approved by the NRC. All structures will be designed with demolition in mind. Funds totaling 320 million dollars for decommissioning shall be escrowed over the 2nd to 17th year of the PSFB's operation. But in reality, a program of reprocessing and continued storage is expected to happen with a greatly expanding nuclear industry.

Quality Control

Quality control will begin with formalized material handling procedures, ongoing personnel training and oversight. Monitoring will include mapping of both radioactivity outside the cask and cooling air temperature of each cask with comparison to previous measures. This will insure rapid and safe identification of the integrity of the spent fuel storage cask. On a routine basis, the pressurization of each container will be checked. Casks will be visually monitored remotely. Security personnel will be remotely monitoring the storage facility at all times. Emergency and security plans as required by the NRC shall be in place at all times.

Location

An ideal location for short term UNF storage can be defined by broad parameters. It would be geologically stable, easily accessible by a safe transport via rail, yet distant from significant population centers. The PSFB site is that ideal. The "Pigeon Spur" is a railroad spur off the main line of the transcontinental railroad, twelve miles east of the Utah-Nevada border, 45 miles south of the Utah-Idaho border, in Box Elder County, Utah. Pigeon Spur is remote from population centers in Utah and surrounding states with an estimated population density of 9 human inhabitants in the 300 square miles surrounding the site. Despite this, Pigeon Spur is only two miles to an emergency airfield, making it a distance of 100 miles by air travel to metropolitan Salt Lake City. The site is currently contracted for purchase and is owned by the railroad. The railroad is a willing partner in the task of hauling spent nuclear cargo to the Pigeon Spur facility. The proposed site:

- Is at an existing RR spur
- Is adjacent to BLM owned property.
- Is located in a dry region of the mid-belt of the United States, conducive to concrete endurance.
- Is within a region rated seismic zone 2, and 25 miles distant from the closest of 11,000 recorded seismic events since records have been maintained.
- Has no wetlands within five miles.
- Has no trees or roosting habitats for either bald eagles or peregrine falcons within 5 miles, the only recorded endangered species that could potentially inhabit the area.
- Is not likely to be visited by unintentional visitors as it is 8 miles by unpaved road to Utah Highway 30, which extends 124 miles between Interstates 80 and 84. It is 26 miles of unpaved road to Grouse
  Creek, the nearest community.
- Is not located in any significant flood plain.

Environmental Awareness

The PSFB will not pollute. The pigeon Spur is located in a region which was overgrazed by livestock a hundred years ago. The site is located five miles east of the former railroad town of Lucin, now a ghost town. Lucin was once a thriving community supported by the shipping of local livestock both east and west. The surrounding area's vegetation remains at only 10% of native foliage density the that would otherwise exist. There are no endangered plant or animal species in the region. Antelope foraging in the area is controlled by the Utah Division of

Wildlife. Utah is an energy producing and exporting state. Most of the energy is produced from coal. Utah's locally mined coal contains uranium , which is consequently spread by its smoke and concentrated by the mountainous geography. Were Utah to switch to nuclear energy as its sole source of energy production, each Utah family would likely experience a 5 million fold reduction in exposure to radioactive material. This data is extrapolated from that published by the U.S. Navy in its comparison of the relative hazards of UNF storage. The PSFB plans to be an environmentally friendly installation.

Competition

P&A Engineers is the current leader in the design of used nuclear fuel storage facilities. The PSFB's management has the experience and ability to build and run a state of the art project. We have spent eight years of non stop efforts to see this project become reality. Due to the social and political difficulties that this field engenders, an organization has to have tenacity to see this type project to its conclusion. P&A Engineers has tenacity.

The "Private Fuel Storage" Nuclear Utility Group is leasing land from the Skull Valley Band of Goshutes Indians. On June 25th 1997 they submitted an application with the Nuclear Regulatory Commission (NRC) and on July 31,1997 it was accepted, ref (Docket No. 72-22) The PFS Group is a well funded consortium of 8 utility companies determined to prevail in the complex regulatory, political and technical difficulties that this project will demand. The Goshutes project began with a willing Landowner but without a facility design and transportation scheme. This has resulted in the "Private Nuclear Storage Group's" current difficulties with the Governor of Utah and rail access to their reservation. We expect PFS to prevail and build 31 miles of RR spur to the Goshute reservation. When constructed, it is projected that the Goshutes development will be able to contain 4000 casks of used nuclear fuel rods.

Approximately one third of the nation's nuclear utilities are participating in PFS and will be expecting use of this facility. With any part of the growth expected, there will be little if no extra capacity for other utilities at PFS. If the entire nuclear industry were to begin closure, the PFS capacity could in theory contain existing rods requiring storage and possible rod production for the next ten years output from this nations nuclear power plants (approx. 10 million rods with 24 assemblies per cask, 275 rods per assembly). The current administration's plan for energy calls for continued use and expansion of the nuclear industry. Actually our nation has no other choice. We expect the demand for storage at PFS, PSFB, and sites planed in Wyoming and North Dakota to exceed availability until all four sites are built and operating and a plan is carefully worked out for reprocessing and additional storage is finalized for the separated actinides.

Unanticipated dalays in site approvals and construction only cause more demand. Even if one assumes that all of our challenges are overcome in a timely manner, we believe that there would continue to be an adequate market of spent fuel already cached at Utility company sites and the possible storage of processed military product to fund the PSFB.. P&A Engineers plans to offer economic incentives and placement priorities to participating utility companies in order to insure success.

Rather than competition, we view the Goshutes development as an opportunity to expedite the PSFB. The Goshutes site is currently a lightening rod for public attention due to

Utah's Governor's avowed opposition. This has brought the topic of spent nuclear storage to the forefront of public attention. This fact has resulted in the publication of multiple positive newspaper articles regarding nuclear power and the related UNF storage issue, and has better educated the average Utahan regarding this type of endeavor. One estimate notes that 83% of the population does not know where used nuclear fuel is stored. P&A Engineers believes that it offers many competitive advantages both to utility companies, the federal government and to Utah with our project. The following are some of the PSFB's major advantages:

- Local support in Box Elder County
- A superior location due to our further distance from population centers and greater geologic stability
- Tax benefit to the state of Utah
- Job benefit for the state of Utah
- Superior storage technology
- Rail access

Marketing

The Company plans to market the facility by two parallel methods. The local Utah residents are implicit customers of the facility. P&A Engineers believes that due to the politically and socially charged nature of spent fuel storage, it should invest considerable effort in community education and community development projects. This would include ongoing stipends to Box Elder County and local communities. The Company also will consider investing in the development of a University in the Box Elder County, with the aim of transforming the image of *Pigeon Spur Nuclear Fuel Storage* to one of community benefactor and asset. The Company has engaged a psychological consultant, George Nikopoulos MD. a prominent psychiatrist in Salt Lake City, to assist our community education efforts in addressing the phobic and irrational fears associated with used nuclear fuel.

The Company's explicit customers are the country's utility companies that have a requirement for spent or used fuel storage. Once funded, the Company plans to expend effort to relieve Utility companies of their overflow of UNF. Centralized storage at the PSFB, has safety and political benefits. The facility will offer a significant cost savings to specific companies if one considers the longer term political and social and cost risks that Utilities may suffer by the current on-site storage. The Company also plans to assist in legislative/legal efforts regarding clarification of the ownership of the spent fuel. Centralized storage at a private facility will help this effort. In partnership with INEEL, the Company will research the feasibility of reprocessing spent fuel to a mixed oxide fuel. We will also research efforts at supplying the US military with spent fuel/ high level nuclear material storage. Note that INEEL wants to and plans to eventually reprocess UNF. By contract with the Federal Government Idaho will not be storing UNF. Pigeon Spur is nation's best location for storage access to for reprocessing at INEEL.

Management Team

Mr. William D. Peterson, P.E., Chairman and Chief Executive Officer

Mr. Peterson has over 30 years experience in engineering and construction within the

fields of specialized material handling and alternative energy technologies. He has developed leading technologies for storage of UNF and has received more than 12 patents for a variety of engineering technologies. He has extensive experience in the engineering of storage and handling of high level nuclear materials. Mr. Peterson has supporting experience in the manufacture, maintenance and handling of solid fuel rocket motors. He has founded three successful engineering companies.

Mr. Wayne Edwards, P.E., Project Engineer and Chief Operating Officer

Mr. Edwards has over 25 years of experience in project management and has lead the engineering operations for Ford Bacon and Davis Engineering/Contractors, responsible for some of the Inter mountain States largest projects. He is responsible for the PSFB's project development, construction and operations.

Mr. Bruce Shirley, B.Sc. Construction Manager

Mr. Shirley has 35 years experience in both construction and management at INEL. He currently oversees some of INEL's strategic and important projects. Mr. Shirley will be responsible for implementing process technology, its implementation, setting up plant operations and product development.

Accountants: Schow & Associates

Schow & Associates have been retained to fulfill finance and accounting functions.

Technical Advisory Board

The Company also retains technical advisors and management consultants to provide support in decision making and setting of strategic direction of the Company within those markets it is currently serving or plans to serve. The primary members of the technical and consulting advisory board are:

Any of the following PSFB advisory board members will tell you more about this.

Dr. Steven Barrowes	801-467-0354	Former Nuclear Science Instructor
Prof. Max Carbon	608-831-0914	U of Wisconsin
Prof. Bernard Cohen	412-642-9245	U of Pittsburgh
Prof. John Moulder	414-456-4672	Medical College of Wisconsin
Prof. Gary Sandquist	801-904-4000	URS, U of Utah
Prof. Richard Wilson	617-495-3387	Harvard U
Richard Stallings	208-232-9468	Former Congressman, Negotiator
Robert Hoffman	801-584-1266	Former Chair, Utah Radiation Board
Dr. George Nikopoulos	801-249-1116	Chief of Psychiatry
Bruce Shirley	208-533-7535	Nuclear Projects Engineer
Henning Hoj	801-266-8881	Western States Crane Builder
Dennis Ickes	801-272-0691	Washington Correspondent, Attorney

300-YEAR STORAGE SOLUTION

We propose that spent or used nuclear fuel (UNF) be disposed of in 300 years instead of the present scientifically, practically, and historically indefensible 10,000-year proposal for of Yucca Mountain. The 300-year solution starts with five or more years of pool storage where ninety-nine percent (%) of the fission waste energy decays. Further storage, if desired, may then be done in convection air cooled concrete casks. During 50 years of convection air cooled storage the energy declines another half %. At some point the UNF is reprocessed to separate the 97% (as high as 99%) of actinides (approximately 95% U238 uranium, 1% U235 uranium, and 1% Pu239 plutonium) from the 3% fission wastes. The actinides are made into MOX (mixed oxide) fuel pellets for future reactor fuel. The pure fission wastes are vitrified (cast into glass) then put into dry storage for the remainder of around 300 years, where most of the remaining half % of its radiation energy decays, after which the fission wastes can go into a common landfill and are thus effectively eliminated. Proprietary information.

WDP File: P/Nuc/bus-plan/BusPla3c.wpd 9/27/2002

November 5, 2009

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
BEFORE THE ATOMIC AND SAFETY LICENSING BOARD

In the Matter of	)	SUPLIMENT TO PETITION TO ENTER
	)	
U.S. DEPARTMENT OF ENERGY	)	Docket No. 63-001-HLW
License Applicant Appellant	)	
v.	)	(High-Level Waste Repository)
	)	license application speculation
U.S. NUCLEAR REGULATORY	)	
COMMISSION, Licensor Appeallee	)	Before the A&SL Board
	)	
& v.	)	ASLBP Nos. 09-876-HLW-CAB01
	)	09-877-HLW-CAB02
William D Peterson, 300-year spent nuclear	)	9-878-HLW-CAB03
fuel permanent disposal solution	)	09-892-HLW-CAB04
Third Party Petitioner	)	

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing SUPLIMENT TO PETITION TO ENTER for the NRC staff for production of documents asserted as privileged by NRC Staff. Under 10 C.F.R. Part 2, Subpart J, and MOTION to enter as a Third Party License Applicant dated November 5, 2009, have been served upon the following persons by Electronic Information Exchange.

Dated this 5th day of November, 2009.

William D Peterson, 300-year spent nuclear
fuel permanent disposal solution
Third Party License Applicant Appellant

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