



Private Fuel Storage, LLC

# **Response to Questions about the Operation of the Private Fuel Storage Facility**

A Report to the Citizens of Utah  
February 2001



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# Response to Questions about the Operation of the Private Fuel Storage Facility

A Report to the Citizens of Utah

## Introduction

The proposal to build and operate a temporary facility (the Private Fuel Storage (PFS) facility, or Facility) for the storage of spent nuclear fuel in Skull Valley, Utah has sparked heated debates in the state's capitol and in communities along the Wasatch Front. Those who oppose the Facility raise concerns about its safety, claim that it is risky to transport spent nuclear fuel across the state, and question whether the Facility will be temporary, given delays in the federal government's development of a permanent repository for high level radioactive waste such as spent fuel.

Opponents also question the motives of electric utility companies that would store spent fuel in Utah rather than in their own back yards. The bottom line question seems to be: "If it's so safe, why not leave it where it is?"

It is understandable that the citizens of Utah would have questions regarding the planned storage facility. PFS has continually sought to provide information to the public on the safety and other aspects of the proposed Facility. The purpose of this report is to provide further information and to answer questions and concerns that have been raised recently.

The State of Utah (State) and other opponents of the Facility have made various inaccurate and misleading statements, obviously intended to instill fear in the public. This report will also respond to those statements and point out the fallacies in the opponents' arguments.

## Overview

Utah citizens may be naturally apprehensive about potential risks that might be created by the transportation and storage of spent nuclear fuel in Utah. The fact is, however, that the proposed PFS facility will be safe. If it is not safe, it will not be built. The storage and transportation of spent nuclear fuel are governed by stringent health and safety regulations. These regulations

ensure that the risks involved are low and manageable and will actually be lower than many other risks that the average person accepts every day. The facts are as follows:

1. **Fact:** In 30 years of shipping and storing spent nuclear fuel in the United States, there has never been an accident that resulted in an injury, death or environmental contamination from radiation. That is an outstanding safety record, not an accident waiting to happen as opponents want the public to believe.
2. **Fact:** Utilities that send spent nuclear fuel to Skull Valley will continue to own and be liable for their spent fuel until it is taken to a federal repository for permanent storage. Ownership and liability cannot be shifted to the Skull Valley Band of Goshute Indians (Band) or to the State. Storage on the Skull Valley Goshute Reservation *must be temporary*, according to the lease with the Band, according to the Nuclear Regulatory Commission (NRC) license application and the design of the Facility, according to the federal government that has the legal responsibility for permanent storage, and according to the best interest of the utilities, which want to send their spent fuel to a permanent government repository as quickly as possible.
3. **Fact:** Never has a failure in a spent fuel canister or a storage or transportation cask caused a “leak” of radioactive material. Multiple confinement barriers are designed to safely shield radiation and contain the radioactivity. Because of the protection provided by these multiple barriers, there is no credible natural or man-made hazard that would cause radioactive materials to be released to the environment.
4. **Fact:** Both the operation of the Private Fuel Storage Facility and the transportation of spent nuclear fuel to and from the Facility will be subject to rigorous regulation by the NRC (and the U.S. Department of Transportation (DOT) for transportation) to ensure public health and safety.
5. **Fact:** In its draft Environmental Impact Statement (DEIS) and its final Safety Evaluation Report (SER), the NRC Staff confirmed that the PFS facility and the spent fuel storage system of canisters, transportation casks and storage casks can withstand the effects of credible natural and man-made hazards.
6. **Fact:** In a detailed analysis of Air Force policies, practices, and accident data, PFS has shown that the annual probability of an accident involving aircraft, missiles, or other weapons impacting the PFS facility is less than

one in a million, a level of risk considered so low as to be incredible, and thus acceptable by the NRC.

7. **Fact:** PFS will carry both nuclear property insurance and third party liability insurance. The amounts of insurance will be sufficient to cover damage and losses arising in the highly unlikely event that a natural or man-made hazard were to cause the release of radioactive material at the PFS facility. During spent fuel transportation, the utility owner of the spent fuel will be covered by the Price Anderson Act, which requires the utility to carry private insurance and participate in an industry insurance pool.
8. **Fact:** Studies of the effect of nuclear plants and storage facilities on surrounding communities have shown a positive, rather than negative, economic impact. For example, in spite of fears of property devaluation along transportation routes and near the federal Waste Isolation Pilot Project (WIPP) facility prior to its opening in Carlsbad, New Mexico, the area around Carlsbad is thriving economically.

After providing some background information on the PFS facility, this report will address these issues and other questions in more detail.

## Background Information on the PFS Facility

### *Description of the Private Fuel Storage Facility.*

The Private Fuel Storage facility will be located on the Skull Valley Band of Goshutes Reservation, approximately 50 air miles southwest of Salt Lake City. The Facility will be designed to temporarily store spent nuclear fuel inside sealed stainless steel canisters, welded shut, and placed within massive cylindrical steel and concrete storage casks. The thickness of the protective steel and concrete cylindrical wall of the storage cask that will surround the sealed canister is approximately 2½ feet. Each cask will be 19 feet tall and 11 feet in diameter, and will weigh approximately 175 tons when loaded with a spent fuel canister.

The restricted area of the Facility, in which the spent fuel storage casks will be located, will cover approximately 99 acres (0.15 sq. mi.) of the site's 820 acres. It will contain, at full capacity, 4,000 spent fuel storage casks. The restricted area will be surrounded by security fences and protected by armed security guards. The restricted area will be located well inside the boundary of the 820-acre owner-controlled area, with restricted public access.

The restricted area is approximately 2 miles off the nearest public road via a private, controlled access road. Spent fuel will be shipped to the Facility by rail using a new rail line to be constructed from the main Union Pacific Line at Low, Utah, down the west side of Skull Valley to the site.<sup>1</sup>

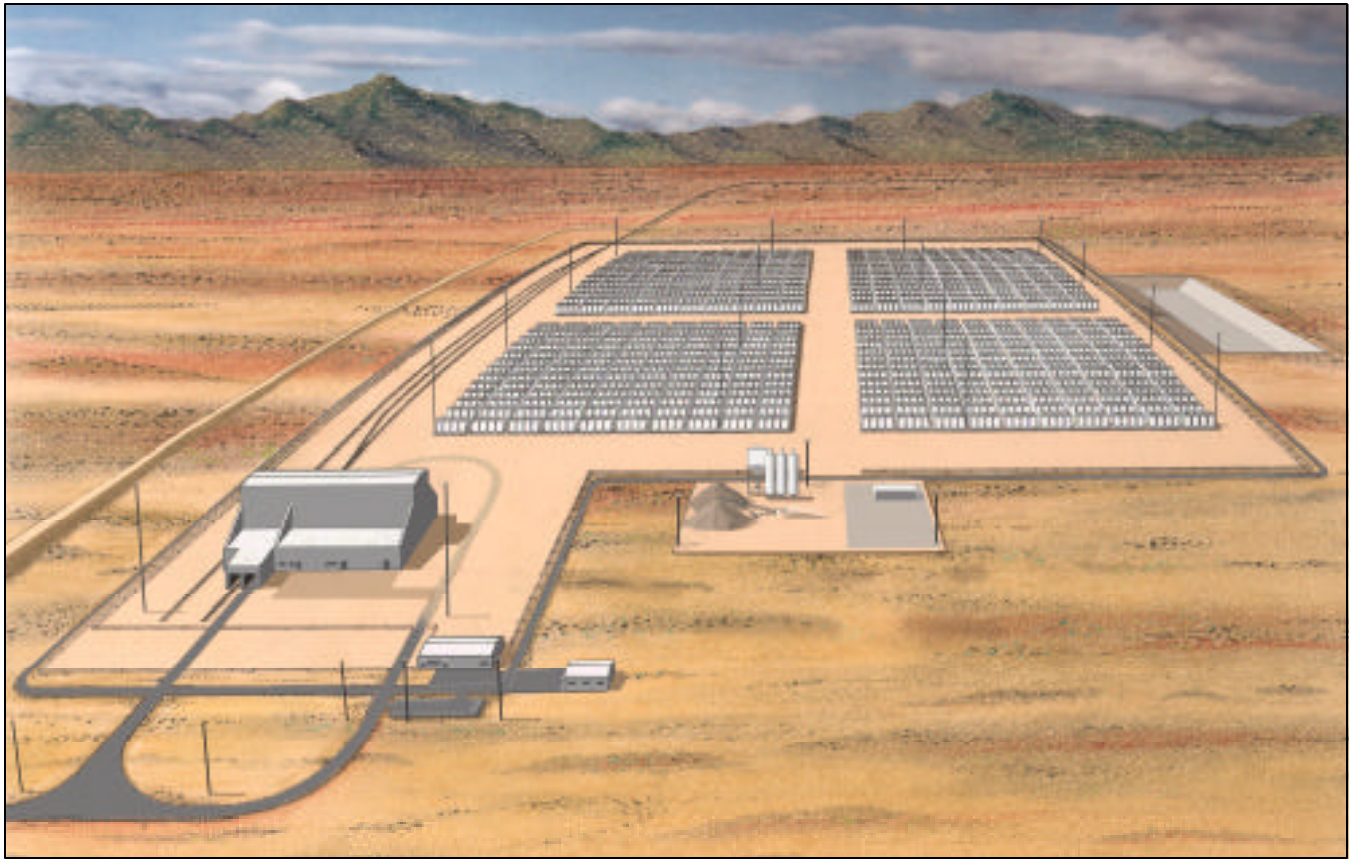
Spent nuclear fuel consists of the uranium fuel rods taken from a nuclear reactor after they have been used to produce power in the reactor. The fuel is in the form of cylindrical pellets of uranium dioxide, a hard ceramic material. Each pellet is somewhat less than half an inch in diameter and roughly half an inch long. The pellets are stacked on end inside long hollow metal rods about 12 feet long which are held together in assemblies of up to 250-300 rods parallel to each other spaced in a square arrangement. Each canister at the PFS facility will contain either 24 or 68 assemblies, depending on the type of nuclear reactor they come from. There will be *no* loose solid materials and *no* liquids inside the canisters that will be shipped to and stored at the PFS facility.

The canisters will be loaded with the spent nuclear fuel and welded shut at the reactor site shipping the fuel. Upon arrival at the PFS facility, the sealed canisters will be unloaded from the heavy steel transportation casks in which they are shipped to the PFS site and will be placed within the massive steel and concrete storage casks. Upon leaving the site, the process will be reversed. The sealed canisters will be removed from the storage casks and placed within transportation casks for shipment to the final repository. The spent fuel will always remain within the sealed canisters while at the PFS facility. The canisters will not be reopened and the spent fuel assemblies will not be handled.

Thus, while at the PFS facility, the spent nuclear fuel will always be confined within sealed canisters which will be stored inside massive concrete and steel storage casks. Because of this protection, there is no credible natural or man-made hazard that would cause radioactive material to be released from the Facility to the environment.

***The PFS facility will be designed to be as safe as any facility in Tooele County's hazardous industry zone.***

Tooele County (the County), which surrounds the Skull Valley Reservation where the PFS facility will be located, is already host to a variety of industries in which hazardous materials are being successfully managed by the federal government, private industry, and County officials. These industries range from Envirocare's mixed hazardous chemical and low-level nuclear waste storage facility to the Army's chemical weapons incinerator. They provide



The artist's rendering, above, shows the proposed 820-acre temporary storage facility for spent nuclear fuel rods on the Skull Valley Goshute Indian Reservation in Utah. Private Fuel Storage (PFS) will construct the facility after the Nuclear Regulatory Commission has issued a license. The site is designed to store up to 4,000 concrete and steel storage casks containing thick stainless steel canisters that hold spent fuel rods from nuclear power plants. The rendering below shows how the facility will look from Skull Valley Road.

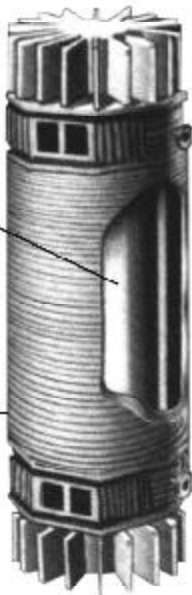


# Safe Management of Spent Fuel Is Simple.

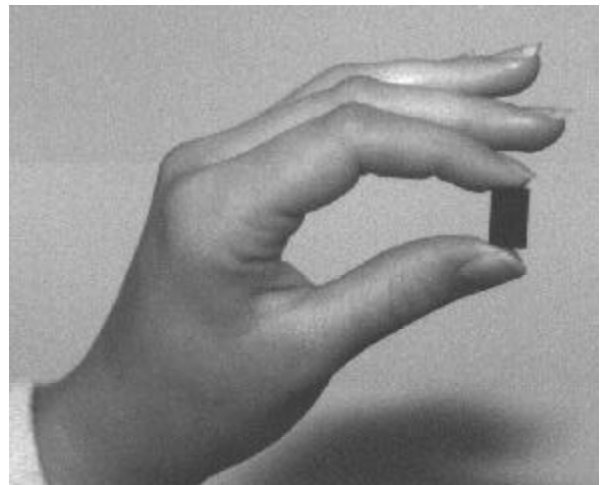
Spent fuel assemblies are removed from the nuclear reactor, cooled underwater for several years, then sealed inside a rugged steel canister. This canister is never opened.



The multi-purpose canisters are transported by rail or highway to the centralized storage site in NRC-approved steel transport casks.



At the storage site, the multi-purpose canisters are placed inside 19-foot-tall, rugged concrete and steel casks. These casks can withstand tornadoes, lightning strikes, and floods, without ever releasing any of the radioactivity inside.



Spent nuclear fuel is in the form of hard ceramic pellets like the simulated one shown here. They cannot become air-borne, or leach into the ground.

hundreds of jobs to County residents and revenue to the County government, which is used to improve recreation, schools and the quality of life for residents.

The PFS facility will be at least as safe as any of the others currently located in the County. Unlike some other industrial sites in the County, operation of the PFS facility will produce no emissions into the air, ground, or water. Nevertheless, PFS has made an agreement with the county to pay fees in lieu of taxes, which are not required since the Facility will be located on a sovereign Indian Reservation. These fees will be available to the County to provide services to its residents, or to reduce or replace property taxes for current services.

***The Skull Valley Band of Goshute Indians General Council has fully approved the lease of land to PFS.***

The lease for the Facility between PFS and the Skull Valley Band of Goshute Indians was approved in full compliance with the Band's established traditions. The lease is backed by more than two-thirds of the entire Band membership, who have signed the resolution approving and ratifying the PFS lease.

The Skull Valley Band of Goshute Indians has a traditional form of government in which all adult members of the Band are members of the General Council, which decides by majority rule all matters that affect its reservation and members. The General Council elects an Executive Committee (comprised of a chairman, vice chairman, and secretary) which is authorized to carry out certain activities on behalf of the Band and to handle the Band's day-to-day business. The Executive Committee acts as authorized by General Council resolutions approved by a majority of the Council. Decisions by the General Council are made by signature on written resolutions brought before the Council.<sup>2</sup>

The Band's General Council authorized the Executive Committee to study the feasibility of storing spent fuel on the reservation under the federal government's monitored retrievable storage (MRS) plan in the early 90s. That study (which included trips to nuclear facilities in the United States and four foreign countries) resulted in two reports being presented to members of the Band so that they would have a thorough understanding before making further decisions. After receiving the reports, the General Council, by resolution, authorized the Executive Committee to enter negotiations with the U.S. Government or private entities to build an interim spent fuel storage facility.<sup>3</sup>

When the federal MRS program was cancelled, the Band decided to pursue negotiations with private utility companies. The Executive Committee contacted PFS. A lease agreement was negotiated over a six-month period, and was presented to the General Council at a meeting in December 1996 and, following discussion, a resolution approving the lease and authorizing the Executive Committee to sign it was passed overwhelmingly.<sup>4</sup>

Because of the important nature of the project and the desire for full participation by the General Council, the Executive Committee further contacted Council members not present to explain the project and determine whether they would provide their agreement, by signature, to the resolution approving the Band's lease of property to PFS. More than two thirds of the entire membership of the General Council signed the resolution.<sup>5</sup>

The U.S. Bureau of Indian Affairs (BIA) also approved the PFS lease with the Band. The BIA, whose representatives attend General Council meetings as observers, began review of the lease in early December 1996, and approved the final version, the Amended and Restated Business Lease, on May 23, 1997.<sup>6</sup> The BIA's approval reflected the agency's thorough review of the lease's provisions over the six month period.<sup>7</sup>

Charges have been made that the members of the Band who opposed the lease will not benefit from the project. These charges are simply wrong. The General Council (adult voting members) decides how proceeds will be allocated; benefits are currently being provided throughout the Band. Such benefits currently (or in the future) will include programs such as health care, education and training, and housing, as well as payments to each individual member of the Band. Lease payments, and the benefits to all members of the Band, are expected to increase over the life of the lease.

Thus, all members of the Band will benefit from the payments to be made by PFS under the lease.

***Operation of the Facility will produce economic benefits to Utah.***

The Band will not be the sole economic beneficiary from the operation of the Facility. The total cost of the PFS facility, if it is operated for a maximum of 40 years, will be in excess of \$3 billion. PFS is committed to spending as much of that money in Utah as possible. PFS will seek suppliers of goods and services in Utah. PFS will also hire Utahns, including members of the Skull Valley Band, for jobs at the Facility.

PFS has encouraged its certified cask supplier to partner with Utah fabricators to produce transportation casks and storage canisters worth more than \$1 billion over the life of the project. Discussions with manufacturers and industrial developers have already begun.

In addition, the Utah Economic Development Corporation has estimated that the PFS facility and a related cask manufacturing business will generate approximately \$1 million per year in state and local sales taxes.<sup>8</sup>

***The Facility will be safe or it will not be built.***

The PFS facility will be owned and operated by a consortium of utility companies, each with up to 40 years of experience in nuclear power generation and the safe handling and storage of nuclear materials. Their record is not unique. In the history of the U.S. commercial nuclear power industry, there has never been a radiation-related fatality or injury to the industry's workers or to the public. Even the worst commercial nuclear power accident in the United States, which occurred at Three Mile Island Unit 2 in 1979, resulted in no fatalities and no radiation-related injuries.

The safety record of the nuclear power industry in the United States can be attributed to the safety features engineered and built into nuclear power plants, the quality assurance programs that verify a facility's compliance with design and regulatory requirements, and close federal government oversight that ensures that each plant is designed, built and managed according to strict safety regulations.

The risk from spent fuel storage is substantially lower than the risk from operating a nuclear reactor. Unlike a nuclear reactor, stored spent nuclear fuel is not capable of a self sustaining chain reaction, and accordingly, there is no driving force in the form of high temperature or pressure that could potentially disperse radioactive materials into the environment. Further, the spent fuel has cooled for a minimum of 5 years prior to loading in a canister for long-term storage, so residual heat produced from radioactive decay of fission products is very much less than that of fuel in a nuclear reactor. Also, spent fuel inside a canister is in solid form – so it does not migrate easily from its location.

Further, the same safety ethic that has earned such an outstanding record for the nation's nuclear power plants applies to the design, construction and operation of spent fuel storage facilities such as the proposed PFS facility. Indeed, multiple layers of protection will ensure that the Facility will be safe:

- The PFS facility must be licensed by the United States Nuclear Regulatory Commission, an independent agency with unique expertise in nuclear safety matters. The NRC has overseen the development of the nuclear industry since its beginnings, and has issued stringent regulations for the above-ground storage of spent nuclear fuel that cover the suitability of the site, the design of the storage and transportation casks, and the operation and management of the facility. These regulations must be satisfied or PFS will not be granted a license to operate.
- The PFS facility will be owned and operated by a consortium of experienced electric utility companies, and will employ highly trained professionals who are certified in various specialties within the nuclear field.
- Once the Facility starts operating, it will be subject to constant monitoring by the NRC, which will require that appropriate measures be taken if there are questions about the safety of the Facility's operation.

Are there risks? Of course there are some risks, just as there are risks associated with any human endeavor. Nothing is completely free of risk. However, as noted above, the risk from spent fuel storage is substantially lower than the risk from operating nuclear reactors, which are common in many communities throughout the United States and the world. Moreover, because of the multiple layers of protection incorporated into the design, the risks associated with spent fuel storage at the PFS facility are lower than other common risks that people accept every day – from driving their automobiles, to flying in airplanes, living close to a civilian or military airport, or living in a community through which gasoline tankers and chemical shipments pass.

***Licensing and operation of the Facility will be conducted in accordance with all applicable laws.***

Licensing and operation of an away-from-reactor temporary storage facility for spent fuel is covered by Title 10 Code of Federal Regulations (CFR), Part 72, the federal regulations that were created to implement the provisions of the Atomic Energy Act as they apply to spent fuel storage facilities. The NRC is responsible for issuing licenses to companies that can comply with the regulations, and for monitoring facility operations to ensure continuing compliance.

The licensing of the PFS facility by the NRC is a rigorous process that is carried out by NRC Staff experts on safety and environmental protection matters. In addition, any material concerns about the Facility raised by third

parties are being aired in public licensing proceedings presided over by a three-member NRC Atomic Safety and Licensing Board (ASLB), a panel of experts on nuclear matters who act as judges.<sup>9</sup> PFS, the facility's owner, must show that the site and the Facility design are safe and that PFS has the technical and managerial competence and the financial wherewithal to build and operate the facility in compliance with applicable regulations.<sup>10</sup> The State has been, and continues to be, a full participant in the ASLB licensing proceeding. Other individuals and entities opposed to the PFS facility are also participants in the licensing proceeding, as is the NRC Staff, which is participating fully as an independent party.

Those opposed to the PFS facility have had the opportunity to present to the ASLB facts and testimony showing why the Facility should not be allowed to operate. The State, in particular, has availed itself of this opportunity and has raised numerous safety, environmental, and financial contentions. Many of its arguments have been dismissed for lack of merit. Others are still being adjudicated.

The licensing process is long and thorough and provides opportunities for public participation. Thus far, there have been six public meetings at which members of the public were invited to provide oral comments on environmental impacts and other concerns about the proposed Facility. There will be more opportunities for public comment during the ASLB hearings in Salt Lake City this summer. All documentation associated with the licensing process, with the exception of security safeguards and certain confidential company information, is available to the public through the NRC's public document room and the NRC web site.<sup>11</sup>

Once the ASLB has heard all the evidence and arguments for and against the license application, it will issue a written decision, which is expected in late 2001. In order to approve the license, both the NRC Staff and the ASLB (with respect to the issues raised before it) must find that construction and operation of the Facility will comply with the applicable laws and regulations. The licensing decision is subject to review by the full Nuclear Regulatory Commission and could be appealed in the federal courts.

The licensing process is still ongoing. Nonetheless, the State is asking the Utah legislature for more than \$1.6 million to wage a political battle to stop the PFS project. The State is seeking to bring to the "court of public opinion" many of the same arguments that have been dismissed by the ASLB for lack of merit, or that are based on inaccurate or misleading information. Legislators must decide whether such an expenditure of public funds would be an appropriate use of the taxpayer's money, given that there is already a fair and thorough process in place to determine whether the project should be approved, and that the allegations that are being made have no substance.

Utahns can be sure that if the PFS facility passes the scrutiny of regulators and judges, it will be safe.

***Centralized interim storage serves an important public need.***

The question has been asked, if the storage of spent nuclear fuel is so safe, why not leave the spent fuel where it is. The fact is that nuclear power plants were originally designed with only limited spent fuel storage capacity because the industry and the nation planned to reprocess the spent fuel and use it over and over again. That has not come to pass, however, because the reprocessing option has been eliminated from consideration in the nation's waste management program. Therefore, without a temporary storage facility or a permanent repository, the operation of many of these plants -- and their continued generation of electricity to meet the nation's energy demand -- will be challenged.

The current energy crisis in California and its repercussions in Utah and other western states has demonstrated the interdependence of electricity producers and consumers across state boundaries. Although Governor Leavitt and other critics of the PFS facility have claimed that Utah has not generated, nor benefited from, nuclear energy and therefore should not have to store the waste products, the fact is Utah is connected to the national power grid. When Utah Power and other electric utilities purchase power from the grid, they cannot distinguish electricity generated by nuclear plants from that generated by coal or oil. A strong national grid is as important to Utah as to any other state. The nation cannot afford to place in jeopardy any of the 20 percent of the nation's electricity that is generated by nuclear power plants.<sup>12</sup>

Today, more than 20 reactor units have run out of room for spent fuel in their storage pools.<sup>13</sup> By 2010, the earliest estimated date for a U.S. Department of Energy (DOE) permanent repository, more than 70 reactor units will have run out of pool space.<sup>14</sup>

To date, over 20 reactor units have developed dry cask storage facilities. In the future, others will also pursue that option. However, not all reactor sites can do so. Some have shut down their reactors and must send the spent fuel off site before they can fully decommission the site. Others have state restrictions that prevent building enough dry cask storage for all their needs. Others simply do not have the physical space for dry cask storage.

Therefore, providing storage for spent nuclear fuel serves an important public function, for it allows the continued generation of electrical power by the nation's nuclear power plants. Further, economies of scale can be achieved

in the storage of spent nuclear fuel at a single large facility instead of the individual nuclear plants. Thus, construction of a central facility for the temporary storage of spent nuclear fuel, such as the PFS facility, serves an important public need and makes good economic sense.<sup>15</sup>

## Questions and Responses about the PFS Facility

Following is a discussion of the questions most often asked about the operation of the PFS facility. A summary response to each question is presented, followed by a discussion containing additional details.

***Question: Will spent fuel be stored in Skull Valley indefinitely?***

***Summary Response:***

***Storage on the Skull Valley Goshute Reservation must be temporary, according to the lease with the Band, according to the Nuclear Regulatory Commission license application and the design of the Facility, according to the federal government that has the legal responsibility for permanent storage, and according to the best interest of the utilities, which want to send their spent fuel to a permanent government repository as quickly as possible.***

***Discussion:***

The State and others have questioned whether the PFS facility will be temporary. They speculate that (1) there is no guarantee that the spent nuclear fuel will be removed from the Facility; (2) DOE's permanent repository at Yucca Mountain may never be built; and (3) it may be impossible to return the spent fuel to the utilities because they may have decommissioned their nuclear power plants. There are, however, clear reasons why the PFS facility cannot become permanent.

First, the utilities that send spent nuclear fuel to Skull Valley will continue to own, and be liable for, the fuel until it is taken to a federal repository for permanent storage. Ownership and ultimate storage responsibility cannot be shifted from the owning utility to PFS, the Skull Valley Band, or the State of Utah. Furthermore, storage of spent fuel at Skull Valley *must be temporary*, a fact dictated by the PFS lease with the Band,<sup>16</sup> by the license that will be issued by the NRC, by the design of the facility as approved by the NRC, and by the legal responsibility that rests with the federal government to establish a

permanent high-level radioactive waste repository and to move the spent fuel there.

The State argues that there is no incentive to move the spent fuel from the PFS facility once it is located there. That is not the case. The utilities that ship spent fuel to PFS have a strong incentive to send their spent fuel to a permanent government repository as quickly as possible, since the utilities have already paid billions of dollars (and continue to make payments) to the Nuclear Waste Fund for permanent fuel storage.<sup>17</sup> Until the federal government accepts the spent fuel, title to and responsibility for the fuel remains with the utilities.<sup>18</sup> The sooner the federal government takes the fuel, the better for the utilities.

The speculation that the U.S. government may have no incentive to move the fuel out of the Facility also is not credible. The DOE is required by law to develop a permanent high level radioactive waste repository and is studying the viability of creating such a repository at Yucca Mountain, Nevada.<sup>19</sup> Further, in addition to its legal obligation to provide for the permanent disposal of commercial spent fuel, the federal government must dispose of a large amount of accumulated defense-related spent fuel and high-level nuclear waste (for example, spent fuel from the nation's nuclear submarine fleet). This is a pressing national problem that makes it imperative for the government to complete one or more repositories as soon as possible.

Moreover, even if the DOE were to fail to take possession of the spent nuclear fuel at the expiration of the PFS license, the fuel still would not stay in Skull Valley. The utilities that own the fuel have a contractual obligation to take it back at the end of the PFS license. This contractual obligation persists even after the operating plant that generated the spent fuel is decommissioned.

Opponents also argue that the DOE may decide to pay the utilities to continue storing spent fuel rather than complete and license the permanent high-level radioactive waste repository. However, this argument ignores the fact that the PFS facility is *designed* to serve only as a temporary facility, not a permanent geological repository such as that envisioned for Yucca Mountain.<sup>20</sup> Thus, the PFS site could *not* be turned into DOE's permanent repository even if the DOE wished to do so. Further, neither the lease nor the NRC license for the Facility would allow permanent operation of the Facility.

**Question: Will the Facility have a negative impact on property values?**

**Summary Response:**

***Studies of the effect of nuclear plants and storage facilities on surrounding communities have shown a positive, rather than negative, economic impact. For example, the area around Carlsbad, New Mexico, the location of the recently opened federal Waste Isolation Pilot Project facility, is thriving economically.***

**Discussion:**

Realtors in Utah have questioned whether transportation of spent fuel through Utah will create a perception of risk that will in turn diminish property values along transportation routes. There is ample evidence, however, that the contrary is true.

A study of the economic impact of nuclear plants and storage facilities on surrounding communities showed an actual positive, rather than negative, economic impact.<sup>21</sup> In addition to the five communities included in that study, there are numerous other examples throughout the U.S. and in other countries where thriving communities surround facilities where nuclear materials are used and stored.

Nonetheless, to inflame the concern about property values, the State cites a recent survey performed on behalf of the Utah Association of Realtors that revealed that 85 percent of 402 respondents (341 people) said “the proposal [to transport spent fuel by rail to the PFS site] would have an impact on whether they purchased property within a mile of the tracks.”

It is not surprising that many people would be apprehensive about anything connected with the term “nuclear” before gaining the necessary information on how spent nuclear fuel is being transported safely, and how risks are minimized by the extremely robust design and construction of the containers, the safety regulations, and the procedures followed by shippers and carriers. While it is important to understand the current attitudes and opinions of Utahns about shipment and storage of spent fuel in Utah, it is not necessarily correct to conclude that today’s fears will result in a particular form of behavior after the PFS facility is licensed and begins operation. For as renowned pollster George Gallup noted in his book *The Sophisticated Poll Watcher’s Guide*,<sup>22</sup> what people say they intend to do is not necessarily borne out by their actual behavior.

Further, researchers at Argonne National Laboratories warn policy makers and decision makers to “balance survey evidence, which suggests that adverse economic impacts and stigmatization are likely to result [from siting of high level waste facilities or transportation routes], with findings of research using market-based techniques, which suggest that risk perceptions that may exist are not likely to be reflected in local economic behavior.”<sup>23</sup>

The case involving transportation of nuclear materials to the federal Waste Isolation Pilot Project facility (WIPP) in New Mexico is a good illustration of this wide gap between risk perception and actual behavior. When the State of New Mexico condemned a piece of property near Santa Fe for the construction of a highway by-pass to be used by WIPP shipments, the property owner successfully claimed in court that the value of his remaining property would be affected by the *perception* that property values along the transportation route would be diminished. The plaintiff used as evidence a survey that showed fears similar to those expressed in the Utah survey, and a jury agreed and awarded him damages.

Yet the reality today, 10 years after the lawsuit, is much different from the predictions. The highway by-pass has become the engine for economic growth in that area and property values have increased, not decreased. New businesses and residential developments are going up within 100 yards of the highway used by WIPP shippers. Santa Fe Economic Development, Inc., a private non-profit organization that aims to promote the city’s business environment, conducts bus tours that include prime real estate along the route, such as the 4,700-acre gated community of Las Campanas that features a Jack Nicklaus championship golf course.<sup>24</sup>

Furthermore, the economy of Carlsbad, NM, site of the WIPP repository for nuclear waste, is booming: more than 1,000 direct and indirect jobs, a nearly \$65.5 million boost to the economy even before the facility opened, and some \$250,000 in charitable donations by WIPP contractors have resulted from the project.<sup>25</sup>

Perceived risks are often overlooked or minimized by property buyers or owners because other factors play a more important role in their decision to purchase. People own property adjacent to interstate highways and rail lines throughout the country, ignoring or accepting the hazards associated with daily shipments of gasoline and toxic chemicals. There is no reason to expect that Utahns living near the rail line used to move spent fuel to the PFS facility would behave any differently.

***Question: Will it be safe to transport spent fuel to and from the Facility?***

***Summary Response:***

***The transportation of spent nuclear fuel is undertaken in robust transportation casks to ensure safety even in the event of an accident. In 30 years of shipping spent fuel in the United States, there has never been an accident that resulted in an injury, death or environmental contamination from radiation.***

***Discussion:***

Many people have questioned whether transportation of spent fuel can be accomplished safely. The answer is yes.

While there are risks associated with all forms of transportation regardless of the cargo, the safety record of nuclear spent fuel shipments is exemplary. The process of transporting spent nuclear fuel is strictly regulated by the NRC and the U.S. Department of Transportation.<sup>26</sup> Compliance with the NRC and DOT regulations ensures that the risks in shipping spent nuclear fuel will remain very small.

Indeed, in 30 years of shipping spent nuclear fuel across this country, there has never been an accident that resulted in an injury, death, or environmental contamination from radioactive material.<sup>27</sup> That outstanding record shows that transportation of spent nuclear fuel can be done safely, contrary to unsupported claims by opponents.

Utah's director of the Division of Radiation, Bill Sinclair, has repeatedly expressed confidence in the safety of spent fuel shipments through Utah en route to an Idaho storage facility. "We're used to transportation of spent fuel through the state. It's a well regulated practice, and we've never had any accidents of any consequence," he told an Associated Press reporter.<sup>28</sup> PFS shipments will be made in accordance with the same regulations that govern the Idaho shipments.

- ***It is extremely unlikely that a transportation cask will emit radioactivity in excess of safe limits set by the NRC.***

In assessing the concerns over the transportation of spent nuclear fuel, it is important to begin with an understanding of how the fuel is prepared for transportation. Spent nuclear fuel is in the form of hard ceramic pellets,

contained within metal rods, themselves enclosed in sealed, welded-shut, helium-filled stainless steel canisters. Each canister is in turn contained in a heavy, sealed steel transportation cask.

Each of these elements provides a separate, independently sealed, protective boundary against the escape of radioactivity. In particular, the sealed transportation cask -- constructed with 13-inch side walls of heavy steel and neutron-shielding material -- is designed to shield the radiation and contain the radioactive material in the unlikely event that radioactive matter were to escape the sealed canister inside the cask.<sup>29</sup>

The cask-canister storage and transportation system that will be used by PFS has been certified by the NRC to meet all federal regulations that protect workers, the public, and the environment. To earn certification, the canister/shipping cask system had to be shown to be able to withstand great physical impacts, such as a 30-foot drop onto an unyielding surface, be puncture resistant, and be impervious to the effects of severe fires and immersion in water.<sup>30</sup> The design of the cask ensures that it would not be ruptured even in a high speed collision or derailment. Thus, even if a cask were to be involved in a transportation accident, the escape of radioactive material would be highly improbable.

- ***A transportation cask that emits radioactivity above regulatory limits will not be moved to or from the PFS site.***

One of the risks postulated by opponents of the PFS facility is the possibility that a shipment would contain a damaged, contaminated or leaking transportation cask or fuel canister and, upon arrival at the Facility, PFS would refuse the shipment, causing it to be returned to the shipping utility and thus pose risks to workers and to the public. The postulated scenario, however, will simply not happen.

In the first place, a shipping utility will not be allowed to ship a canister and shipping cask if either of them is damaged or contaminated at the time of shipment.<sup>31</sup> Further, transportation of a shipping cask to the PFS facility may not proceed unless the cask meets the rigorous regulatory requirements for public transportation, which include testing of the shipping cask to assure the confinement integrity, which is designed to prevent the escape of radioactive materials from the cask.<sup>32</sup>

Likewise, PFS will not, and legally cannot, ship any transportation cask that emits radiation above the safe limits set by the NRC. If a transportation cask were damaged to such an extent that it would not provide an effective shield

against radiation as required by federal regulations, it could not be used to transport a spent fuel canister from the PFS site until it was repaired.<sup>33</sup>

In the highly unlikely event that a canister/shipping cask system were to arrive at the PFS facility site damaged or contaminated, any corrective action necessary would take place in a secure, protected environment (the Canister Transfer Building). Under no circumstances would spent nuclear fuel be shipped in a damaged or contaminated shipping cask, nor would a damaged or contaminated cask be left sitting in an unprotected area of the PFS site.

- ***Proper procedures exist to respond to a spent fuel transportation accident.***

In the unlikely event of a serious transportation accident involving spent fuel casks, emergency response would follow appropriate emergency plans. Federal regulations provide for federal government assistance to local governments, where necessary, to develop the capability to respond to a spent nuclear fuel transportation accident.<sup>34</sup> In addition, PFS intends to transport spent fuel via dedicated rail service to minimize the shipping time and the risk of an accident.<sup>35</sup>

- ***The potential consequences of a transportation accident have been grossly overstated.***

The State has claimed that a worst case transportation accident would cost \$313 billion to clean up. The State's calculation is, however, founded on unrealistic assumptions.<sup>36</sup> Moreover, based on the NRC's most recent study of the risks of spent nuclear fuel transportation, the probability of a worst case accident over the course of the entire PFS project is less than one in a billion.<sup>37</sup> Thus, the worst case scenario postulated by the State is less likely to happen than the Earth being struck by a large meteor in the next forty years. Such a wildly improbable scenario does not provide a basis for rational decision-making.

Critics of the project have also raised concerns that a transportation accident involving spent fuel could close Interstate 80 and disrupt interstate commerce. This is highly unlikely, however, because spent fuel shipments will not be made via truck on I-80, but on the rail line that parallels I-80 for a short distance west of Salt Lake City. In the event of a transportation accident, the robust design of the transportation package ensures that any disruption to transportation routes would be brief. The claim that a spent fuel transportation accident could result in the prolonged closure and disruption of I-80 traffic is just not believable.

**Question: Will the spent fuel storage casks fail?**

**Summary Response:**

***The spent fuel casks to be used at the Facility are of a proven, robust design whose safety under normal and abnormal conditions has been certified by the NRC.***

**Discussion:**

Some people have questioned whether spent fuel storage technology is reliable and safe. Industry experience for more than 15 years, as well as regulatory requirements, show that the answer is yes.

The casks used to store spent fuel at the PFS facility are similar to those that have been in use elsewhere for many years without problems. For example, dry cask storage has been used at the Idaho National Environmental and Engineering Laboratory (INEEL) for more than fifteen years. Recently, one of the original casks stored at INEEL was opened and inspected, and the contents of the cask were determined to be in the same condition as when originally stored.<sup>38</sup> Likewise, dry cask storage systems have been successfully used by utilities at commercial nuclear plants under NRC license since the mid-1980s.

Further, the designer of the cask storage system that PFS will use has demonstrated the safety of its design under normal and abnormal conditions as required by federal regulations, and the design has been certified by the NRC. Thus, PFS is applying a proven storage technology already being used by others and shown to be safe and reliable.

Nor is the technology used in the storage casks particularly complicated. No active systems are involved in the storage of the spent fuel. The spent fuel rods are contained in sealed stainless steel canisters which in turn are stored in huge concrete and steel cylinders. The cylinders containing the canisters are set on concrete pads. There are no operating mechanisms that can fail.

Federal regulations applicable to the construction of storage casks<sup>39</sup> require a comprehensive inspection program for quality assurance to ensure that manufacturing defects do not occur or are detected before a cask is approved for use. The success of the quality assurance program in finding manufacturing defects, as reported from time to time, should be reassuring, rather than a source of concern.<sup>40</sup>

**Question: *Is the Facility vulnerable to natural hazards or terrorist acts?***

**Summary Response:**

***The spent fuel storage system of canisters, transportation casks and storage casks and the PFS facility can withstand the effects of credible natural and man-made hazards. This has been confirmed by evaluations conducted by both PFS and the NRC Staff.***

**Discussion:**

Some people have asked whether PFS has considered what would happen to its facility if there were an earthquake, tornado, or other hazard, either natural or man-made.

PFS and the NRC Staff have evaluated the impact of potential hazards that could damage the storage casks and concluded that the casks at the PFS facility will be safe. These results are documented in the draft Environmental Impact Statement and the Safety Evaluation Report. In addition, these conclusions are the subject of ongoing hearings before the ASLB. If the ASLB does not uphold these conclusions, PFS will not receive a license to build and operate the Facility.

- ***The risks posed by seismic hazards are low and are accommodated by the facility's design.***

Opponents of the PFS facility claim that its site will not comply with NRC standards for seismic safety and acceptable geologic conditions. However, the site has been the subject of extensive geologic and seismic investigations, which have shown it to be a suitable location for the Facility.<sup>41</sup> In its Safety Evaluation Report, the NRC Staff concluded that the PFS facility site is suitable from the standpoint of seismic hazards.<sup>42</sup>

It has been suggested that because the NRC may grant PFS an exemption from the earthquake definition standards set forth in its regulations, the site may not be safe from earthquakes. The exemption, however, is intended to permit the use at the PFS facility of the latest scientific methods for evaluating earthquake hazards (which already have been incorporated into the regulations governing the analysis of earthquake hazards at operating nuclear plants), while waiting for the regulations for spent fuel storage facilities to be updated. As is the case with any exemption from its regulations granted by

the NRC, the exemption granted to PFS must provide adequate protection for public health and safety.

The potential consequences of a postulated seismic event have also raised concerns. It has been claimed, for example, that if a spent fuel storage cask tipped over in an earthquake, the metal cladding that surrounds the fuel rods in the canister inside the cask would rupture and render the canister of spent fuel unsuitable for shipment to the permanent DOE high-level waste repository. This is incorrect. First, it is highly improbable that even a severe earthquake would cause storage casks to tip over. Second, even if a cask were to tip over in an earthquake, the fuel rod cladding would not rupture. Finally, even if the cladding did rupture in a tip-over accident, the canister would retain its integrity and prevent a release of radioactivity. As stated, the spent fuel at the PFS facility will be stored inside a stainless steel canister that will be welded shut. The canister will contain the radioactive material in the spent fuel even if the metal cladding around the fuel rods fails.

Under NRC regulations, fuel with failed metal cladding could be shipped to a DOE repository.<sup>43</sup> There is no truth to the allegation that the DOE could refuse to accept such a shipment of damaged fuel. In fact, even without an accident, some fuel shipments from operating nuclear power plants are likely to include fuel that is at least in part damaged, and the DOE is required to accept them under the terms of its standard contract with the electric utilities.<sup>44</sup>

- ***The threats of a terrorist attack against the Facility have been grossly exaggerated***

Opponents to the PFS facility use grossly inaccurate and misleading statements to describe the potential impacts of a terrorist attack on spent nuclear fuel. For example, they say that one nuclear fuel assembly from a reactor contains far more long-lived radioactivity than many bombs like the one dropped on Hiroshima. What is not said, however, is that whatever radioactive material is present in spent fuel will not “explode” like a bomb, even if subjected to a terrorist attack.<sup>45</sup> For that reason, if such an attack were to occur, it would have no adverse consequences to the general public.

A draft report was prepared on the potential radiological effects of terrorist attacks in the United States, including attacks on commercial nuclear facilities, by a committee of the National Commission on Radiation Protection and Measurements (NCRP).<sup>46</sup> The report notes that a successful attack on an *operating nuclear power plant* would not have a lethal effect outside the containment building, and thus would not threaten the general public.<sup>47</sup> The draft report concludes that the effects of a terrorist attack on a spent nuclear fuel storage facility would be *much less severe* than at a power plant.

Allegations have also been made, supposedly based on the above mentioned draft report, that a blast of 1000 pounds of TNT will release enough radiation from 220 pounds of spent nuclear fuel to cause widespread exposure to lethal doses of radioactivity. It is implied that such consequences could result from a terrorist attack on a spent fuel cask in storage at the PFS facility or in transit to the Facility. This is not true; such allegations are a baseless attempt to stir up public fears.

The actual scenario in the draft NCRP committee report is a deliberate attack using a radiation enhanced weapon manufactured with radioactive material from spent fuel as one of its components. Such a weapon would be difficult to design and fabricate, as it would be made using conventional explosives and radioactive sources processed to maximize the effect of the device, and would require large amounts of shielding during fabrication and deployment. The draft report notes that such a device could only be fabricated using considerable technical expertise and sophisticated resources. Specifically, it could not be created simply by placing explosives next to, or firing a weapon into, a spent fuel storage or transportation cask. The suggestion that spent nuclear fuel is anything like a manufactured weapon is just irresponsible.

It has also been claimed that PFS has failed to take adequate precautions to ward off a terrorist attack against the PFS facility. In reality, NRC regulations require PFS to implement a suitable security plan to protect the facility.<sup>48</sup> Although the details of the plan are classified, it includes among other provisions the presence of an armed guard force to protect the Facility from terrorist activities. Indeed, the sufficiency of the security measures at the PFS facility was the subject of nine contentions raised by the State before the ASLB, and the ASLB found that the PFS security plan was sufficient to protect the public health and safety.<sup>49</sup>

NRC regulations also require shippers of spent fuel to implement security measures to protect shipments in transit.<sup>50</sup> Such measures will be part of the security arrangements for the PFS facility. Further protection against terrorism is provided by the law enforcement organizations in Utah, federal law enforcement agencies, such as the Federal Bureau of Investigations, and the U. S. military and intelligence apparatus. While PFS does not take credit for this outside protection, it is very real and constitutes the first line of defense against terrorism regardless of the target.<sup>51</sup>

**Question: Does operation of the Facility increase the risk of wildfires in Skull Valley?**

**Summary Response:**

***The PFS facility is designed to be protected against fires and has a well thought out plan for fighting fires should they occur. Further, the PFS facility and the rail line through Skull Valley are designed to reduce the threat of wildfires at the site and in the immediate area.***

**Discussion:**

Some have wondered, given the arid climate in Skull Valley, if the Facility itself, or the rail line running to it, would increase the risk of wildfires in Skull Valley. In fact, the design of the Facility and rail line will actually *reduce* the threat of wildfires.

It needs to be said at the outset that the PFS facility is completely self-sufficient in its ability to handle any threat of fire. First, the Facility is designed to be protected from fires through the use of fire resistant materials and restrictions on combustible materials on the site. An area of compacted gravel devoid of any combustible matter will surround the fuel storage pads. There also will be a minimum 200-foot separation between the storage pad area and any vegetation. Moreover, a barrier of fire-resistant vegetation will surround the entire operating facility as an additional protection against fires.

Second, the Facility will have a fire brigade that will be trained and available to fight fires during operating hours when the relative risk of a fire will increase due to the possible use of diesel-fueled equipment. This brigade will consist of at least five people trained and equipped in accordance with National Fire Protection Association (NFPA) standards for industrial fire brigades.<sup>52</sup> At least six other trained members can augment the fire brigade, if needed. Two fire trucks will be available to provide support to the Facility, one on-site and one 3.5 miles away in the Band's Village. To supplement on-site fire fighting capabilities, the County and PFS have developed an assistance agreement under which county fire personnel can be deployed if requested at the PFS facility.

The plans for fire fighting at the Facility meet NFPA standards and have been reviewed by experts in the field, who found them to be more than adequate to deal with any fire that might threaten the Facility. The NRC Staff and the ASLB likewise found PFS's precautions to be sufficient to protect the Facility

from fire hazards. The ASLB recently issued a decision dismissing fire hazard allegations asserted by the State.<sup>53</sup>

Special care has also been taken in the design of the PFS rail line to the Facility to reduce the risk of starting a wildfire in the surrounding area. The draft Environmental Impact Statement concluded that operation of this line would not appreciably change the likelihood of wildfires occurring in the valley. Data for the region show that railroads, generally, account for only 1.7 percent of all fires and 0.5 percent of all acreage affected by fire. Even these low percentages will be reduced by the design used in the proposed rail line.<sup>54</sup> In fact, the Bureau of Land Management has noted that the rail corridor constructed to the site could have a beneficial effect, functioning “as a green strip to help prevent the spread of both wildfires and those caused by operation of the rail line.”<sup>55</sup> The proposed rail line would thus be an asset in the BLM’s fire management plan for Skull Valley.

In short, far from increasing the risk of wildfire in Skull Valley, the PFS facility and proposed rail line would become an integral part of the BLM’s fire management efforts in the Valley, promoting biodiversity and improving the overall local ecosystem.

***Question: Does the presence of the Facility pose risks to or from operations of the Air Force facilities in the vicinity of the site?***

***Summary Response:***

***In a detailed analysis of Air Force policies, practices, and accident data, PFS has shown that the annual probability of an accident involving aircraft, missiles, or other weapons impacting the PFS facility is less than one in a million, a level of risk considered so low as to be incredible, and thus acceptable by the NRC. Likewise, the presence of the Facility will not require any reduction or curtailment of Air Force operations in the area surrounding the site.***

***Discussion:***

The State has questioned whether the presence of the PFS facility in Skull Valley would compromise Air Force operations on the Utah Test and Training Range. PFS has, however, assessed the risk of an aircraft crash at the PFS facility in great detail in a report that was submitted to the NRC and is publicly available.<sup>56</sup>

This study was prepared for PFS by three senior retired Air Force officers: a former Air Force Chief of Safety and commander of the air lift wing that transports the President of the United States, a former B-52 wing commander, and a former F-16 pilot and commander of the 388<sup>th</sup> Fighter Wing at Hill Air Force Base. The PFS study analyzed Air Force practices and procedures, Air Force accident data, and the results of those accidents, and then calculated the probability of an accident at the PFS site. The study found that the probability of an aircraft accident that would cause a release of radioactive material would be less than one in a million per year. The U.S. Air Force has concurred that an aircraft accident at the PFS facility is “highly unlikely.”<sup>57</sup>

PFS studies have also assessed the risk from military training and weapon testing on the Utah Test and Training Range (UTTR) and on Dugway Proving Ground, including the testing of cruise missiles on the UTTR, and has determined that such activity would pose no hazard to the PFS facility.<sup>58</sup>

The repeated concern over cruise missile hazards has absolutely no basis in fact. The Air Force test squadron responsible for planning cruise missile tests on the UTTR has advised PFS that the Air Force does not conduct cruise missile tests over Skull Valley because it is inhabited. The closest cruise missile approach to the proposed PFS site is more than 10 miles away. Standard procedures and safety features employed in cruise missile testing (such as an automatic flight termination system to destruct errant missiles) will ensure that cruise missile testing would present no hazard to the PFS facility. The Air Force has recorded no failures of the flight termination system, nor have any cruise missiles crashed more than a mile off the planned path of the missile during the test.<sup>59</sup>

In addition to being safe from aircraft accident risks, the construction and operation of the PFS facility will not require (as has been alleged) the Air Force to reduce or curtail its testing and training operations. PFS performed its risk assessment assuming that the Air Force would conduct operations on and around the UTTR as it does today, i.e., without assuming any sort of restrictions imposed on behalf of or because of the PFS facility. PFS found that the risk of a radiological accident at the Facility was less than one in a million per year. That risk would not require the Air Force to change its operations, including the routes Air Force aircraft take to and from the range, in any respect. Indeed, the Air Force has agreed with PFS’s assessment that a military accident at the PFS facility is highly unlikely and has stated that “there is no foreseeable reason why the facility owners or the NRC should ever require or seek any changes in the operation of UTTR.”<sup>60</sup> Therefore, the construction and operation of the PFS facility in Skull Valley would not endanger the operations on or around the UTTR and would not threaten the viability of the range or Hill AFB in any way.

**Question: Will adequate provisions exist to protect from the environmental consequences of an accident relating to the Facility?**

**Summary Response:**

***The likelihood of an accident at the PFS facility that would result in radioactive contamination of the environment or a threat to public health and safety is extremely low. In the highly unlikely event such an accident were to occur, the cost of addressing its consequences would be met by insurance, which PFS will carry in sufficient amounts to cover damage and losses arising from the accident. During spent fuel transportation, the utility owner of the spent fuel will be covered by the Price Anderson Act, which requires the utility to carry private insurance and participate in an industry insurance pool.***

**Discussion:**

Some people have asked who would pay for clean up and damages if there were an incident at the facility or in transportation that caused environmental contamination. First, the likelihood of an accident at the PFS facility that would result in radioactive contamination of the environment or a threat to public health and safety is extremely low. As noted earlier, the spent fuel at the Facility will be stored inside welded steel canisters, which will themselves be encased in massive concrete and steel storage casks. Under normal operations, there will be no emissions of any kind into the air, the ground, or the water. Furthermore, because of the protection provided by the storage system, there is no credible event at the site that would cause radioactive material to be released to the environment.

Indeed, in order to receive a license for the Facility, PFS must demonstrate to the NRC that the design and construction includes measures to prevent the release of radioactive materials as a result of severe weather (including tornadoes, floods, ice and snow), earthquakes, volcanoes, accidents at nearby industrial and military facilities (including aircraft crashes and military testing and training), fires, explosions, and lightning. PFS must also demonstrate that operations at the Facility itself, such as the transfer of spent fuel canisters from transportation casks to storage casks, would not result in radioactive releases to the environment. The NRC Staff has concluded in its Safety Evaluation Report that the PFS facility meets all applicable safety regulations.

Furthermore, claims that PFS will operate without funds sufficient to clean up an accident or pay damages to someone harmed in an accident are

unfounded. NRC regulations impose financial assurance requirements on PFS to ensure that sufficient funds will be available to build, operate, and decommission the PFS facility safely.<sup>61</sup> Before the Facility will be allowed to operate, PFS must have contracts with its customers that require the customers to pay sufficient fees to cover the costs of operating and decommissioning the Facility. The contracts also have financial assurance provisions that will enable PFS to monitor the financial health of the customers and require additional guarantees (e.g., prepayment of future funds owed to PFS) if necessary. This level of financial assurance is similar to that required by the NRC of nuclear power plant owners that operate in a deregulated market.

It has also been claimed that because PFS is structured as a limited liability company (LLC), the member utilities would be shielded from all potential liability arising from the project. The best protection to the public is not, however, in the legal structure of PFS, since all corporate structures shield shareholders from liability in various respects. Rather, as recognized by the NRC, the public is best protected, primarily, by the incorporation of safety features in the design, construction and operation of the Facility and, secondarily, through the provision of insurance and other financial mechanisms, all supervised by the NRC through its oversight and through the imposition of financial assurance requirements.<sup>62</sup>

Financial assurance will be enforced through NRC license conditions that will require PFS to show it has contracts in place to cover costs associated with operating the PFS facility, and will require PFS to maintain liability insurance to fund potential public liability arising out of the project, and property damage insurance to cover potential accident recovery costs. Furthermore, customers who ship spent fuel to the PFS facility will be covered by the Price-Anderson Act, which requires the nuclear industry to maintain insurance of up to \$9.5 billion to cover potential liability and recovery costs arising out of an accident at a power plant or in transportation, including transportation to the PFS facility. For shipments from PFS to a DOE repository, the DOE would maintain the same coverage. In addition, under the Price-Anderson Act, Congress would be asked to appropriate funds to cover any costs arising out of a nuclear incident not otherwise covered by insurance. There is no reasonably foreseeable scenario in which costs arising out of a nuclear incident would not be paid.

***Question: Would operation of the Facility be consistent with federal law and policy?***

***Summary Response:***

***Under federal law, a private party can build and operate an interim spent nuclear storage facility, and the NRC has the legal authority to license and regulate a facility such as the one being proposed by PFS.***

***Discussion:***

The State has claimed that operation of the PFS facility would violate the Nuclear Waste Policy Act (NWPA). This claim is based on an erroneous reading of the NWPA and completely ignores the pre-existing and independent statutory authority and policy in the Atomic Energy Act providing the NRC authority to license away-from-reactor storage facilities, such as the proposed PFS facility.

The Atomic Energy Act provides the NRC broad authority to regulate for the public health and safety the possession of source, special nuclear and byproduct materials, including spent nuclear fuel.<sup>63</sup> This authority is well-established and recognized by judicial precedent.<sup>64</sup>

The NWPA provides for the development of repositories for the permanent disposal of high-level radioactive waste and spent nuclear fuel. During the passage of the law, the need for interim spent nuclear fuel storage facilities pending development of a permanent repository was thoroughly examined by Congress. Congress was aware that the NRC had the authority to license private, large, away-from-reactor storage facilities, three of which were in existence or planned at the time, and did nothing to modify or repeal the NRC's existing authority.<sup>65</sup> Indeed, the NRC had just informed Congress, as part of the legislative record, that it had promulgated its own extensive regulations for licensing away-from-reactor fuel storage facilities.<sup>66</sup> Congress also did nothing to affect those regulations.<sup>67</sup>

Thus, the NWPA does not affect the interim storage of spent nuclear fuel in current or future private storage facilities licensed by the NRC.

**Question: Is the process of licensing the Facility fair?**

**Summary Response:**

***Licensing of the PFS facility is being conducted in accordance with applicable laws and following well established NRC licensing requirements. The licensing process is lengthy, rigorous, fair and open, and provides many opportunities for public involvement as well as the legal involvement by the State and other interested parties.***

**Discussion:**

Although opponents of the project attempt to create the perception that the NRC's licensing process is "rushed," this is not true. It is a necessarily long and rigorous process that allows full consideration of all safety and environmental issues.

With the authority it has under the Atomic Energy Act,<sup>68</sup> the NRC has issued detailed regulations to ensure the safety of independent spent nuclear fuel storage facilities. These cover, among other things, the facilities' design, the evaluations of the site, the training and certification of personnel, emergency response measures, quality assurance measures, and the methods of storing radioactive materials.

The NRC Staff and the ASLB are now reviewing the PFS facility under these stringent regulations. The regulatory review process is thorough and exacting. Contrary to the claim that it has been rushed, the PFS facility licensing proceeding is entering its fourth year. The original license application was filed in June 1997. Following that license application, the State and other parties opposing the PFS facility intervened, becoming part of the licensing process, and thus helping to assure that all legitimate concerns about the Facility are aired. Rather than rushed, this process has been exhaustive, and has taken into account relevant concerns of all parties, the most up-to-date scientific knowledge, and the advice of authoritative experts in a multitude of disciplines that relate to the Facility's operation.

The NRC has followed all applicable statutory and regulatory requirements to assure that the licensing issues are fully addressed. Two documents reflecting important areas of the NRC's review, the Safety Evaluation Report and the Environmental Impact Statement, are illustrative of the thorough review that the PFS facility license application is undergoing. In drafting its Safety Evaluation Report, the NRC requested additional information regarding a vast array of safety-related issues, including how the nuclear material will be

stored, the operation of the facility, an evaluation of all potential hazards that may affect the Facility, and many others. In September 2000, the NRC issued its final Safety Evaluation Report, three years after the initial license application was filed.

Similarly, the potential environmental concerns posed by the construction and operation of the PFS facility have been addressed with the same meticulous care as the safety concerns. Since June 1997, there have been numerous information requests regarding the environmental impact of the PFS facility, encompassing responses to the issues raised by not only the NRC, but also the Bureau of Land Management, the Bureau of Indian Affairs and the U.S. Surface Transportation Board. These agencies have considerable experience in addressing environmental impacts under a variety of statutory and regulatory guidelines, including the National Environmental Policy Act of 1969 (NEPA). In each stage of this process, all parties, including the State of Utah, have had their environmental concerns addressed and evaluated independently by the appropriate agency. A Draft Environmental Impact Statement was issued in June 2000. Again, this represents the work product of three years of review of every aspect of the PFS facility's potential impact on Skull Valley and the surrounding area, including geology, water resources, air quality, wildlife, vegetation, the socioeconomic impact of the Facility, the effects of transportation of material to the site (including fire hazard), and a host of other issues. In all respects, the Facility has been subject to stringent and exacting standards and evaluations. By the time the Environmental Impact Study is finalized, the process will likely have consumed nearly four years of detailed examination.<sup>69</sup>

The licensing process also includes opportunities for public participation. There have been numerous hearings, including hearings held in Salt Lake City, where anyone, even someone not a party to the license proceeding, has been able to provide input into the process. The parties to the licensing proceeding were made aware of these meetings so that their members or representatives, as well as other members of the public, could attend and participate in them.

In summary, far from being a rushed process with little opportunity for public input or participation, licensing of the PFS facility has been deliberate and thorough, with every interested governmental unit, group, and individual having notice of the opportunity to be heard in one or more venues. This process has helped assure that the PFS facility, if approved, will have heard and addressed all concerns raised, be they from an interest group, a governmental unit, or a private individual.

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- <sup>1</sup> As an alternative option, PFS is also considering the possibility of shipping fuel by rail to an intermodal transfer point (ITP) approximately two miles west of Rowley Junction, just north of the PFS facility. At the ITP, if that shipment option were used, the spent fuel transportation cask would be moved by crane from a rail car to a heavy haul truck trailer, and then taken by truck down Skull Valley Road to the PFS facility. The preferred option, however, is to ship the fuel by rail directly to the site.
- <sup>2</sup> Thus, there is a written record of which members agreed to each resolution. Such a written record exists of the Council's decision to approve the PFS lease. Skull Valley Band of Goshute Indians, General Council Resolution No. 97-12A and Resolution Attachment No. 97-12A(1), Dec. 7, 1996.
- <sup>3</sup> Skull Valley Band of Goshute Indians, General Council Resolution No. 97-02, Feb. 19, 1994.
- <sup>4</sup> Skull Valley Band of Goshute Indians, General Council Resolution No. 97-12A, Dec. 7, 1996.
- <sup>5</sup> Affidavit of Leon D. Bear, filed in Docket No. IBIA 98-16-A, U.S. Department of Interior, Office of Hearings and Appeal. Thus, repeated charges that have been made in the press and elsewhere that the Band's Executive Committee was not properly authorized by the Band to execute the PFS lease are simply fallacious. The fact that the decision was not unanimous is not surprising or unusual. Decisions by governing bodies in the United States – whether county, state or federal -- are rarely unanimous. The Band, just as other forms of government, has made the decision that the majority will rule. (It should also be noted that some members were simply unavailable to express their position; they did not necessarily oppose the lease.)
- <sup>6</sup> The BIA approval of the lease is further subject to the completion of the environmental impact statement and the granting of the license by the Nuclear Regulatory Commission.
- <sup>7</sup> Affidavit of Leon D. Bear, filed in Docket No. IBIA 98-16-A, U.S. Department of Interior, Office of Hearings and Appeal. Repeated charges that have been made in the press and elsewhere that the BIA approved the lease "just 3 days" after the Band signed it are misleading, since they ignore the extensive period of BIA involvement in the negotiation of the lease.
- <sup>8</sup> "Economic Impact Model for Private Fuel Storage and Holtec International," Utah Economic Development Corporation, Aug. 4, 1999.
- <sup>9</sup> 10 C.F.R. 2 Subpart G; 10 C.F.R. 72 Subpart C.
- <sup>10</sup> 10 C.F.R. Section 72.40(a).
- <sup>11</sup> <http://www.nrc.gov/NRC/ADAMS/index.html>
- <sup>12</sup> Governor Leavitt has acknowledged the interdependence of states on the western power grid ("Leavitt Calls for Balance of Power, Environment," Salt Lake Tribune, Dec. 21, 2000), and the editorial writer for the Salt Lake Tribune (Dec. 19, 2000) urges a balance between "Americans' growing need for power and their desire to protect the environment....Whether nuclear, hydro or coal-fired, the country needs some new power plants."
- <sup>13</sup> William Brach, Director, SPFO, US NRC, INM Spent Fuel Management Seminar XVIII, January 2000.

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- <sup>14</sup> <http://www.nrc.gov/OPA/drycask/sfdata.htm>; [www.nei.org/doc.asp?catnum=2&catid=70](http://www.nei.org/doc.asp?catnum=2&catid=70).
- <sup>15</sup> The State and other opponents argue that, because Utah does not have any nuclear power plants, Utah should not be the site of a temporary nuclear waste storage facility. But such a view is short-sighted and contrary to fundamental constitutional principles underlying our federal system. As discussed above, the State of Utah is an integral part of the nation's electrical grid for which nuclear power provides 20% of the electricity generated. Moreover, our federal system of government provides for the free flow of commerce across state lines, even where that commerce involves waste. See, e.g., City of Philadelphia v. New Jersey, 437 U.S. 617 (1978). Thus, in accordance with this constitutional principle, current waste facilities that operate in the West Central Utah area accept wastes generated outside the State of Utah.
- <sup>16</sup> The initial term of the lease with the Band is for a period of 25 years and may be renewed for another 25-year period.
- <sup>17</sup> The Nuclear Waste Policy Act of 1982 required the nuclear utilities to pay one mill (0.1 cents) into a nuclear waste fund for every kilowatt hour generated and sold from nuclear power plants to cover the cost of a permanent repository. To date, many billions of dollars have been collected from the utilities for this fund.
- <sup>18</sup> The DOE is obligated by law and by contracts executed with the electric utilities to start accepting spent fuel for storage in 1998. Some utilities have sued the DOE, seeking to recover the damages resulting from the DOE's failure to take fuel for permanent storage. Until these lawsuits are decided, utilities must continue to bear the costs of interim storage of spent nuclear fuel at the PFS facility or elsewhere.
- <sup>19</sup> Nuclear Waste Policy Act of Public Law 97-425. See also, e.g., <http://www.rw.doe.gov> describing the DOE's plans and efforts to develop a permanent high level radioactive waste repository.
- <sup>20</sup> The federal government, the nuclear industry, and scientific experts agree that a deep geologic repository is the correct way to permanently dispose of spent nuclear fuel. See, e.g., Nuclear Waste Policy Act of 1982, Public Law 97-425; Waste Confidence Decision, 49 Fed. Reg. 34,658 (Aug. 31, 1984), codified at 10 C.F.R. 51.23; prepared testimony of NRC Chairman Shirley Ann Jackson to the Subcommittee on Energy and Power, Committee on Commerce, United States House of Representatives concerning high-level waste legislation, April 29, 1997.
- <sup>21</sup> "Economic Benefits of Nuclear Facilities to the Surrounding Areas," April 1992, Management Information Services, Inc. for The U.S. Council for Energy Awareness.
- <sup>22</sup> *The Sophisticated Poll Watcher's Guide* by George Gallup, Princeton Opinion Press, 1972 and 1976, p. 87-88. Gallup uses several examples to illustrate the difference between intent and reality. He notes that if you ask the public questions about better medical care, better schools, better housing, you may get a broad level of agreement, but when the public must weigh the costs and priorities associated with specific programs to bring about those goals, their opinions and behavior may be different.
- <sup>23</sup> "Does Utility Spent Fuel Storage Affect Local Property Values" by William C. Metz, Tim Allison, David E. Clark, Radwaste Magazine, May 1997.
- <sup>24</sup> Tamar Steiber, "Focus on Santa Fe: A Better City Different," *New Mexico Business Journal Online*, 1999 (see <http://www.nmbiz.com/cpprofiles>).

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- <sup>25</sup> “Nuclear Waste Site Revitalizes Carlsbad; WIPP Brings Jobs, Hope to Ailing N.M. Area,” by Jim Hughes, The Denver Post, June 11, 2000.
- <sup>26</sup> See, e.g., *Transportation of Radioactive Material*, NRC Fact Sheet (December 2000).
- <sup>27</sup> Public Information Circular for Shipments of Irradiated Reactor Fuel, NUREG-0725 (October 1997).
- <sup>28</sup> “Nuclear Waste Shipments Coming Through Utah,” Salt Lake Tribune, April 7, 1998. See also “Nuclear Waste Doesn’t Worry State,” Salt Lake Tribune, May 21, 1996.
- <sup>29</sup> The side walls consist of 8.5 inches of heavy steel, and 5 inches of neutron shielding. See Drawing No. C1397, sheet 1 of 7, in the Topical Safety Analysis Report for the Holtec International Storage, Transport and Repository Cask System, (HI-STAR 100 Cask System), Holtec Report HI-951251, Docket 71-9261, Revision 9, April 2000. Additionally, the bottom plate is 12 inches thick steel, and the top closure is 6 inches thick steel.
- <sup>30</sup> 10 C.F.R. Section 71.73.
- <sup>31</sup> 10 C.F.R. Section 71.87; see also Private Fuel Storage Safety Analysis Report, Chapter 10 Appendix 10A at 16, Revision 18, Sept. 2000.
- <sup>32</sup> 49 C.F.R. 173 Subpart I; 49 C.F.R. 174; 10 C.F.R. Section 71.87.
- <sup>33</sup> With respect to a contaminated or damaged canister, transportation casks are designed to safely shield radiation even in the event that radioactive contamination were to escape from the sealed canister. Therefore, a contaminated or damaged canister could be shipped back to the reactor site from which it came in an undamaged transportation cask. Thus, contrary to the State’s often repeated allegation, *there is no need* for equipment or facilities at the site for repackaging spent fuel canisters, and the provision of such facilities may actually be undesirable in that it would result in the direct handling of spent nuclear fuel, with the attendant risks that such handling would entail.
- <sup>34</sup> The Department of Transportation Research and Special Programs Administration (RSPA) has developed a reimbursable grant program for emergency response planning and training covering transportation of all hazardous materials, including radioactive materials. 49 C.F.R. Part 110. The grant program, authorized by 49 U.S.C. Section 5116, is intended to provide financial and technical assistance for developing and enhancing State, Tribal, and local hazardous materials transportation emergency preparedness and response programs. The DOT Federal Highway Administration (FHWA), the DOT Federal Railroad Administration (FRA), and the Federal Emergency Management Agency (FEMA) also provide grants, training and/or assistance. 49 C.F.R. Part 350 (FHWA); 49 C.F.R. Part 212 (FRA); 44 C.F.R. Parts 350, 351 (FEMA).
- <sup>35</sup> Allegations that there are no federal regulations to prevent spent fuel casks from being delayed in shipment are simply not true. Federal regulations require that the movement of shipments of spent nuclear fuel, like all hazardous material shipments by rail, be expedited. 49 C.F.R. Section 174.14(a) requires that each shipment of hazardous materials be forwarded within two business days of receipt at any rail yard, transfer station or interchange point or on the first available train. Further, PFS will be using dedicated trains and therefore there would be *no* delays for transfers of cask cars from train to train.
- <sup>36</sup> Just as one example, the State assumes a population density of 1,344 persons/km<sup>2</sup>, when it acknowledges that the population density of Salt Lake City is 567 persons/km<sup>2</sup>. See Declaration of Dr. Marvin Resnikoff in Support of Utah’s Request for Admission of Late-Filed Contentions Utah LL through Utah OO (Aug. 2, 2000) Appendix A.

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- <sup>37</sup> J.L. Spring, et al., Reexamination of Spent Fuel Shipment Risk Estimates, Sandia National Laboratories, STND 2000-0234, NUREG/CR-6672 (Mar. 2000).
- <sup>38</sup> Electric Power Research Institute, Dry Cask Storage Characterization Project: Interim Progress Report, TR-1000157, June 2000.
- <sup>39</sup> 10 C.F.R. 72 Subpart G.
- <sup>40</sup> Reference is sometimes made to a 1996 event in which, during loading SNF into a storage canister, hydrogen was released due to a chemical reaction between a zinc-based surface coating on the canister and the acidic water in the section of the pool used to store the SNF. The gas ignited during welding the lid to the canister, leaving the lid cocked by three inches. The circumstances that led to this event have been thoroughly investigated and addressed by the NRC and industry. (See, e.g., NRC Bulletin 96-04 (July 5, 1996)). In addition, this event occurred during loading of spent fuel into a canister. PFS will operate a dry storage system and will not handle SNF directly or move it in or out of canisters.
- <sup>41</sup> Final Report, Fault Evaluation Study and Seismic Hazard Assessment, Private Fuel Storage Facility, Geomatrix Consultants, Inc. (February 1999); Declaration of Dr. Kevin Coppersmith (Dec. 30, 2000).
- <sup>42</sup> SER at 2-22, 2-33, 2-44 – 2-45, 2-54, 2-56. (Secs. 2.1.6.0, 2.1.6.1, 2.1.6.2, 2.1.6.3, 2.1.6.4).
- <sup>43</sup> 10 C.F.R. Sections 60.135(b)(3), 60.135(c).
- <sup>44</sup> The standard contract between DOE and the nuclear utilities for the ultimate disposal of spent nuclear fuel, embodied in 10 C.F.R. Section 961.11, requires DOE to accept damaged fuel so long as it is encapsulated as it would be in a sealed canister arriving from the PFS facility. See C.F.R. § 961.11, Art. VI.A; *id.* App. E.
- <sup>45</sup> See, e.g., <http://www.pbs.org/wgbh/pages/frontline/shows/reaction/interact/survey.html>; [http://rabi.phys.virginia.edu/HTW/nuclear\\_reactors.html](http://rabi.phys.virginia.edu/HTW/nuclear_reactors.html); <http://www.britannica.com/seo/n/nuclear-reactor/>.
- <sup>46</sup> This report has been cited by opponents to the PFS project in support of their allegation that a terrorist attack against the PFS facility might threaten the health and safety of the public. As discussed in the text, the opponents misuse the information and conclusions from this draft report. Further, it should be noted that the NRCP committee describes the report as work in progress and hence its conclusions do not necessarily constitute the NRCP's final word on the subjects it covers. See <http://www.ncrp.com/SC46-14.pdf>.
- <sup>47</sup> *Radiation Protection Issues Related to Terrorism Activities that Result in Dispersal of Radioactive Material*, draft report available for review at <http://www.ncrp.com/SC46-14.pdf>.
- <sup>48</sup> 10 C.F.R. Section 72.180.
- <sup>49</sup> Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), LBP-98-13, 47 NRC 360 (1998); LBP-98-17, 48 NRC 69 (1998); LBP-99-31, 50 NRC 147 (1999); LBP-00-5, 51 NRC 64 (2000).
- <sup>50</sup> 10 C.F.R. Section 73.37.

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- <sup>51</sup> It has also been said that PFS does not have the assets to clean up any damage that might result from a terrorist attack. As discussed below, sufficient money would be available to deal with the effects of such an unlikely event.
- <sup>52</sup> NFPA 600 provides the standards appropriate for fire brigades that respond to fires at a specific facility where they work. The generic standard, NFPA 1500, which covers municipal fire departments that fight fires at any location, is not applicable to the PFS facility.
- <sup>53</sup> Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), LBP-00-35 (December 29, 2000).
- <sup>54</sup> By design, the rail line incorporates four elements that will make it unlikely that any additional wildfires are caused by rail activity and help control wildfires generated by other sources. First, sparking generally occurs when a train moves around a curve or with wheel slippage as a train moves uphill. There are no sharp curves (very few curves at all) and no steep grades in the proposed rail line, minimizing these potential sources of sparking. Second, in the event that sparking occurs, there is a 40-foot wide corridor along the line that will be devoid of vegetation and other combustibles. This will make it extremely unlikely that any sparking from a train would ignite a wildfire. Third, the additional land cleared during construction (beyond the 40-foot wide corridor) would, in accordance with BLM guidelines, primarily be revegetated with native species that would be fire resistant and act as a natural fire barrier. See DEIS at 5-15 and 5-17. As with the vegetative fire barrier surrounding the facility, this design element has the added benefit of increasing biodiversity and improving local ecosystems. Finally, the railroad line will be designed in conjunction with local authorities to 1) assure that the rail line is close to grade to allow emergency fire vehicles access over the rail bed, and 2) establish crossings where the rail line intersects off-highway vehicle trails or dirt roads. In both regards, the design of the railroad line will assure the ability of emergency fire vehicles to cross the rail bed.
- <sup>55</sup> Bureau of Land Management, DOI, Environmental Assessment and Fire Management Plan for the Salt Lake District, cited in the DEIS at 5-17.
- <sup>56</sup> Aircraft Crash Impact Hazard at the Private Fuel Storage Facility, Rev. 4 (August 10, 2000); a synopsis may be found on the PFS Web site: <http://www.privatefuelstorage.com>.
- <sup>57</sup> Letter from Thomas W. L. McCall, Jr., Deputy Assistant Secretary of the Air Force (Environment, Safety and Occupational Health) to the NRC of September 18, 2000. Even though the Air Force has concurred that a military aircraft accident is highly unlikely, it has taken no formal position on the licensing of the PFS facility.
- <sup>58</sup> Declaration of George Carruth (Dec. 29, 2000); Declaration of George Wagner and David Girman (Dec. 30, 2000).
- <sup>59</sup> See Declaration of George Wagner and David Girman (Dec. 30, 2000); see also "Weapons Testing on the UTTR South Range," 388<sup>th</sup> Fighter Wing, Hill AFB, UT, Response to Freedom of Information Act Request (Dec. 18, 1998). Also, the December 1997 cruise missile crash into the observatory trailer on the UTTR (Defense Department land) was not a failure of the flight termination system. Rather, the missile landed where it was programmed to land. Test planners were unaware of the location of the trailer at that time (Accident Investigation Board Report, U.S. Air Force AGM-129 Advanced Cruise Missile Serial No. 90-0061, 10 December 1997, Dugway Proving Ground, Utah, Volume 1).
- <sup>60</sup> Letter from Thomas W. L. McCall, Jr., Deputy Assistant Secretary of the Air Force (Environment, Safety and Occupational Health) to the NRC of September 18, 2000.

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<sup>61</sup> 10 C.F.R. Section 72.22.

<sup>62</sup> See Louisiana Energy Services, L.P. (Claiborne Enrichment Center), CLI-97-15, 46 NRC 294, 306-08 (1997) (the Commission approved the use of a funding mechanism for a uranium enrichment facility very similar to the mechanism PFS will use for the PFSF).

<sup>63</sup> See, e.g., 42 U.S.C. § 2073 (authorizing the Commission to “issue licenses to transfer or receive in interstate commerce, transfer, deliver, acquire, possess, own, receive possession of or title to, import or export special nuclear material.”); see also, 42 U.S.C. §§ 2093, 2111.

<sup>64</sup> See, e.g., Jersey Central Power & Light Co. v. Lacey Township, 772 F.2d 1103, 1112 (3d 1985), cert. denied, 475 U.S. 1013 (1986) (the “pervasive scheme of federal regulation established by the [Atomic Energy Act] and NRC regulations . . . include[s] the storage and shipment of spent fuel.”); Illinois v. General Electric Co., 683 F.2d 206, 215 (7th Cir. 1982), cert denied, sub nom., Hartigan v. General Elec. Co., 461 U.S. 913 (1983) (“the Commission’s authority to regulate the storage of spent nuclear fuel” under the Atomic Energy Act “preempts state regulation of the storage, and shipment for storage, interstate and intrastate alike, of spent nuclear fuel”).

<sup>65</sup> Thus, the NWPA contains the following provision:

Notwithstanding any other provision of law, nothing in [the NWPA] shall be construed to encourage, authorize or require the private or Federal use, purchase, lease or other acquisition of any storage facility located away from the site of any civilian nuclear power reactor and not owned by the Federal Government in January 7 1983.

42 U.S.C. Sec. 10155(h). This language says nothing about changing the NRC’s authority to license additional private storage facilities.

<sup>66</sup> See, e.g., Report No. 97-282, 97th Cong. 1st Sess. at 44 (Statement of Nunzio Palladino, then Chairman of the NRC, that in anticipation of requests to license AFR facilities, the NRC had promulgated Part 72 and “is ready and able to take prompt action for any licensing actions relating to interim spent fuel storage”). The 10 C.F.R. Part 72 regulations referred to by Chairman Palladino specifically cover ISFSIs located away from nuclear power plants (e.g., section 72.32(a) (emergency planning)). The NRC was very clear when it promulgated Part 72 that it was to cover away-from-reactor facilities. 43 Fed. Reg. 46,309 (1978); 45 Fed. Reg. 74,693, 74,696 (1980) (emphasis added) (“The NRC is not aware of any compelling reasons generally favoring either at-reactor or away-from-reactor siting of an ISFSI. There are many factors to be considered in each situation and in the licensing actions involved; accordingly, the rule permits either.”).

<sup>67</sup> See, e.g., Report No. 97-282, 97th Cong. 1st Sess. at 65 (Supplemental views of Senator Tsongas stating that existence of private AFR storage facilities resulted in “no need for a Federal role” in such facilities). See also 42 U.S.C. Sec. 10155(h).

<sup>68</sup> See note 63, supra.

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<sup>69</sup> Contrary to claims made recently by the State, there is no void in environmental regulations governing the PFS project. Federal and tribal regulations, which will be implemented by the federal EPA as well as a tribal environmental agency, will provide the necessary environmental protection. The Federal Government, as trustee of tribal lands, will apply all federal environmental protection laws. The few remaining areas not covered by federal law will be covered by tribal environmental regulations or standards, which will be adopted by the Band to cover this project. Both PFS and the Band are committed to a safe and environmentally benign facility.

PFS will comply with all applicable permits, including federal, tribal and state, on tribal lands and the PFS rail line. PFS has provided a detailed explanation of the regulations governing its project in a response to an information request from the NRC in connection with the application for an NRC license. See October 19, 1999 letter to the NRC from John Parkyn and attachments.

1/24/01

Private Fuel Storage  
P.O. Box 1405  
Salt Lake City, Utah 84110-1405

PFS Comment Line  
1-888-701-8585

PFS Web Site  
[www.privatefuelstorage.com](http://www.privatefuelstorage.com)