

UNITED STATES OF AMERICA  
BEFORE THE  
NUCLEAR REGULATORY COMMISSION

Private Fuel Storage, a Limited  
Liability Company;

(Independent Spent Fuel Storage  
Installation).

Docket No. 72-22 ISFSI

**OHNGO GAUDADEH DEVIA'S CONTENTIONS REGARDING THE MATERIALS  
LICENSE APPLICATION OF PRIVATE FUEL STORAGE IN AN INDEPENDENT  
SPENT FUEL STORAGE INSTALLATION**

Pursuant to 10 C.F.R. §2.714, Ohngo Gaudadeh Devia ("OGD") hereby submits its contentions regarding the materials license application of Private Fuel Storage ("PFS") which has applied for a materials license to possess spent fuel and other radioactive materials associated with spent nuclear fuel in an Independent Spent Fuel Storage Installation ("ISFSI") in and upon the Skull Valley Goshute Indian Reservation in Skull Valley, Utah.

As documented below, the applicant PFS does not comply with existing or proposed standards for the Independent Spent Fuel Storage Installation. In fact, the license application is substantially incomplete. OGD therefore respectfully submits that this license application should be denied.

**I. CONTENTIONS**

**A. Lack of sufficient provisions for prevention of and recovery from accidents.**

**CONTENTION:** The license application poses undue risk to public health and safety because it lacks sufficient provisions for prevention of and recovery from accidents during storage resulting from such causes as sabotage, fire, cask drop and bend, lid drop damage and/or

improper welds.

**BASIS:** The license application acknowledges that certain accidents could occur, See, Environmental Report (ER) Chapter 2. A comprehensive risk assessment, which is not included in the license application or the safety analysis report, should identify the full range of accidents which could occur when the shipping cask is lifted off the transport vehicle or rail car using the overhead bridge crane inside the Canister Transfer Building; when the canister is transferred from the shipping cask into the concrete storage cask using the onsite transfer cask; when the loaded storage cask is moved to the storage area and placed on the pad; while the loaded storage cask resides at the storage area; and when (and if) the storage cask is returned to the Canister Transfer Building and reloaded for shipment to a geologic repository or some other off-site destination. The license application does not adequately address similar handling accidents that could occur at the Intermodal Transfer Facility, if a new rail access spur is not constructed. See, generally, Guidelines on the Scope, Content, and Use of Comprehensive Risk Assessment in the Management of High-Level Nuclear Waste Transportation, Golding and White, NWPA-TN-007-90, attached as Exhibit 1 and referenced herein and made a part hereof on the use of comprehensive risk assessment.

The license application is deficient because it does not address the impacts of human errors or intentional human actions such as insider sabotage which could cause the accidents identified in ER, Chapter 2, or other credible accidents identified in a comprehensive risk assessment, to result in on-site and/or off-site releases of radioactive materials and/or radiation exposures exceeding the allowable limits established by the NRC. Human errors and/or sabotage could cause or exacerbate accidents during handling and storage operations at the PFS.

Additionally, accident risks could be significantly exacerbated by human errors (or intentional human actions such as insider sabotage) in the following aspects of facility planning: facility and equipment design; preparation of the facility license application and safety analysis report, and supporting risk estimations; facility construction; canister transfer building equipment fabrication and installation; canister design and fabrication; storage cask design and fabrication; storage pad design and construction; and in the design, manufacturing, installation, calibration and maintenance of monitors and safety systems. In Exhibit 1, at p. 15 it states, "Human error and quality control take on added significance in accident analysis since they may act as initiating or enabling events in an accident sequence, or they may exacerbate or mitigate the final consequences." This becomes a very relevant factor considering the fact that the License Application at, LA Chapter 7, p.7.1 states that "of necessity, the first individuals certified may have to improvise in certain situations to complete the practical factors." It further provides that operators will not be trained for the specific job when hired and that operators will undergo on-the-job training, and classroom training leading to certification. In Exhibit 2, p. 2, entitled; Appendix: Organizational Foresight and the EXXON oil Spill, Freedenberg, which is attached and referenced herein and hereby made a part hereof it is stated that;

(T)he problem of organizational effectiveness in mitigating hazards is increasingly vexing, and indicates a growing dependence on organizations as agents of rescue. Now more than ever before, organizational anticipation of mishaps and misfortunes shapes both the likelihood of untoward events and productive responses to them. This is especially true for accidents and unforeseen conditions regarding technological risks. Organizations and modern technology provide much of what we value and cherish, but they are simultaneously responsible for terrible hazards. It is little solace that we simultaneously depend on organizations for protection. Hence any assessment of important risks that ignores organizational processes, and the social systems in which those organizations are set, will be seriously flawed.

The license application is deficient because it does not address the impacts of human errors or intentional human actions (such as employee sabotage) which could cause accidents at the Intermodal Transfer Facility to result in releases of radioactive materials and/or radiation exposures exceeding the allowable limits established by the NRC.

The license application is deficient because the facility plan does not include a "hot cell" and the associated remote fuel handling equipment necessary to safely unload, replace, and reload a fuel canister damaged in an accident resulting in a release of radioactive materials and/or radiation exposures exceeding the allowable limits established by the NRC. This deficiency is so serious that the Commission should direct PFS to amend the application to include a "hot cell" or the license request should be denied for this reason alone.

The license application further poses undue risks to public health and safety because it anticipates an expansion of capacity from 15,000 MTU to 40,000 MTU, and does not preclude expansion to a capacity greater than 40,000 MTU, without providing for a "hot cell" and the associated remote fuel handling equipment necessary to safely unload, replace, and reload a damaged or defective fuel canister. It is unreasonable to assume that the storage facility could operate for 20 or more years, and handle 40,000 MTU or more of spent fuel, without receiving a single defective fuel canister or experiencing a single accident requiring reloading of a damaged fuel canister.

Even if no accidents occur, the ever present risk of accidents is sufficient to adversely impact members of the OGD who seek to follow a traditional life style. The physical presence of the facility on the Skull Valley Goshutes' sacred homeland, and the continuous introduction into their homeland of highly radioactive spent nuclear fuel, will daily remind OGD members of

these risks for at least twenty years. PFS proposes to cast shadows upon their lives for 7,000 sunrises.

Members of the OGD adamantly oppose PFS inspite of promises of great financial rewards. If, however, the Commission allows PFS to operate this facility in the heart of the Skull Valley Goshute Reservation, OGD has no recourse but to petition the Commission to require PFS to implement the following measures to minimize accident risks, and to mitigate the impacts of any accidents and incidents which might occur:

- (1) require construction of a rail access spur, eliminating risks associated with cask handling at the intermodal transfer facility;
- (2) absent construction of a rail access spur, license the intermodal transfer facility as an extension of the Canister Transfer Building;
- (3) require construction of a "hot cell" and the associated remote handling equipment necessary for safely unloading, replacing, and reloading damaged or defective fuel canisters;
- (4) strictly prohibit any future license amendment which would allow the facility to receive bare spent fuel assemblies or canisters containing damaged fuel assemblies;
- (5) require PFS to prepare a comprehensive risk assessment of potential human errors and insider sabotage which could cause or exacerbate handling and storage accidents;
- (6) require PFS to prepare and implement a life-of-operations, comprehensive risk management program, with particular attention to prevention of human errors and humans insider sabotage; and
- (7) require PFS to prepare a culturally-appropriate risk communications program, to be developed with substantial input from members of the OGD, governing PFS risk communications with the host community, local and state governments, and the media during day-to-day operations, and during and after an accident or incident.

**B. Emergency Plan fails to address the safety of those living outside of the facility.**

**CONTENTION:** The license application, specifically the emergency plan submitted with the license application fails to address the safety provisions made for those individuals living outside of the facility within a five mile radius of the facility. The emergency plan addresses only those measures that pertain to employees and have not addressed the provisions that would apply to those people living around the facility. The emergency plan does not address a warning system such as would be implemented to put the residents on notice of an accident.

**BASIS:** PFS has not provided backup means for offsite communication for notification of emergencies or requests for assistance, as required by 10 C.F.R. § 72.32.

Further, PFS has not indicated how it plans to comply with Section 303, Section 304 and other relevant sections of the Emergency Planning and Community Right-To-Know Act of 1986, Title III, Pub. L. 99-499 with respect to hazardous materials at the facility as required by 10 C.F.R. §72.32.

PFS has failed to show a "commitment to" and a "means to" promptly notify offsite response organizations and request offsite assistance, including medical assistance for the treatment of contaminated injured onsite workers when appropriate. The license application fails to deal with the unavailability of some personnel, parts of the facility, and some equipment should an accident occur, as required in 10 C.F.R. §72.32 (8).

**C. License application lacks sufficient provisions for protection against transportation accidents.**

**CONTENTION:** The license application poses undue risk to public health and safety

because it lacks sufficient provisions for protection against transportation accidents, including a criticality accident.

**BASIS:** The design of the shipping casks do not provide sufficient protection against a criticality accident during transportation. Nor does the license application provide sufficient measures for protection of shipping casks during the harsh summers and sub-zero temperatures of winter.

The license application poses undue risk to public health and safety because it lacks sufficient provisions for protection against transportation accidents, including a criticality accident. For instance, the design of the shipping cask does not provide sufficient protection against a criticality accident during transportation. Nor does the license application provide sufficient measures for protection of shipping casks during the harsh summers and sub-zero temperatures of winter. The license application fails to consider the historical record of spent nuclear fuel transportation accidents and incidents, the risks of severe accidents and terrorist attacks which could result in significant radiological releases, the ways in which human errors or insider sabotage could cause or exacerbate transportation accidents, the radiological risks of routine transportation, and the traumatic collective impact of transportation risks on members of OGD who seek to preserve their traditional life style.

The license application fails to provide sufficient information to fully evaluate the impacts and risks of spent nuclear fuel transportation to PFS. First and foremost, the license application does not provide detailed information about the radiological characteristics of the spent fuel which will be shipped to Skull Valley. It appears that the average cooling time for spent fuel shipped to PFS could be as little as five years. See, License Application, ER Chapter 4 p. 4.7-2.

The radiological risks associated with these shipments would be considerably greater than the risks calculated for shipments to the proposed Yucca Mountain repository, which is being designed to receive spent fuel at least ten years out of reactor. According to DOE, a typical 5-year-old, medium-high burnup fuel assembly would contain total radioactivity of about 600,000 curies and have a surface dose rate of about 47,000 rem/hour. A person standing unshielded next to such an assembly could receive a lethal dose of radiation in less than one minute. See, Exhibit 3, attached and referenced herein and made a part hereof entitled, Nuclear Waste Transportation Security and Safety Issues, Halstead & Ballard, p 6-7. The license application fails to provide the detailed inventory of specific radionuclides expected to be present in the typical fuel assembly received at PFS. However, based on analyses of ten year-old fuel prepared for Yucca Mountain shipments, the major radionuclides of concern in a transportation accident would be fission products, such as strontium-90 and cesium-137. Fission products emit beta and gamma radiation, and would be the primary sources of exposure during routine operations and the major potential source of irradiation and contamination in the event of an accident or terrorist attack that breaches a cask. See, Exhibit 3, at p. 6.

The license application also fails to provide sufficient details about the anticipated shipment characteristics necessary for evaluation of transportation impacts and risks. About 4,000 large casks would be shipped to Skull Valley by rail from reactor sites around the country. See, License Application LA, Chapter 3, p.3-1. There could be as many as 4,000 rail shipments if these casks are shipped in general freight service, or as few as 800 rail shipments if PAS utilizes dedicated trains averaging five cars per train. Based on analyses of shipments from reactor sites to Yucca Mountain, in Exhibit 4, attached and referenced herein and made a part hereof, The



Transportation of Spent Nuclear Fuel and High-Level Waste: A systematic basis for planning and management at National, Regional, and Community Levels, it is reasonable to assume that the average rail shipment distance to Skull Valley will be between 1,500 and 2,000 miles. If a new rail access spur is not constructed, an additional 4,000 heavy haul truck(HHT) shipments would be needed to move the incoming casks from the intermodal transfer point to the container transfer building. The average HHT loaded shipment distance would be about 25 miles. Empty transport casks would be returned to the intermodal transfer point by HHT. Compared to past shipments of spent nuclear fuel in the United States from 1979 to 1995, which are reported annually by the NRC, the proposed shipments to Skull Valley would represent an unprecedented increase in the amount of spent fuel shipped (40,000 MTU compared to 1,335 MTU), the numbers of rail shipments (800 to 4,000, compared to 138), and the average rail shipment distance (estimated 1,500 to 2,000 miles, compared to 346 miles). See, Exhibit 5 at page 8. Exhibit 5 is entitled Public Information Circular for Shipments of Irradiated Reactor Fuel, and is hereby attached and referenced herein and made a part hereof.

The license application ignores the historical record of spent nuclear fuel transportation accidents and incidents. Between 1957 and 1964, there were 11 transportation accidents and incidents involving spent fuel shipments, two of which resulted in radioactive releases requiring cleanup. Between 1971 and 1990, there were six accidents and 47 incidents involving spent fuel casks. Three accidents (two truck, one rail) involved casks loaded with spent fuel. No radioactivity was released in these accidents. Most of the reported incidents involved excess radioactive contamination on cask surfaces, a result of the so-called "weeping" phenomena on casks loaded and unloaded in wet storage pools. See, Exhibit 3.

The license application ignores the accident rate analysis prepared by DOE in Exhibit 6, entitled, Nevada Commercial Spent Nuclear Fuel Transportation Experience, attached and referenced herein and made a part hereof, for use in assessing the impacts of spent nuclear fuel shipments to the proposed Yucca Mountain repository. Based on the 1971-1990 data, DOE calculated accident and incident rates for commercial spent fuel shipments to a repository. For truck shipments, DOE calculated 0.7 accidents and 10.5 incidents per million shipment miles. For rail shipments, DOE calculated 9.7 accidents and 19.4 incidents per million shipment miles. DOE compared these accident rates to the accident rates for large commercial trucks and freight trains in general service, and concluded the general truck and rail accident rates should be used for repository transportation risk and impact studies. DOE recommended using a truck accident rate of 0.7-3.0 accidents per million shipment miles, and a rail accident rate of 11.9 accidents per million shipment miles. See, Exhibit 3 and Exhibit 6.

The license application is silent regarding the number of accidents that would be expected to occur during shipments to PFS if those shipments are made as safely as past shipments. The number of rail accidents and incidents likely to occur during spent fuel shipments to PFS can be obtained by multiplying DOE's historical accident and incident rates by the expected cumulative shipment miles over the 20-year life of the facility for two scenarios: all casks shipped singly in general freight service, and all casks shipped in five-cask dedicated trains. Given these assumptions, about 60 to 80 accidents and about 115 to 155 incidents would be expected over 20 years if all cask shipments are made individually in general freight service. Even if all shipments were made in five-cask dedicated trains, and were transported as safely as past shipments, the expected 12 to 16 accidents over 20 years would represent an unacceptably high

level of risk to members of the OGD and probably to other residents of Utah and other states along the transportation corridors to Skull Valley.

The license application ignores the accident consequence analyses prepared by DOE and by the State of Nevada for use in assessing the impacts of spent nuclear fuel shipments to the proposed Yucca Mountain repository. A severe rail accident involving a very small release of cask contents could have significant, long-term adverse impacts on members of OGD. A DOE study prepared in support of the 1986 Environmental Assessment for the Yucca Mountain repository site evaluated the consequences of such an accident in a rural area. That study concluded that a release of about 1,400 curies of Co-60, Cs-134, Cs-137 could contaminate an area of 42 square miles, could require 460 days to clean up, and could exceed half a billion dollars, in cleanup costs. See, Exhibit 3, pages 7 - 8, which summarizes conclusions of Exhibit 7 entitled, Exposures and Health Effects From Spent Fuel Transportation, attached and referenced herein and made a part hereof, and Exhibit 8, entitled, Probabilistic Risk Assessment and Nuclear Waste Transportation; A case study of the use of Radtran in the 1986 Environmental Assessment for Yucca Mountain, attached and referenced herein and made a part hereof. The shipping casks PFS proposes to use would contain about twice as much spent fuel as the casks assumed in Exhibit 7, creating the potential for even greater consequences. While the probability of an accident severe enough to cause even a small release of radioactivity is extremely low (the previously cited study estimated the probability of the very severe rail accident at no more than two accidents per million shipments), the very fact such an event is possible provides reasonable basis for the accident concerns of the members of the OGD. Studies prepared for the State of Nevada have identified a number of accident scenarios which could potentially result in such

releases, or greater releases, including a high-speed rail collision followed by a long-duration fire; a truck cask collision involving another truck loaded with commercial or military explosives; a truck or rail cask involved in a massive infrastructure failure or natural disaster; and a rail or truck cask involved in an accident with a military aircraft. The Nevada studies further identify human errors and intentional human actions such as insider sabotage which could result in even more severe consequences than those acknowledged by DOE. See, Exhibits 1, 2, 3, 8, and Exhibit 9 entitled, The Effects of Human Reliability in the Transportation of Spent Nuclear Fuel, and Exhibit 10, entitled, Nuclear Waste Shipping Container Response to Severe Accident Conditions: A Brief Critique of the Modal Study, both of which are attached and referenced herein and made a part hereof. Moreover, members of OGD are concerned that even if the contamination resulting from a very severe transportation accident could be completely cleaned up, the cleanup process itself would have severe impacts on their community and their traditional life style, and their attitudes towards their traditional homeland could be permanently altered, tinged forever by uncertainty about the events they had already experienced and burdened by additional fears of future radioactive releases.

The license application ignores the potentially severe consequences of a successful terrorist attack against a spent fuel shipping cask using a high energy explosive device or an anti-tank weapon. In the early 1980s, NRC and DOE sponsored research on the consequences of terrorist attacks, including scale-model and full-scale tests at Sandia National Laboratories and Battelle Memorial Institute, to determine the effects on shipping casks of attacks involving high energy explosive devices. These studies demonstrated that terrorists using military explosives could blow a 6-inch hole in the cask wall, penetrate the cask deeply, and disperse one percent of the fuel

mass to the environment. See, generally, Exhibit 3 and Exhibit 11, which is entitled, An Assessment of the Safety of Spent Fuel Transportation in Urban Environs, attached and referenced herein and made a part hereof. A number of reviewers criticized the Sandia full scale attack test, and related scale-model tests and subsequent analyses conducted at Sandia and Battelle Columbus Laboratories, on the grounds that the tests did not represent a worst case scenario. See, Exhibit 3. An analysis prepared for the State of Nevada indicates that new high-capacity rail casks similar in design to those which would be used for shipments to PFS are at least equally vulnerable (and potentially more vulnerable) to terrorist attacks using high energy explosive devices or anti-tank weapons and that a one-percent release from a large rail cask containing 10-year fuel could amount to 40,000 to 60,000 curies of dangerous radioactive materials. See, Exhibit 3, pages 49-71; and Exhibit 12 entitled, Concerns About Terrorists with PGMS, attached and referenced herein and made a part hereof. Even larger releases of radioactive materials could occur from a terrorist attack if PFS ships five-year-old spent fuel to Skull Valley. Members of OGD could very likely be among the five groups of people impacted by near-site contamination and irradiation: (1) persons at the immediate scene of the attack at the time of occurrence; (2) persons responding to the attack, especially law enforcement and emergency personnel, but also probably members of the general public (evacuation may be delayed or hindered by confusion and panic); (3) personnel involved in recovery and cleanup activities; (4) persons residing or working within the area contaminated by the attack until completion of clean-up activities; and (5) future users and/or residents of the contaminated area, which, depending upon the level of cleanup, may receive residual exposures from radionuclides deposited on soil or buildings. Depending upon the physical geography of the attack location and weather conditions at the time

of incident and immediately thereafter, radioactive contamination from a terrorist incident could also spread beyond the site of the attack.

The license application ignores the potentially significant radiation exposures which members of the OGD and other residents of Skull Valley may receive as a result of gridlock traffic incidents involving HHT shipments from the intermodal transfer point to the canister transfer building. While such incidents are usually associated with highly congested urban interchanges, the potential exists for gridlock situations in rural areas as a result of limited highway route options, severe accidents involving multiple vehicles, delayed emergency response, sudden severe weather, and other factors. Since NRC regulations allow emissions of 10 mrem/hour at 2 meters from the cask surface, passengers trapped in elevated vehicles (such as pickup trucks, sport utility vehicles, vans or buses) next to the HHT trailer carrying a cask could receive exposures of 10-40 mrem, equivalent to several medical X-rays. See, Exhibit 3, pages 6-8. While the risk of health effects from short-duration, low-level radiation exposures is currently a matter of scientific debate, members of OGD consider any additional man-made radiation exposures potentially dangerous, and objectionable to their traditional life style.

The license application further ignores a wide range of routine transportation activities which may expose members of the OGD and other residents of Skull Valley to daily, low-level doses of gamma and neutron radiation. Rail transportation activities potentially resulting in exposures include: uninterrupted transport at maximum speed, uninterrupted transport at designated speed less than maximum, waiting at grade-crossing, train assembly and car drop off, unanticipated stops for bad weather, track or bridge closure, signal system failure, mechanical problems, traffic congestion, crew health emergency, or regulatory violations. Heavy haul truck

(HHT) activities potentially resulting in radiation exposures include: uninterrupted transport from intermodal transfer point to canister transfer facility, anticipated stops at traffic signals and stop signs, anticipated stops for inspections, anticipated stops for fuel, food, driver change, unanticipated stop for bad weather, road closure, mechanical problems, driver health emergency, traffic violation, and slowed or stop-and-go transport due to bad weather, road construction, or heavy traffic. See, Exhibits 3, 7 and 8. While the risk of health effects from short-duration, low-level radiation exposures is currently a matter of scientific debate, members of OGD consider any additional man-made radiation exposures potentially dangerous, and objectionable to their traditional life style.

Members of OGD adamantly oppose the PFS and the transportation activities that would be associated with its operations. If, however, the Commission allows PFS to operate this facility, OGD petitions the Commission to require PFS to implement the following measures to minimize transportation risks, and to mitigate the impacts of any transportation accidents and incidents which might occur:

- (1) require construction of a rail access spur, eliminating risks associated with heavy haul truck transportation;
- (2) require PFS to use dedicated trains for all spent fuel shipments to the facility, thus reducing the total number of shipments, and mitigating many safety and security concerns associated with general rail freight service;
- (3) require full-scale physical testing of the transportation casks, in addition to other NRC certification requirements, to demonstrate compliance with NRC accident cask performance standards;
- (4) require armed escorts for the entire length of each shipment, not just the route segments through highly populated areas, as currently required under 10 C.F.R. §73;
- (5) require construction of a "hot cell" and the associated remote handling equipment

necessary for safely unloading, replacing, and reloading canisters and/or casks damaged in transportation accidents;

- (6) strictly prohibit any future license amendment which would allow the facility to receive bare spent fuel assemblies shipped in transportation-only casks;
- (7) require PFS to prepare a comprehensive transportation risk assessment, with particular attention to potential human errors, insider sabotage, and terrorist attacks which could cause or exacerbate accidents;
- (8) require PFS to prepare and implement a life-of-operations, comprehensive transportation risk management program, with particular attention to prevention of human errors, insider sabotage, and terrorist attacks; and
- (9) require PFS to prepare a culturally-appropriate transportation risk communications program, to be developed with substantial input from members of the OGD.

**D. License Application lacks procedures for returning damaged casks to the generating reactor.**

**CONTENTION:** The license application poses undue risk to public health and safety because it has not provided procedures for returning casks to the generating reactor. The SAR indicates that the casks will be inspected for damage prior to "accepting" the cask and before it enters the Restricted Area. SAR p. 5.1-4. If the casks are damaged or do not meet the criteria specified in LA AP. A, p. TS-19 there is no provision for housing the casks prior to shipping the cask back to the generating reactor.

**BASIS:** The license application does not provide for procedures for returning casks to the generating reactor should there be an accident as provided for in 10 C.F.R. §72.32 which requires a description of the means of restoring the facility to a safe condition after an accident. OGD hereby incorporates the discussions regarding possible accidents and the mitigation measures in both contentions A and C contained within this document.



**E. License Application fails to provide information and a plan to deal with casks that may leak or become contaminated during the 20 to 40 year storage period.**

**CONTENTION:** The License Application poses undue risk to the public health and safety because it fails to provide information and a plan to deal with casks that may leak or become contaminated during the 20 to 40 year storage period. Sending such casks back to the generating reactor may not be an option for several reasons, such as: PFS does not have the facilities to repackage contaminated canisters, the casks may be too contaminated to transport, or the nuclear power plant from which the fuel originated may have been decommissioned, and there are no assurances that the storage will be only "interim".

The license application provides no assurance that there will be an alternative location to which canisters and/or casks can be shipped if they become defective while in storage at PFS.

**BASIS:** The license application does not provide for procedures for returning casks to the generating reactor or dealing with the casks should the generating facility have become decommissioned should there be an accident or a contaminated canister as provided for in 10 C.F.R. §72.32 which requires a description of the means of restoring the facility to a safe condition after an accident.

The license application provides no assurance that there will be an alternative location to which canisters and/or casks can be shipped if they become defective while in storage at PFS.

The license application provides evidence that at least some of the reactor sites which might ship spent fuel to PFS would be rapidly decommissioned and thus unavailable for return of their spent fuel if the canisters and/or casks became defective while in storage at PFS. "Several reactors, such as Indian Point 1 and LaCrosse BWR, are only awaiting shipment of the spent fuel

in their pools before completing the decommissioning of the plant and restoration of the site." See, Licensing Application, Environmental Report Chapter 8 p. 8.1-3.

The license application does adequately address the uncertainties about the suitability of Yucca Mountain as a repository site, and the uncertainties about when, if ever, spent fuel stored at PFS could be shipped to Yucca Mountain. The Environmental Assessment (EA) for Yucca Mountain(DOE/RW-0073), cited in the PFS license application, [page 5.2-3] provides a detailed discussion of the site characterization process which must be completed before a repository license application can be submitted to the NRC. In the EA, DOE identifies many technical siting issues which must be documented, and acknowledges that Yucca Mountain may not be found suitable for development as a repository at the end of site characterization. Even if Yucca Mountain is found suitable for repository development, under current DOE plans the very earliest date of availability would be 2010. See, Exhibit 3, page 10.

**F. The License application fails to make clear provisions for funding of estimated construction costs, operating costs, and decommissioning costs.**

**CONTENTION:** The license application fails to make clear provisions for funding of estimated construction costs, operating costs, and decommission costs. It also fails to make clear as part of the construction costs who the contractors will be

**BASIS:** The license application poses undue risk to public health and safety because it fails to make clear provisions for funding of estimated construction costs, operating costs, and decommissioning costs. 10 C.F.R. §§72.22 (e). The application does not demonstrate that PFS "either possesses the necessary funds, or...has reasonable assurance of obtaining the necessary

funds" as required by 10 C.F.R. §72.22 (e).

**G. The license application fails to provide for adequate radiation monitoring.**

**CONTENTION:** The license application poses undue risk to public health and safety because it fails to provide for adequate radiation monitoring to protect the health of the public and workers. It also fails to provide for adequate radiation monitoring necessary to facilitate radiation detection, event classification, emergency planning and notification.

**BASIS:** The license application does not meet the requirements of 10 C.F.R. §72.32 (6) which requires that each application for an ISFSI make an description of the methods and equipment to assess releases of radioactive material. There is nothing that addresses releases outside of the ISFSI site.

OGD petitions the Commission to require PFSF to implement the following measures to monitor radiation exposures resulting from PFSF storage and transportation activities, and to mitigate the impacts of radiation exposures which might occur a result of routine activities, gridlock incidents, and/or accidents:

- / (a) All facility employees, and regulatory personnel such as vehicle inspectors, should have complete medical examinations before beginning work at PFSF or on SNF shipments, and should be reexamined annually. Monitoring of white blood cell and platelet counts would be particularly important, although one would not necessarily expect to see impacts at exposures less than 10,000 mrem.
- / (b) All facility employees, and regulatory personnel such as vehicle inspectors, should be equipped with personal dosimeters, and actual doses should be monitored collectively and individually, at least monthly.
- / (c) Shipping cask, canister, and storage cask inspection records should be carefully monitored, and actual emission levels should be tracked in aggregate, by cask type, and by individual cask.

- (d) An ALARA assessment should develop exposure reduction strategies for all facility employees and regulatory personnel (e.g., for vehicle inspectors, consider construction of specialized inspection bays, redesign hand-held instrumentation, and use remote instrumentation and/or robots)
- (e) All potential rail and highway routes should be surveyed to identify locations where the dose per shipment is likely to exceed 0.04 mrem/shipment, the calculated dose for a 2 minute exposure at 15 meters distance from the cask center. The traffic flow rates, demographics, building types, etc. at these locations should then be evaluated to determine the potential for actual exposures.
- (f) Collect baseline data on cancers and genetic disorders within 20 miles of the PFSF location, and in any corridor communities which appear to have potential for high exposures (for example, if an elementary school classroom is found to be located within 15 to 30 meters of a traffic light or stop or yield sign along a primary shipment route).
- (g) A system of fixed radiation monitors should be installed at various locations at PFSF, at off-site location within 5 miles of PFSF, and along shipment routes, at various distances, to record actual exposure rates. Preferably this should be done before shipments to PFSF begin, to establish baseline data.
- (h) It should be assumed that gridlock incidents will occur during SNF transport. PFSF should develop a gridlock risk reduction strategy and formulate a clear policy on response to gridlock incidents, including protocols for monitoring the physical and mental health of gridlock incident victims. All individuals involved in a reported gridlock incident should be monitored for some period of time, perhaps several years, during which time counseling services may be necessary.

**H. The license application poses undue risk to public health and safety because it fails to provide adequate protection of the site against intruders.**

**CONTENTION:** The license application poses undue risk to public health and safety because it fails to provide adequate protection of the ISFSI against intruders. The site is in such a remote area that it would take at least two (2) hours for access to the site to be made by emergency personnel.

**BASIS:** The license application provides only that the facility be protected by a fenced

perimeter. One layer of the fencing will be bounded by typical range fence. See, License Application, LA Chapter 12 p. 12.1. There will be an intrusion detection system. But since the security plan is not public information, one can only speculate about whether this security system will be manned full time or by how many individuals.

The license application fails to address the vulnerability of the dry storage casks to terrorist attack with high energy explosive devices. PFS has not demonstrated the proposed storage casks' ability to withstand an attack intended to breach the storage cask and container and release radioactive materials to the environment. At least two modes of attack must be evaluated:

(1) an attack in which adversaries penetrate the security system and apply explosives directly against the storage cask; and (2) an attack in which adversaries use missiles or rockets to project warheads against the storage casks from a distance. Scenario one would be similar to capture attacks on shipping casks using weapons analyzed in Exhibits 3, 10, 11. Knowledgeable, heavily-armed intruders must be assumed capable of approaching the site undetected, disabling the intrusion detection system, disarming any fixed anti-personnel weapons, penetrating the security fences, and gaining unimpeded access to the storage casks for a period of at least 15 minutes. A variety of explosive devices could be variously applied to the target. For example, one or more military demolition charges such as the M3A1 used in the Sandia full-scale truck cask test could be applied to the cask lid; a large quantity of linear cutting charge could be applied around the middle of the cask exterior; or multiple commercial shaped charges could be applied to various parts of the cask lid and exterior and detonated simultaneously. Under scenario two, adversaries armed with missiles or rocket-propelled explosives could attack the casks from a

distance of 250 to 1,000 meters (depending upon elevation), or from the security fence perimeter. Attackers could employ a variety of military weapons similar to those identified as threats to metal shipping casks in Exhibits 3 and 12. Knowledgeable adversaries might well be capable of tailoring their weapons selection to missiles specifically designed for attacking bunkers and field fortifications, such as the U.S. Army's AT-8 Bunker Buster or the U.S. Army's SMAW (Shoulder-launched Multi-purpose Assault Weapon) armed with an HE Dual Purpose Warhead.

**I. The cask design is unsafe and untested for long periods of time.**

**CONTENTION:** The license application poses undue risk to public health and safety because it calls for use of a cask whose design is unsafe and untested for long periods of time and which has not been certified for either transportation or long term storage.

**BASIS:** Until the Cask design is certified there is no way that PFS can make the necessary description of their ability to operated the facility as planned. There is no way that they can completely plan for on-going operations until and unless the cask design is certified. 10 C.F.R. §72.22 (e) requires that the plan must contain information regarding the general plan for carrying out the activity, OGD asserts that without the certified cask design it would be impossible for PFS to do this with sufficient assurances for the license to be granted at this time. OGD would request that this License Application be deem incomplete until such time as the cask design for this facility be certified.

Further, there is no way that a meaningful Environmental Impact Statement under the National Environmental Policy Act, 42 U.S.C. §4321 et seq. can be completed until the cask design is certified.

**J. The license application fails to address the status of compliance with all permits, licenses and approvals required for the facility.**

**CONTENTION:** The license application violates NRC regulations because the ER fails to address the status of compliance with all permits, licenses and approvals required for the facility.

**BASIS:** Under 10, C.F.R. §§ 51.71 (c) (d) the ER fails to address federal water discharge requirements and the certifications and permits required for water and storm discharges, erosion and sediment control for prevention of pollution of water; air quality requirements and the construction of a stationary source permit. After, Train vs. Colorado Public Interest Research Group, Inc. et al. 426 U.S. 1, (1976) in which the court said that the EPA had no authority to regulate discharge of the source, by-product and special nuclear materials covered by the Atomic Energy Act, and because of the Special Trust Relationship that the Federal Government and thus the NRC has with the Tribes it is vitally important that the NRC make certain that the land as well as the water is protected from harm. It is a well established concept that Federal Agencies have a certain Trust Responsibility over Indian Lands. In, Nevada v. United States, 463 U.S. 110 (1983) the government is recognized as a trustee and has special obligations to the tribe. The court in Nevada, Id. says that even if eventually a court may conclude that obligations to other parties predominate, the special duty to protect Indian resources does not vanish simply because other interests are involved.

The Court has given attention to the trust duties of federal officials when dealing with Indian tribes and individuals. In this setting, the modern cases make it clear that the limited Agency action is subject, at a minimum to judicial scrutiny under the Administrative Procedure

Act (APA) 5 U.S.C. §§701-76 (1982). Moreover, judicial scrutiny of the administration of Indian policy seems to be heightened because of the fiduciary standards required by the trust relationship. In Morton v. Ruiz 415 U.S. 199 (1973) the Court imposed trust standards on top of the rule making provisions of the APA, Id. §§701-76.

In Seminole Nation v. United States, 316 U.S. 286 (1942) the court held that the federal trust duty extends to protection of Indians from their own improvidence. Thus the NRC is held to a higher standard in this case than in cases involving non-Indians.

Even though every precaution against accidents may be taken there is ever present the possibility that an accident will occur. OGD hereby incorporates Contention A and the accident discussion found in this document. If such an accident were to occur however minor it might be there is the possibility that the accident will be cleaned up using existing water and this water will be contaminated. There will be other activities that will require the use of water to clean contaminated parts, provisions need to be made so that this water does not contaminate the already sparse water that is available for this area. Contaminated water will have an adverse effect on the members of OGD. The NRC has a special obligation to make sure that the members of OGD are protected for this kind of harm.

**K. There are no provisions for paying for casks that may need to be returned to the generating facility.**

**CONTENTION:** The license application poses undue risk to public health and safety because it does not address how the facility will deal with paying for or returning casks that may prove unsafe should the generating reactor have been decommissioned.



**BASIS:** 10 C.F.R. §72.22 part (3) requires that the License application discuss the estimated decommissioning costs, and the necessary financial arrangements to provide reasonable assurance prior to licensing that decommissioning will be carried out after the removal of spent fuel and/or high-level radioactive waste from storage. There is not enough information contained in the Licensing Application for an informed determination to be made about the financial capability of the existing generating facilities who are now apart of PFS and the financial arrangements made with those facilities, and their financial capability to assure that after decommissioning there will be funds to carry out necessary mitigation should a problem arise. There are also no assurances that other generating facilities will be allowed to use the facility. There is no information about these other facilities to determine whether assurance of their financial capabilities will be sufficient to provide adequate mitigation should there be problems in the future. Lack of this information should deem this application incomplete and PFS should be required to address this issue before further consideration of the application.

**L. Operators will not be trained for the specific job when hired and operators will undergo on-the-job training.**

**CONTENTION:** The license application poses undue risk to public health and safety because it provides that operators will not be trained for the specific job when hired and that operators will undergo on-the-job training, and classroom training leading to certification. The license application states that "of necessity, the first individuals certified may have to improvise in certain situations to complete the practical factors." See, License Application, LA Chapter 7 p. 7.1. This doesn't protect public health and safety in any manner.

**BASIS:** 10 C.F.R. §72.32 (7) requires that the License application provide a description of the responsibilities of licensee personnel should an accident occur. With personnel being hired that are trained on-the-job, it seems very plausible that personnel will not be able to carry out the responsibilities required under this section. This matter goes to the very heart of protection of OGD members. The matter of human reliability is a very critical issue in the handling of Nuclear Fuel. It becomes even more critical to protection of health and safety of those living close to a ISFSI site when personnel are not even trained when they take over the critical job of handling nuclear fuel.

**M. No provisions for transportation accidents are made.**

**CONTENTION:** The license application poses undue risks to public health and safety because it makes no provisions for transportation accidents that might occur.

**BASIS:** 10 C.F.R. §72.32 (2) requires that the Emergency Plan contain an identification of each type of radioactive materials accident that may occur.

Dugway Proving Ground receives and ships conventional Army weapons approximately 95 times a year. Some of the shipments will travel the Skull Valley Road. The license application recognizes that this presents "potential for an explosion" near the site. There are no provisions for dealing with this scenario should it occur.

There could occur a collision between a cask on a heavy haul trailer and/or a collision between a truckload of military explosives in a grade crossing accident which may result from unique local conditions, this could result in impact forces in excess of those specified in NRC Cask performance standards. The License Application does not deal with this probability and

PFS should be made to look at this type of accident scenerio.

**N. There may be a leak that contaminates the present water system.**

**CONTENTION:** The license application poses undue risk to public health and safety because it fails to address the possibility of a leak occuring that might contaminate the present water system that members of the community rely on. The application admits that several wells are going to have to be built to meet the demand that will be presented by the facility. Neither contingencies to deal with contamination nor lowering of the present water table are discussed.

**BASIS:** OGD hereby incorporates the discussion on the NRC's trust responsibility to protect the natural resources of the Tribe and individual Tribal members as found in Contention J found within this document. These issues need to be addressed in the License Application.

**O. Environmental Justice Issues are not addressed.**

**CONTENTION:** The license application poses undue risk to public health and safety because it fails to address environmental justice issues. In, Executive Order 12898, 3 C.F.R. 859 (1995) issued February 11, 1994, President Clinton directed that each Federal agency "shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies and activities on minority populations and low-income populations in the United States." It is not just and fair that this community be made to suffer more environmental degradation at the hands of the NRC. Presently, the area is surrounded by a ring of environmentally harmful

companies and facilities. Within a radius of thirty-five (35) miles the members of OGD and the Goshute reservation are inundated with hazardous waste from: Dugway Proving Ground, Utah Test and Training Range South, Deseret Chemical Depot, Tooele Army Depot, Envirocare Mixed Waste storage facility, Aptus Hazardous Waste Incinerator, Grassy Mountain Hazardous Waste Landfill and Utah Test and Training Range North.

**BASIS:** The National Environmental Protection Act requires the NRC to fully assess the impacts of the proposed licensing action, and to weigh its costs and benefits. 42 U.S.C. §102. PFS's Environmental Report contains a brief "benefit-cost analysis" that is improperly slanted in favor of the benefits of the project, and contains little discussion of the potentially significant impacts and their environmental and social costs. The discussion is inadequate with respect to the following issues:

1. The proposed plant will have negative economic and sociological impacts on the Native community of Goshute Indians who live very close to the proposed site. The ER does not reflect consideration of the fact that the plant is to be placed in the dead center of an Indian Reservation. The proposed siting of the ISFSI in a minority community follows a pattern noted in a 1987 study by the United Church of Christ, marked as Exhibit 13, attached and referenced herein and made apart hereof, entitled, "Toxic Wastes and Race in the United States. A National Report on the Racial and Socio-Economic Characteristics of Communities with Hazardous Waste Sites." The study found that "race proved to be the most significant among variables tested in association with the location of commercial hazardous waste facilities. This represented a consistent national pattern." The study also found that "(i)n communities with one commercial hazardous waste facility, the average minority percentage of the population was twice the average minority

percentage of the population in communities without such facilities (24 percent vs. 12 percent)." Id. at p. xiii. The License Application does not demonstrate any attempts to avoid or mitigate the disparate impact of the proposed plant on this minority community.

Further it has been a long standing policy of the federal government to actively recruit and site waste facilities on tribal lands throughout the United States. See, Exhibit 14, a Letter from the Office of the Nuclear Waste Negotiator which contains the MRS Grant Application List as of June 30, 1993. Of the 20 entities in Phase I of the MRS process, 16 of the entities are Tribes or Tribal corporations. Of the 9 entities in Phase II of the MRS process, 9 are Tribal or Tribal Corporate entities. Grace Thorpe, founder of the National Environmental Coalition of Native Americans (NECONA) which was formed in 1993 to lobby against the MRS or any nuclear waste disposal on Indian Lands, recalls that in 1987 Congress passed the Nuclear Waste Policy Act, which set in motion a nationwide search for a community that would accept a temporary storage site, Native American lands were targeted. See, Exhibit 15 entitled, Our Homes are not Dumps: Creating Nuclear-Free Zones, attached and referenced herein and made a part hereof. Grace Thorp has said, "How ironic that, after centuries of attempting to destroy Native American sovereignty, the U.S. Government is suddenly interested in promoting Tribal Sovereignty--just so it can dump its lethal garbage!"

2. The ER at Chapter 7 p. 7.2-2 says that "the direct benefits for the Skull Valley Band of Goshute Indians (Band) are shown to be a steady revenue stream for the Tribal Government and Band members, a diverse set of meaningful jobs for tribal members and training/development opportunities for other Band members.

ER Chapter 7 p.7.2-3 states,

(t)he indirect benefits for the Band include increased traffic and business at their convenience store during construction and operation, and an increased profile for the Band in Utah business economy, potentially bringing new economic development initiatives to the Band. Other indirect benefits will include upgrades to Skull Valley Road or construction of a railroad spur to the site, improving transportation routes to the reservation and offering opportunities for further Band economic development projects. In addition, the project will provide improved access to the western portion of the reservation and improved electric and phone services through upgraded distribution and communications lines to the reservation area.

In contrast, the costs of the project to the Skull Valley Band of Goshutes are never addressed. The only mention of indirect costs are found in ER Chapter 7 p. 7.3-1 which states: "The indirect costs, which are derived from socioeconomic and environmental impacts of the facility, are minimal due to the remote location and small size of the actual storage area."

The License Application fails to discuss the environmental, sociological and psychological costs that those living within a few miles of the facility which they may have to withstand. See, Exhibits 17, 18, and 19 which are the amended affidavits of Margene Bullcreek, Lester Wash, Garth J. Bear and Abby Bullcreek respectively, which are attached and referenced herein and made a part hereof. The License Application fails to discuss the cost sociological, individual and psychological costs of added traffic, more people, cultural impacts on traditional lifestyles, stigmatization resulting from adverse impacts (real or perceived) of the storage facility, changes in traffic patterns, and the pervasive fear of living in close proximity to the biggest nuclear storage facility in the United States.

3. ER Chapter 7 p. 7.3-1 estimates that the total life cycle cost for the facility and its operation over its projected 40 year operating life is \$1.536 billion. There has been no benefit-

cost analysis done that looks at the alternative of leaving waste on-site at reactors until a safe solution is developed. "The rush to move dangerous nuclear waste across American by road and rail is more dangerous and expensive than keeping the waste on-site at nuclear power plants. Undue haste and nuclear waste are a bad combination." See, Public Citizen News Release, Oct. 6, 1997 statement by Auke Piersma.

4. The ER Chapter 1 p. 1.2-1, purports to discuss the need for the ISFSI. The ER states that "(t)he unavailability of added storage has become a significant risk that utilities must consider. Inability of an operating reactor to provide sufficient spent fuel storage capacity will cause the shutdown of that reactor."

This theory is questioned by those in the industry. "The Energy Information Administration (EIA) has published statistics showing only 9 reactors will require irradiated nuclear fuel pool expansion or dry cask storage before 2000." In a paper by Auke Piersma entitled, The Real Costs of On-Site Storage of Highly Irradiated Nuclear Fuel, published by the Public Citizen's Critical Mass Energy Project, it is suggested that there is a manipulation of data by the utility industry in the use of full core reserve in calculating the available capacity of the pool. "Full core reserve is the ability to transfer the entire core (bundled fuel rods) out of the reactor and into the pool at any given time. The industry desire for full core reserve is to enhance profits. By transferring the entire core during a refueling outage, utilities can reduce the shutdown time and bring the reactor back online sooner." Id., at III. The generalized statement of PFS that the unavailability of added storage has become a significant risk that utilities must consider does not constitute a demonstration that additional fuel storage capacity is needed. PFS

should be required to evaluate existing and projected storage capacity both in the U.S. and abroad, and to evaluate existing and projected storage need.

5. Pursuant to Executive Order 12898, 3 C.F.R. 859 (1995), and an accompanying Memorandum for the Heads of All Departments and Agencies, 30 Weekly Comp. Pres. Doc. 279 (Feb. 14, 1994), there are two aspects to environmental justice: first, each agency is required to identify and address disproportionately high and adverse health or environmental effects on minority and low-income populations; and second, each agency must ensure that its programs, policies, and activities that substantially affect human health or the environment do not have the effect of subjecting persons and populations to discrimination because of their race, color, or national origin. The first of these requirements addresses one of the basic issues raised in this license application. The disproportionate adverse health or environmental effects on a minority population is a troubling aspect of the site chosen for this ISFSI facility.

As stated in the original contention, within a radius of thirty-five (35) miles the members of OGD and the Goshute reservation are inundated with hazardous waste from: Dugway Proving Ground, Utah Test and Training Range South, Desert Chemical Depot, Tooele Army Depot, Envirocare Mixed Waste and Low Level Radioactive Waste Landfill, Clive Hazardous Waste Storage Facility, Aptus Hazardous Waste Incinerator, Grassy Mountain Hazardous Waste Landfill and Utah Test and Training Range North.

Exhibit 20 is a map from the Environmental Protection Agency (EPA) which is attached and referenced herein and made a part hereof which shows that in Tooele County there are 9 Toxic Release Inventory (TRI) sites, 6 Comprehensive Environmental Response, Compensation,



and Liability (CERCLA) sites, 2 National Pollutant Discharge Elimination System (NPDES) sites, and 40 Resource Conservation Recovery Act (RCRA) sites.

There are hundreds of different chemicals in the facilities around the Goshute Reservation. Exhibit 21, is the risk assessment for the Clive Incineration Facility and contains a detailed listing of the Hazard Indices, (See, Table I-2) as well as the Emission rates of the chemicals that are released from the site (See, Table III-1). Exhibit 21 is attached and referenced herein and made a part hereof.

Appendix A of Exhibit 21 includes Emission rates and Ambient Impacts for the area, with Attachment A-1 listing the stack testing of the Hazardous Substance List Compounds at the Aptus Facility. Included in this exhibit are exposure calculations for children and adults, as well as cancer risks for both of these categories.

Included as a separate exhibit is Exhibit 22 which is attached and referenced herein and made a part hereof. Exhibit 22 is the RCRA permit for Grassy Mountain. It sets forth all of the wastes that are permitted in the facility.

Exhibit 23 identifies the permitted and prohibited waste from the Envirocare Facility of Utah, it also includes the radioactive material license issued by the Utah Department of Environmental Quality. Exhibit 23 is attached and referenced herein and made a part hereof.

Exhibit 24 includes the permitted hazardous wastes that are found at the TOCDF, CAMDS and Deseret Chemical Depots. Exhibit 24 is attached and referenced herein and made a part hereof.

Exhibit 25 lists the waste chemicals that are allowed at the Tooele Army Depot North, and Exhibit 26 contains the permitted wastes allowed at Tooele Army Depot South. Both Exhibits

25 and 26 are attached and referenced herein and made a part hereof.

Finally, Exhibit 27 lists by hazardous waste code all those hazardous wastes that are permitted at the Dugway Proving Grounds. Exhibit 27 is attached and referenced herein and made a part hereof.

All of the above exhibits contain numerous chemical and nuclear material that OGD members may be breathing, eating and living with on a daily basis, if any type of Environmental assessment is done it needs to look at these facilities as part of the cumulative impacts and disproportionate impacts that the OGD community has been made to suffer.

PFS in its license application has failed to consider any of the disproportionate impacts that may be suffered by the members of the Goshute Tribe who live in the area or OGD members and others who may be effected by the proposed ISFSI.

Moreover, the ER does not reflect consideration of the fact that the ISFSI site is to be placed in the dead center of a rural Native American community.

On the reservation itself, a March 13, 1968 sheep kill incident resulted in contamination of sheep carcasses by chemical agents, and the burial of the carcasses on the reservation. This site may be a Formerly Used Defense site (FUDS). Other areas in Skull Valley also may have been contaminated during this incident and may be potential FUDS. See, Exhibit 28 entitled, Final Report of Comprehensive Document Review for Dugway Proving Ground, p. 5, which is attached and referenced herein and made a part hereof.

6. The ER, fails to address the effect that the facility will have on the property that is owned by members of OGD or by people living in and around the area of the proposed ISFSI

site.

The property values of the surrounding lands will be diminished by the ISFSI site itself, the dangers of nuclear waste transport, and the fear that these activities engender in the public. Various courts have recently addressed this issue. In Kelley v. Selin, 42 F.3d 1501, 1509 (6th Cir. 1995), the sixth circuit held that "The petitioners have asserted a personal stake in the outcome of the litigation by virtue of their ownership and use of their property for residential and leisure pursuits. Not only do petitioners assert harm to their aesthetic interests and their physical health, but each also asserts that the value of his or her property will be diminished by the storage of nuclear waste . . . ." The court went on to find that the petitioners in Kelley had established standing. Id. The potential negative impact of the nuclear waste on the property values of the members of the OGD certainly establishes that they too "have a personal stake" in the outcome of this proceeding.

Public fears of the danger of nuclear waste and nuclear waste transportation are extensive. This public perception can, by itself, lower the value of the local properties. As the Supreme Court of New Mexico recently found in a similar situation, "compensation is awarded for loss of market value even if the loss is based on fears not founded on objective standards." City of Santa Fe v. Komis, 845 P.2d 753 (N.M. 1992). In that case, compensation was granted for the diminution of property values due to public perception of the dangers of nuclear waste transport. "Whether or not the transportation of hazardous nuclear materials actually is or is not safe is irrelevant; the issue is whether public perception of those danger has a depressing effect on the value of the property not taken." Id. at 760.

The property values of the tribal members and members of the OGD will be adversely

impacted by the siting of this facility. The danger inherent in the transport of nuclear waste will also decrease their property values. The NRC has utterly failed to consider this concern.

**P. Members of OGD will be adversely impacted by routine operations of the proposed storage facility and its associated transportation activities.**

**CONTENTION:** The ability of OGD members to pursue the traditional Goshute life style will be adversely impacted by the routine operations at the storage facility. Obvious impacts resulting from the physical presence of the facility are; visual intrusion, noise, worker and visitor traffic to and from the storage site, and presence of strangers in the community. Those impacts that are not as obvious but nonetheless serious are; individual and collective social, psychological, and cultural impacts such as a sense of loss of well-being because of the dangerous wastes that are being stored near their homes, in their community, and on their ancestral lands.

The ability of OGD members to pursue a traditional Goshute life style will be adversely affected by routine transportation operations of spent nuclear fuel and/or the presence of trucks, especially very large heavy haul trucks. The other obvious and other effects include the same kind of effects that are listed above, including fear that a transportation accident might happen, fear of acts of terrorism or sabotage which could expose members of OGD and their families, their homes, the community and their ancestral land.

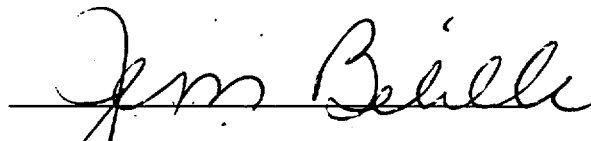
**BASIS:** 10 C.F.R. §72.32 (5) requires that the License Application contain a brief description of the means of mitigating the consequences of each type of accident. The License application fails to address the concerns that OGD members have about the obvious impacts resulting from living in fear that an accident will happen which could expose members and their

families, their homes, their community and their ancestral land.

The License Application fails to address the concerns of OGD members, see, Exhibits 16, 17, 18, 19 that may be effected should an accident occur, such as making their ancestral homelands unlivable.

OGD hereby incorporates by reference the discussion of accidents and the mitigation of those accidents found in Contentions A and C within this document in light of the requirements of 10 C.F.R. §72.32 (11) which requires a discussion within the license application of restoring the facility to a safe condition after an accident. What about the possibility of PFS not being able to restore the facility to a safe condition. OGD is very concerned with this possibility considering that this land is special to them in that it is their ancestral homeland.

Respectfully Submitted,

A handwritten signature in cursive script, appearing to read "Jean Belille", written over a horizontal line.

Jean Belille, Attorney for OGD  
Land and Water Fund of the Rockies  
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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

Before the Atomic Safety and Licensing Board

Private Fuel Storage, a Limited  
Liability Company;

(Independent Spent Fuel Storage  
Installation).

Docket No. 72-22 ISFSI  
ASLBP No. 97-732-02  
ISFSI

November 24, 1997

**CERTIFICATE OF SERVICE**

I hereby Certify that copies of the Contentions dated 11/24/97, were served on the persons listed below (unless otherwise noted) by Federal Express. Others, as notated below, received them this day by email or facsimile. All exhibits are being sent by Federal Express.

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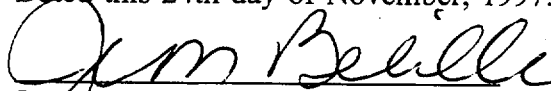
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Catherine L. Marco, Esq.

Dated this 24th day of November, 1997.

  
Jean M. Belille

RECEIVED

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## TABLE OF EXHIBITS

- Exhibit 1. GUIDELINES ON THE SCOPE, CONTENT, AND USE OF COMPREHENSIVE RISK ASSESSMENT IN THE MANAGEMENT OF HIGH-LEVEL NUCLEAR WASTE TRANSPORTATION by Dominic Golding and Allen White Center for Technology, Environment and Development (CENTED) Clark University Worcester, Massachusetts
- Exhibit 2. APPENDIX: ORGANIZATIONAL FORESIGHT AND THE EXXON OIL SPILL A Report From Freedenberg and Associates, Middleton, Wisconsin
- Exhibit 3. NUCLEAR WASTE TRANSPORTATION SECURITY AND SAFETY ISSUES The Risk of Terrorism and Sabotage Against Repository Shipments. by Robert J. Halstead & James David Ballard.
- Exhibit 4. THE TRANSPORTATION OF SPENT NUCLEAR FUEL AND HIGH-LEVEL WASTE: A Systematic Basis for Planning and Management at National, Regional, and Community Levels. Prepared for the Nevada Nuclear Waste Project Office.
- Exhibit 5. PUBLIC INFORMATION CIRCULAR FOR SHIPMENTS OF IRRADIATED REACTOR FUEL. Spent Fuel Project Office, Office of Nuclear Material Safety and Safeguards, Nuclear Regulatory Commission
- Exhibit 6. NEVADA COMMERCIAL SPENT NUCLEAR FUEL TRANSPORTATION EXPERIENCE, Yucca Mountain Site Characterization Project. U.S. Department of Energy.
- Exhibit 7. EXPOSURES AND HEALTH EFFECTS FROM SPENT FUEL TRANSPORTATION Prepared for the U.S. Department of Energy, Office of Civilian Radioactive Waste Management. G.M. Sanquist, V.C. Rogers, A.A. Sutherland and G.B. Merrell.
- Exhibit 8. PROBABILISTIC RISK ASSESSMENT AND NUCLEAR WASTE TRANSPORTATION: A CASE STUDY OF THE USE OF RADTRAN IN THE 1986 ENVIRONMENTAL ASSESSMENT FOR YUCCA MOUNTAIN. State of Nevada Agency for Nuclear Projects/Nuclear Waste Project Office. Marvin Resnikoff Radioactive Waste Management Associates, New York
- Exhibit 9. THE EFFECTS OF HUMAN RELIABILITY IN THE TRANSPORTATION OF SPENT NUCLEAR FUEL Seth Tuler, Roger E. Kasperson and Samuel Ratick Center for Technology, Environment, and Development Clark University June, 1988
- Exhibit 10. NUCLEAR WASTE SHIPPING CONTAINER RESPONSE TO SEVERE ACCIDENT CONDITIONS: A BRIEF CRITIQUE OF THE MODAL STUDY by Lindsay Audin Consulting Engineer Ossining, New York December, 1990
- Exhibit 11. AN ASSESSMENT OF THE SAFETY OF SPENT FUEL TRANSPORTATION IN URBAN ENVIRONS, Sandia Report. R.P. Sandocal, J.P. Weber, H.S. Levine, A.D. Romig, J.D. Johnson, R.E. Luna, G.J. Newton, B.A. Wong, R.W. Marshall, Jr., J.L. Alvarez, F. Gelbard

- Exhibit 12. CONCERNS ABOUT TERRORISTS WITH PGMS Marvin B Schaffer
- Exhibit 13. TOXIC WASTES AND RACE IN THE UNITED STATES A National Report in the Racial and Socio-Economic Characteristics of Communities with Hazardous Waste Sites. Commission for Racial Justice, United Church of Christ.
- Exhibit 14. Letter from office of Nuclear Waste Negotiator
- Exhibit 15. Grace Thorpe article
- Exhibit 16. Amended Affidavit from Margene Bullcreek
- Exhibit 17. Amended Affidavit from Lester Wash
- Exhibit 18. Amended Affidavit from Garth J. Bear
- Exhibit 19. Affidavit from Abby Bullcreek
- Exhibit 20. ENVIRONMENTAL JUSTICE, STATE OF UTAH, Tooele County. Map produced for Environmental Protection Agency Environmental Justice Program.
- Exhibit 21. SCREENING-LEVEL RISK ASSESSMENT FOR THE USPCI CLIVE INCINERATION FACILITY, prepared for USPCI Clive Incineration Facility, by ENVIRON Corporation.
- Exhibit 22. USPCI, Grassy Mountain Revised RCRA Permit April 15, 1996
- Exhibit 23. RADIOACTIVE MATERIAL LICENSE, Utah Department of Environmental Quality, Division of Radiation Control.
- Exhibit 24. MODULE I STANDARD PERMIT CONDITIONS TOCDF July 1997
- Exhibit 25. TOOELE ARMY DEPOT, North Revision 1, July 7, 1995
- Exhibit 26. CHEMICAL MUNITIONS IGLOOS FOR THE CONTAINER STORAGE OF WASTE GENERATED FROM THE MAINTENANCE OF THE CHEMICAL MUNITIONS STOCKPILE. Attachment D.2. Tooele Army Depot- South Hazardous Waste Storage Permit attachment 12- Container Management
- Exhibit 27. MODULE III- CONTAINERS Dugway Permit Issued March 15, 1994
- Exhibit 28. FINAL REPORT OF COMPREHENSIVE DOCUMENT REVIEW FOR DUGWAY PROVING GROUND, prepared for U.S. Environmental Protection Agency. Science Applications International Corporation.

1997 NOV 25 A 10 58

1997 NOV 25 A 10 58