

ATTACHMENTS

June 21, 2000

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

In the Matter of)
)
Private Fuel Storage, L.L.C.) Docket No. 72-22
) ASLBP No. 97-732-02-ISFSI
(Private Fuel Storage Facility))

**STATE OF UTAH'S PLAN FOR CROSS-EXAMINATION
OF NRC STAFF ON CONTENTION E**

- I. Question witnesses re scope and nature of Staff's safety review, basis for NRC's safety finding
- II. Question witnesses re meaning of license conditions, how they will be administered by NRC Staff
- III. Question witnesses re term of license

NRC STAFF'S CROSS EXAMINATION
PLAN MICHAEL SHEEHAN

- A. Clarification regarding statements in Answer 10 pertaining to industrial accidents.

June 27, 2000

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
Before the Atomic Safety and Licensing Board

In the Matter of)
)
PRIVATE FUEL STORAGE L.L.C.) Docket No. 72-22
)
(Private Fuel Storage Facility)) ASLBP No. 97-732-02-ISFSI

**APPLICANT'S CROSS-EXAMINATION PLAN FOR
STATE'S WITNESS MICHAEL F. SHEEHAN REGARDING CONTENTION S**

Pursuant to the Atomic Safety and Licensing Board's Memorandum and Order of May 1, 2000,¹ Applicant Private Fuel Storage, L.L.C. submits its cross examination plan for State of Utah witness Michael F. Sheehan regarding Contention S.

1. Witness qualifications.
 - No expertise in accident probability, clean up costs, nuclear accident consequences, risk analysis, nuclear damage estimation.
2. Coverage for large accidents.
 - Testimony is inconsistent on whether witness wants both insurance and decommissioning funding vs. insurance or decommissioning funding.
 - No NRC regulations or guidance including large accident cleanup as part of decommissioning.
 - Size of NRC approved decommissioning funds inconsistent with inclusion of large accident.

¹ Memorandum and Order (Granting Joint Motion to Approve Stipulation on Contention Utah S and Outlining Administrative Matters) (May 1, 2000) at 8.

- Witness familiarity with Trojan
 - No NRC studies including large accident as part of decommissioning.
3. Assumption that large accidents from military activities, seismic events can occur.
 - Inconsistent with NRC licensing, i.e. no "significant risks of radionuclide release" from large accident.
 - Need for "appropriately conservative cost estimate" for large accident inconsistent with "reasonable assurance."
 4. Coverage for military-caused accidents unnecessary.
 - Federal government responsibility.
 5. Witness can't support relevance of cited DOE, NRC reports to support damage estimate for ISFSI.
 6. Adjustment of decommissioning cost estimates.
 - Claim that annual adjustment is limited to inflation is misreading of License Application.
 - Witness' interpretation of 1998 Business Plan statement on enrichment D&D as limiting adjustment is unsupported.
 - Witness' uncertainty on adjustment for changes in technology, regulation rebutted by explicit language in License Application.
 7. Adjustment of letter of credit.
 - Witness' "high degree of uncertainty" is totally unsupported.

NRC STAFF'S CROSS EXAMINATION
PLAN JOHN PARKYN

- A. Years' dollars of decommissioning cost estimates
- B. Vintage of data used in decommissioning estimates
- C. PFS' adjustment factors regarding cost escalation
- D. Increases to letter of credit.

June __, 2000

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NUCLEAR REGULATORY COMMISSION
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In the Matter of)
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PRIVATE FUEL STORAGE L.L.C.) Docket No. 72-22
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(Private Fuel Storage Facility)) ASLBP No. 97-732-02-ISFSI

**APPLICANT’S CROSS-EXAMINATION PLAN
FOR MICHAEL F. SHEEHAN REGARDING CONTENTION UTAH E**

Pursuant to the Atomic Safety and Licensing Board’s Memorandum and Order of May 1, 2000,¹ Applicant Private Fuel Storage, L.L.C. submits its cross examination plan for State of Utah witness Michael F. Sheehan regarding Contention Utah E.

1. Qualifications
 - Lack of experience regarding cost estimation; nuclear safety issues; accident probabilities; radiological consequences; nuclear insurance; ISFSI operation; risk analysis; contingencies; decommissioning.
2. Asserted requirement that cost estimates be “hard” or “firm”.
 - Basis for this requirement [LES decisions];
 - Y-Claimed requirement misuses LES language;
3. Absence of any affirmative data.
 - Witness’s testimony has no cost estimates of his own. Only information is that supplied by PFS.

¹ Memorandum and Order (Granting Joint Motion to Approve Stipulation on Contention Utah S and Outlining Administrative Matters) (May 1, 2000) at 8.

– Witness prior testimony, assistance in LES, HRI, other nuclear cases

4. Witness’s proposed methodology.

– [Q/A 80] “virtually all major uncertainties resolved”;

– [Q/A 34] cost estimate, financing, construction “must happen more or less simultaneously”;

5. Witness’s creation of uncertainties where none exist.

a. [Q/A 23,33,73] Lack of firm date for construction
- inconsistent with State’s stated aim to derail project

→ b. [Q/A 25,31,58] Asserted construction of both ITP and railroad

→ c. [Q/A 26] Cask manufacture on- or off-site

→ d. [Q/A 27,31,37] Using earlier estimates where later ones have superceded them.

→ e. [Q/A 28] Alleged uncertainty as to what will be constructed.

f. [Q/A 30] Alleged shifting of railroad costs out of PFS cost estimate

g. [Q/A 35] Assumption that cost estimates are outdated

h. [Q/A 35] Assumption that PFS, after demonstrating financing, would delay construction to a significantly later period.

→ i. [Q/A 37] Current financing assumptions are ignored

→ j. [Q/A 57] Castle Rock settlement not included
- ignores Parkyn deposition that it was signed subsequent to Business Plan

→ k. [Q/A 62] Forseeability of non-nuclear decommissioning costs
- “it would not be unforeseeable”

l. Property insurance

- [Q/A 66] PFS witness “had not gotten a figure for the cost”

- [Q/A 73] amount and cost “are all unknown”

- [Q/A 68] alleged failure to address for railroad or ITP, thus ignoring Price-Anderson

→ m. [Q/A 73] Sales tax “uncertainty” because of canister/cask uncertainty

- n. [Q/A 73] Operating cost uncertain because off-site shipping uncertain.
 - ignores DOE responsibility for off-site shipping
 - ignores no change in staffing
- o. [Q/A 75] Lack of information on underlying assumptions
 - failure to ask during depositions taken by State
 - reference to assumptions from Mescalero Project
- p. [Q/A 77] Years dollars for cask/canisters
 - “Uncertainty” based on misreading of Parkyn deposition

6. Witness’ speculation without expertise or bases

- a. [Q/A 25] “Potential to cut corners” vs. “estimate based on safe design”
- b. [Q/A 26] Holtec letter on site surveys is unrelated to PFS costs
- c. [Q/A 26] Dry transfer system estimates “are extremely rough”
- d. [Q/A 56] No “guarantee” on future cask costs; “no competitive incentive” for Holtec to maintain same price
 - ignores availability of other vendors
- e. [Q/A 58] BLM lease payments/bonding
 - ignores BLM regulations
- f. [Q/A 59] Dry transfer system
 - irrelevance of DOE design
 - “may have significant operating costs”
- g. [Q/A 64] Utah Radiation Control Act
 - federal preemption
 - \$2 billion cash bond
 - “I don’t know how much you should budget for”
 - witness’ criticism of state attempts to preempt local action
- h. [Q/A 73] BIA/Band required bonding/insurance “could be substantial”
 - ignores Parkyn deposition
 - ignore provisions of lease
- i. [Q/A 80] Use of 1990 vintage data
 - Is there any?
- j. [Q/A 86] Significant risks of large accidents, radionuclide release
 - Witness’ lack of expertise, basis
 - NRC determination on license negates “significant risk,” i.e. no license

if significant risk

- reasonable assurance vs. “appropriately conservative”

— k. [Q/A 94] “Location of PFS site poses a problem as to scope and renewability of coverage”

- Witness’ lack of insurance expertise
- Responsibility of U.S. government for harm caused by U.S. military activities on UTTR

— 7. Pass through costs

- [Q/A 60] witness’ argument that PFS must assume primary responsibility, even if costs are directly billed to and paid by customer

8. Insurance

- [Q/A 88, 94] Implication that insurer knew little about facility
- [Q/A 86] Need for PFS to demonstrate “risk of such accidents is insignificant”
- [Q/A 89] Relevance of PFS not approaching ANI
- Need to assume “significant risks of radionuclide release”
- Absence of NRC requirement for ISFSI property damage insurance, unlike Part 50

NRC STAFF'S CROSS-EXAMINATION PLAN

- A. Experience of Dr. Sheehan
 - 1. ~~Cost estimating experience~~
 - 2. ~~Experience evaluating availability of nuclear insurance~~
 - 3. ~~Experience conducting risk analyses~~
 - 4. ~~Experience pricing letters of credit~~
- B. ~~Dr. Sheehan does not provide dollar figures to challenge PFS's estimates~~
- C. Dr. Sheehan's opinion of the Stone and Webster construction cost estimates
- D. ~~Dr. Sheehan's knowledge regarding Heltec customers' willingness to purchase casks/canisters.~~ Clarification regarding maximum secondary insurance premium
- E. Clarifications regarding NRC Staff's review of PFS application.

STATE OF UTAH'S CROSS EXAMINATION PLAN
CONTENTION UTAH R
PFS WITNESSES KEN DUGAN & WAYNE LEWIS

Contention:

The Applicant has not provided reasonable assurance that the public health and safety will be adequately protected in the event of an emergency at the storage site in that PFS has not adequately described the means and equipment for mitigation of accidents because it does not have adequate support capability to fight fires onsite.

- I. Qualifications & Familiarity with the Skull Valley
 - Neither are responsible for design the facility
 - Establish that PFS need to be self-sufficient re fire fighting
 - Details about off-site assistance
 - How far away is Tooele County fire dept? Is it all volunteer?
 - How long does it take to drive to PFS?
 - How long to muster volunteers from Tooele?
 - Total response time?

- II. Site Layout
 - Location of rail tracks in relation to ISFSI pads

- III. Combustible Material
 - Locomotive fuel tank
 - Propane tank

 - Fuel drawn into cask intake duct? Any analysis??

 - Cafeteria (Admin Building)

- IV. Sprinkler System & Water Supply
 - A. Sprinkler System
 - In all buildings or only CTB?
 - Water capacity? (where does it come from?)
 - Water from fire pumps (electric motor & diesel engine)
 - Where is diesel engine located? And the diesel fuel tank??
 - B. Electrical Wiring/Fuses
 - Effect on sprinkler system
 - Worker safety
 - C. Water Supply
 - What authority does PFS have to drill on-site wells?
 - Any from State Engineer? (McCarren Doctrine; fed. reserved water rights)
 - What is the source for the 200,000 gal. water tanks? Authority to fill tanks?

V. Diesel fire and heavy haul truck
Worker Safety

Fire brigade training and building entry

VI Non-rad. hazards Any analysis?

VII Propane Fires Explosion or sabotage

VIII Fire Trucks
Numbers and location of trucks
Operators, training, and their location
Number of persons to man trucks

IX Training/Staffing
How many trained fire fighters?
To what standard?
What other duties will they have?
What shifts will they work?

What other training for non-fire brigade?
What positions will these people hold?

IX "Normal" working hours vs. off-hours

A. Normal Hours

What are "normal" hours?

Probe why fire will only occur during business hours!!

PFS not credible given time it takes to transfer canisters in CTB

See SAR Table 5.1-1

B. Off-Normal Hours

Describe call in procedures?

How long to respond?

Number of staff during off-normal hours?

What training will on-site (off normal hrs) people have?

How many will be training?

Will training involve more than use of a fire extinguisher? What?

June 19, 2000

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)
)
PRIVATE FUEL STORAGE, LLC) Docket No. 72-22-ISFSI
)
(Independent Spent)
Fuel Storage Installation))

NRC STAFF'S PROPOSED CROSS-EXAMINATION PLAN
CONCERNING THE PREFILED TESTIMONY OF
KEN DUNGAN AND WAYNE LEWIS (CONTENTION UTAH R)

1. Determine whether PFS plans to submit a revised fire safety analysis, or other licensing materials concerning fire protection.
2. Determine whether NRC Staff has accepted or commented upon PFS' analysis of the minimum water requirements for fire protection.
3. Determine the current state of development of PFS' fire brigade training program.
4. Determine the anticipated timing for PFS' submission of emergency plan implementing procedures, fire brigade procedures, and details concerning the fire brigade training program.
5. Confirm PFS' intent to comply with NFPA 600. Determine PFS' view of the applicability of NFPA-1500 to its facility.

STATE OF UTAH'S CROSS EXAMINATION PLAN
CONTENTION UTAH R
NRC STAFF WITNESSES PAUL W. LAIN & RANDOLPH L. SULLIVAN

Contention:

The Applicant has not provided reasonable assurance that the public health and safety will be adequately protected in the event of an emergency at the storage site in that PFS has not adequately described the means and equipment for mitigation of accidents because it does not have adequate support capability to fight fires onsite.

I. Qualifications & Familiarity with the Skull Valley

Establish that PFS needs to be self-sufficient re fire fighting

Details about off-site assistance

How far away is Tooele County fire dept? Is it all volunteer?

How long does it take to drive to PFS?

How long to muster volunteers from Tooele?

Total response time?

II. Site Layout & Diesel Spill

Locomotive with 6,000 gal. fuel capacity

Physical stops so loco will not go into CTB -- rollover potential?

Location of rail tracks in relation to ISFSI pads

Potential for diesel fuel from locomotive to pool and burn in gravel pad area

Fuel drawn into the cask intake duct and burns -- any analysis??

III. PFS Em Plan

[establish from Staff that PFS needs to deal with more than just rad incidents]

Events involving fires not just radiological incidents

Mitigation of accidents

Worker Safety (in general, not just from rad. incidents)

IV. PFS Fire Fighting Capability

A. Water Supply Authority?

B. Fire Trucks One or 2? Location? Operator Training?

Role of the fire truck?

C. Staffing & Training

5 members -- who? other duties?

Type of training? When? Who long?

No. staff during normal hours/off-normal hours

D. Fire only during "normal hours" [does Staff agree?]

E. Off-normal hours - no coverage?

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(Private Fuel Storage Facility)) ASLBP No. 97-732-02-ISFSI

**APPLICANT'S CROSS-EXAMINATION PLAN
FOR STATE WITNESS GARY A. WISE REGARDING CONTENTION UTAH R**

Pursuant to the Atomic Safety and Licensing Board's Memorandum and Order of May 1, 2000,¹ Applicant Private Fuel Storage, L.L.C. submits its cross examination plan for State of Utah witness Gary A. Wise regarding Contention Utah R.

1. Materials the witness reviewed
2. The asserted potential for fires at the PFSF during off-normal hours.
 - Tooele County distances
 - Combustible material
 - Ignition sources
3. Assertions regarding the members of the PFSF fire brigade
 - The PFS organizations from which the members will be drawn
 - How many people will be trained
 - The training required to drive a fire truck

¹ Memorandum and Order (Granting Joint Motion to Approve Stipulation on Contention Utah S and Outlining Administrative Matters) (May 1, 2000) at 8.

2

4. Assertions regarding the training of the PFSF fire brigade
 - Training provided to employees who are not part of the formal fire brigade
 - The frequency with which fire brigade members will participate in drills
5. The presence of fire brigade “organizational statements” in emergency plans
6. The assertion that the safety of the facility will be threatened because of the fire brigade response time during off-hours and the training provided to “back up” fire brigade members
7. The assertion that PFS will need to use more than one fire hose at once
8. The asserted need to use fire trucks at the PFSF
 - The assertion that PFS will need to use the fire truck at the Goshute village
 - The asserted number of people needed to operate a fire truck
9. The asserted need for PFS to adhere to NFPA 1500
 - The assertion that NFPA 1500 applies because of the distance from the PFSF to the nearest municipality with a fire department
 - The assertion that NFPA 1500 applies because the PFS fire brigade will be able to perform interior structural firefighting
 - The assertion that NFPA 1500 applies because the PFS fire brigade will be able to perform some rescue operations

June 19, 2000

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)
)
PRIVATE FUEL STORAGE, LLC) Docket No. 72-22-ISFSI
)
(Independent Spent)
Fuel Storage Installation))

NRC STAFF'S PROPOSED CROSS-EXAMINATION PLAN
CONCERNING THE PREFILED TESTIMONY
OF GARY A. WISE (CONTENTION UTAH R)

1. Clarify the extent and scope of the witness' educational qualifications. Contrast these qualifications with those of a fire protection engineer.
 2. Determine the scope of the witness' review. Identify the materials he reviewed in preparing his testimony. Explore his familiarity with the facility design, fire hazards at the facility, fire protection systems in place, and PFS' fire safety analysis.
 3. Determine the witness' experience in evaluating private industrial or commercial facilities, their fire protection plans, and their fire brigades.
 4. Determine the witness' experience in evaluating a nuclear facility, including facilities licensed by NRC.
 5. Determine the witness' experience in evaluating a facility or fire brigade similar to those at the PFS facility.
 6. Explore the witness' assumption re: the need for a manual response to fires, as affected by the facility's design, materials of construction, and contents; the fire protection systems in place, and the effect of allowing a fire to burn without a manual response.
 7. Explore the witness' views concerning the minimum required fire response at the PFS facility, considering its layout and design, materials of construction, contents, fire hazards, and fire protection systems.
 8. Explore the applicability of NFPA-1500 to the PFS fire brigade. Clarify the differences between industrial and municipal fire brigades.
-

9. Explore the witness' views as to the applicability of NFPA-600. Determine whether he knows if NRC accepts NFPA 600 as adequate, and whether NRC has ever applied NFPA 1500.
10. Determine whether there is any non-OSHA basis for the witness' statements in response to questions 6 and 7.
11. Clarify the meaning of the citation to NFPA § A-1-5, in response to question 10.
12. Determine the witness' familiarity with applicable NRC regulatory requirements and guidance on fire safety.
13. Explore the witness' familiarity with the NRC licensing process; the timing of submissions; and NRC's reviews of emergency plan procedures, fire brigade procedures, emergency response training, and drills.

**CROSS EXAMINATION PLAN
JOSEPH GASE AND GEORGE TAKACS IV**

A. Flood Protection Berms

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of:)	Docket No. 72-22-ISFSI
)	
PRIVATE FUEL STORAGE, LLC)	ASLBP No. 97-732-02-ISFSI
(Independent Spent Fuel)	
Storage Installation))	June 20, 2000

**STATE OF UTAH'S CROSS EXAMINATION PLAN OF PFS WITNESSES - JOHN
PARKYN AND JON KAPITZ ON O&M**

CONTENTION UTAH E

Contrary to the requirements of 10 CFR §§ 72.22(e) and 72.40(a)(6), the Applicant has failed to demonstrate that it is financially qualified to engage in the Part 72 activities for which it seeks a license in that:

6. The Applicant has failed to show that it has the necessary funds to cover the estimated costs of construction and operation of the proposed ISFI because its cost estimates are vague, generalized, and understated.

- I. Examine Jon Kapitz expertise and how it relates to what PFS has proposed. Goes to the weight of his testimony.
- II. Determine the basis of the O&M cost estimate, what items it included.
- III. Determine what costs were not included in the O&M estimate.

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PRIVATE FUEL STORAGE, LLC)	ASLBP No. 97-732-02-ISFSI
(Independent Spent Fuel)	
Storage Installation))	June 20, 2000

**STATE OF UTAH'S CROSS EXAMINATION PLAN OF PFS WITNESS - JOHN
PARKYN ON NUCLEAR PROPERTY INSURANCE**

Contrary to the requirements of 10 CFR §§ 72.22(e) and 72.40(a)(6), the Applicant has failed to demonstrate that it is financially qualified to engage in the Part 72 activities for which it seeks a license in that:

10. [with respect to onsite nuclear insurance] The Applicant does not provide assurance that PFS will have sufficient resources to cover non-routine expenses including without limitation the costs of a worst case accident in transportation, storage, or disposal of the fuel.

- I. Determine the scope of Mr. Parkyn's statement that PFS will obtain the nuclear property insurance that is "now" available at "reasonable costs" and "reasonable terms."
- II. If Mr. Pickerl indicates that the combined [REDACTED] does not include certain property damage coverage, including property on the proposed Low rail spur or at the proposed intermodal transfer facility, then determine how PFS plans to cover those costs. The issues goes to whether there is reasonable assurance that PFS will have funds to cover non-routine expenses and goes to overall operating costs.
- III. If Mr. Pickerl indicates that the combined [REDACTED] does not include earthquake, etc. coverage, then determine how PFS plans to cover those costs. The issues goes to whether there is reasonable assurance that PFS will have funds to cover non-routine expenses and goes to overall operating costs.
- IV. If Mr. Pickerl indicates that the combined [REDACTED] does not include military training or weapons testing, then determine how PFS plans to cover those costs. The issues goes to whether there is reasonable assurance that PFS will have funds to cover non-routine

expenses and goes to overall operating costs.

- V. If Mr. Pickerl indicates that the combined [REDACTED] does not include onsite personal injury liability, then determine how PFS plans to cover those costs. The issues goes to whether there is reasonable assurance that PFS will have funds to cover non-routine expenses and goes to overall operating costs.

STATE OF UTAH'S CROSS EXAMINATION PLAN
CONTENTION UTAH E
PFS WITNESS, JOHN PARKYN, ON PFS CONSTRUCTION COSTS

Contention:

Contrary to the requirements of 10 CFR §§ 72.22(e) and 72.40(a)(6), the Applicant has failed to demonstrate that it is financially qualified to engage in the Part 72 activities for which it seeks a license in that:

6. the applicant has failed to show that it has the necessary funds to cover the construction ... of the proposed ISFSI because its costs estimates are vague, generalized, and understated. See 10 CFR Part 50, App, C § II.

License Condition

LC17-1: Construction of the Facility shall not commence before funding (equity, revenue, and debt is fully committed that is adequate to construct a facility with the initial capacity as specified by PFS to the NRC [REDACTED]). Construction of any additional capacity beyond this initial capacity amount shall commence only after funding is fully committed that is adequate to construct such additional capacity.

I. Phased Construction: Volume and Timing

[Affects when costs will be incurred]

A. No. of Phases (3)

[Establish the volume of each phase]

I = 10,000 MTU

II = 10,000 MTU

III = 20,000 MTU

B. Are volumes in each phase subject to change?

[Moving target; can't accurately estimate const. costs if volume is unknown]

1. What would cause a change?

2. Is it possible volumes will decrease in any/all phases?

C. Timing:

[Establish PFS must construct after making a \$ showing -- can't put off construction until some indefinite future date when construction costs may no longer be valid]

When will Phase I start? How long will it take (2 yrs?)

Utah construction season limited (shutdown in winter season?)

Increased cost to construct in winter

Typically what is the duration of bids?

[PFS says it will get bids soon after license issuance]

PFS makes no allowance for escalation during construction (bids "soon" after license issuance) Contingencies if PFS does not start "soon"??

Host payments based on 2 yr. period

Delay in construction = increase in host payments

II. Rail & Transportation Equipment

[Refurbished equipment: Is PFS cheap (safety?) or is refurbished equipment reliable?]

A. Refurbished equipment

1. Mainline locomotive
2. Security car (refurb. passenger car)
3. Buffer Car (used RR transport car)
4. Short Line Locomotive (unit currently in service)

B. Reliability and cost comparison of Refurbished Equipment

1. Basis for costs estimates to refurbish
2. Extra Maintenance & Repair for used equipment
3. Greater potential for accidents/need more insurance?
4. Cost of refurbished vs. new

C. Transportation Casks

1. Documents to support that [redacted] is based on actual fabrication costs
2. How long will it take to construct the Casks?
3. When will the casks be available?

III. All of Stone & Webster's revised construction costs went up; all of Parkyn's costs went down -- why???

Item	April 00 (State Ex. ¹⁶ 39)	Exh. C Parkyn Testimony	Phase
Cask Hauler	[redacted]	[redacted]	I
50 ton mobile crane	[redacted]	[redacted]	I
Visitor Center	[redacted]	[redacted]	I
Breached Canister overpack	[redacted]	[redacted] Need 1 or 2??	I
Firetruck	[redacted]	[redacted] Need 2 [redacted]	I
Ambulance	[redacted]	[redacted]	
Shortline locomotive	[redacted]	[redacted]	II
COST DECREASE from Ex 39 -->Exh C		[redacted]	

IV. Equipment

A. Get Information on Equipment

1. Cask Hauler (details about Hatch)
2. Short Line Locomotive (function??)
3. Make up of unit train (2 locos, 2 buffer, 1 security, 6 cask cars)
4. Security Car (cost of security equipment)
5. "other" loading system equipment (HI-TRAC casks??)
6. Miscellaneous Equipment
 - a. Holtec Analysis (every PFS member plant different re loading fuel; very costly because of non-uniformity)
 - b. Another "pass through costs" or direct PFS cost?
7. Dry Transfer System
 - a. Unproved technology
 - b. Not licensed (PFS license or reactor Pt. 50 license)
 - c. Time intensive

V. Other Costs Incurred During Construction

[get details about what is included in categories; total cost of Phase I > 

- A. Personnel & Engineering
- B. Host Payments
- C. Administrative
- D. Interest on borrowed construction funds??
- E. Increased cost of design basis to withstand worst case earthquake

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PRIVATE FUEL STORAGE, LLC)	ASLBP No. 97-732-02-ISFSI
(Independent Spent Fuel)	
Storage Installation))	June 20, 2000

**STATE OF UTAH'S CROSS EXAMINATION PLAN OF PFS EXPERT - HANSON
PICKERL ON NUCLEAR PROPERTY INSURANCE**

Contrary to the requirements of 10 CFR §§ 72.22(e) and 72.40(a)(6), the Applicant has failed to demonstrate that it is financially qualified to engage in the Part 72 activities for which it seeks a license in that:

10. [with respect to onsite nuclear insurance] The Applicant does not provide assurance that PFS will have sufficient resources to cover non-routine expenses including without limitation the costs of a worst case accident in transportation, storage, or disposal of the fuel.

- I. Obtain specific information (name, commitment, etc.) concerning the un-named, undocumented "London companies" that have indicated it will offer an additional [REDACTED] in nuclear property insurance.
- II. Establish how NEIL or Marsh USA determined that [REDACTED] in nuclear property insurance is adequate for PFS facility.
- III. Determine the deductibles associated with the coverage. The issue goes to whether there is reasonable assurance that PFS will have funds to cover non-routine expenses and goes to operating costs.
- IV. Determine what the [REDACTED] in combined nuclear property insurance covers, including property on the proposed Low rail spur or at the proposed intermodal transfer facility. The issues goes to whether there is reasonable assurance that PFS will have funds to cover non-routine expenses and goes to overall operating costs.
- V. Determine the scope of the earthquake etc. exclusion. Whether property damage from earthquake, etc. is covered under the standard policy or under an endorsement.

- VI. Determine the scope of warlike exclusion and whether the original offer for coverage considered whether PFS's location under and next to military training and weapons testing areas.
- VII. Determine whether the [REDACTED] in combined nuclear property coverage is the maximum amount available.
- VIII. Determine the cost of additional coverage which goes to whether [REDACTED] is the maximum amount available.

**CROSS EXAMINATION PLAN
JOHN PARKYN AND JON KAPITZ**

- A. ~~Concrete Batch Plant Issues~~
- B. Railroad Fee Issues
- C. Technical Oversight at Reactor
- D. ~~Bureau of Land Management Fee Issues~~
- E. Nuclear Property Insurance Costs
- F. ~~Letter of Credit Costs~~
- G. Bureau of Indian Affairs/Skull Valley Band Issues
- H. Depreciation
- I. Holtec Customers

**CROSS EXAMINATION PLAN
JOHN PARKYN (CONSTRUCTION)**

A. Concrete Batch Plant Issues



C. Debt Financing Costs

D. Heavy Haul Truck Costs

E. Railspur Cost Shifting

F. The Dry Transfer System

STATE OF UTAH'S CROSS EXAMINATION PLAN
CONTENTION UTAH S, DECOMMISSIONING
PFS WITNESSES JOHN D. PARKYN

Contention:

The decommissioning plan does not contain sufficient information to provide reasonable assurance that the decontamination or decommissioning of the ISFSI at the end of its useful life will provide adequate protection to the health and safety of the public as required by 10 C.F.R. § 72.30(a), nor does the decommissioning funding plan contain sufficient information to provide reasonable assurance that the necessary funds will be available to decommission the facility, as required by 10 C.F.R. § 72.22(e).

See Basis 1, 4, 5 & 10 as modified by Stipulation dated April 7, 2000

I. Qualifications

- La Crosse plant shut down
- Show differences between La Crosse & PFS

II. Parkyn prepared Decom Plan

- Vintage of the data under lying the costs
- In what year's dollars were costs originally estimated.
- Costs are LA are in 1997 dollars -- what are those costs today?
- [Need to know to figure out payments under service agreement]

III. Cost Review

IV Shortfall in funding Decom. Costs

- How will PFS obtain an increase in the letter of credit?

- Pass through costs to customers

- Feasibility of passing through costs to PFS member customers
- Built in conflict of interest (customer is PFS board member)

- The Black hole of the Service Agreement will cover:

- Customer proprtionate share of increase in site decom.

- Same for storage casks

- Contamination -- if caused by customer

- Costs increase after annual review -- customer billed!

- Increase in site survey --IS THIS A PASS THRU TOO?

V Accidents

PFS says post accident cleanup costs are unrelated to decom
Look to insurance? But PFS is located over Military Operating Area (war risk
exclusion)

Does PFS admit that accident clean up is part of PFS's operating costs?

What if an accident occurred while PFS was decom the site, then how would
the costs be covered?

How will the last few casks at PFS pay for insurance premiums needed to cover
accidents?

How will PFS pass costs through to customers if and when only a few casks
remain at PFS?

VI. Infeasibility of Passing on costs to PFS members????

June 19, 2000

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

In the Matter of)
)
Private Fuel Storage, L.L.C.) Docket No. 72-22
) ASLBP No. 97-732-02-ISFSI
(Private Fuel Storage Facility))

**STATE OF UTAH'S PLAN FOR CROSS-EXAMINATION
OF JOSEPH F. GASE AND GEORGE L. TACKAS**

- I. Question witnesses re scope, nature, timing, thoroughness of review; questions re scope of S&W's role in entire project (also responsible for detailed engineering drawings, architecture?); previous S&W problems in doing accurate cost estimates.
- II. Clarify whether G&T made judgments about what construction costs should be included in scope of work, or whether that was done by PFS alone; clarify definition of construction costs — same as capital costs?
- III. Question witnesses re differences between April and May 2000 cost estimates.
- IV. Question witnesses re meaning of term "conceptual estimate."
- V. Question witnesses re cost of detailed design drawings. What are likely costs, where are they reflected in construction cost estimates?
- VI. Obtain information about missing ITF costs.
- VII. Clarify whether cost estimate includes construction of concrete batch facility
- VIII. Question witnesses re amount and nature of costs already incurred, whether they are reflected in construction cost estimate.
- IX. Clarify what is meant by representation on p.5 that all estimates are in 4th quarter 1999 dollars — does this mean data is that fresh? How old is data?
- X. How is useful life of equipment accounted for in cost estimate? Or is this an O&M expense?

- XI. Question witnesses regarding seismic design requirements assumed for purposes of construction cost estimate. If estimate is based on assumption that PFS will receive an exemption from regulations, how much would cost estimate change if regulatory compliance were required/assumed?