

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-ISFSI
)	
(Independent Spent)	
Fuel Storage Installation))	

NRC STAFF'S RESPONSE TO STATE OF UTAH'S
MOTION IN LIMINE TO EXCLUDE PORTIONS
OF NRC STAFF'S PREFILED TESTIMONY
CONCERNING UNIFIED CONTENTION UTAH L/QQ

INTRODUCTION

Pursuant to 10 C.F.R. § 2.730 and the Atomic Safety and Licensing Board's "Memorandum and Order (Revised General Schedule)," dated September 17, 2001, the staff of the Nuclear Regulatory Commission ("Staff") hereby responds to the "State of Utah's Motion in Limine to Exclude Portions of NRC Staff's Prefiled Testimony of Luk & Guttman; Waters; and Stamatakos, McCann & Chen (Unified Contention Utah L/QQ)" ("Motion"). For the reasons set forth below, the Staff submits that the State's Motion should be denied in its entirety.

DISCUSSION

A. Legal Standards Governing the Admissibility of Evidence.

The rules governing the admissibility of evidence in an NRC adjudicatory proceeding are set forth in 10 C.F.R. § 2.743(c), which specifies that "[o]nly relevant, material, and reliable evidence which is not unduly repetitious will be admitted." As noted by the State (Motion at 1-2), the Federal Rules of Evidence ("FRE") have been referred to in NRC adjudicatory proceedings for guidance, as appropriate. In particular, the following rule has been adopted in the FRE, with respect to the testimony of expert witnesses:

Rule 702. Testimony by Experts.

If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise, if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.

B. The State's Motion Should Be Denied.

In its Motion, the State requests that the Licensing Board strike substantial portions of three sets of prefiled testimony filed by the Staff concerning Unified Contention Utah L/QQ, filed on April 1, 2002, or "enter alternative orders consistent with [its] motion. The testimony challenged by the State consists of: (a) the testimony of Jack Guttman and Dr. Vincent Luk concerning Part D of the contention; (b) the testimony of Michael Waters concerning dose consequences, related to Part E of the contention; and (c) the testimony of Drs. John Stamatakos, Martin McCann and Rui Chen, concerning Part E of the contention.¹ In addition, the State seeks to strike the entire report produced by Dr. Luk concerning the potential for cask tipover and/or sliding at the proposed PFS Facility, under 2,000-year, 10,000-year, and 1971 San Fernando Earthquake (Pacoima Dam record) seismic conditions.² In support of its Motion, the State asserts, that the specified portions of these three sets of testimony "are unreliable; are not based on sufficient facts or data; have no foundational basis; and contain opinions of unidentified persons" (Motion at 1); and that the Luk

¹ See (1) "NRC Staff Testimony of Vincent K. Luk and Jack Guttman Concerning Unified Contention Utah L/QQ (Geotechnical Issues)" ("Guttman/Luk testimony"); (2) "NRC Staff Testimony of John A. Stamatakos, Rui Chen and Martin W. McCann, Jr., Concerning Unified Contention Utah L/QQ, Part E (Seismic Exemption)" ("Stamatakos/Chen/McCann Testimony"); and (3) "NRC Staff Testimony of Michael D. Waters Concerning Radiological Dose Considerations Related to Unified Contention Utah L/QQ, Part E (Seismic Exemption)" ("Waters Testimony"), each of which were filed on April 1, 2002.

² See "NRC Project on Seismic Behavior of Spent Fuel Storage Cask Systems / Seismic Analysis Report on HI-STORM 100 Casks at Private Fuel Storage Facility, Rev. 1," dated March 31, 2002 ("Luk Report"). This report has been filed as proposed Staff Exhibit "P".

Report “is summary in nature, is based on information and data to which the State has had no access, and . . . whose principal investigator and author the State has not had the opportunity to depose.” For the reasons set forth below, the Staff respectfully submits that the State’s Motion should be denied in its entirety.

1. The Testimony of Jack Guttman and Dr. Vincent K. Luk, and Dr. Luk’s Report.

The State seeks to strike the prefiled testimony of Jack Guttman and Dr. Vincent K. Luk, concerning Part D of Unified Contention L/QQ,³ as well as Dr. Luk’s report concerning the potential for cask tipover and/or sliding at the proposed PFS Facility under 2,000-year, 10,000-year, and 1971 San Fernando Earthquake (Pacoima Dam record) seismic conditions. As noted by the State (Motion at 2), the testimony of Mr. Guttman and Dr. Luk “relates exclusively to the Luk Cask Report [Staff Exh. P].” The State asserts that the Luk Report “is summary in nature, is based on information and data to which to State has had no access, and . . . whose principal investigator and author the State has not had the opportunity to depose” (*Id.* at 2); and it further asserts that the Guttman/Luk Testimony and the Luk Report are “based on undisclosed facts and data, unknown principles and methods, and unreliable application of principles and methods” (*Id.* at 3; capitalization omitted). These assertions are without merit.

As set forth in the prefiled testimony of Daniel J. Pomerening and Goodluck I. Ofoegbu concerning Part D of this contention, the Staff has previously concluded, based on its review of the PFS application and supporting documentation, that the HI-STORM 100 storage casks placed on the concrete storage pads at the proposed PFS Facility will not tipover or slide excessively. See Pomerening/Ofoegbu Testimony, at 10-15, and 28. This conclusion is reflected as well in the Staff’s Consolidated SER (Staff Exhibit C). See, e.g., Staff Exh. C, at 5-16 to 5-18, and 15-31

³ The Staff filed two sets of testimony concerning Part D of Unified Contention Utah L/QQ, only one of which is the subject of the State’s Motion; the State has not moved to strike the “NRC Staff Testimony of Daniel J. Pomerening and Goodluck I. Ofoegbu Concerning Unified Contention Utah L/QQ, Part D (Seismic Design and Foundation Stability)” (“Pomerening/Ofoegbu Testimony”).

to 15-32.⁴ Further, as set forth in the testimony of Mr. Guttman and Dr. Luk, the Staff requested, through the NRC Office of Nuclear Regulatory Research, that a confirmatory analysis be performed by Sandia National Laboratories, concerning these matters. See Guttman/Luk Testimony at 2. As described in the Staff's testimony, this analytical effort was performed by a team under the direction of Dr. Luk; it involved the development of a three-dimensional coupled finite element model of the proposed PFS dry cask storage system to examine the nonlinear and dynamic behavior of the casks under prescribed seismic conditions; and it culminated in the production of Dr. Luk's Report on March 31, 2002 (proposed Staff Exh. P). *Id.*

The State asserts that both it and PFS issued their reports on November 30 and August 20, 2001, respectively; and that they produced documents relevant to their reports and made the authors of those reports available for deposition; in contrast, the State asserts that "[n]o such opportunity existed with respect to the Luk Report or the testimony based thereon" (Motion at 3). The State fails to observe, that the Luk Report relates to Part D of Unified Contention Utah L/QQ -- which is an issue that was raised in Contention Utah QQ, and which was admitted for litigation in this proceeding only three months before issuance of the final Luk Report on March 31, 2002.⁵ Thus, while the State has unilaterally asserted that this matter was identified as an issue in discovery under former Contention Utah L, it had not been identified in that contention or any of its admitted bases, and was only admitted for litigation as part of Contention Utah QQ, in December 2001. Thus, only after the Board issued its decision in LBP-01-39, did the Staff determine that Dr. Luk's efforts and his resulting report may be relevant to an issue in this adjudicatory proceeding

⁴ The Staff's conclusions regarding the adequacy of the Applicant's (revised) geotechnical/seismic analyses were first published in Supplement No. 2 to the Staff's Safety Evaluation Report ("SER"), on December 21, 2001. See letter from Sherwin E. Turk to Denise Chancellor and Jay Silberg, dated December 21, 2001, enclosing SER Supplement No. 2.

⁵ See *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-01-39, 54 NRC 497 (Dec. 26, 2001).

-- and the Staff then requested that Dr. Luk expedite the completion of his report, and it subsequently produced relevant documents related to that report.

Specifically, on February 25, 2002, in response to the State's 17th set of discovery requests (filed on January 17, 2002), the Staff produced a "Summary Report" containing a summary of the conclusions reached by Dr. Luk in his analysis, along with a copy of Dr. Luk's professional qualifications; in addition, the Staff stated that it expected to produce Dr. Luk's detailed report within approximately two weeks, and that it expected to produce Dr. Luk as a witness in this proceeding.⁶ On March 8, 2002, the Staff produced Dr. Luk's initial detailed report, on an expedited basis.⁷ On March 20, 2002, the Staff advised the State of an error in the labeling of certain Figures contained in Appendices II and III of that report, and indicated that it expected to publish a revised report, reflecting the results of two additional computer runs pertaining to the 10,000-year and 1971 San Fernando Earthquake (Pacoima Dam record) seismic events, which "would supplement the information containing in Tables 9 and 10 of the Final Report."⁸ On April 1, 2002, the Staff produced a copy of Dr. Luk's Final Report (dated March 31, 2002).⁹ Finally, by letters dated April 17 and 22, 2002, the Staff identified and/or produced a number of additional documents, including

⁶ See letter from Sherwin E. Turk to Denise Chancellor, dated February 25, 2002, and enclosures thereto.

⁷ See letter from Sherwin E. Turk to Denise Chancellor, dated March 8, 2002, and enclosure thereto.

⁸ See letter from Sherwin E. Turk to Denise Chancellor, dated March 22, 2002.

⁹ See letter from Sherwin E. Turk to the Licensing Board, dated April 2, 2002, providing a list of the Staff's pre-filed testimony and exhibits which had been filed and E-mailed earlier.

input parameters and outputs related to Dr. Luk's report.¹⁰ Thus, there is no basis for the State's assertion that "[t]he Luk Cask Report has come too late and the State has not and will not have the opportunity to test the accuracy of the data."¹¹

Moreover, the Staff has not objected to the State's request that it be allowed to depose Dr. Luk. This matter was the subject of discussions between the State and the Staff in March 2002, while Dr. Luk was out of the country on a previously scheduled official trip to Korea. At that time, the parties discussed conducting Dr. Luk's deposition during the last ten days of March, after his return to the United States; the State, however, did not pursue its interest in taking Dr. Luk's deposition in March, following his return to the country on March 20, 2002.¹² While the State has recently expressed its renewed interest in taking Dr. Luk's deposition, the parties have been unable to agree upon a mutually acceptable time and place for his deposition, given the rapidly approaching commencement of hearings on seismic/geotechnical issues and the need for the parties to devote at least 2 - 3 travel days in order to conduct that deposition during the time remaining before hearings.

In sum, the Staff has produced to the State a detailed report by Dr. Luk, as well as extensive documentation related thereto. This document production renders moot the State's

¹⁰ See (1) letter from Sherwin E. Turk to Denise Chancellor, dated April 17, 2002, enclosing documents related to the testimony of Michael Waters and Dr. Vincent Luk, and commenting on whether a deposition of Dr. Luk would be necessary; and (2) letter from Sherwin E. Turk to Denise Chancellor, dated April 22, 2002, identifying and producing documents related to the testimony of Dr. Vincent Luk

¹¹ Motion at 5, *citing Alabama Power Co. (Joseph M. Farley Nuclear Plant, Units 1 and 2)*, LBP-77-24, 5 NRC 804, 938 n. 268 (1977), *modified on other grounds*, ALAB-646, 13 NRC 1027 (1981).

¹² See (1) E-mail message from Sherwin Turk to Denise Chancellor, dated April 16, 2002 (Subject: Additional Discovery); and (2) letter from Sherwin E. Turk to Denise Chancellor, dated April 17, 2002 (listed in n. 10, *supra*), discussing whether a deposition of Dr. Luk would be necessary, "particularly in view of the travel demands that a deposition would impose on all parties at this time."

complaint that the witnesses' testimony lacks "any indication of the input parameters, methods or other specifics of the scope of the confirmatory analysis" (Motion, at 3). Further, while the State complains that it needs to see the information referred to in the Staff's testimony, as to the "basic information [provided by the Staff] to the research team, with respect to cask design, pad dimensions, soil-cement layers under and adjacent to the pad, the site specific soil profile, and time histories of seismic accelerations" (Motion at 3, *citing* Guttman/Luk Testimony, A.6 at 4), the Staff has, in fact, provided that information to the State. Moreover, the Staff has produced or identified the detailed computer input and output files, which the State asserts it requires in order to analyze the Luk Report (Motion at 3-4), including, *e.g.*, detailed information concerning the time histories, soil properties, and deconvoluted accelerations utilized in the analysis. Accordingly, there is no basis for the State's assertion that it requires such information in order to test the reliability or accuracy of Dr. Luk's conclusions.

Further, while the State may well prefer to take Dr. Luk's deposition before conducting his cross-examination at the hearing, there is no requirement that depositions be conducted before a witness is proffered at hearing¹³ -- and indeed, just ten days ago, the Licensing Board allowed two witnesses (U.S. Air Force pilots) to be examined at hearing without first having been produced for deposition and without any other prior discovery of their expected testimony having been conducted. Moreover, the Staff has not hindered the State from conducting the deposition of Dr. Luk -- and, indeed, the Staff has expressed its willingness to allow that deposition to be taken. Inasmuch as the State could have noticed Dr. Luk's deposition at any time after the Staff identified him as a witness on February 25, 2002, there is no merit in the State's complaint that it has not been able to take Dr. Luk's deposition, or that its inability to take his deposition "will hamper the State in formulating trial strategy and proffering its best evidence" (Motion at 5). Further, to the

¹³ See 10 C.F.R. § 2.740(a) ("Parties may obtain discovery by one or more of the following methods . . ."); *cf.* 10 C.F.R. § 2.720(h) (procedures for discovery against the Staff).

extent that the State seeks to discover additional information concerning Dr. Luk's analysis and his report, no reason appears why it could not pursue this matter during cross-examination of the witness at hearing.¹⁴

Finally, in view of the limited time available for hearings, and the fact that all parties have been aware of the hearing schedule for many months, there is no merit in the State's request that, in lieu of striking the Guttman/Luk Testimony and the Luk Report, the Board "could order that the Staff make Dr. Luk available in Salt Lake City to have his deposition taken during the early part of the week of April 22 and thereafter permit the State to supplement its prefiled testimony." *Id.* Rather, in view of the State's ability to have conducted Dr. Luk's deposition previously, and the Staff's identification or production of the documents which the State requested concerning Dr. Luk's Report and prefiled testimony, there is no basis for the State's assertion that "[a]nything less [than a deposition of Dr. Luk and an opportunity to supplement its prefiled testimony] would not accord the State a level playing field." *Id.*

For these reasons, the State's request to strike the testimony of Mr. Guttman and Dr. Luk, and to strike the Luk Report, should be denied.

2. The Testimony of Michael Waters Concerning Unified Contention Utah L/QQ Part E (Dose Consequences).

In its Motion, the State further challenges the prefiled testimony of Michael Waters, concerning dose consequences related to Part E of Contention Utah L/QQ, on the grounds that the testimony is "based on undisclosed facts and data, unknown principles and methods, [and] is

¹⁴ See, e.g., *Virginia Electric and Power Co.* (North Anna Nuclear Power Station, Units 1 and 2), ALAB-555, 10 NRC 23, 27 (1979) (where the outcome of an important issue may hinge on the acceptance or rejection of an expert conclusion resting upon a performed analysis, it is not unreasonable to require the witness to "make available (either in his prepared testimony or on the stand") sufficient information pertaining to the details of the analysis to permit the correctness of the conclusion to be evaluated" (*id.*, emphasis added)).

unreliable” (Motion at 6; capitalization omitted). The State’s request to strike Mr. Waters’ prefiled testimony is without merit.

In support of this request, the State asserts that the Staff has failed to produce documentation concerning the dose consequence calculations performed by Mr. Waters, which are referred to in his testimony (*Id.*).¹⁵ However, the Staff has already identified or produced the documentation sought by the State, following the State’s filing of its Motion.¹⁶ These documents include “the facts, data, or methodology that Mr. Waters relies upon to base his opinion,” with respect to Answers 19 and 21 in his testimony (*Id.*). Further, the documentation includes documents related to Answer 20 of Mr. Waters’ testimony, concerning the “computer codes [used] to perform multiple dose calculations as a result of thermal degradation,” including [t]he inputs to these calculations “ (*Id.*). Accordingly, there no longer exists any basis for the State’s assertion that it lacks sufficient “facts,” “data,” or “evidence of the application of principles and methods” used by Mr. Waters “to reach his conclusions” (*Id.*). Similarly, in view of the Staff’s production of these materials, there is no merit in the State’s request that, “[a]s an alternative to striking Answer 20, the Board could order the calculations and the various assumptions that went into those calculations . . . be turned over to the State in sufficient time for the State’s experts to analyze them and assist

¹⁵ The Staff notes that Unified Contention Utah L/QQ does not explicitly raise an issue concerning the dose consequences of a hypothetical cask tipover event. However, in view of the fact that the State and PFS have indicated that their testimony would address this issue, the Staff recently decided to provide the Mr. Waters’ testimony concerning this issue. See (1) E-mail message from Sherwin Turk to Denise Chancellor and Paul Gaukler, dated March 1, 2002, identifying the Staff’s proposed witnesses on Contention Utah L/QQ -- including “Michael Waters (tentative) (dose consequences, if needed);” and (2) “NRC Staff’s First Supplemental Response to the State of Utah’s Twentieth Set of Discovery Requests Directed to the NRC Staff,” dated March 13, 2002, at 8 (indicating that “[t]o the extent that dose consequences may arguably be within the scope of Unified Contention Utah L/QQ, Mr. Waters will testify . . . concerning potential dose consequences in the event of a beyond-design-basis hypothetical cask tipover. . . .”).

¹⁶ See letter from Sherwin E. Turk to Denise Chancellor, dated April 17, 2002, enclosing documents related to the testimony of Michael Waters and Dr. Vincent Luk (referred to in n.10, *supra*).

in formulating questions for cross examination during the hearing” (*Id.* at 6-7). Accordingly, this aspect of the State’s Motion should be denied.

3. The Testimony of Drs. Stamatakos, Chen and McCann Concerning Unified Contention Utah L/QQ, Part E (Seismic Exemption).

In the final portion of its Motion, the State seeks to strike substantially all of the prefiled testimony of Drs. Stamatakos, Chen and McCann, on the grounds that those portions of the testimony “are unreliable, lack a witness sponsor, [and] lack foundation” (Motion at 7; capitalization omitted). There is no merit in this request.

First, the State moves to strike a portion of Answer 27 of the prefiled testimony, in which the witnesses report on a telephone conversation that was held by the Staff with Dr. Harish Chander of the U.S. Department of Energy (“DOE”), concerning DOE’s reason for revising a portion of DOE-STD-1020-94, whereby the return period for PC-3 facilities from a 2,000-year return period to a 2,500-year return period (Motion at 7). In Answer 27, the witnesses state. In pertinent part, as follows:

In DOE-STD-1020-2002, DOE revised its Standard by changing the hazard annual probability of exceedance for the seismic design ground motion for PC 3 SSCs, from a mean annual probability of exceedance of 5×10^{-4} (2,000-year return period) to 4×10^{-4} (2,500-year return period). The Staff has discussed this development with the DOE official responsible for making this change (Dr. Harish Chander). Based on these conversations, we understand that the revision was not based upon technical considerations, but instead was undertaken in order to make the DOE standard consistent with U.S. Geological Survey National Earthquake Hazard Reduction Program (“NEHRP”) maps, and thereby result in analytical descriptions of seismic hazards that can be more readily used in conjunction with the USGS NEHRP maps.

Stamatakos/McCann/Chen Testimony, A. 27, at 31-32. The State complains that this testimony omits the name of the specific Staff employee who engaged in the reported conversation(s) with Dr. Chander of DOE, claiming that this is an “unattributed answer, based on an unidentified NRC Staff conversation, on an unknown date, purportedly with a DOE official responsible for making a

change in DOE-STD 1020-2002” (Motion, at 7). Further, the State asserts that the testimony’s account of this communication “is rife with speculation, unreliability and lack of factual knowledge, and it should not be allowed to stand” (*Id.*).

The State’s complaints regarding the Staff witnesses’ factual account of the Staff’s communications with Dr. Chander are without merit. The Staff has identified the DOE official with whom it spoke, as well as the substance of the communication. There is no reason why the State could not verify the veracity of this account by telephoning Dr. Chander directly, or by telephoning Staff Counsel to request further information. Indeed, the Staff is willing to provide such information to the State, upon request, and the State may still request confirmation from Dr. Chander or other DOE officials as to the reasons for DOE’s revision of DOE-STD-1020, or as to the veracity of the Staff’s account. Further, the State is able to pursue this matter in its cross-examination of the Staff’s witnesses. Accordingly, the State has not been disadvantaged by the Staff’s account of this communication, and the State’s request to strike this portion of the Staff’s testimony should be denied.¹⁷

In addition to moving to strike Answer 27 from the witnesses’ testimony, the State seeks to strike substantially all of their testimony (Answers 4 and 6-32) for failing to attribute the answers to specific members of the witness panel. This request is also without merit. First, the testimony of these witnesses represents a collaborative effort, for which no one individual member of the panel takes credit. Second, notwithstanding the collaborative nature of their testimony, the Staff is identifying herein which witness is principally responsible for each of the answers -- subject to the caveat that other members of the witness panel may have valuable information or insights to

¹⁷ While the State complains specifically of the witnesses’ reference to the Staff’s communications with Dr. Chander, it also seeks to strike the entirety of Answer 27, much of which does not pertain to those communications but, instead, provides other reasons why the witnesses conclude that DOE’s revision of DOE-STD-1020 does not affect their conclusions. The State has provided no reason why it believes these other portions of Answer 27 should be stricken, and its motion to strike such other portions of Answer 27 should therefore be denied lacking any basis.

contribute to any oral answers provided by another witness during cross-examination.¹⁸ Accordingly, the parties and Licensing Board members are not limited in their ability to test the witnesses' credibility or the weight to be given to their testimony.

Finally, the State asserts that certain answers suffer from a lack of foundation for the substantive responses" (Motion at 8). In this regard, the State appears to identify Answers 8, 12, and 15 - 31, as to which the State complains that the witnesses describe the "Staff's" conclusions without indicating that whose conclusions these are (*Id.*). This concern is baseless. As stated in response to Question 3 of their testimony -- to which the State has not objected -- the Staff's witnesses on Part E of this contention were substantially involved in conducting the Staff's evaluation of the Applicant's seismic exemption request and its probabilistic seismic hazard analysis and in preparing the related SER sections concerning these matters. See Stamatakos/McCann/Chen Testimony, at 3-5. While the witnesses' testimony, at times, may speak of the "Staff's" conclusions (as the regulatory entity responsible for evaluating the Applicant's analyses, in the first instance), the State should readily be able to establish, in its cross-examination of the witnesses, whether those conclusions in fact represent the witnesses' own conclusions as well. There is therefore no basis for the State's complaint that "the unattributed answer is in terms of what 'the Staff' – not these witnesses – does or does not consider or conclude" (Motion at 8).¹⁹ Similarly, there is no basis for the State's *ipse dixit* assertion that the Staff is relying upon

¹⁸ In this regard, the Staff identifies the following members of this panel as having lead responsibility for the various answers, as indicated: Answers 4-21 (Dr. John A. Stamatakos); Answers 22-27 and 30-31 (Dr. Martin W. McCann, Jr.); Answers 28-29 (Dr. Rui Chen); Answer 32 (All).

¹⁹ As a result, the State's reference to *Southern California Edison Co.* (San Onofre Nuclear Generating Station, Units 2 and 3), ALAB-717, 17 NRC 346, 366, 367 (1983), is misplaced -- in that here, rather than relying solely upon the SER, the Staff has proffered "one or many witnesses ... who are competent to testify about those aspects of the FSAR that are in controversy," who "can be examined on the reliability of the factual assertions and soundness of the scientific opinions found in the documents." See Motion at 8.

“unsponsored technical analysis . . . by witnesses who do not offer their own factual assertions and who do not have a foundation for the opinions presented in the testimony.” *Id.*

CONCLUSION

For the reasons set forth above, the Staff respectfully submits that the State’s motion to strike all pr portions of the Staff’s prefiled testimony of Jack Guttman and Dr. Vincent Luk, and the Luk Report; the prefiled testimony of Michael Waters; and the prefiled testimony of Drs. John Stamatakos, Martin McCann and Rui Chen, should be denied in its entirety.

Respectfully submitted,

/RA/
Sherwin E. Turk
Counsel for NRC Staff

Dated at Rockville, Maryland
this 22nd day of April, 2002

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

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

CERTIFICATE OF SERVICE

I hereby certify that copies of "NRC STAFF'S RESPONSE TO STATE OF UTAH'S MOTION IN LIMINE TO EXCLUDE PORTIONS OF NRC STAFF'S PREFILED TESTIMONY CONCERNING UNIFIED CONTENTION UTAH L/QQ," in the above captioned proceeding have been served on the following through deposit in the NRC's internal mail system, with copies by electronic mail, as indicated by an asterisk, or by deposit in the U.S. Postal Service, as indicated by double asterisk, with copies by electronic mail this 22nd day of April, 2002:

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